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Promass 84F15, DN15 1/2"

Coriolis mass flowmeter for custody transfer application

84F15-

50108331

SPK: DDA



Promass 84F15, DN15 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
U	Stainl. steel, AD2000, mat. certificate type test (containment) + pressure test (tube)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
CWS	12-VCO-4 (3/4"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L/ 1.4404
FUE	Tri-Clamp 1/2", 0.8um 3A EHEDG, 1.4404/ 316L
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L/ 1.4404
FUF	Tri-Clamp 1/2", 0.4um 3A EHEDG, 1.4404/ 316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L/1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L/ 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L/ 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404/316L
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L/ 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L/ 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 1.4404/316L
FSA	SMS1145, 0.8um/150grit 3A, 1.4404/316L
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L

D2C PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC Cl.150, Alloy C-22, flange ANSI B16.5
ABC Cl.300, Alloy C-22, flange ANSI B16.5
ACC Cl.600, Alloy C-22, flange ANSI B16.5
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)

F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube) +
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L MID Type Examination MI-002
M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable

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E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
G PTB Gas 7.251 (Germany)
K MC (Canada)
L MID Type Examination Cert. Gas MI-002 (Europe)
M MID Evaluation Cert. Liquid MI-005 (Europe)
U NTEP (USA)
X Sensor only

Output; Input:
1 Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

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Promass 80I80, DN80 3"

Coriolis mass flowmeter

80I80-

50109440

SPK: DDA



Promass 80I80, DN80 3"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Titanium
C	Titanium, mat. certificate (wetted parts)
P	Titanium, PED Cat.III
R	Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:

D2W	PN40, EN1092-1-B1 (DIN2501) flange
D3W	PN63, EN1092-1-B2 (DIN2501) flange
D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NDW	10K, flange JIS B2220
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
ERA	Eccen. Tri-Clamp 2 1/2",0.8um/150grit 3A
ERD	Eccen. Tri-Clamp 2 1/2",0.4um/240grit 3A
ECA	Eccen. Tri-Clamp 3",0.8um/150grit 3A
ECD	Eccen. Tri-Clamp 3",0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FKA	DIN11864-2A, 0.8um/150grit 3A
FKD	DIN11864-2A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.

A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency

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D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83A02, DN2 1/12"

Coriolis mass flowmeter

83A02-

50096714

SPK: DDA



Promass 83A02, DN2 1/12"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
G Stainl. steel, high-pressure
K Stainl. steel, high pressure, mat. certificate (wetted parts)

Process Connection:
SVW Cajon 4-VCO-4
PPD Cajon 4-VCO-4, 0.4um/240grit
STA Tri-Clamp 1/2", 0.8um/150grit 3A
SPD Tri-Clamp 1/2", 0.4um/240grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC

K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement

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T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA HART SIL + frequency
B 4-20mA HART SIL + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1xout, 1x in), modules exchangeable
4 4-20mA HART + freq.+relay+20mA in M= modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In, modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1xout, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83A01, DN1 1/24"

Coriolis mass flowmeter

83A01-

50096713

SPK: DDA



Promass 83A01, DN1 1/24"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)

Process Connection:
SVW Cajon 4-VCO-4
PPD Cajon 4-VCO-4, 0.4um/240grit
STA Tri-Clamp 1/2", 0.8um/150grit 3A
SPD Tri-Clamp 1/2", 0.4um/240grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language

DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:

A 4-20mA HART SIL + frequency
B 4-20mA HART SIL + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1xout, 1x in), modules exchangeable
4 4-20mA HART + freq.+relay+20mA in M= modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In, modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1xout, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80F1H, DN100 4"

Coriolis mass flowmeter

80F1H-

50096706

SPK: DDA



Promass 80F1H, DN100 4"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D1S	PN16, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D5S	PN16 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
D1C	PN16, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D5C	PN16 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5

ACC Cl.600, Alloy C-22, flange ANSI B16.5
NDC 10K, Alloy C-22, flange JIS B2220
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
P 0.1%, 0.0005g/cc
Q 0.1%, 0.0005g/cc+Spec.Density

Approval:
1 ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2 ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.

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N Compact IP67 NEMA4X, stainless, Ex, HE, -40oC/oF T-amb., HE = harsh environment

R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80F80, DN80 3"

Coriolis mass flowmeter

80F80-

50096705

SPK: DDA



Promass 80F80, DN80 3"

Measuring Tube Material:

1	Alloy C-22 + stainl. steel, HT, mat. certificate (containment + wetted parts) HT = high temperature
2	Alloy C-22 + stainl. steel, HT, PED Cat.III, mat. certificate (containment + wetted parts), HT = high temperature
3	Alloy C-22, high temp., mat. certificate (containment + wetted parts)
4	Alloy C-22, high temp., PED Cat.III mat. certificate (containment + wetted parts)
9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A ,316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange

D8C PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC Cl.150, Alloy C-22, flange ANSI B16.5
ABC Cl.300, Alloy C-22, flange ANSI B16.5
ACC Cl.600, Alloy C-22, flange ANSI B16.5
NDC 10K, Alloy C-22, flange JIS B2220
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
P 0.1%, 0.0005g/cc
Q 0.1%, 0.0005g/cc+Spec.Density

Approval:
1 ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2 ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable

K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex, HE, -40oC/oF T-amb., HE = harsh environment

R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80F50, DN50 2"

Coriolis mass flowmeter

80F50-

50096704

SPK: DDA



Promass 80F50, DN50 2"

Measuring Tube Material:

1	Alloy C-22 + stainl. steel, HT, mat. certificate (containment + wetted parts) HT = high temperature
2	Alloy C-22 + stainl. steel, HT, PED Cat.III, mat. certificate (containment + wetted parts), HT = high temperature
3	Alloy C-22, high temp., mat. certificate (containment + wetted parts)
4	Alloy C-22, high temp., PED Cat.III mat. certificate (containment + wetted parts)
9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A ,316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L

FJD ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC Cl.150, Alloy C-22, flange ANSI B16.5
ABC Cl.300, Alloy C-22, flange ANSI B16.5
ACC Cl.600, Alloy C-22, flange ANSI B16.5
NDC 10K, Alloy C-22, flange JIS B2220
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
P 0.1%, 0.0005g/cc
Q 0.1%, 0.0005g/cc+Spec.Density

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex, HE, -40oC/oF T-amb., HE = harsh environment

R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80F40, DN40 1 1/2"

Coriolis mass flowmeter

80F40-

50096703

SPK: DDA



Promass 80F40, DN40 1 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A ,316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange

D4C PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC Cl.150, Alloy C-22, flange ANSI B16.5
ABC Cl.300, Alloy C-22, flange ANSI B16.5
ACC Cl.600, Alloy C-22, flange ANSI B16.5
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)

F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
P 0.1%, 0.0005g/cc
Q 0.1%, 0.0005g/cc+Spec.Density

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex, HE, -40oC/oF T-amb., HE = harsh environment

R Compact stainless + Polycarbonate window, IP67 NEMA4X

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80F25, DN25 1"

Coriolis mass flowmeter

80F25-

50096702

SPK: DDA



Promass 80F25, DN25 1"

Measuring Tube Material:

1	Alloy C-22 + stainl. steel, HT, mat. certificate (containment + wetted parts) HT = high temperature
3	Alloy C-22, high temp., mat. certificate (containment + wetted parts)
9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
U	Stainl. steel, AD2000, mat. certificate, type test (containment) + pressure test (tube)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A ,316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5

ABC Cl.300, Alloy C-22, flange ANSI B16.5
ACC Cl.600, Alloy C-22, flange ANSI B16.5
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)

F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
P 0.1%, 0.0005g/cc
Q 0.1%, 0.0005g/cc+Spec.Density

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex, HE, -40oC/oF T-amb., HE = harsh environment

R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable

4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80F15, DN15 1/2"

Coriolis mass flowmeter

80F15-

50096701

SPK: DDA



Promass 80F15, DN15 1/2"

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
U	Stainl. steel, AD2000, mat. certificate, type test (containment) + pressure test (tube)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
CWS	12-VCO-4 (3/4"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A ,316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUE	Tri-Clamp 1/2", 0.8um 3A EHEDG, 1.4404/ 316L
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404
FUF	Tri-Clamp 1/2", 0.4um 3A EHEDG, 1.4404/ 316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
P 0.1%, 0.0005g/cc
Q 0.1%, 0.0005g/cc+Spec.Density

Approval:

3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex, HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

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9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80F08, DN8 3/8"

Coriolis mass flowmeter

80F08-

50096700

SPK: DDA



Promass 80F08, DN8 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)

E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
U	Stainl. steel, AD2000, mat. certificate, type test (containment) + pressure test (tube)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
CVS	8-VCO-4 (1/2"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A ,316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUE	Tri-Clamp 1/2", 0.8um 3A EHEDG, 1.4404/ 316L
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404
FUF	Tri-Clamp 1/2", 0.4um 3A EHEDG, 1.4404/ 316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)

C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)

F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
P 0.1%, 0.0005g/cc
Q 0.1%, 0.0005g/cc+Spec.Density

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex, HE, -40oC/oF T-amb., HE = harsh environment

R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2

F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83I08, DN8 3/8"

Coriolis mass flowmeter

83I08-

50096716

SPK: DDA



Promass 83I08, DN8 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5
ACW Cl.600, flange ANSI B16.5
NEW 20K, flange JIS B2220
NGW 40K, flange JIS B2220

NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A
FPD	Tri-Clamp 3/4", 0.4um/240grit 3A
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A
FPA	Tri-Clamp 3/4", 0.8um/150grit 3A
EBA	Eccen. Tri-Clamp 1/2", 0.8um/150grit 3A
EBD	Eccen. Tri-Clamp 1/2", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FGA	DIN11851 Rd28x1/8", 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FKA	DIN11864-2A, 0.8um/150grit 3A
FKD	DIN11864-2A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J	0.1%, 0.0005g/cc, Viscosity
R	0.1% 5-pt, 0.0005g/cc, Viscosity
K	0.1%, 0.0005g/cc+Spec.Density, Viscosity
L	0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9	Special version, TSP-no. to be spec.

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable
R	Compact stainless + Polycarbonate window, IP67 NEMA4X
1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable

4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

J	PROFIBUS DP
K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7	Modbus RS485 + 2x relay + stat.In modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 84F08, DN8 3/8"

Coriolis mass flowmeter for custody transfer application

84F08-

50108330

SPK: DDA



Promass 84F08, DN8 3/8"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
U	Stainl. steel, AD2000, mat. certificate type test (containment) + pressure test (tube)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

CVS	8-VCO-4 (1/2"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L/ 1.4404
FUE	Tri-Clamp 1/2", 0.8um 3A EHEDG, 1.4404/ 316L
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L/ 1.4404
FUF	Tri-Clamp 1/2", 0.4um 3A EHEDG, 1.4404/ 316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L/1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L/ 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L/ 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404/316L
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L/ 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L/ 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 1.4404/316L
FSA	SMS1145, 0.8um/150grit 3A, 1.4404/316L
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube) +
U	Verified cleaned (wetted parts)
W	Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L	MID Type Examination MI-002

M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

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Custody Transfer Approval:

9	Special version, TSP-no. to be spec.
A	PTB (Germany)
C	METAS (Switzerland)
E	BEV (Austria)
G	PTB Gas 7.251 (Germany)
K	MC (Canada)
L	MID Type Examination Cert. Gas MI-002 (Europe)
M	MID Evaluation Cert. Liquid MI-005 (Europe)
U	NTEP (USA)
X	Sensor only

Output; Input:

1	Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2	4-20mA HART + freq.+relay+20mA out modules exchangeable
7	Modbus RS485 + 2x relay + stat.In modules exchangeable
D	4-20mA HART + freq.+ relay+stat.In modules exchaneable
N	Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q	Modbus RS485
S	4-20mA HART active + freq., Ex-i, freq. = passive
T	4-20mA HART passive + freq., Ex-i, freq. = passive
M	Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83I15, DN15 1/2"

Coriolis mass flowmeter

83I15-
50096717

SPK: DDA



Promass 83I15, DN15 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Titanium
C	Titanium, mat. certificate (wetted parts)

Process Connection:

D2W	PN40, EN1092-1-B1 (DIN2501) flange
D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A
FPD	Tri-Clamp 3/4", 0.4um/240grit 3A
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A
FPA	Tri-Clamp 3/4", 0.8um/150grit 3A
EPA	Eccen. Tri-Clamp 3/4", 0.8um/150grit 3A
EPD	Eccen. Tri-Clamp 3/4", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FGA	DIN11851 Rd28x1/8", 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A

FLD DIN11864-1A, 0.4um/240grit 3A
FKA DIN11864-2A, 0.8um/150grit 3A
FKD DIN11864-2A, 0.4um/240grit 3A
FJA ISO2853, 0.8um/150grit 3A
FJD ISO2853, 0.4um/240grit 3A
FSA SMS1145, 0.8um/150grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J 0.1%, 0.0005g/cc, Viscosity
R 0.1% 5-pt, 0.0005g/cc, Viscosity
K 0.1%, 0.0005g/cc+Spec.Density, Viscosity
L 0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9 Special version, TSP-no. to be spec.

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2

F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable

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D	4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 84F25, DN25 1"

Coriolis mass flowmeter for custody transfer application

84F25-

50108332

SPK: DDA



Promass 84F25, DN25 1"

Measuring Tube Material:

1	Alloy C-22 + stainl. steel, HT, mat. certificate (containment + wetted parts) HT = high temperature
3	Alloy C-22, high temp., mat. certificate (containment + wetted parts)
9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
U	Stainl. steel, AD2000, mat. certificate type test (containment) + pressure test (tube)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L/1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L/ 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L

FLD DIN11864-1A, 0.4um/240grit 3A, 316L/ 1.4404
FLF DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW DIN11864-2A, 316L/1.4404/316L
FKA DIN11864-2A, 0.8um/150grit 3A, 316L/ 1.4404
FKE DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD DIN11864-2A, 0.4um/240grit 3A, 316L/ 1.4404
FKF DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW SMS1145, 1.4404/316L
FSA SMS1145, 0.8um/150grit 3A, 1.4404/316L
FSE SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC Cl.150, Alloy C-22, flange ANSI B16.5
ABC Cl.300, Alloy C-22, flange ANSI B16.5
ACC Cl.600, Alloy C-22, flange ANSI B16.5
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate

5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube) +
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L MID Type Examination MI-002
M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
G PTB Gas 7.251 (Germany)
K MC (Canada)
L MID Type Examination Cert. Gas MI-002 (Europe)
M MID Evaluation Cert. Liquid MI-005 (Europe)
U NTEP (USA)
X Sensor only

Output; Input:
1 Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable

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N	Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q	Modbus RS485
S	4-20mA HART active + freq., Ex-i, freq. = passive
T	4-20mA HART passive + freq., Ex-i, freq. = passive
M	Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 84F40, DN40 1 1/2"

Coriolis mass flowmeter for custody transfer application

84F40-

50108333

SPK: DDA



Promass 84F40, DN40 1 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L/1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L/ 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L/ 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404/316L
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L/ 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L

FKD DIN11864-2A, 0.4um/240grit 3A, 316L/ 1.4404
FKF DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW SMS1145, 1.4404/316L
FSA SMS1145, 0.8um/150grit 3A, 1.4404/316L
FSE SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC Cl.150, Alloy C-22, flange ANSI B16.5
ABC Cl.300, Alloy C-22, flange ANSI B16.5
ACC Cl.600, Alloy C-22, flange ANSI B16.5
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)

F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube) +
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L MID Type Examination MI-002
M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment

6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
G PTB Gas 7.251 (Germany)
K MC (Canada)
L MID Type Examination Cert. Gas MI-002 (Europe)
M MID Evaluation Cert. Liquid MI-005 (Europe)
U NTEP (USA)
X Sensor only

Output; Input:
1 Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA + 2x pulse/freq. (phase-shifted)

X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 84F50, DN50 2"

Coriolis mass flowmeter for custody transfer application

84F50-

50108334

SPK: DDA



Promass 84F50, DN50 2"

Measuring Tube Material:
1 Alloy C-22 + stainl. steel, HT, mat. certificate (containment + wetted parts) HT = high temperature
2 Alloy C-22 + stainl. steel, HT, PED Cat.III, mat. certificate (containment + wetted parts), HT = high temperature
3 Alloy C-22, high temp., mat. certificate (containment + wetted parts)
4 Alloy C-22, high temp., PED Cat.III mat. certificate (containment + wetted parts)
9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
E Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate
S Alloy C-22, PED Cat.III
T Alloy C-22, PED Cat.III, mat. certificate
V Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NDS 10K, SUS316L, flange JIS B2220
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L/1.4404
FME DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L/ 1.4404
FLE DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD DIN11864-1A, 0.4um/240grit 3A, 316L/ 1.4404
FLF DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L

FKW	DIN11864-2A, 316L/1.4404/316L
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L/ 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L/ 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 1.4404/316L
FSA	SMS1145, 0.8um/150grit 3A, 1.4404/316L
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NDC	10K, Alloy C-22, flange JIS B2220
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube) +
U	Verified cleaned (wetted parts)
W	Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L	MID Type Examination MI-002
M	PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N	PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

3	ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5	ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

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CH - 4153 Reinach

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL
B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL
C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN
G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:

9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
G PTB Gas 7.251 (Germany)
K MC (Canada)
L MID Type Examination Cert. Gas MI-002 (Europe)
M MID Evaluation Cert. Liquid MI-005 (Europe)
U NTEP (USA)
X Sensor only

Output; Input:

1 Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable

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D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 84F80, DN80 3"

Coriolis mass flowmeter for custody transfer application

84F80-

50108335

SPK: DDA



Promass 84F80, DN80 3"

Measuring Tube Material:
1 Alloy C-22 + stainl. steel, HT, mat. certificate (containment + wetted parts) HT = high temperature

2 Alloy C-22 + stainl. steel, HT, PED Cat.III, mat. certificate (containment + wetted parts), HT = high temperature

3 Alloy C-22, high temp., mat. certificate (containment + wetted parts)
4 Alloy C-22, high temp., PED Cat.III mat. certificate (containment + wetted parts)
9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
E Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate
S Alloy C-22, PED Cat.III
T Alloy C-22, PED Cat.III, mat. certificate
V Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NDS 10K, SUS316L, flange JIS B2220
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L/1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L/ 1.4404

FLD	DIN11864-1A, 0.4um/240grit 3A, 316L/ 1.4404
FKW	DIN11864-2A, 316L/1.4404/316L
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L/ 1.4404
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L/ 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FSW	SMS1145, 1.4404/316L
FSA	SMS1145, 0.8um/150grit 3A, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NDC	10K, Alloy C-22, flange JIS B2220
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube) +
U	Verified cleaned (wetted parts)
W	Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L	MID Type Examination MI-002
M	PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N	PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

1	ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2	ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4	ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6	ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
M	NEPSI Ex dia IIC.
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q	NEPSI Ex deia IIC.

R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
G PTB Gas 7.251 (Germany)
K MC (Canada)
L MID Type Examination Cert. Gas MI-002 (Europe)
M MID Evaluation Cert. Liquid MI-005 (Europe)
U NTEP (USA)
X Sensor only

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Output; Input:

1	Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2	4-20mA HART + freq.+relay+20mA out modules exchangeable
7	Modbus RS485 + 2x relay + stat.In modules exchangeable
D	4-20mA HART + freq.+ relay+stat.In modules exchaneable
N	Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q	Modbus RS485
S	4-20mA HART active + freq., Ex-i, freq. = passive
T	4-20mA HART passive + freq., Ex-i, freq. = passive
M	Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 84F1H, DN100 4"

Coriolis mass flowmeter for custody transfer application

84F1H-

50108336

SPK: DDA



Promass 84F1H, DN100 4"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D1S	PN16, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D5S	PN16 groove, 316L/1.4404, EN1092-1-D (DIN212N) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L/1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L/ 1.4404

FKW	DIN11864-2A, 316L/1.4404/316L
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L/ 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 1.4404/316L
FSA	SMS1145, 0.8um/150grit 3A, 1.4404/316L
D1C	PN16, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D5C	PN16 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NDC	10K, Alloy C-22, flange JIS B2220
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube) +
U	Verified cleaned (wetted parts)
W	Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L	MID Type Examination MI-002
M	PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N	PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

1	ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2	ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4	ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6	ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
M	NEPSI Ex dia IIC.
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q	NEPSI Ex deia IIC.
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
K MC (Canada)
M MID Evaluation Cert. Liquid MI-005 (Europe)
U NTEP (USA)
X Sensor only

Output; Input:
1 Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable

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D	4-20mA HART + freq.+ relay+stat.In modules exchaneable
N	Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q	Modbus RS485
S	4-20mA HART active + freq., Ex-i, freq. = passive
T	4-20mA HART passive + freq., Ex-i, freq. = passive
M	Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 84F1F, DN150 6"

Coriolis mass flowmeter for custody transfer application

84F1F-

50108337

SPK: DDA



Promass 84F1F, DN150 6"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D1S	PN16, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D5S	PN16 groove, 316L/1.4404, EN1092-1-D (DIN212N) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
D1C	PN16, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D5C	PN16 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5

ACC Cl.600, Alloy C-22, flange ANSI B16.5
NDC 10K, Alloy C-22, flange JIS B2220
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube) +

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L MID Type Examination MI-002
M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:
1 ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2 ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable

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L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
K MC (Canada)
M MID Evaluation Cert. Liquid MI-005 (Europe)
U NTEP (USA)
X Sensor only

Output; Input:
1 Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 84F2F, DN250 10"

Coriolis mass flowmeter for custody transfer application

84F2F-

50108338

SPK: DDA



Promass 84F2F, DN250 10"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
C	Stainl. steel, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate

Process Connection:

D1S	PN16, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D5S	PN16 groove, 316L/1.4404, EN1092-1-D (DIN212N) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube) +

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L	MID Type Examination MI-002
M	PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N	PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

1	ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2	ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4	ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6	ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T	NEPSI Ex deia IIB
W	TIIS Ex dia IIB

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable

4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
M MID Evaluation Cert. Liquid MI-005 (Europe)
X Sensor only

Output; Input:
1 Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X Sensor only
9 Special version, TSP-no. to be spec.

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CH - 4153 Reinach

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 84A02, DN2 1/12"

Coriolis mass flowmeter for custody transfer application

84A02-

50108346

SPK: DDA



Promass 84A02, DN2 1/12"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
G Stainl. steel, high-pressure
K Stainl. steel, high pressure, mat. certificate (wetted parts)

Process Connection:

SVW Cajon 4-VCO-4
PPD Cajon 4-VCO-4, 0.4um/240grit
STA Tri-Clamp 1/2", 0.8um/150grit 3A
SPD Tri-Clamp 1/2", 0.4um/240grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube) +

Calibration:

9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L MID Type Examination MI-002

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
G PTB Gas 7.251 (Germany)
L MID Type Examination Cert. Gas MI-002 (Europe)
M MID Evaluation Cert. Liquid MI-005 (Europe)
X Sensor only

Output; Input:
1 Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.

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Z2 Bus address, see additional spec.

Promass 84A04, DN4 1/8"

Coriolis mass flowmeter for custody transfer application

84A04-

50108347

SPK: DDA



Promass 84A04, DN4 1/8"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
G Stainl. steel, high-pressure
K Stainl. steel, high pressure, mat. certificate (wetted parts)

Process Connection:

SVW Cajon 4-VCO-4
PPD Cajon 4-VCO-4, 0.4um/240grit
STA Tri-Clamp 1/2", 0.8um/150grit 3A
SPD Tri-Clamp 1/2", 0.4um/240grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube) +

Calibration:

9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
L MID Type Examination MI-002

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.

3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
9 Special version, TSP-no. to be spec.
A PTB (Germany)
C METAS (Switzerland)
E BEV (Austria)
G PTB Gas 7.251 (Germany)
L MID Type Examination Cert. Gas MI-002 (Europe)
M MID Evaluation Cert. Liquid MI-005 (Europe)
X Sensor only

Output; Input:
1 Relay + 20mA + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA + 2x pulse/freq. (phase-shifted)
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80F2F, DN250 10"

Coriolis mass flowmeter

80F2F-
50108590

SPK: DDA



Promass 80F2F, DN250 10"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
C	Stainl. steel, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate

Process Connection:

D1S	PN16, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D5S	PN16 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
P	0.1%, 0.0005g/cc
Q	0.1%, 0.0005g/cc+Spec.Density

Approval:

1	ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2	ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4	ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6	ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone

G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex, HE, -40oC/oF T-amb., HE = harsh environment

R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version

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Kägenstrasse 2
CH - 4153 Reinach

X Sensor only

Output; Input:

A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83F1H, DN100 4"

Coriolis mass flowmeter

83F1H-

50096730

SPK: DDA



Promass 83F1H, DN100 4"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
E Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate
S Alloy C-22, PED Cat.III
T Alloy C-22, PED Cat.III, mat. certificate
V Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D1S PN16, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D5S PN16 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NDS 10K, SUS316L, flange JIS B2220
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW DIN11864-2A, 316L/1.4404
FKA DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404

FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
D1C	PN16, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D5C	PN16 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NDC	10K, Alloy C-22, flange JIS B2220
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube)
S	marine certificate
T	marine certificate + pressure test tube) + type test (containment)
U	Verified cleaned (wetted parts)
W	Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
M	PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N	PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

1	ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2	ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4	ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6	ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
M	NEPSI Ex dia IIC.
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q	NEPSI Ex deia IIC.
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T	NEPSI Ex deia IIB

W TIIS Ex dia IIB

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching

K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80I50, DN50 2"

Coriolis mass flowmeter

80I50-

50096699

SPK: DDA



Promass 80I50, DN50 2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)
P Titanium, PED Cat.III
R Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange

D3W	PN63, EN1092-1-B2 (DIN2501) flange
D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NDW	10K, flange JIS B2220
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
ESA	Eccen. Tri-Clamp 2", 0.8um/150grit 3A
ESD	Eccen. Tri-Clamp 2", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FKA	DIN11864-2A, 0.8um/150grit 3A
FKD	DIN11864-2A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
M	NEPSI Ex dia IIC.
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q	NEPSI Ex deia IIC.
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T	NEPSI Ex deia IIB
W	TIIS Ex dia IIB

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable
R	Compact stainless + Polycarbonate window, IP67 NEMA4X

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80H40, DN40 1 1/2"

Coriolis mass flowmeter

80H40-

50101149

SPK: DDA



Promass 80H40, DN40 1 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
B	Zirconium 702
D	Zirconium 702, mat. certificate (wetted parts)
F	Tantalum
H	Tantalum, mat. certificate (wetted parts)
J	Tantalum, PED Cat.III
L	Tantalum, PED Cat.III, mat certificate (wetted parts)
U	Zirconium 702, PED Cat.III
W	Zirconium 702, PED Cat.III, mat. certificate (wetted parts)

Process Connection:

D2Z	PN40, EN1092-1-B1 (DIN2501) flange
AAZ	Cl.150, flange ANSI B16.5
ABZ	Cl.300, flange ANSI B16.5
NEZ	20K, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5	Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83F80, DN80 3"

Coriolis mass flowmeter

83F80-

50096729

SPK: DDA



Promass 83F80, DN80 3"

Measuring Tube Material:

1	Alloy C-22 + stainl. steel, HT, mat. certificate (containment + wetted parts) HT = high temperature
2	Alloy C-22 + stainl. steel, HT, PED Cat.III, mat. certificate (containment + wetted parts), HT = high temperature
3	Alloy C-22, high temp., mat. certificate (containment + wetted parts)
4	Alloy C-22, high temp., PED Cat.III mat. certificate (containment + wetted parts)
9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NDC	10K, Alloy C-22, flange JIS B2220
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

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Additional Test, certificate:

5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

1 ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2 ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable

4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i

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V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83F50, DN50 2"

Coriolis mass flowmeter

83F50-

50096728

SPK: DDA



Promass 83F50, DN50 2"

Measuring Tube Material:
1 Alloy C-22 + stainl. steel, HT, mat. certificate (containment + wetted parts) HT = high temperature
2 Alloy C-22 + stainl. steel, HT, PED Cat.III, mat. certificate (containment + wetted parts), HT = high temperature
3 Alloy C-22, high temp., mat. certificate (containment + wetted parts)
4 Alloy C-22, high temp., PED Cat.III mat. certificate (containment + wetted parts)
9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
E Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate
S Alloy C-22, PED Cat.III
T Alloy C-22, PED Cat.III, mat. certificate
V Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5

NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NDC	10K, Alloy C-22, flange JIS B2220
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube)
S	marine certificate
T	marine certificate + pressure test tube) + type test (containment)
U	Verified cleaned (wetted parts)
W	Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density

G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

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Kägenstrasse 2
CH - 4153 Reinach

Promass 83F40, DN40 1 1/2"

Coriolis mass flowmeter

83F40-

50096727

SPK: DDA



Promass 83F40, DN40 1 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange

D8C PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC Cl.150, Alloy C-22, flange ANSI B16.5
ABC Cl.300, Alloy C-22, flange ANSI B16.5
ACC Cl.600, Alloy C-22, flange ANSI B16.5
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL
B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL
C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN
G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive

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U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83F25, DN25 1"

Coriolis mass flowmeter

83F25-

50096726

SPK: DDA



Promass 83F25, DN25 1"

Measuring Tube Material:
1 Alloy C-22 + stainl. steel, HT, mat. certificate (containment + wetted parts) HT = high temperature
3 Alloy C-22, high temp., mat. certificate (containment + wetted parts)
9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
E Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
U Stainl. steel, AD2000, mat. certificate, type test (containment) + pressure test (tube)

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L

FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube)
S	marine certificate
T	marine certificate + pressure test tube) + type test (containment)
U	Verified cleaned (wetted parts)
W	Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
M	PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N	PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

3	ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5	ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone

H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83F15, DN15 1/2"

Coriolis mass flowmeter

83F15-

50096725

SPK: DDA



Promass 83F15, DN15 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel

B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
E Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
U Stainl. steel, AD2000, mat. certificate, type test (containment) + pressure test (tube)

Process Connection:

D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
R2S PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
CWS 12-VCO-4 (3/4"), 316L/1.4404
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FUW Tri-Clamp 1/2", 316L/1.4404
FUA Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUE Tri-Clamp 1/2", 0.8um 3A EHEDG, 1.4404/ 316L
FUD Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404
FUF Tri-Clamp 1/2", 0.4um 3A EHEDG, 1.4404/ 316L
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L
FLD DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW DIN11864-2A, 316L/1.4404
FKA DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC Cl.150, Alloy C-22, flange ANSI B16.5
ABC Cl.300, Alloy C-22, flange ANSI B16.5
ACC Cl.600, Alloy C-22, flange ANSI B16.5
NEC 20K, Alloy C-22, flange JIS B2220
NGC 40K, Alloy C-22, flange JIS B2220
NHC 63K, Alloy C-22, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)

9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)

F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test tube) + type test (containment)
U Verified cleaned (wetted parts)
W Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)

B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable

0	4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83F08, DN8 3/8"

Coriolis mass flowmeter

83F08-

50096724

SPK: DDA



Promass 83F08, DN8 3/8"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
U	Stainl. steel, AD2000, mat. certificate, type test (containment) + pressure test (tube)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
CVS	8-VCO-4 (1/2"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTE	Tri-Clamp, 0.8um 3A EHEDG, 1.4404/316L
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FTF	Tri-Clamp, 0.4um 3A EHEDG, 1.4404/316L
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUE	Tri-Clamp 1/2", 0.8um 3A EHEDG, 1.4404/ 316L
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404
FUF	Tri-Clamp 1/2", 0.4um 3A EHEDG, 1.4404/ 316L
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FME	DIN11851, 0.8um 3A EHEDG, 1.4404/316L
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FLE	DIN11864-1A, 0.8um 3A EHEDG, 1.4404/316L

FLD	DIN11864-1A, 0.4um/240grit 3A, 316L 1.4404
FLF	DIN11864-1A, 0.4um 3A EHEDG, 1.4404/316L
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FKE	DIN11864-2A, 0.8um 3A EHEDG, 1.4404/316L
FKD	DIN11864-2A, 0.4um/240grit 3A, 316L 1.4404
FKF	DIN11864-2A, 0.4um 3A EHEDG, 1.4404/316L
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FJE	ISO2853, 0.8um 3A EHEDG, 1.4404/316L
FJD	ISO2853, 0.4um/240grit 3A, 316L/1.4404
FJF	ISO2853, 0.4um 3A EHEDG, 1.4404/316L
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
FSE	SMS1145, 0.8um 3A EHEDG, 1.4404/316L
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
NHC	63K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube)
S	marine certificate
T	marine certificate + pressure test tube) + type test (containment)
U	Verified cleaned (wetted parts)
W	Verified cleaned (wetted parts) + pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
M	PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N	PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

3	ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
5	ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL
B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL
C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN
G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching

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L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83I50, DN50 2"

Coriolis mass flowmeter

83I50-

50096723

SPK: DDA



Promass 83I50, DN50 2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)
P Titanium, PED Cat.III
R Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange
D3W PN63, EN1092-1-B2 (DIN2501) flange

D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NDW	10K, flange JIS B2220
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
ESA	Eccen. Tri-Clamp 2", 0.8um/150grit 3A
ESD	Eccen. Tri-Clamp 2", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FKA	DIN11864-2A, 0.8um/150grit 3A
FKD	DIN11864-2A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J	0.1%, 0.0005g/cc, Viscosity
R	0.1% 5-pt, 0.0005g/cc, Viscosity
K	0.1%, 0.0005g/cc+Spec.Density, Viscosity
L	0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9	Special version, TSP-no. to be spec.

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
M	NEPSI Ex dia IIC.
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q	NEPSI Ex deia IIC.
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T	NEPSI Ex deia IIB
W	TIIS Ex dia IIB

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable

E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only

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9 Special version, TSP-no. to be spec.

Output; Input:

A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83I41, DN40 1 1/2" FB

Coriolis mass flowmeter

83I41-

50096722

SPK: DDA



Promass 83I41, DN40 1 1/2" FB

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)
P Titanium, PED Cat.III
R Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:

D2W PN40, EN1092-1-B1 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5
ACW Cl.600, flange ANSI B16.5
NEW 20K, flange JIS B2220
NGW 40K, flange JIS B2220

NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
ESA	Eccen. Tri-Clamp 2", 0.8um/150grit 3A
ESD	Eccen. Tri-Clamp 2", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J	0.1%, 0.0005g/cc, Viscosity
R	0.1% 5-pt, 0.0005g/cc, Viscosity
K	0.1%, 0.0005g/cc+Spec.Density, Viscosity
L	0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9	Special version, TSP-no. to be spec.

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
M	NEPSI Ex dia IIC.
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q	NEPSI Ex deia IIC.
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T	NEPSI Ex deia IIB
W	TIIS Ex dia IIB

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable
R	Compact stainless + Polycarbonate window, IP67 NEMA4X
1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5	Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment

6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:

A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus

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Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7	Modbus RS485 + 2x relay + stat.In modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83I40, DN40 1 1/2"

Coriolis mass flowmeter

83I40-

50096721

SPK: DDA



Promass 83I40, DN40 1 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Titanium
C	Titanium, mat. certificate (wetted parts)
P	Titanium, PED Cat.III
R	Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:

D2W	PN40, EN1092-1-B1 (DIN2501) flange
D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
EUA	Eccen. Tri-Clamp 1 1/2",0.8um/150grit 3A
EUD	Eccen. Tri-Clamp 1 1/2",0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FKA	DIN11864-2A, 0.8um/150grit 3A

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FKD DIN11864-2A, 0.4um/240grit 3A
FJA ISO2853, 0.8um/150grit 3A
FJD ISO2853, 0.4um/240grit 3A
FSA SMS1145, 0.8um/150grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J 0.1%, 0.0005g/cc, Viscosity
R 0.1% 5-pt, 0.0005g/cc, Viscosity
K 0.1%, 0.0005g/cc+Spec.Density, Viscosity
L 0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9 Special version, TSP-no. to be spec.

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20

L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable

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L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80H08, DN8 3/8"

Coriolis mass flowmeter

80H08-

50101146

SPK: DDA



Promass 80H08, DN8 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
B Zirconium 702
D Zirconium 702, mat. certificate (wetted parts)
F Tantalum
H Tantalum, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NEZ 20K, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC

K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL
B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL
C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:

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Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83A04, DN4 1/ 8"

Coriolis mass flowmeter

83A04-
50096715

SPK: DDA



Promass 83A04, DN4 1/ 8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
G Stainl. steel, high-pressure
K Stainl. steel, high pressure, mat. certificate (wetted parts)

Process Connection:
SVW Cajon 4-VCO-4
PPD Cajon 4-VCO-4, 0.4um/240grit
STA Tri-Clamp 1/2", 0.8um/150grit 3A
SPD Tri-Clamp 1/2", 0.4um/240grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.

3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA HART SIL + frequency
B 4-20mA HART SIL + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i

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H	PROFIBUS PA
J	PROFIBUS DP
K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7	Modbus RS485 + 2x relay + stat.In, modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1xout, 1x in), modules exchangeable
4	4-20mA HART + freq.+relay+20mA in M= modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In, modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1xout, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 80H25, DN25 1"

Coriolis mass flowmeter

80H25-

50101148

SPK: DDA



Promass 80H25, DN25 1"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
B	Zirconium 702
D	Zirconium 702, mat. certificate (wetted parts)
F	Tantalum
H	Tantalum, mat. certificate (wetted parts)

Process Connection:

D2Z	PN40, EN1092-1-B1 (DIN2501) flange
AAZ	Cl.150, flange ANSI B16.5
ABZ	Cl.300, flange ANSI B16.5
NEZ	20K, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

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Kägenstrasse 2
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9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83I80, DN80 3"

Coriolis mass flowmeter

83I80-

50109441

SPK: DDA



Promass 83I80, DN80 3"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)
P Titanium, PED Cat.III
R Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange
D3W PN63, EN1092-1-B2 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5
ACW Cl.600, flange ANSI B16.5
NDW 10K, flange JIS B2220
NEW 20K, flange JIS B2220
NGW 40K, flange JIS B2220
NHW 63K, flange JIS B2220
FTA Tri-Clamp, 0.8um/150grit 3A
FTD Tri-Clamp, 0.4um/240grit 3A
ERA Eccen. Tri-Clamp 2 1/2",0.8um/150grit 3A
ERD Eccen. Tri-Clamp 2 1/2",0.4um/240grit 3A
ECA Eccen. Tri-Clamp 3",0.8um/150grit 3A
ECD Eccen. Tri-Clamp 3",0.4um/240grit 3A
FMA DIN11851, 0.8um/150grit 3A
FLA DIN11864-1A, 0.8um/150grit 3A
FLD DIN11864-1A, 0.4um/240grit 3A
FKA DIN11864-2A, 0.8um/150grit 3A
FKD DIN11864-2A, 0.4um/240grit 3A
FJA ISO2853, 0.8um/150grit 3A
FJD ISO2853, 0.4um/240grit 3A
FSA SMS1145, 0.8um/150grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval

6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J 0.1%, 0.0005g/cc, Viscosity
R 0.1% 5-pt, 0.0005g/cc, Viscosity
K 0.1%, 0.0005g/cc+Spec.Density, Viscosity
L 0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9 Special version, TSP-no. to be spec.

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20

R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable

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0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80H50, DN50 2"

Coriolis mass flowmeter

80H50-
50101150

SPK: DDA



Promass 80H50, DN50 2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
B Zirconium 702
D Zirconium 702, mat. certificate (wetted parts)
U Zirconium 702, PED Cat.III
W Zirconium 702, PED Cat.III, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NDZ 10K, flange JIS B2220
NEZ 20K, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB

L NEPSI Ex dia IIB
M *NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

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>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83H08, DN8 3/8"

Coriolis mass flowmeter

83H08-

50101152

SPK: DDA



Promass 83H08, DN8 3/8"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
B Zirconium 702
D Zirconium 702, mat. certificate (wetted parts)
F Tantalum
H Tantalum, mat. certificate (wetted parts)

Process Connection:

D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NEZ 20K, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh

environment
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485

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R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83H15, DN15 1/2"

Coriolis mass flowmeter

83H15-
50101153

SPK: DDA



Promass 83H15, DN15 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
B Zirconium 702
D Zirconium 702, mat. certificate (wetted parts)
F Tantalum
H Tantalum, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NEZ 20K, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density

C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Adjustment; Software Feature

A	Default liquid; Basic version
B	Default gas; Basic version
C	Default liquid; Concentration measurement
E	Default liquid; Advanced diagnostics
D	Default gas; Advanced diagnostics
J	Default liquid; Batching
K	Default gas; Batching
L	Default liquid; Batching + Concentration measurement
N	Default liquid; Batching + Advanced diagnostics
R	Default liquid; Advanced diagnostics + concentration measurement
T	Default liquid; Batching + Diagnostics+ concentration measurement
X	Sensor only
9	Special version, TSP-no. to be spec.

Output; Input:

A	4-20mA SIL HART + frequency
B	4-20mA SIL HART + freq. + 2x relay
F	PROFIBUS PA, Ex-i
G	FOUNDATION Fieldbus, Ex-i
H	PROFIBUS PA
J	PROFIBUS DP
K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7	Modbus RS485 + 2x relay + stat.In, modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3	4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83H25, DN25 1"

Coriolis mass flowmeter

83H25-

50101154

SPK: DDA



Promass 83H25, DN25 1"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
B Zirconium 702
D Zirconium 702, mat. certificate (wetted parts)
F Tantalum
H Tantalum, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NEZ 20K, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20

L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable

5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83H40, DN40 1 1/2"

Coriolis mass flowmeter

83H40-

50101155

SPK: DDA



Promass 83H40, DN40 1 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
B Zirconium 702
D Zirconium 702, mat. certificate (wetted parts)
F Tantalum
H Tantalum, mat. certificate (wetted parts)
J Tantalum, PED Cat.III
L Tantalum, PED Cat.III, mat certificate (wetted parts)
U Zirconium 702, PED Cat.III
W Zirconium 702, PED Cat.III, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NEZ 20K, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Output; Input:

A	4-20mA SIL HART + frequency
B	4-20mA SIL HART + freq. + 2x relay
F	PROFIBUS PA, Ex-i
G	FOUNDATION Fieldbus, Ex-i
H	PROFIBUS PA
J	PROFIBUS DP
K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7	Modbus RS485 + 2x relay + stat.In, modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3	4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83H50, DN50 2"

Coriolis mass flowmeter

83H50-

50101156

SPK: DDA



Promass 83H50, DN50 2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
B	Zirconium 702
D	Zirconium 702, mat. certificate (wetted parts)
U	Zirconium 702, PED Cat.III
W	Zirconium 702, PED Cat.III, mat. certificate (wetted parts)

Process Connection:

D2Z	PN40, EN1092-1-B1 (DIN2501) flange
AAZ	Cl.150, flange ANSI B16.5
ABZ	Cl.300, flange ANSI B16.5
NDZ	10K, flange JIS B2220
NEZ	20K, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.

A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M *NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
J Default liquid; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80F1F, DN150 6"

Coriolis mass flowmeter

80F1F-

50101620

SPK: DDA



Promass 80F1F, DN150 6"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
E	Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F	Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate
S	Alloy C-22, PED Cat.III
T	Alloy C-22, PED Cat.III, mat. certificate
V	Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:

D1S	PN16, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D5S	PN16 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N)
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
D1C	PN16, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D5C	PN16 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NDC	10K, Alloy C-22, flange JIS B2220
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube)
S	marine certificate

T marine certificate + pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
P 0.1%, 0.0005g/cc
Q 0.1%, 0.0005g/cc+Spec.Density

Approval:

1 ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2 ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex, HE, -40oC/oF T-amb., HE = harsh environment

R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2

M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83F1F, DN150 6"

Coriolis mass flowmeter

83F1F-
50101621

SPK: DDA



Promass 83F1F, DN150 6"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)
E Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
F Alloy C-22, mat. certificate (CT+WP = containment + wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate
S Alloy C-22, PED Cat.III
T Alloy C-22, PED Cat.III, mat. certificate
V Stainl. steel, AD2000, PED Cat.III, mat. certificate

Process Connection:
D1S PN16, 316L/1.4404, EN1092-1-B1 (DIN2501) flange

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D5S	PN16 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
D1C	PN16, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D2C	PN40, Alloy C-22, EN1092-1-B1 (DIN2501) flange
D3C	PN63, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D4C	PN100, Alloy C-22, EN1092-1-B2 (DIN2501) flange
D5C	PN16 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D6C	PN40 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D7C	PN63 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
D8C	PN100 groove, Alloy C-22, EN1092-1-D (DIN2512N) flange
AAC	Cl.150, Alloy C-22, flange ANSI B16.5
ABC	Cl.300, Alloy C-22, flange ANSI B16.5
ACC	Cl.600, Alloy C-22, flange ANSI B16.5
NDC	10K, Alloy C-22, flange JIS B2220
NEC	20K, Alloy C-22, flange JIS B2220
NGC	40K, Alloy C-22, flange JIS B2220
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
F	Purge + pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube)
S	marine certificate
T	marine certificate + pressure test tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
M	PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N	PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:

1	ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2	ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4	ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6	ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1

R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83I26, DN25 1" FB

Coriolis mass flowmeter

83I26-

50096720

SPK: DDA



Promass 83I26, DN25 1" FB

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange

D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
EUA	Eccen. Tri-Clamp 1 1/2",0.8um/150grit 3A
EUD	Eccen. Tri-Clamp 1 1/2",0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J	0.1%, 0.0005g/cc, Viscosity
R	0.1% 5-pt, 0.0005g/cc, Viscosity
K	0.1%, 0.0005g/cc+Spec.Density, Viscosity
L	0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9	Special version, TSP-no. to be spec.

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable
R	Compact stainless + Polycarbonate window, IP67 NEMA4X
1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment

5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP

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K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7	Modbus RS485 + 2x relay + stat.In modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83I25, DN25 1"

Coriolis mass flowmeter

83I25-

50096719

SPK: DDA



Promass 83I25, DN25 1"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Titanium
C	Titanium, mat. certificate (wetted parts)

Process Connection:

D2W	PN40, EN1092-1-B1 (DIN2501) flange
D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
EAA	Eccen. Tri-Clamp 1", 0.8um/150grit 3A
EAD	Eccen. Tri-Clamp 1", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FKA	DIN11864-2A, 0.8um/150grit 3A
FKD	DIN11864-2A, 0.4um/240grit 3A

FSA SMS1145, 0.8um/150grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)

Calibration:
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J 0.1%, 0.0005g/cc, Viscosity
R 0.1% 5-pt, 0.0005g/cc, Viscosity
K 0.1%, 0.0005g/cc+Spec.Density, Viscosity
L 0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9 Special version, TSP-no. to be spec.

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20

R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable

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0	4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83I16, DN15 1/2" FB

Coriolis mass flowmeter

83I16-

50096718

SPK: DDA



Promass 83I16, DN15 1/2" FB

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Titanium
C	Titanium, mat. certificate (wetted parts)

Process Connection:

D2W	PN40, EN1092-1-B1 (DIN2501) flange
D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FPD	Tri-Clamp 3/4", 0.4um/240grit 3A
FPA	Tri-Clamp 3/4", 0.8um/150grit 3A
EAA	Eccen. Tri-Clamp 1", 0.8um/150grit 3A
EAD	Eccen. Tri-Clamp 1", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density

G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J 0.1%, 0.0005g/cc, Viscosity
R 0.1% 5-pt, 0.0005g/cc, Viscosity
K 0.1%, 0.0005g/cc+Spec.Density, Viscosity
L 0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9 Special version, TSP-no. to be spec.

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN

H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

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Promass 80H15, DN15 1/2"

Coriolis mass flowmeter

80H15-

50101147

SPK: DDA



Promass 80H15, DN15 1/2"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
B Zirconium 702
D Zirconium 702, mat. certificate (wetted parts)
F Tantalum
H Tantalum, mat. certificate (wetted parts)

Process Connection:

D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NEZ 20K, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium

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Kägenstrasse 2
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B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Cubemass 8CM06, DN6 1/4"

Ultra compact coriolis mass flowmeter
for various OEM applications.
Housing in stainless steel.
Same external dimensions for all
tube diameters.

8CM06-

71100986

SPK: DDA



Cubemass 8CM06, DN6 1/4"

Approval:
AA Non-hazardous area

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81 ATEX II 2G Ex d[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x

83 ATEX II 2G Ex demb[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex demb[ia] IIC; IECEx Z21 Ex tD A21 IP6x

C3 NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G
84 ATEX II 2G Ex d[ia] IIC + ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x; NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G

I/O Signal:
9 Special version, TSP-no. to be spec.
B 2x (phase-shifted) pulse/freq. + Stat.out. + Modbus RS485

Power supply:
9 Special version, TSP-no. to be spec.
B 10-30VDC, 20-28VAC

Display, operation:
9 Special version, TSP-no. to be spec.
A W/o display, via communication

Operation language:
0 Not used

Housing:
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, aluminium

Electrical connection:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2"
C Thread G 1/2"

Measuring tube material:
9 Special version, TSP-no. to be spec.
A Stainl. steel, 1.4539

Process connection:
9 Special version, to be specified
B Cajon 8-VCO-4 , stainl. steel

Secondary containment:
A 304
B 304 + rupture disk
C 304 + pressure monitoring
D 304 + pressure monitoring + rupture disk

Calibration:
9 Special version, to be specified
C 0.1%
D 0.1%, 5-Point
E 0.1%, 5-Point, traceable, ISO/IEC 17025

>Density calibration:
F9 Special version, TSP-no. to be spec.
FA 0.002 g/ccm

>>Service:
H9 Special version, TSP-no. to be spec.
HB Cleaned from oil+grease (wetted parts)

>>Test, certificate:
J9 Special version, TSP-no. to be spec.
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate

>>Additional approval:
L9 Special version, TSP-no. to be spec.

>>Accessory enclosed:
MA Universal mounting plate for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

NB 2 x adapter NPT 1/2" + O-Ring Viton
ND 2 x adapter NPT 1/2" + O-Ring EPDM
NF 2 x adapter NPT 1/2" + O-Ring Silicone

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NH 2 x adapter NPT 1/2" + O-Ring Kalrez
MH 2 x adapter + O-Ring Viton, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MI 2 x adapter + O-Ring Viton, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MJ 2 x adapter + O-Ring Viton, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MK 2 x adapter + O-Ring Viton, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
ML 2 x adapter + O-Ring EPDM, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MM 2 x adapter + O-Ring EPDM, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MN 2 x adapter + O-Ring EPDM, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MO 2 x adapter + O-Ring EPDM, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MP 2 x adapter + O-Ring Silicone, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MQ 2 x adapter + O-Ring Silicone, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MR 2 x adapter + O-Ring Silicone, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MS 2 x adapter + O-Ring Silicone, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MT 2 x adapter + O-Ring Kalrez, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MU 2 x adapter + O-Ring Kalrez, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MV 2 x adapter + O-Ring Kalrez, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MW 2 x adapter + O-Ring Kalrez, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
M9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83F2F, DN250 10"

Coriolis mass flowmeter

83F2F-

50108591

SPK: DDA



Promass 83F2F, DN250 10"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)
E Stainl. steel, mat. certificate (CT+WP = containment + wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate

Process Connection:
D1S PN16, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D5S PN16 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D7S PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NDS 10K, SUS316L, flange JIS B2220
NES 20K, SUS316L, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)

F Purge + pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)
S marine certificate
T marine certificate + pressure test tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
M PremiumCal 0.05%, 0.0005g/cc, traceable ISO/IEC17025
N PremiumCal 0.05%, 0.0005g/cc+Spec. Density, traceable ISO/IEC17025

Approval:
1 ATEX II 1/2GD+IECEx Z0/1,21 Ex dia IIC. Z= Zone
2 ATEX II 1/2GD+IECEx Z0/1,21 Ex deiaIIC. Z= Zone
4 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
6 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
G Remote, wall, extension neck + 10m/30ft Cable
H Remote, wall, extension neck + 20m/65ft Cable
J Remote, field, extension neck + 10m/30ft cable
K Remote, field, extension neck + 20m/65ft cable
L Compact IP67 NEMA4X, stainless, Ex
M Compact IP67 NEMA4X, stainless, Ex, -40 oC/oF T-amb.
N Compact IP67 NEMA4X, stainless, Ex,HE, -40oC/oF T-amb., HE = harsh environment
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada

K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable

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4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83P50, DN50 2"

Coriolis mass flowmeter

83P50-

71040526

SPK: DDA



Promass 83P50, DN50 2"

Measuring Tube Material:

6	1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7	1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished
8	1.4435/316L, 0.38um, PED Cat.III, mat. certificate (wetted parts), electro-polished
9	Special version, TSP-no. to be spec.
A	1.4435/316L, 0.76um
C	1.4435/316L, 0.76um, mat. certificate (wetted parts)
H	1.4435/316L, 0.76um, CRN approval
K	1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)
P	1.4435/316L, 0.76um, PED Cat.III
R	1.4435/316L, 0.76um, PED Cat.III, mat. certificate (wetted parts)

Process Connection:

D2Z	PN40, EN1092-1-B1 (DIN2501) flange
D3Z	PN63, EN1092-1-B2 (DIN2501) flange
AAZ	Cl.150, flange ASME B16.5
ABZ	Cl.300, flange ASME B16.5
NDZ	20K, flange JIS B2220
NGZ	40K, flange JIS B2220
FTM	Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
ETE	Eccen. Tri-Clamp 2", ASME BPE, 3A, EHEDG
FMD	DIN11851, 3A
FSD	SMS1145, 3A, EHEDG
FJG	ISO2853 Thread, 3A, EHEDG
FLH	DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG	DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA	DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FWB	Eccen. DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW	DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FDZ	Eccen. DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FEA	ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB	ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC	Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
BCD	BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD	BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BED	Eccen. BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BBA	BBS Thread, DIN11866 Line A
BBC	BBS Thread, DIN11866 Line B
BBD	BBS Clamp, DIN11866 Line A with notch
BBE	Eccen. BBS Clamp DIN11866 Line A with notch
BBF	BBS Clamp , DIN11866 Line B with notch
BBG	Eccen. BBS Clamp, DIN11866 Line B with notch

BBH BBS Flange small, DIN11866 Line A Flange with notch
BBK BBS Flange small, DIN11866 Line B Flange with notch
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
D Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate
F Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G CoC surface finish meas. + ASME BPE certificate
H CoC surface finish + Ferrite meas. + ASME BPE certificate
J Surface finish meas. + EN10204 3.1 certificate
K Surface finish + Ferrite meas. + EN10204 3.1 certificate
L Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
M Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate
P Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
R Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
S IQ/OQ documentation + CoC surface finish + Ferrite meas. + ASME BPE certificate
T IQ/OQ documentation + surface finish + Ferrite meas. + EN10204 3.1 certificate
U IQ/OQ documentation

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:

A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable

L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

CNGmass 8FF08, DN08 3/8"

Coriolis mass flowmeter for CNG fueling applications

8FF08-

71083991

SPK: DDA



CNGmass 8FF08, DN08 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A stainless steel
C stainless steel, mat. certificate (wetted parts)

Process Connection:
999 Special version, TSP-no. to be spec.
G15 G1/2" female thread

Additional Test, Certificate:
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.
A basic version
B pressure test (tube)

Calibration:
2 5-point, 100/50/20/5/100%
9 Special version, TSP-no. to be spec.
A 2-point, 25/100%
C 5-point, 20/35/50/75/100%
G 5-point, 20/35/50/75/100%, traceable ISO/IEC 17025

Approval:
8 ATEX II2GD+IECEx+XP CEC/NEC Cl.I-III Div.1
9 Special version, TSP-no. to be spec.
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z=Zone
C ATEX II 2GD+ IECEx Z1,21 Ex demb ia IIC Ex tD A21 Z=Zone
K NEPSI Ex d IIC
L NEPSI Ex de IIC
M CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1

Housing:
9 Special version, TSP-no. to be spec.
A compact IP67 NEMA4X, aluminium

Cable Entry:
9 Special version, TSP-no. to be spec.
A gland M20 (EEx d > thread M20)

B thread NPT 1/2
C thread G 1/2

Power Supply; Display:
1 10-30VDC, 20-28VAC, w/o display, remote configuration
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
0 w/o
9 Special version, TSP-no. to be spec.
A PTB (Germany)
B NMI (Netherland)
C METAS (Switzerland)
E BEV (Austria)
F LNE (France)
H PTB, NMI, METAS, BEV
N NTEP (USA)

Output; Input:
9 Special version, TSP-no. to be spec.
H Modbus (Short Interpreter) 2x (phase-shifted) puls/freq. + Stat.Out.
N Modbus 2x (phase-shifted) puls/freq. + Stat.Out.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

Promass 80I41, DN40 1 1/2" FB

Coriolis mass flowmeter

80I41-

50096698

SPK: DDA



Promass 80I41, DN40 1 1/2" FB

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)
P Titanium, PED Cat.III
R Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5
ACW Cl.600, flange ANSI B16.5
NEW 20K, flange JIS B2220
NGW 40K, flange JIS B2220
NHW 63K, flange JIS B2220
FTA Tri-Clamp, 0.8um/150grit 3A
FTD Tri-Clamp, 0.4um/240grit 3A
ESA Eccen. Tri-Clamp 2", 0.8um/150grit 3A
ESD Eccen. Tri-Clamp 2", 0.4um/240grit 3A
FMA DIN11851, 0.8um/150grit 3A
FLA DIN11864-1A, 0.8um/150grit 3A
FLD DIN11864-1A, 0.4um/240grit 3A
FJA ISO2853, 0.8um/150grit 3A
FJD ISO2853, 0.4um/240grit 3A
FSA SMS1145, 0.8um/150grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB
W TIIS Ex dia IIB

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:

A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80I40, DN40 1 1/2"

Coriolis mass flowmeter

80I40-

50096697

SPK: DDA



Promass 80I40, DN40 1 1/2"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)
P Titanium, PED Cat.III
R Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:

D2W PN40, EN1092-1-B1 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5
ACW Cl.600, flange ANSI B16.5
NEW 20K, flange JIS B2220
NGW 40K, flange JIS B2220
NHW 63K, flange JIS B2220
FTA Tri-Clamp, 0.8um/150grit 3A
FTD Tri-Clamp, 0.4um/240grit 3A

EUA Eccen. Tri-Clamp 1 1/2",0.8um/150grit 3A
EUD Eccen. Tri-Clamp 1 1/2",0.4um/240grit 3A
FMA DIN11851, 0.8um/150grit 3A
FLA DIN11864-1A, 0.8um/150grit 3A
FLD DIN11864-1A, 0.4um/240grit 3A
FKA DIN11864-2A, 0.8um/150grit 3A
FKD DIN11864-2A, 0.4um/240grit 3A
FJA ISO2853, 0.8um/150grit 3A
FJD ISO2853, 0.4um/240grit 3A
FSA SMS1145, 0.8um/150grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80I26, DN25 1" FB

Coriolis mass flowmeter

80I26-

50096696

SPK: DDA



Promass 80I26, DN25 1" FB

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5
ACW Cl.600, flange ANSI B16.5
NEW 20K, flange JIS B2220
NGW 40K, flange JIS B2220

NHW 63K, flange JIS B2220
FTA Tri-Clamp, 0.8um/150grit 3A
FTD Tri-Clamp, 0.4um/240grit 3A
EUA Eccen. Tri-Clamp 1 1/2",0.8um/150grit 3A
EUD Eccen. Tri-Clamp 1 1/2",0.4um/240grit 3A
FMA DIN11851, 0.8um/150grit 3A
FLA DIN11864-1A, 0.8um/150grit 3A
FLD DIN11864-1A, 0.4um/240grit 3A
FJA ISO2853, 0.8um/150grit 3A
FJD ISO2853, 0.4um/240grit 3A
FSA SMS1145, 0.8um/150grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2

C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

CNGmass DCI 8DF08, DN08 3/8"

Coriolis mass flowmeter for custody transfer application

8DF08-

71090381

SPK: DDA



CNGmass DCI 8DF08, DN08 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A stainless steel
C stainless steel, mat. certificate (wetted parts)

Process Connection:
999 Special version, TSP-no. to be spec.
G15 G1/2" female thread

Additional Test, Certificate:
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.
A basic version

B pressure test (tube)

Calibration:
9 Special version, TSP-no. to be spec.
A 2-point, 25/100%
C 5-point, 20/35/50/75/100%
G 5-point, 20/35/50/75/100%, traceable ISO/IEC 17025

Approval:
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
M CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
9 Special version, TSP-no. to be spec.

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A gland M20 (EEx d > thread M20)
B thread NPT 1/2
C thread G 1/2
X sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
0 w/o
9 Special version, TSP-no. to be spec.
A PTB (Germany)
B NMI (Netherland)
C METAS (Switzerland)
H PTB, NMI, METAS, BEV
N NTEP (USA)
X Sensor only

Output; Input:
1 Relay + 20mA active + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
X Sensor only

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CH - 4153 Reinach

7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA aktive + 2x pulse/freq. (phase-shifted)
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

CNGmass DCI 8DF15, DN15 1/2"

Coriolis mass flowmeter for custody transfer application

8DF15-

71090382

SPK: DDA



CNGmass DCI 8DF15, DN15 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A stainless steel
C stainless steel, mat. certificate (wetted parts)

Process Connection:
999 Special version, TSP-no. to be spec.
G20 G3/4" female thread

Additional Test, Certificate:
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.
A basic version
B pressure test (tube)

Calibration:
9 Special version, TSP-no. to be spec.
A 2-point, 25/100%
C 5-point, 20/35/50/75/100%
G 5-point, 20/35/50/75/100%, traceable ISO/IEC 17025

Approval:
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
M CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
9 Special version, TSP-no. to be spec.

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable

F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A gland M20 (EEx d > thread M20)
B thread NPT 1/2
C thread G 1/2
X sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
0 w/o
9 Special version, TSP-no. to be spec.
A PTB (Germany)
B NMI (Netherland)
C METAS (Switzerland)
H PTB, NMI, METAS, BEV
N NTEP (USA)
X Sensor only

Output; Input:
1 Relay + 20mA active + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
X Sensor only
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA aktive + 2x pulse/freq. (phase-shifted)
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

CNGmass DCI 8DF25, DN25 1"

Coriolis mass flowmeter for custody transfer application

8DF25-

71090383

SPK: DDA



CNGmass DCI 8DF25, DN25 1"

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A stainless steel
C stainless steel, mat. certificate (wetted parts)

Process Connection:

999 Special version, TSP-no. to be spec.
G25 G1" female thread

Additional Test, Certificate:

6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.
A basic version
B pressure test (tube)

Calibration:

9 Special version, TSP-no. to be spec.
A 2-point, 25/100%
C 5-point, 20/35/50/75/100%
G 5-point, 20/35/50/75/100%, traceable ISO/IEC 17025

Approval:

A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
M CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
9 Special version, TSP-no. to be spec.

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:

9 Special version, TSP-no. to be spec.
A gland M20 (EEx d > thread M20)
B thread NPT 1/2
C thread G 1/2
X sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:

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CH - 4153 Reinach

0 w/o
9 Special version, TSP-no. to be spec.
A PTB (Germany)
B NMI (Netherland)
C METAS (Switzerland)
H PTB, NMI, METAS, BEV
N NTEP (USA)
X Sensor only

Output; Input:
1 Relay + 20mA active + 2x pulse freq. (phase-shifted), modules exchangeable
2 4-20mA HART + freq.+relay+20mA out modules exchangeable
X Sensor only
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
D 4-20mA HART + freq.+ relay+stat.In modules exchaneable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA aktive + 2x pulse/freq. (phase-shifted)
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

Cubemass 8CM01, DN1 1/24"

Ultra compact coriolis mass flowmeter
for various OEM applications.
Housing in stainless steel.
Same external dimensions for all
tube diameters.

8CM01-

71100983

SPK: DDA



Cubemass 8CM01, DN1 1/24"

Approval:
AA Non-hazardous area
81 ATEX II 2G Ex d[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x
83 ATEX II 2G Ex demb[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex demb[ia] IIC; IECEx Z21 Ex tD A21 IP6x
C3 NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G
84 ATEX II 2G Ex d[ia] IIC + ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x; NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G

I/O Signal:
9 Special version, TSP-no. to be spec.
B 2x (phase-shifted) pulse/freq. + Stat.out. + Modbus RS485

Power supply:
9 Special version, TSP-no. to be spec.
B 10-30VDC, 20-28VAC

Display, operation:
9 Special version, TSP-no. to be spec.
A W/o display, via communication

Operation language:
0 Not used

Housing:
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, aluminium

Electrical connection:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2"
C Thread G 1/2"

Measuring tube material:
9 Special version, TSP-no. to be spec.
A Stainl. steel, 1.4539

Process connection:
9 Special version, to be specified
A Cajon 4-VCO-4 , stainl. steel

Secondary containment:
A 304
B 304 + rupture disk
C 304 + pressure monitoring
D 304 + pressure monitoring + rupture disk

Calibration:
9 Special version, to be specified
C 0.1%
D 0.1%, 5-Point
E 0.1%, 5-Point, traceable, ISO/IEC 17025

>Density calibration:
F9 Special version, TSP-no. to be spec.
FA 0.002 g/ccm

>>Service:
H9 Special version, TSP-no. to be spec.
HB Cleaned from oil+grease (wetted parts)

>>Test, certificate:
J9 Special version, TSP-no. to be spec.
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate

>>Additional approval:
L9 Special version, TSP-no. to be spec.

>>Accessory enclosed:
MA Universal mounting plate for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

NA 2 x adapter NPT 1/4" + O-Ring Viton
NC 2 x adapter NPT 1/4" + O-Ring EPDM
NE 2 x adapter NPT 1/4" + O-Ring Silicone
NG 2 x adapter NPT 1/4" + O-Ring Kalrez
MH 2 x adapter + O-Ring Viton, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MI 2 x adapter + O-Ring Viton, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MJ 2 x adapter + O-Ring Viton, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MK 2 x adapter + O-Ring Viton, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
ML 2 x adapter + O-Ring EPDM, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MM 2 x adapter + O-Ring EPDM, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MN 2 x adapter + O-Ring EPDM, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MO 2 x adapter + O-Ring EPDM, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MP 2 x adapter + O-Ring Silicone, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MQ 2 x adapter + O-Ring Silicone, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MR 2 x adapter + O-Ring Silicone, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MS 2 x adapter + O-Ring Silicone, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MT 2 x adapter + O-Ring Kalrez, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MU 2 x adapter + O-Ring Kalrez, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MV 2 x adapter + O-Ring Kalrez, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MW 2 x adapter + O-Ring Kalrez, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
M9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.

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CH - 4153 Reinach

Z2 Bus address, see additional spec.

Promass 83P25, DN25 1"

Coriolis mass flowmeter

83P25-
71040524

SPK: DDA



Promass 83P25, DN25 1"

Measuring Tube Material:

6 1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7 1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished
9 Special version, TSP-no. to be spec.
A 1.4435/316L, 0.76um
C 1.4435/316L, 0.76um, mat. certificate (wetted parts)
H 1.4435/316L, 0.76um, CRN approval
K 1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)

Process Connection:

D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ASME B16.5
ABZ Cl.300, flange ASME B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
ETC Eccen. Tri-Clamp 1", ASME BPE, 3A, EHEDG
FMD DIN11851, 3A
FSD SMS1145, 3A, EHEDG
FJG ISO2853 Thread, 3A, EHEDG
FLH DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FWB Eccen. DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FDZ Eccen. DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FEA ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
FED Eccen. Clamp ISO2852, (DN15/50.5), DIN11866 Line B, 3A, EHEDG
BCD BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BED Eccen. BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BBA BBS Thread, DIN11866 Line A
BBC BBS Thread, DIN11866 Line B
BBD BBS Clamp, DIN11866 Line A with notch
BBE Eccen. BBS Clamp DIN11866 Line A with notch
BBF BBS Clamp , DIN11866 Line B with notch
BBG Eccen. BBS Clamp, DIN11866 Line B with notch
BBH BBS Flange small, DIN11866 Line A Flange with notch
BBK BBS Flange small, DIN11866 Line B Flange with notch
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

9 Special version, TSP-no. to be spec.
A Basic version
B Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
D Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate
F Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G CoC surface finish meas. + ASME BPE certificate

H CoC surface finish + Ferrite meas. + ASME BPE certificate
J Surface finish meas. + EN10204 3.1 certificate
K Surface finish + Ferrite meas. + EN10204 3.1 certificate
L Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

M Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate

P Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

R Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
S IQ/OQ documentation + CoC surface finish + Ferrite meas. + ASME BPE certificate
T IQ/OQ documentation + surface finish + Ferrite meas. + EN10204 3.1 certificate
U IQ/OQ documentation

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Cubemass 8CM04, DN4 1/8"

Ultra compact coriolis mass flowmeter
for various OEM applications.
Housing in stainless steel.
Same external dimensions for all
tube diameters.

8CM04-

71100985

SPK: DDA



Cubemass 8CM04, DN4 1/8"

Approval:
- AA Non-hazardous area
- 81 ATEX II 2G Ex d[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x
- 83 ATEX II 2G Ex demb[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex demb[ia] IIC; IECEx Z21 Ex tD A21 IP6x
- C3 NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G
- 84 ATEX II 2G Ex d[ia] IIC + ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x; NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G

I/O Signal:
- 9 Special version, TSP-no. to be spec.
- B 2x (phase-shifted) pulse/freq. + Stat.out. + Modbus RS485

Power supply:
- 9 Special version, TSP-no. to be spec.
- B 10-30VDC, 20-28VAC

Display, operation:
- 9 Special version, TSP-no. to be spec.
- A W/o display, via communication

Operation language:
- 0 Not used

Housing:
- 9 Special version, TSP-no. to be spec.
- A Compact IP67 NEMA4X, aluminium

Electrical connection:
- 9 Special version, TSP-no. to be spec.
- A Gland M20 (EEx d > thread M20)
- B Thread NPT 1/2"
- C Thread G 1/2"

Measuring tube material:
- 9 Special version, TSP-no. to be spec.
- A Stainl. steel, 1.4539

Process connection:
- 9 Special version, to be specified
- A Cajon 4-VCO-4 , stainl. steel

Secondary containment:
- A 304
- B 304 + rupture disk
- C 304 + pressure monitoring
- D 304 + pressure monitoring + rupture disk

Calibration:
- 9 Special version, to be specified
- C 0.1%
- D 0.1%, 5-Point
- E 0.1%, 5-Point, traceable, ISO/IEC 17025

>Density calibration:
- F9 Special version, TSP-no. to be spec.
- FA 0.002 g/ccm

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

>>Service:

H9 Special version, TSP-no. to be spec.
HB Cleaned from oil+grease (wetted parts)

>>Test, certificate:

J9 Special version, TSP-no. to be spec.
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate

>>Additional approval:

L9 Special version, TSP-no. to be spec.

>>Accessory enclosed:

MA Universal mounting plate for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

NA 2 x adapter NPT 1/4" + O-Ring Viton
NC 2 x adapter NPT 1/4" + O-Ring EPDM
NE 2 x adapter NPT 1/4" + O-Ring Silicone
NG 2 x adapter NPT 1/4" + O-Ring Kalrez
MH 2 x adapter + O-Ring Viton, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MI 2 x adapter + O-Ring Viton, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MJ 2 x adapter + O-Ring Viton, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MK 2 x adapter + O-Ring Viton, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
ML 2 x adapter + O-Ring EPDM, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MM 2 x adapter + O-Ring EPDM, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MN 2 x adapter + O-Ring EPDM, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MO 2 x adapter + O-Ring EPDM, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MP 2 x adapter + O-Ring Silicone, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MQ 2 x adapter + O-Ring Silicone, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MR 2 x adapter + O-Ring Silicone, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MS 2 x adapter + O-Ring Silicone, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MT 2 x adapter + O-Ring Kalrez, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MU 2 x adapter + O-Ring Kalrez, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MV 2 x adapter + O-Ring Kalrez, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MW 2 x adapter + O-Ring Kalrez, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
M9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83P15, DN15 1/2"

Coriolis mass flowmeter

83P15-

71040523

SPK: DDA



Promass 83P15, DN15 1/2"

Measuring Tube Material:

6 1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7 1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished
9 Special version, TSP-no. to be spec.
A 1.4435/316L, 0.76um
C 1.4435/316L, 0.76um, mat. certificate (wetted parts)
H 1.4435/316L, 0.76um, CRN approval
K 1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)

Process Connection:

D2Z PN40, EN1092-1-B1 (DIN2501) flange

AAZ	Cl.150, flange ASME B16.5
ABZ	Cl.300, flange ASME B16.5
NDZ	20K, flange JIS B2220
NGZ	40K, flange JIS B2220
FTM	Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
FUG	Tri-Clamp 1/2", ASME BPE 3A, EHEDG
FAB	Tri-Clamp 1", ASME BPE 3A, EHEDG
ETB	Eccen. Tri-Clamp 3/4", ASME BPE, 3A, EHEDG
FMD	DIN11851, 3A
FGD	DIN11851 Rd28x1/8", 3A
FSD	SMS1145, 3A, EHEDG
FJG	ISO2853 Thread, 3A, EHEDG
FLH	DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG	DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA	DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FWB	Eccen. DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW	DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FDZ	Eccen. DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FEA	ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB	ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC	Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
BCD	BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD	BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BED	Eccen. BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BBA	BBS Thread, DIN11866 Line A
BBC	BBS Thread, DIN11866 Line B
BBD	BBS Clamp, DIN11866 Line A with notch
BBE	Eccen. BBS Clamp DIN11866 Line A with notch
BBF	BBS Clamp , DIN11866 Line B with notch
BBG	Eccen. BBS Clamp, DIN11866 Line B with notch
BBH	BBS Flange small, DIN11866 Line A Flange with notch
BBK	BBS Flange small, DIN11866 Line B Flange with notch
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.
A	Basic version
B	Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C	Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
D	Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate
F	Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G	CoC surface finish meas. + ASME BPE certificate
H	CoC surface finish + Ferrite meas. + ASME BPE certificate
J	Surface finish meas. + EN10204 3.1 certificate
K	Surface finish + Ferrite meas. + EN10204 3.1 certificate
L	Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
M	Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate
P	Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
R	Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
S	IQ/OQ documentation + CoC surface finish + Ferrite meas. + ASME BPE certificate
T	IQ/OQ documentation + surface finish + Ferrite meas. + EN10204 3.1 certificate
U	IQ/OQ documentation

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Cubemass DCI 8CN01, DN1 1/24"

Ultra compact coriolis mass flowmeter
for various OEM applications.
Housing in stainless steel.
Same external dimensions for all
tube diameters.

8CN01-

71100993

SPK: DDA



Cubemass DCI 8CN01, DN1 1/24"

Approval:
AA Non-hazardous area
81 ATEX II 2G Ex d[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x

82 ATEX II 2G Ex de[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex de[ia] IIC; IECEx Z21 Ex tD A21 IP6x

C3 NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G
84 ATEX II 2G Ex d[ia] IIC + ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x; NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G

I/O signal:

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

1 Relay + 20mA active + 2x pulse/freq.
2 4-20mA HART + freq.+relay+20mA out
7 Modbus RS485 + 2xrelay + stat.In
D 4-20mA SIL HART + freq.+relay+stat.In
N Modbus RS485 + 20mA +freq.+stat.In
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA active + 2x pulse/freq. (phase-shifted)
9 Special version, TSP-no. to be spec.

Power supply:
7 85-260VAC
8 20-55VAC/16-62VDC
9 Special version, TSP-no. to be spec.

Display, operation:
9 Special version, TSP-no. to be spec.
E Display, 4-line, touch control

Operation language:
9 Special version, TSP-no. to be spec.
A WEA = DE+EN+FR+IT+ES+PT+NL
B EES = SV+FI+NO+RU+PL+CS+EN
C SEA = JA+ID+EN
D CN = ZH+EN

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X, -40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X, -40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, wall IP67 NEMA4X + 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable

Electrical connection:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2

Measuring tube material:
9 Special version, TSP-no. to be spec.
A Stainl. steel, 1.4539

Process connection:
9 Special version, to be specified
A Cajon 4-VCO-4 , stainl. steel

Secondary containment:
A 304
B 304 + rupture disk
C 304 + pressure monitoring
D 304 + pressure monitoring + rupture disk

Calibration:
9 Special version, to be specified
C 0.1%
D 0.1%, 5-Point
E 0.1%, 5-Point, traceable, ISO/IEC 17025

>Density calibration:
F9 Special version, TSP-no. to be spec.
FA 0.002 g/ccm

>>Service:

H9 Special version, TSP-no. to be spec.
HB Cleaned from oil+grease (wetted parts)

>>Test, certificate:

J9 Special version, TSP-no. to be spec.
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate

>>Additional approval:

L9 Special version, TSP-no. to be spec.

>>Accessory enclosed:

MA Universal mounting plate for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

NA 2 x adapter NPT 1/4" + O-Ring Viton
NC 2 x adapter NPT 1/4" + O-Ring EPDM
NE 2 x adapter NPT 1/4" + O-Ring Silicone
NG 2 x adapter NPT 1/4" + O-Ring Kalrez
MH 2 x adapter + O-Ring Viton, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MI 2 x adapter + O-Ring Viton, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MJ 2 x adapter + O-Ring Viton, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MK 2 x adapter + O-Ring Viton, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
ML 2 x adapter + O-Ring EPDM, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MM 2 x adapter + O-Ring EPDM, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MN 2 x adapter + O-Ring EPDM, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MO 2 x adapter + O-Ring EPDM, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MP 2 x adapter + O-Ring Silicone, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MQ 2 x adapter + O-Ring Silicone, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MR 2 x adapter + O-Ring Silicone, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MS 2 x adapter + O-Ring Silicone, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MT 2 x adapter + O-Ring Kalrez, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MU 2 x adapter + O-Ring Kalrez, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MV 2 x adapter + O-Ring Kalrez, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MW 2 x adapter + O-Ring Kalrez, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
M9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Cubemass DCI 8CN02, DN2 1/12"

Ultra compact coriolis mass flowmeter
for various OEM applications.
Housing in stainless steel.
Same external dimensions for all
tube diameters.

8CN02-

71100994

SPK: DDA



Cubemass DCI 8CN02, DN2 1/12"

Approval:

AA Non-hazardous area
81 ATEX II 2G Ex d[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x

82 ATEX II 2G Ex de[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex de[ia] IIC; IECEx Z21 Ex tD A21 IP6x

C3 NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G
84 ATEX II 2G Ex d[ia] IIC + ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x; NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G

I/O signal:

1 Relay + 20mA active + 2x pulse/freq.
2 4-20mA HART + freq.+relay+20mA out
7 Modbus RS485 + 2xrelay + stat.In
D 4-20mA SIL HART + freq.+relay+stat.In
N Modbus RS485 + 20mA +freq.+stat.In
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA active + 2x pulse/freq. (phase-shifted)
9 Special version, TSP-no. to be spec.

Power supply:
7 85-260VAC
8 20-55VAC/16-62VDC
9 Special version, TSP-no. to be spec.

Display, operation:
9 Special version, TSP-no. to be spec.
E Display, 4-line, touch control

Operation language:
9 Special version, TSP-no. to be spec.
A WEA = DE+EN+FR+IT+ES+PT+NL
B EES = SV+FI+NO+RU+PL+CS+EN
C SEA = JA+ID+EN
D CN = ZH+EN

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X, -40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X, -40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, wall IP67 NEMA4X + 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable

Electrical connection:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2

Measuring tube material:
9 Special version, TSP-no. to be spec.
A Stainl. steel, 1.4539

Process connection:
9 Special version, to be specified
A Cajon 4-VCO-4 , stainl. steel

Secondary containment:
A 304
B 304 + rupture disk
C 304 + pressure monitoring
D 304 + pressure monitoring + rupture disk

Calibration:
9 Special version, to be specified
C 0.1%
D 0.1%, 5-Point
E 0.1%, 5-Point, traceable, ISO/IEC 17025

>Density calibration:
F9 Special version, TSP-no. to be spec.
FA 0.002 g/ccm

>>Service:

H9 Special version, TSP-no. to be spec.
HB Cleaned from oil+grease (wetted parts)

>>Test, certificate:

J9 Special version, TSP-no. to be spec.
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate

>>Additional approval:

L9 Special version, TSP-no. to be spec.

>>Accessory enclosed:

MA Universal mounting plate for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

NA 2 x adapter NPT 1/4" + O-Ring Viton
NC 2 x adapter NPT 1/4" + O-Ring EPDM
NE 2 x adapter NPT 1/4" + O-Ring Silicone
NG 2 x adapter NPT 1/4" + O-Ring Kalrez
MH 2 x adapter + O-Ring Viton, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MI 2 x adapter + O-Ring Viton, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MJ 2 x adapter + O-Ring Viton, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MK 2 x adapter + O-Ring Viton, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
ML 2 x adapter + O-Ring EPDM, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MM 2 x adapter + O-Ring EPDM, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MN 2 x adapter + O-Ring EPDM, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MO 2 x adapter + O-Ring EPDM, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MP 2 x adapter + O-Ring Silicone, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MQ 2 x adapter + O-Ring Silicone, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MR 2 x adapter + O-Ring Silicone, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MS 2 x adapter + O-Ring Silicone, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MT 2 x adapter + O-Ring Kalrez, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MU 2 x adapter + O-Ring Kalrez, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MV 2 x adapter + O-Ring Kalrez, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MW 2 x adapter + O-Ring Kalrez, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
M9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Cubemass DCI 8CN04, DN4 1/8"

Ultra compact coriolis mass flowmeter
for various OEM applications.
Housing in stainless steel.
Same external dimensions for all
tube diameters.

8CN04-

71100995

SPK: DDA



Cubemass DCI 8CN04, DN4 1/8"

Approval:

AA Non-hazardous area
81 ATEX II 2G Ex d[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x

82 ATEX II 2G Ex de[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex de[ia] IIC; IECEx Z21 Ex tD A21 IP6x

C3 NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G
84 ATEX II 2G Ex d[ia] IIC + ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x; NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G

I/O signal:

1 Relay + 20mA active + 2x pulse/freq.
2 4-20mA HART + freq.+relay+20mA out
7 Modbus RS485 + 2xrelay + stat.In
D 4-20mA SIL HART + freq.+relay+stat.In
N Modbus RS485 + 20mA +freq.+stat.In
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA active + 2x pulse/freq. (phase-shifted)
9 Special version, TSP-no. to be spec.

Power supply:
7 85-260VAC
8 20-55VAC/16-62VDC
9 Special version, TSP-no. to be spec.

Display, operation:
9 Special version, TSP-no. to be spec.
E Display, 4-line, touch control

Operation language:
9 Special version, TSP-no. to be spec.
A WEA = DE+EN+FR+IT+ES+PT+NL
B EES = SV+FI+NO+RU+PL+CS+EN
C SEA = JA+ID+EN
D CN = ZH+EN

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X, -40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X, -40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, wall IP67 NEMA4X + 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable

Electrical connection:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2

Measuring tube material:
9 Special version, TSP-no. to be spec.
A Stainl. steel, 1.4539

Process connection:
9 Special version, to be specified
A Cajon 4-VCO-4 , stainl. steel

Secondary containment:
A 304
B 304 + rupture disk
C 304 + pressure monitoring
D 304 + pressure monitoring + rupture disk

Calibration:
9 Special version, to be specified
C 0.1%
D 0.1%, 5-Point
E 0.1%, 5-Point, traceable, ISO/IEC 17025

>Density calibration:
F9 Special version, TSP-no. to be spec.
FA 0.002 g/ccm

>>Service:

H9 Special version, TSP-no. to be spec.
HB Cleaned from oil+grease (wetted parts)

>>Test, certificate:

J9 Special version, TSP-no. to be spec.
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate

>>Additional approval:

L9 Special version, TSP-no. to be spec.

>>Accessory enclosed:

MA Universal mounting plate for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

NA 2 x adapter NPT 1/4" + O-Ring Viton
NC 2 x adapter NPT 1/4" + O-Ring EPDM
NE 2 x adapter NPT 1/4" + O-Ring Silicone
NG 2 x adapter NPT 1/4" + O-Ring Kalrez
MH 2 x adapter + O-Ring Viton, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MI 2 x adapter + O-Ring Viton, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MJ 2 x adapter + O-Ring Viton, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MK 2 x adapter + O-Ring Viton, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
ML 2 x adapter + O-Ring EPDM, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MM 2 x adapter + O-Ring EPDM, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MN 2 x adapter + O-Ring EPDM, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MO 2 x adapter + O-Ring EPDM, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MP 2 x adapter + O-Ring Silicone, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MQ 2 x adapter + O-Ring Silicone, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MR 2 x adapter + O-Ring Silicone, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MS 2 x adapter + O-Ring Silicone, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MT 2 x adapter + O-Ring Kalrez, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MU 2 x adapter + O-Ring Kalrez, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MV 2 x adapter + O-Ring Kalrez, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MW 2 x adapter + O-Ring Kalrez, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
M9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Cubemass DCI 8CN06, DN6 1/4"

Ultra compact coriolis mass flowmeter
for various OEM applications.
Housing in stainless steel.
Same external dimensions for all
tube diameters.

8CN06-

71100996

SPK: DDA



Cubemass DCI 8CN06, DN6 1/4"

Approval:

AA Non-hazardous area
81 ATEX II 2G Ex d[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x

82 ATEX II 2G Ex de[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex de[ia] IIC; IECEx Z21 Ex tD A21 IP6x

C3 NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G
84 ATEX II 2G Ex d[ia] IIC + ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x; NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G

I/O signal:

1 Relay + 20mA active + 2x pulse/freq.
2 4-20mA HART + freq.+relay+20mA out
7 Modbus RS485 + 2xrelay + stat.In
D 4-20mA SIL HART + freq.+relay+stat.In
N Modbus RS485 + 20mA +freq.+stat.In
Q Modbus RS485
S 4-20mA HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-i, freq. = passive
M Stat. In + 20mA active + 2x pulse/freq. (phase-shifted)
9 Special version, TSP-no. to be spec.

Power supply:
7 85-260VAC
8 20-55VAC/16-62VDC
9 Special version, TSP-no. to be spec.

Display, operation:
9 Special version, TSP-no. to be spec.
E Display, 4-line, touch control

Operation language:
9 Special version, TSP-no. to be spec.
A WEA = DE+EN+FR+IT+ES+PT+NL
B EES = SV+FI+NO+RU+PL+CS+EN
C SEA = JA+ID+EN
D CN = ZH+EN

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X, -40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X, -40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, wall IP67 NEMA4X + 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable

Electrical connection:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2

Measuring tube material:
9 Special version, TSP-no. to be spec.
A Stainl. steel, 1.4539

Process connection:
9 Special version, to be specified
B Cajon 8-VCO-4 , stainl. steel

Secondary containment:
A 304
B 304 + rupture disk
C 304 + pressure monitoring
D 304 + pressure monitoring + rupture disk

Calibration:
9 Special version, to be specified
C 0.1%
D 0.1%, 5-Point
E 0.1%, 5-Point, traceable, ISO/IEC 17025

>Density calibration:
F9 Special version, TSP-no. to be spec.
FA 0.002 g/ccm

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

>>Service:

H9 Special version, TSP-no. to be spec.
HB Cleaned from oil+grease (wetted parts)

>>Test, certificate:

J9 Special version, TSP-no. to be spec.
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate

>>Additional approval:

L9 Special version, TSP-no. to be spec.

>>Accessory enclosed:

MA Universal mounting plate for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

NB 2 x adapter NPT 1/2" + O-Ring Viton
ND 2 x adapter NPT 1/2" + O-Ring EPDM
NF 2 x adapter NPT 1/2" + O-Ring Silicone
NH 2 x adapter NPT 1/2" + O-Ring Kalrez
MH 2 x adapter + O-Ring Viton, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MI 2 x adapter + O-Ring Viton, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MJ 2 x adapter + O-Ring Viton, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MK 2 x adapter + O-Ring Viton, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
ML 2 x adapter + O-Ring EPDM, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MM 2 x adapter + O-Ring EPDM, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MN 2 x adapter + O-Ring EPDM, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MO 2 x adapter + O-Ring EPDM, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MP 2 x adapter + O-Ring Silicone, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MQ 2 x adapter + O-Ring Silicone, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MR 2 x adapter + O-Ring Silicone, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MS 2 x adapter + O-Ring Silicone, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MT 2 x adapter + O-Ring Kalrez, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MU 2 x adapter + O-Ring Kalrez, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MV 2 x adapter + O-Ring Kalrez, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MW 2 x adapter + O-Ring Kalrez, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
M9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80I25, DN25 1"

Coriolis mass flowmeter

80I25-

50096695

SPK: DDA



Promass 80I25, DN25 1"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)

Process Connection:

D2W PN40, EN1092-1-B1 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5
ACW Cl.600, flange ANSI B16.5

NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
EAA	Eccen. Tri-Clamp 1", 0.8um/150grit 3A
EAD	Eccen. Tri-Clamp 1", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FKA	DIN11864-2A, 0.8um/150grit 3A
FKD	DIN11864-2A, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable
R	Compact stainless + Polycarbonate window, IP67 NEMA4X
1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5	Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
8	Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9	Special version, TSP-no. to be spec.

Cable Entry:

9	Special version, TSP-no. to be spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80I16, DN15 1/2" FB

Coriolis mass flowmeter

80I16-

50096694

SPK: DDA



Promass 80I16, DN15 1/2" FB

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5

ACW	Cl.600, flange ANSI B16.5
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FPD	Tri-Clamp 3/4", 0.4um/240grit 3A
FPA	Tri-Clamp 3/4", 0.8um/150grit 3A
EAA	Eccen. Tri-Clamp 1", 0.8um/150grit 3A
EAD	Eccen. Tri-Clamp 1", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable
R	Compact stainless + Polycarbonate window, IP67 NEMA4X
1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5	Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
8	Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9	Special version, TSP-no. to be spec.

Cable Entry:

9	Special version, TSP-no. to be spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80I15, DN15 1/2"

Coriolis mass flowmeter

80I15-

50096693

SPK: DDA



Promass 80I15, DN15 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5

ACW	Cl.600, flange ANSI B16.5
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A
FPD	Tri-Clamp 3/4", 0.4um/240grit 3A
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A
FPA	Tri-Clamp 3/4", 0.8um/150grit 3A
EPA	Eccen. Tri-Clamp 3/4", 0.8um/150grit 3A
EPD	Eccen. Tri-Clamp 3/4", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FGA	DIN11851 Rd28x1/8", 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FKA	DIN11864-2A, 0.8um/150grit 3A
FKD	DIN11864-2A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable
R	Compact stainless + Polycarbonate window, IP67 NEMA4X
1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment

5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80I08, DN8 3/8"

Coriolis mass flowmeter

80I08-

50096692

SPK: DDA



Promass 80I08, DN8 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.

A	Titanium
C	Titanium, mat. certificate (wetted parts)

Process Connection:

D2W	PN40, EN1092-1-B1 (DIN2501) flange
D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FTA	Tri-Clamp, 0.8um/150grit 3A
FTD	Tri-Clamp, 0.4um/240grit 3A
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A
FPD	Tri-Clamp 3/4", 0.4um/240grit 3A
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A
FPA	Tri-Clamp 3/4", 0.8um/150grit 3A
EBA	Eccen. Tri-Clamp 1/2", 0.8um/150grit 3A
EBD	Eccen. Tri-Clamp 1/2", 0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FGA	DIN11851 Rd28x1/8", 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FKA	DIN11864-2A, 0.8um/150grit 3A
FKD	DIN11864-2A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable

E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80A04, DN4 1/ 8"

Coriolis mass flowmeter

80A04-

50096691

SPK: DDA



Promass 80A04, DN4 1/ 8"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
G	Stainl. steel, high-pressure
K	Stainl. steel, high pressure, mat. certificate (wetted parts)

Process Connection:

SVW	Cajon 4-VCO-4
PPD	Cajon 4-VCO-4, 0.4um/240grit
STA	Tri-Clamp 1/2", 0.8um/150grit 3A
SPD	Tri-Clamp 1/2", 0.4um/240grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5	Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL2 HART + frequency
D 4-20mA SIL2 HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

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Kägenstrasse 2
CH - 4153 Reinach

Promass 80A02, DN2 1/12"

Coriolis mass flowmeter

80A02-

50096690

SPK: DDA



Promass 80A02, DN2 1/12"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
B	Alloy C-22
C	Stainl. steel, mat. certificate (wetted parts)
D	Alloy C-22, mat. certificate (wetted parts)
G	Stainl. steel, high-pressure
K	Stainl. steel, high pressure, mat. certificate (wetted parts)

Process Connection:

SVW	Cajon 4-VCO-4
PPD	Cajon 4-VCO-4, 0.4um/240grit
STA	Tri-Clamp 1/2", 0.8um/150grit 3A
SPD	Tri-Clamp 1/2", 0.4um/240grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)
G	Rupture disk + pressure test (tube)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2	Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5	Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

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Kägenstrasse 2
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7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL2 HART + frequency
D 4-20mA SIL2 HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

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Kägenstrasse 2
CH - 4153 Reinach

Promass 80A01, DN1 1/24"

Coriolis mass flowmeter

80A01-

50096689

SPK: DDA



Promass 80A01, DN1 1/24"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A Stainl. steel
B Alloy C-22
C Stainl. steel, mat. certificate (wetted parts)
D Alloy C-22, mat. certificate (wetted parts)

Process Connection:

SVW Cajon 4-VCO-4
PPD Cajon 4-VCO-4, 0.4um/240grit
STA Tri-Clamp 1/2", 0.8um/150grit 3A
SPD Tri-Clamp 1/2", 0.4um/240grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)
G Rupture disk + pressure test (tube)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh

environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL2 HART + frequency
D 4-20mA SIL2 HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Cubemass 8CM02, DN2 1/12"

Ultra compact coriolis mass flowmeter
for various OEM applications.
Housing in stainless steel.
Same external dimensions for all
tube diameters.

8CM02-

71100984

SPK: DDA



Cubemass 8CM02, DN2 1/12"

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Approval:
- AA Non-hazardous area
- 81 ATEX II 2G Ex d[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x
- 83 ATEX II 2G Ex demb[ia] IIC; ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex demb[ia] IIC; IECEx Z21 Ex tD A21 IP6x
- C3 NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G
- 84 ATEX II 2G Ex d[ia] IIC + ATEX II 2D Ex tD A21 IP6x IECEx Z1 Ex d[ia] IIC; IECEx Z21 Ex tD A21 IP6x; NEC/CEC XP Cl.I, II, III Div.1 Gr. A-G

I/O Signal:
- 9 Special version, TSP-no. to be spec.
- B 2x (phase-shifted) pulse/freq. + Stat.out. + Modbus RS485

Power supply:
- 9 Special version, TSP-no. to be spec.
- B 10-30VDC, 20-28VAC

Display, operation:
- 9 Special version, TSP-no. to be spec.
- A W/o display, via communication

Operation language:
- 0 Not used

Housing:
- 9 Special version, TSP-no. to be spec.
- A Compact IP67 NEMA4X, aluminium

Electrical connection:
- 9 Special version, TSP-no. to be spec.
- A Gland M20 (EEx d > thread M20)
- B Thread NPT 1/2"
- C Thread G 1/2"

Measuring tube material:
- 9 Special version, TSP-no. to be spec.
- A Stainl. steel, 1.4539

Process connection:
- 9 Special version, to be specified
- A Cajon 4-VCO-4 , stainl. steel

Secondary containment:
- A 304
- B 304 + rupture disk
- C 304 + pressure monitoring
- D 304 + pressure monitoring + rupture disk

Calibration:
- 9 Special version, to be specified
- C 0.1%
- D 0.1%, 5-Point
- E 0.1%, 5-Point, traceable, ISO/IEC 17025

>Density calibration:
- F9 Special version, TSP-no. to be spec.
- FA 0.002 g/ccm

>>Service:
- H9 Special version, TSP-no. to be spec.
- HB Cleaned from oil+grease (wetted parts)

>>Test, certificate:
- J9 Special version, TSP-no. to be spec.
- JA EN10204-3.1 material (wetted parts), inspection certificate
- JB EN10204-3.1 pressure test (tube), inspection certificate

>>Additional approval:
- L9 Special version, TSP-no. to be spec.

>>Accessory enclosed:
- MA Universal mounting plate for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

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NA 2 x adapter NPT 1/4" + O-Ring Viton
NC 2 x adapter NPT 1/4" + O-Ring EPDM
NE 2 x adapter NPT 1/4" + O-Ring Silicone
NG 2 x adapter NPT 1/4" + O-Ring Kalrez
MH 2 x adapter + O-Ring Viton, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MI 2 x adapter + O-Ring Viton, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MJ 2 x adapter + O-Ring Viton, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MK 2 x adapter + O-Ring Viton, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
ML 2 x adapter + O-Ring EPDM, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MM 2 x adapter + O-Ring EPDM, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MN 2 x adapter + O-Ring EPDM, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MO 2 x adapter + O-Ring EPDM, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MP 2 x adapter + O-Ring Silicone, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MQ 2 x adapter + O-Ring Silicone, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MR 2 x adapter + O-Ring Silicone, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MS 2 x adapter + O-Ring Silicone, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
MT 2 x adapter + O-Ring Kalrez, PN40 DN15 316L/904L, EN1092-1 B1 (DIN2501) flange wetted parts

MU 2 x adapter + O-Ring Kalrez, Cl.150 316L/904L, flange ANSI B16.5, wetted parts
MV 2 x adapter + O-Ring Kalrez, Cl.300 316L/904L, flange ANSI B16.5, wetted parts
MW 2 x adapter + O-Ring Kalrez, 10K 1.4539/ 904L, flange JIS B2220, wetted parts
M9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83S40, DN40 1 1/2"

Coriolis mass flowmeter

83S40-

71036039

SPK: DDA



Promass 83S40, DN40 1 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. Steel 0.8um
C Stainl. Steel 0.8um, mat. certificate (wetted parts)
H Stainl. Steel 0.8um, CRN approval
K Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)
P Stainl. Steel 0.8um, PED Cat.III
R Stainl. Steel 0.8um, PED Cat.III, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, 3A
FMD DIN11851, 3A
FLH Nut DIN11864-1A, 3A
FKG Flange DIN11864-2A, 3A
FWA Clamp DIN11864-3A, 3A
FJG ISO2853, 3A
FSD SMS1145, 3A
FDW Clamp DIN32676, 3A
FEA Clamp ISO2852, 3A

999 Special version, TSP-no. to be spec.

Additional Test, certificate:

9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Promass 80I51, DN50 2" FB

Coriolis mass flowmeter

80I51-

50109442

SPK: DDA



Promass 80I51, DN50 2" FB

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Titanium
C	Titanium, mat. certificate (wetted parts)
P	Titanium, PED Cat.III
R	Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:

D2W	PN40, EN1092-1-B1 (DIN2501) flange
D3W	PN63, EN1092-1-B2 (DIN2501) flange
D4W	PN100, EN1092-1-B2 (DIN2501) flange
AAW	Cl.150, flange ANSI B16.5
ABW	Cl.300, flange ANSI B16.5
ACW	Cl.600, flange ANSI B16.5
NDW	10K, flange JIS B2220
NEW	20K, flange JIS B2220
NGW	40K, flange JIS B2220
NHW	63K, flange JIS B2220
FRA	Tri-Clamp 2.5", 0.8um/150grit 3A
FRD	Tri-Clamp 2.5", 0.4um/240grit 3A
ERA	Eccen. Tri-Clamp 2 1/2",0.8um/150grit 3A
ERD	Eccen. Tri-Clamp 2 1/2",0.4um/240grit 3A
ECA	Eccen. Tri-Clamp 3",0.8um/150grit 3A
ECD	Eccen. Tri-Clamp 3",0.4um/240grit 3A
FMA	DIN11851, 0.8um/150grit 3A
FLA	DIN11864-1A, 0.8um/150grit 3A
FLD	DIN11864-1A, 0.4um/240grit 3A
FJA	ISO2853, 0.8um/150grit 3A
FJD	ISO2853, 0.4um/240grit 3A
FSA	SMS1145, 0.8um/150grit 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

5	CRN approval
6	CRN approval + pressure test (tube) + Type test (containment)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone

E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA

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S 4-20mA SIL HART active + freq. , Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83I51, DN50 2" FB

Coriolis mass flowmeter

83I51-
50109443

SPK: DDA



Promass 83I51, DN50 2" FB

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Titanium
C Titanium, mat. certificate (wetted parts)
P Titanium, PED Cat.III
R Titanium, PED Cat. III + mat. certificate (wetted parts)

Process Connection:
D2W PN40, EN1092-1-B1 (DIN2501) flange
D3W PN63, EN1092-1-B2 (DIN2501) flange
D4W PN100, EN1092-1-B2 (DIN2501) flange
AAW Cl.150, flange ANSI B16.5
ABW Cl.300, flange ANSI B16.5
ACW Cl.600, flange ANSI B16.5
NDW 10K, flange JIS B2220
NEW 20K, flange JIS B2220
NGW 40K, flange JIS B2220
NHW 63K, flange JIS B2220
FRA Tri-Clamp 2.5", 0.8um/150grit 3A
FRD Tri-Clamp 2.5", 0.4um/240grit 3A
ERA Eccen. Tri-Clamp 2 1/2",0.8um/150grit 3A
ERD Eccen. Tri-Clamp 2 1/2",0.4um/240grit 3A
ECA Eccen. Tri-Clamp 3",0.8um/150grit 3A
ECD Eccen. Tri-Clamp 3",0.4um/240grit 3A
FMA DIN11851, 0.8um/150grit 3A
FLA DIN11864-1A, 0.8um/150grit 3A
FLD DIN11864-1A, 0.4um/240grit 3A
FJA ISO2853, 0.8um/150grit 3A
FJD ISO2853, 0.4um/240grit 3A
FSA SMS1145, 0.8um/150grit 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
5 CRN approval
6 CRN approval + pressure test (tube) + Type test (containment)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F Purge + Pressure test (tube) + type test (containment)

Calibration:
A 0.1%, 0.0005g/cc

B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025
J 0.1%, 0.0005g/cc, Viscosity
R 0.1% 5-pt, 0.0005g/cc, Viscosity
K 0.1%, 0.0005g/cc+Spec.Density, Viscosity
L 0.1%, 5-pt, 0.0005g/cc+Spec.Density, V V = Viscosity
9 Special version, TSP-no. to be spec.

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language

DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + concentration measurement
T Default liquid; Batching + Diagnostics+ concentration measurement
V Offer No. ??, Default liquid; V V = Viscosity measurement Offer number required on order

W Offer No. ??, Default liquid; V+C Concentration measurement, V = Viscosity measurement Offer number required on order

2 Offer No. ??, Default liquid; V+A V = Viscosity measurement A = Advanced diagnostics Offer number required on order

3 Offer No. ??, Default liquid; V+C+A V = Viscosity measurement C = Concentration measurement A = Advanced diagnostics Offer number required on order
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:

A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

CNGmass 8FF15, DN15 1/2"

Coriolis mass flowmeter for CNG fueling applications

8FF15-
71026028

SPK: DDA



CNGmass 8FF15, DN15 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A stainless steel
C stainless steel, mat. certificate (wetted parts)

Process Connection:
999 Special version, TSP-no. to be spec.
G20 G3/4" female thread

Additional Test, Certificate:
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.
A basic version
B pressure test (tube)

Calibration:
2 5-point, 100/50/20/5/100%
9 Special version, TSP-no. to be spec.
A 2-point, 25/100%
C 5-point, 20/35/50/75/100%
G 5-point, 20/35/50/75/100%, traceable ISO/IEC 17025

Approval:
8 ATEX II2GD+IECEx+XP CEC/NEC Cl.I-III Div.1
9 Special version, TSP-no. to be spec.
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z=Zone
C ATEX II 2GD+ IECEx Z1,21 Ex demb ia IIC Ex tD A21 Z=Zone
K NEPSI Ex d IIC
L NEPSI Ex de IIC
M CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1

Housing:
9 Special version, TSP-no. to be spec.
A compact IP67 NEMA4X, aluminium

Cable Entry:
9 Special version, TSP-no. to be spec.
A gland M20 (EEx d > thread M20)
B thread NPT 1/2
C thread G 1/2

Power Supply; Display:
1 10-30VDC, 20-28VAC, w/o display, remote configuration
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
0 w/o
9 Special version, TSP-no. to be spec.
A PTB (Germany)
B NMI (Netherland)
C METAS (Switzerland)
E BEV (Austria)
F LNE (France)

H PTB, NMI, METAS, BEV
N NTEP (USA)

Output; Input:
9 Special version, TSP-no. to be spec.
H Modbus (Short Interpreter) 2x (phase-shifted) puls/freq. + Stat.Out.
N Modbus 2x (phase-shifted) puls/freq. + Stat.Out.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

CNGmass 8FF25, DN25 1"

Coriolis mass flowmeter for CNG fueling applications

8FF25-

71026029

SPK: DDA



CNGmass 8FF25, DN25 1"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A stainless steel
C stainless steel, mat. certificate (wetted parts)

Process Connection:
999 Special version, TSP-no. to be spec.
G25 G1" female thread

Additional Test, Certificate:
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.
A basic version
B pressure test (tube)

Calibration:
2 5-point, 100/50/20/5/100%
9 Special version, TSP-no. to be spec.
A 2-point, 25/100%
C 5-point, 20/35/50/75/100%
G 5-point, 20/35/50/75/100%, traceable ISO/IEC 17025

Approval:
8 ATEX II2GD+IECEx+XP CEC/NEC Cl.I-III Div.1
9 Special version, TSP-no. to be spec.
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z=Zone
C ATEX II 2GD+ IECEx Z1,21 Ex demb ia IIC Ex tD A21 Z=Zone
K NEPSI Ex d IIC
L NEPSI Ex de IIC
M CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1

Housing:
9 Special version, TSP-no. to be spec.
A compact IP67 NEMA4X, aluminium

Cable Entry:
9 Special version, TSP-no. to be spec.
A gland M20 (EEx d > thread M20)
B thread NPT 1/2
C thread G 1/2

Power Supply; Display:
1 10-30VDC, 20-28VAC, w/o display, remote configuration

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Kägenstrasse 2
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9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
0 w/o
9 Special version, TSP-no. to be spec.
A PTB (Germany)
B NMI (Netherland)
C METAS (Switzerland)
E BEV (Austria)
F LNE (France)
H PTB, NMI, METAS, BEV
N NTEP (USA)

Output; Input:
9 Special version, TSP-no. to be spec.
H Modbus (Short Interpreter) 2x (phase-shifted) puls/freq. + Stat.Out.
N Modbus 2x (phase-shifted) puls/freq. + Stat.Out.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

Promass 80S08, DN08 3/8"

Coriolis mass flowmeter

80S08-
71036030

SPK: DDA



Promass 80S08, DN08 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. Steel 0.8um
C Stainl. Steel 0.8um, mat. certificate (wetted parts)
H Stainl. Steel 0.8um, CRN approval
K Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, 3A
FPE Tri-Clamp 3/4", 3A
FAB Tri-Clamp 1", 3A
FMD DIN11851, 3A
FGD DIN11851 Rd28x1/8", 3A
FLH Nut DIN11864-1A, 3A
FKG Flange DIN11864-2A, 3A
FWA Clamp DIN11864-3A, 3A
FJG ISO2853, 3A
FSD SMS1145, 3A
FDW Clamp DIN32676, 3A
FEA Clamp ISO2852, 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)

D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:

9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Endress+Hauser Consult AG
Kägenstrasse 2
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Adjustment; Software Feature:

9	Special version, TSP-no. to be spec.
A	Default liquid; Basic version
B	Default gas; Basic version
X	Sensor only

Output; Input:

A	4-20mA SIL HART + frequency
D	4-20mA SIL HART + freq.+ status+stat.In
H	PROFIBUS PA
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8	4-20mA SIL HART + 20mA + freq. + stat.In
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 80S15, DN15 1/2"

Coriolis mass flowmeter

80S15-

71036031

SPK: DDA



Promass 80S15, DN15 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. Steel 0.8um
C	Stainl. Steel 0.8um, mat. certificate (wetted parts)
H	Stainl. Steel 0.8um, CRN approval
K	Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)

Process Connection:

D2Z	PN40, EN1092-1-B1 (DIN2501) flange
AAZ	Cl.150, flange ANSI B16.5
ABZ	Cl.300, flange ANSI B16.5
NDZ	20K, flange JIS B2220
NGZ	40K, flange JIS B2220
FTM	Tri-Clamp for Pipe size, 3A
FUG	Tri-Clamp 1/2", 3A
FAB	Tri-Clamp 1", 3A
FMD	DIN11851, 3A
FGD	DIN11851 Rd28x1/8", 3A
FLH	Nut DIN11864-1A, 3A
FKG	Flange DIN11864-2A, 3A
FWA	Clamp DIN11864-3A, 3A
FJG	ISO2853, 3A
FSD	SMS1145, 3A
FDW	Clamp DIN32676, 3A
FEA	Clamp ISO2852, 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80S25, DN25 1"

Coriolis mass flowmeter

80S25-

71036032

SPK: DDA



Promass 80S25, DN25 1"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. Steel 0.8um
C Stainl. Steel 0.8um, mat. certificate (wetted parts)
H Stainl. Steel 0.8um, CRN approval
K Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, 3A
FMD DIN11851, 3A
FLH Nut DIN11864-1A, 3A
FKG Flange DIN11864-2A, 3A
FWA Clamp DIN11864-3A, 3A
FJG ISO2853, 3A
FSD SMS1145, 3A
FDW Clamp DIN32676, 3A
FEA Clamp ISO2852, 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density

C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency

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D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80S40, DN40 1 1/2"

Coriolis mass flowmeter

80S40-

71036033

SPK: DDA



Promass 80S40, DN40 1 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. Steel 0.8um
C Stainl. Steel 0.8um, mat. certificate (wetted parts)
H Stainl. Steel 0.8um, CRN approval
K Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)
P Stainl. Steel 0.8um, PED Cat.III
R Stainl. Steel 0.8um, PED Cat.III, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, 3A
FMD DIN11851, 3A
FLH Nut DIN11864-1A, 3A
FKG Flange DIN11864-2A, 3A
FWA Clamp DIN11864-3A, 3A
FJG ISO2853, 3A
FSD SMS1145, 3A
FDW Clamp DIN32676, 3A
FEA Clamp ISO2852, 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:

9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:

A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive

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8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80S50, DN50 2"

Coriolis mass flowmeter

80S50-

71036034

SPK: DDA



Promass 80S50, DN50 2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. Steel 0.8um
C Stainl. Steel 0.8um, mat. certificate (wetted parts)
H Stainl. Steel 0.8um, CRN approval
K Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)
P Stainl. Steel 0.8um, PED Cat.III
R Stainl. Steel 0.8um, PED Cat.III, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
D3Z PN63, EN1092-1-B2 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NEZ 10K, Flansch JIS B2220
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, 3A
FMD DIN11851, 3A
FLH Nut DIN11864-1A, 3A
FKG Flange DIN11864-2A, 3A
FWA Clamp DIN11864-3A, 3A
FJG ISO2853, 3A
FSD SMS1145, 3A
FDW Clamp DIN32676, 3A
FEA Clamp ISO2852, 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive

Endress+Hauser Consult AG
Kägenstrasse 2
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T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83S08, DN08 3/8"

Coriolis mass flowmeter

83S08-

71036036

SPK: DDA



Promass 83S08, DN08 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. Steel 0.8um
C Stainl. Steel 0.8um, mat. certificate (wetted parts)
H Stainl. Steel 0.8um, CRN approval
K Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, 3A
FPE Tri-Clamp 3/4", 3A
FAB Tri-Clamp 1", 3A
FMD DIN11851, 3A
FGD DIN11851 Rd28x1/8", 3A
FLH Nut DIN11864-1A, 3A
FKG Flange DIN11864-2A, 3A
FWA Clamp DIN11864-3A, 3A
FJG ISO2853, 3A
FSD SMS1145, 3A
FDW Clamp DIN32676, 3A
FEA Clamp ISO2852, 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching

L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83P40, DN40 1 1/2"

Coriolis mass flowmeter

83P40-

71040525

SPK: DDA



Promass 83P40, DN40 1 1/2"

Measuring Tube Material:
6 1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7 1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished
8 1.4435/316L, 0.38um, PED Cat.III, mat. certificate (wetted parts), electro-polished
9 Special version, TSP-no. to be spec.
A 1.4435/316L, 0.76um
C 1.4435/316L, 0.76um, mat. certificate (wetted parts)
H 1.4435/316L, 0.76um, CRN approval
K 1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)

P 1.4435/316L, 0.76um, PED Cat.III
R 1.4435/316L, 0.76um, PED Cat.III, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ASME B16.5
ABZ Cl.300, flange ASME B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
ETD Eccen. Tri-Clamp 1-1/2 ", ASME BPE, 3A, EHEDG
FMD DIN11851, 3A
FSD SMS1145, 3A, EHEDG
FJG ISO2853 Thread, 3A, EHEDG
FLH DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FEA ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
BCD BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BBA BBS Thread, DIN11866 Line A
BBC BBS Thread, DIN11866 Line B
BBD BBS Clamp, DIN11866 Line A with notch
BBF BBS Clamp , DIN11866 Line B with notch
BBG Eccen. BBS Clamp, DIN11866 Line B with notch
BBH BBS Flange small, DIN11866 Line A Flange with notch
BBK BBS Flange small, DIN11866 Line B Flange with notch
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
D Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate

F Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G CoC surface finish meas. + ASME BPE certificate
H CoC surface finish + Ferrite meas. + ASME BPE certificate
J Surface finish meas. + EN10204 3.1 certificate
K Surface finish + Ferrite meas. + EN10204 3.1 certificate
L Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

M Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate

P Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

R Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
S IQ/OQ documentation + CoC surface finish + Ferrite meas. + ASME BPE certificate
T IQ/OQ documentation + surface finish + Ferrite meas. + EN10204 3.1 certificate
U IQ/OQ documentation

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone

D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83S25, DN25 1"

Coriolis mass flowmeter

83S25-

71036038

SPK: DDA



Promass 83S25, DN25 1"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. Steel 0.8um
C Stainl. Steel 0.8um, mat. certificate (wetted parts)
H Stainl. Steel 0.8um, CRN approval
K Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220

FTM Tri-Clamp for Pipe size, 3A
FMD DIN11851, 3A
FLH Nut DIN11864-1A, 3A
FKG Flange DIN11864-2A, 3A
FWA Clamp DIN11864-3A, 3A
FJG ISO2853, 3A
FSD SMS1145, 3A
FDW Clamp DIN32676, 3A
FEA Clamp ISO2852, 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2

S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only

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9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83S50, DN50 2"

Coriolis mass flowmeter

83S50-

71036040

SPK: DDA



Promass 83S50, DN50 2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. Steel 0.8um
C Stainl. Steel 0.8um, mat. certificate (wetted parts)
H Stainl. Steel 0.8um, CRN approval
K Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)
P Stainl. Steel 0.8um, PED Cat.III
R Stainl. Steel 0.8um, PED Cat.III, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
D3Z PN63, EN1092-1-B2 (DIN2501) flange
AAZ Cl.150, flange ANSI B16.5
ABZ Cl.300, flange ANSI B16.5
NEZ 10K, flange JIS B2220
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, 3A
FMD DIN11851, 3A
FLH Nut DIN11864-1A, 3A
FKG Flange DIN11864-2A, 3A
FWA Clamp DIN11864-3A, 3A
FJG ISO2853, 3A
FSD SMS1145, 3A
FDW Clamp DIN32676, 3A
FEA Clamp ISO2852, 3A
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube) + type test (containment)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)

F Purge + Pressure test (tube) + type test (containment)

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area

C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching

K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

LPGmass 8FE08, DN08 3/8"

Coriolis mass flowmeter for LPG-Applications

8FE08-

71036451

SPK: DDA

LPGmass 8FE08, DN08 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5

ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A 316L/1.4404
FWW	Tri-Clamp 3/4", 1.4404/316L
FWA	Tri-Clamp 3/4", 0.8um/150grit 3A, 316L 1.4404
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
CVS	8-VCO-4 (1/2"), 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube)

Calibration Massflow; Density:

9	Special version, TSP-no. to be spec.
A	0.20%, 0.02g/ccm
C	0.20% 5-point, 0.02g/ccm
G	0.20% 5-point, 0.02g/ccm, traceable ISO/IEC17025

Approval:

8	ATEX II2GD+IECEx+XP CEC/NEC Cl.I-III Div.1
9	Special version, TSP-no. to be spec.
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z=Zone
C	ATEX II 2GD+ IECEx Z1,21 Ex demb ia IIC Ex tD A21 Z=Zone
K	NEPSI Ex d IIC
L	NEPSI Ex de IIC
M	CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM Class I, Div. 2, Gps. A,B,C,D
S	UL Class I, Div. 2, Gps. A,B,C,D

Housing:

9	Special version, TSP-no. to be spec.
A	compact IP67 NEMA4X, aluminium

Cable Entry:

9	Special version, TSP-no. to be spec.
A	gland M20 (EEx d > thread M20)
B	thread NPT 1/2
C	thread G 1/2

Power Supply; Display:

1	10-30VDC, 20-28VAC, w/o display, remote configuration
9	Special version, TSP-no. to be spec.

Custody Transfer Approval:

0	w/o
9	Special version, TSP-no. to be spec.
M	MID Evaluation Certificate (Europe)
W	MC (Canada)

Output; Input:

9	Special version, TSP-no. to be spec.
N	2x (phase-shifted) puls/freq. + Stat.Out + Modbus

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

>>>Marking: (optional)

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LPGmass 8FE15, DN15 1/2"

Coriolis mass flowmeter for LPG-Applications

8FE15-

71036452

SPK: DDA

LPGmass 8FE15, DN15 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
C	Stainl. steel, mat. certificate (wetted parts)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A 316L/1.4404
FWW	Tri-Clamp 3/4", 1.4404/316L
FWA	Tri-Clamp 3/4", 0.8um/150grit 3A, 316L 1.4404
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
CWS	12-VCO-4 (3/4"), 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube)

Calibration Massflow; Density:

9	Special version, TSP-no. to be spec.
A	0.20%, 0.02g/ccm
C	0.20% 5-point, 0.02g/ccm
G	0.20% 5-point, 0.02g/ccm, traceable ISO/IEC17025

Approval:

8	ATEX II2GD+IECEx+XP CEC/NEC Cl.I-III Div.1
9	Special version, TSP-no. to be spec.
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z=Zone
C	ATEX II 2GD+ IECEx Z1,21 Ex demb ia IIC Ex tD A21 Z=Zone
K	NEPSI Ex d IIC
L	NEPSI Ex de IIC
M	CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM Class I, Div. 2, Gps. A,B,C,D
S	UL Class I, Div. 2, Gps. A,B,C,D

Housing:

9	Special version, TSP-no. to be spec.
A	compact IP67 NEMA4X, aluminium

Cable Entry:

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9 Special version, TSP-no. to be spec.
A gland M20 (EEx d > thread M20)
B thread NPT 1/2
C thread G 1/2

Power Supply; Display:
1 10-30VDC, 20-28VAC, w/o display, remote configuration
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
0 w/o
9 Special version, TSP-no. to be spec.
M MID Evaluation Certificate (Europe)
N NTEP (USA)
W MC (Canada)

Output; Input:
9 Special version, TSP-no. to be spec.
N 2x (phase-shifted) puls/freq. + Stat.Out + Modbus

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

LPGmass 8FE25, DN25 1"

Coriolis mass flowmeter for LPG-Applications

8FE25-

71036453

SPK: DDA

LPGmass 8FE25, DN25 1"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube)

Calibration Massflow; Density:
9 Special version, TSP-no. to be spec.
A 0.20%, 0.02g/ccm
C 0.20% 5-point, 0.02g/ccm

G 0.20% 5-point, 0.02g/ccm, traceable ISO/IEC17025

Approval:
8 ATEX II2GD+IECEx+XP CEC/NEC Cl.I-III Div.1
9 Special version, TSP-no. to be spec.
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z=Zone
C ATEX II 2GD+ IECEx Z1,21 Ex demb ia IIC Ex tD A21 Z=Zone
K NEPSI Ex d IIC
L NEPSI Ex de IIC
M CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM Class I, Div. 2, Gps. A,B,C,D
S UL Class I, Div. 2, Gps. A,B,C,D

Housing:
9 Special version, TSP-no. to be spec.
A compact IP67 NEMA4X, aluminium

Cable Entry:
9 Special version, TSP-no. to be spec.
A gland M20 (EEx d > thread M20)
B thread NPT 1/2
C thread G 1/2

Power Supply; Display:
1 10-30VDC, 20-28VAC, w/o display, remote configuration
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
0 w/o
9 Special version, TSP-no. to be spec.
M MID Evaluation Certificate (Europe)
N NTEP (USA)
W MC (Canada)

Output; Input:
9 Special version, TSP-no. to be spec.
N 2x (phase-shifted) puls/freq. + Stat.Out + Modbus

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

LPGmass 8FE40, DN40 1 1/2"

Coriolis mass flowmeter for LPG-Applications

8FE40-

71036454

SPK: DDA

LPGmass 8FE40, DN40 1 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
FTS Tri-Clamp, 316L/1.4404

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FTA Tri-Clamp, 0.8um/150grit 3A 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.
A Basic version
B pressure test (tube)

Calibration Massflow; Density:
9 Special version, TSP-no. to be spec.
A 0.20%, 0.02g/ccm
C 0.20% 5-point, 0.02g/ccm
G 0.20% 5-point, 0.02g/ccm, traceable ISO/IEC17025

Approval:
8 ATEX II2GD+IECEx+XP CEC/NEC Cl.I-III Div.1
9 Special version, TSP-no. to be spec.
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z=Zone
C ATEX II 2GD+ IECEx Z1,21 Ex demb ia IIC Ex tD A21 Z=Zone
K NEPSI Ex d IIC
L NEPSI Ex de IIC
M CEC/NEC XP Cl.I,II,III Div.1 Gr.A-G
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM Class I, Div. 2, Gps. A,B,C,D
S UL Class I, Div. 2, Gps. A,B,C,D

Housing:
9 Special version, TSP-no. to be spec.
A compact IP67 NEMA4X, aluminium

Cable Entry:
9 Special version, TSP-no. to be spec.
A gland M20 (EEx d > thread M20)
B thread NPT 1/2
C thread G 1/2

Power Supply; Display:
1 10-30VDC, 20-28VAC, w/o display, remote configuration
9 Special version, TSP-no. to be spec.

Custody Transfer Approval:
0 w/o
9 Special version, TSP-no. to be spec.
M MID Evaluation Certificate (Europe)
W MC (Canada)

Output; Input:
9 Special version, TSP-no. to be spec.
N 2x (phase-shifted) puls/freq. + Stat.Out + Modbus

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

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Promass 80P08, DN08 3/8"

Coriolis mass flowmeter

80P08-

71040516

SPK: DDA



Promass 80P08, DN08 3/8"

Measuring Tube Material:

6	1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7	1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished
9	Special version, TSP-no. to be spec.
A	1.4435/316L, 0.76um
C	1.4435/316L, 0.76um, mat. certificate (wetted parts)
H	1.4435/316L, 0.76um, CRN approval
K	1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)

Process Connection:

D2Z	PN40, EN1092-1-B1 (DIN2501) flange
AAZ	Cl.150, flange ASME B16.5
ABZ	Cl.300, flange ASME B16.5
NDZ	20K, flange JIS B2220
NGZ	40K, flange JIS B2220
FTM	Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
FPE	Tri-Clamp 3/4", ASME BPE 3A, EHEDG
FAB	Tri-Clamp 1", ASME BPE 3A, EHEDG
ETA	Eccen. Tri-Clamp 1/2", ASME BPE 3A, EHEDG
FMD	DIN11851, 3A
FGD	DIN11851 Rd28x1/8", 3A
FSD	SMS1145, 3A, EHEDG
FJG	ISO2853 Thread, 3A, EHEDG
FLH	DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG	DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA	DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FWB	Eccen. DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW	DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FDZ	Eccen. DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FEA	ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB	ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC	Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
BCD	BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD	BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BED	Eccen. BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BBA	BBS Thread, DIN11866 Line A
BBC	BBS Thread, DIN11866 Line B
BBD	BBS Clamp, DIN11866 Line A with notch
BBE	Eccen. BBS Clamp DIN11866 Line A with notch
BBF	BBS Clamp , DIN11866 Line B with notch
BBG	Eccen. BBS Clamp, DIN11866 Line B with notch
BBH	BBS Flange small, DIN11866 Line A Flange with notch
BBK	BBS Flange small, DIN11866 Line B Flange with notch
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.
A	Basic version
B	Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C	Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
D	Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate
F	Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G	CoC surface finish meas. + ASME BPE certificate
H	CoC surface finish + Ferrite meas. + ASME BPE certificate

J Surface finish meas. + EN10204 3.1 certificate
K Surface finish + Ferrite meas. + EN10204 3.1 certificate
L Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

M Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate

P Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

R Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN

E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80P15, DN15 1/2"

Coriolis mass flowmeter

80P15-

71040517

SPK: DDA



Promass 80P15, DN15 1/2"

Measuring Tube Material:
6 1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7 1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished
9 Special version, TSP-no. to be spec.
A 1.4435/316L, 0.76um
C 1.4435/316L, 0.76um, mat. certificate (wetted parts)
H 1.4435/316L, 0.76um, CRN approval
K 1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ASME B16.5
ABZ Cl.300, flange ASME B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
FUG Tri-Clamp 1/2", ASME BPE 3A, EHEDG
FAB Tri-Clamp 1", ASME BPE 3A, EHEDG
ETB Eccen. Tri-Clamp 3/4", ASME BPE, 3A, EHEDG
FMD DIN11851, 3A
FGD DIN11851 Rd28x1/8", 3A
FSD SMS1145, 3A, EHEDG
FJG ISO2853 Thread, 3A, EHEDG
FLH DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FWB Eccen. DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FDZ Eccen. DIN32676 Clamp, DIN11866 Line A 3A, EHEDG

FEA ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
BCD BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BED Eccen. BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BBA BBS Thread, DIN11866 Line A
BBC BBS Thread, DIN11866 Line B
BBD BBS Clamp, DIN11866 Line A with notch
BBE Eccen. BBS Clamp DIN11866 Line A with notch
BBF BBS Clamp , DIN11866 Line B with notch
BBG Eccen. BBS Clamp, DIN11866 Line B with notch
BBH BBS Flange small, DIN11866 Line A Flange with notch
BBK BBS Flange small, DIN11866 Line B Flange with notch
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
D Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate
F Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G CoC surface finish meas. + ASME BPE certificate
H CoC surface finish + Ferrite meas. + ASME BPE certificate
J Surface finish meas. + EN10204 3.1 certificate
K Surface finish + Ferrite meas. + EN10204 3.1 certificate
L Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
M Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate
P Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
R Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh

environment
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80P25, DN25 1"

Coriolis mass flowmeter

80P25-
71040518

SPK: DDA



Promass 80P25, DN25 1"

Measuring Tube Material:
6 1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7 1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished

9	Special version, TSP-no. to be spec.
A	1.4435/316L, 0.76um
C	1.4435/316L, 0.76um, mat. certificate (wetted parts)
H	1.4435/316L, 0.76um, CRN approval
K	1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)

Process Connection:

D2Z	PN40, EN1092-1-B1 (DIN2501) flange
AAZ	Cl.150, flange ASME B16.5
ABZ	Cl.300, flange ASME B16.5
NDZ	20K, flange JIS B2220
NGZ	40K, flange JIS B2220
FTM	Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
ETC	Eccen. Tri-Clamp 1", ASME BPE, 3A, EHEDG
FMD	DIN11851, 3A
FSD	SMS1145, 3A, EHEDG
FJG	ISO2853 Thread, 3A, EHEDG
FLH	DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG	DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA	DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FWB	Eccen. DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW	DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FDZ	Eccen. DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FEA	ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB	ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC	Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
FED	Eccen. Clamp ISO2852, (DN15/50.5), DIN11866 Line B, 3A, EHEDG
BCD	BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD	BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BED	Eccen. BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BBA	BBS Thread, DIN11866 Line A
BBC	BBS Thread, DIN11866 Line B
BBD	BBS Clamp, DIN11866 Line A with notch
BBE	Eccen. BBS Clamp DIN11866 Line A with notch
BBF	BBS Clamp , DIN11866 Line B with notch
BBG	Eccen. BBS Clamp, DIN11866 Line B with notch
BBH	BBS Flange small, DIN11866 Line A Flange with notch
BBK	BBS Flange small, DIN11866 Line B Flange with notch
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.
A	Basic version
B	Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C	Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
D	Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate
F	Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G	CoC surface finish meas. + ASME BPE certificate
H	CoC surface finish + Ferrite meas. + ASME BPE certificate
J	Surface finish meas. + EN10204 3.1 certificate
K	Surface finish + Ferrite meas. + EN10204 3.1 certificate
L	Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
M	Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate
P	Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
R	Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025

H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80P40, DN40 1 1/2"

Coriolis mass flowmeter

80P40-

71040519

SPK: DDA



Promass 80P40, DN40 1 1/2"

Measuring Tube Material:
6 1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7 1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished
8 1.4435/316L, 0.38um, PED Cat.III, mat. certificate (wetted parts), electro-polished
9 Special version, TSP-no. to be spec.
A 1.4435/316L, 0.76um
C 1.4435/316L, 0.76um, mat. certificate (wetted parts)
H 1.4435/316L, 0.76um, CRN approval
K 1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)
P 1.4435/316L, 0.76um, PED Cat.III
R 1.4435/316L, 0.76um, PED Cat.III, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
AAZ Cl.150, flange ASME B16.5
ABZ Cl.300, flange ASME B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
ETD Eccen. Tri-Clamp 1-1/2 ", ASME BPE, 3A, EHEDG
FMD DIN11851, 3A
FSD SMS1145, 3A, EHEDG
FJG ISO2853 Thread, 3A, EHEDG
FLH DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FEA ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
BCD BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BBA BBS Thread, DIN11866 Line A
BBC BBS Thread, DIN11866 Line B
BBD BBS Clamp, DIN11866 Line A with notch
BBF BBS Clamp , DIN11866 Line B with notch
BBG Eccen. BBS Clamp, DIN11866 Line B with notch
BBH BBS Flange small, DIN11866 Line A Flange with notch
BBK BBS Flange small, DIN11866 Line B Flange with notch
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
9 Special version, TSP-no. to be spec.
A Basic version
B Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate

D Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate

F Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G CoC surface finish meas. + ASME BPE certificate
H CoC surface finish + Ferrite meas. + ASME BPE certificate
J Surface finish meas. + EN10204 3.1 certificate
K Surface finish + Ferrite meas. + EN10204 3.1 certificate
L Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

M Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate

P Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

R Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate

Calibration:
9 Special version, TSP-no. to be spec.
A 0.15%, 0.0005g/cc
B 0.15%, 0.0005g/cc+Spec.Density
C 0.15% 5-pt, 0.0005g/cc
D 0.15% 5-pt, 0.0005g/cc+Spec.Density
G 0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language

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DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80P50, DN50 2"

Coriolis mass flowmeter

80P50-

71040520

SPK: DDA



Promass 80P50, DN50 2"

Measuring Tube Material:
6 1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7 1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished
8 1.4435/316L, 0.38um, PED Cat.III, mat. certificate (wetted parts), electro-polished
9 Special version, TSP-no. to be spec.
A 1.4435/316L, 0.76um
C 1.4435/316L, 0.76um, mat. certificate (wetted parts)
H 1.4435/316L, 0.76um, CRN approval
K 1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)
P 1.4435/316L, 0.76um, PED Cat.III
R 1.4435/316L, 0.76um, PED Cat.III, mat. certificate (wetted parts)

Process Connection:
D2Z PN40, EN1092-1-B1 (DIN2501) flange
D3Z PN63, EN1092-1-B2 (DIN2501) flange
AAZ Cl.150, flange ASME B16.5
ABZ Cl.300, flange ASME B16.5
NDZ 20K, flange JIS B2220
NGZ 40K, flange JIS B2220
FTM Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
ETE Eccen. Tri-Clamp 2", ASME BPE, 3A, EHEDG
FMD DIN11851, 3A
FSD SMS1145, 3A, EHEDG
FJG ISO2853 Thread, 3A, EHEDG

FLH	DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG	DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA	DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FWB	Eccen. DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW	DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FDZ	Eccen. DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FEA	ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB	ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC	Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
BCD	BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD	BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BED	Eccen. BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BBA	BBS Thread, DIN11866 Line A
BBC	BBS Thread, DIN11866 Line B
BBD	BBS Clamp, DIN11866 Line A with notch
BBE	Eccen. BBS Clamp DIN11866 Line A with notch
BBF	BBS Clamp , DIN11866 Line B with notch
BBG	Eccen. BBS Clamp, DIN11866 Line B with notch
BBH	BBS Flange small, DIN11866 Line A Flange with notch
BBK	BBS Flange small, DIN11866 Line B Flange with notch
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.
A	Basic version
B	Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C	Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
D	Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate
F	Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G	CoC surface finish meas. + ASME BPE certificate
H	CoC surface finish + Ferrite meas. + ASME BPE certificate
J	Surface finish meas. + EN10204 3.1 certificate
K	Surface finish + Ferrite meas. + EN10204 3.1 certificate
L	Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
M	Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate
P	Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate
R	Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate

Calibration:

9	Special version, TSP-no. to be spec.
A	0.15%, 0.0005g/cc
B	0.15%, 0.0005g/cc+Spec.Density
C	0.15% 5-pt, 0.0005g/cc
D	0.15% 5-pt, 0.0005g/cc+Spec.Density
G	0.15% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.15% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:

A	Compact IP67 NEMA4X, Aluminium
B	Compact IP67 NEMA4X, stainless
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable

E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

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CH - 4153 Reinach

Promass 83P08, DN08 3/8"

Coriolis mass flowmeter

83P08-

71040522

SPK: DDA



Promass 83P08, DN08 3/8"

Measuring Tube Material:

6	1.4435/316L, 0.38um, mat. certificate, (wetted parts), electro-polished
7	1.4435/316L, 0.38um, CRN approval, mat. certificate (wetted parts), electro-polished
9	Special version, TSP-no. to be spec.
A	1.4435/316L, 0.76um
C	1.4435/316L, 0.76um, mat. certificate (wetted parts)
H	1.4435/316L, 0.76um, CRN approval
K	1.4435/316L, 0.76um, CRN approval, mat. certificate (wetted parts)

Process Connection:

D2Z	PN40, EN1092-1-B1 (DIN2501) flange
AAZ	Cl.150, flange ASME B16.5
ABZ	Cl.300, flange ASME B16.5
NDZ	20K, flange JIS B2220
NGZ	40K, flange JIS B2220
FTM	Tri-Clamp for Pipe size, ASME BPE 3A, EHEDG
FPE	Tri-Clamp 3/4", ASME BPE 3A, EHEDG
FAB	Tri-Clamp 1", ASME BPE 3A, EHEDG
ETA	Eccen. Tri-Clamp 1/2", ASME BPE 3A, EHEDG
FMD	DIN11851, 3A
FGD	DIN11851 Rd28x1/8", 3A
FSD	SMS1145, 3A, EHEDG
FJG	ISO2853 Thread, 3A, EHEDG
FLH	DIN11864-1A Thread, DIN11866 Line A 3A, EHEDG
FKG	DIN11864-2A Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
FWA	DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FWB	Eccen. DIN11864-3A Clamp, DIN11866 Line A with notch, 3A, EHEDG
FDW	DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FDZ	Eccen. DIN32676 Clamp, DIN11866 Line A 3A, EHEDG
FEA	ISO2852 Clamp, ISO 2037 3A, EHEDG
FEB	ISO2852 Clamp, DIN11866 Line B 3A, EHEDG
FEC	Eccen. ISO2852 Clamp , DIN11866 Line B, 3A, EHEDG
BCD	BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BFD	BioConnect Flange, DIN11866 Line A Flange with notch, 3A, EHEDG
BED	Eccen. BioConnect Clamp, DIN11866 Line A with notch, 3A, EHEDG
BBA	BBS Thread, DIN11866 Line A
BBC	BBS Thread, DIN11866 Line B
BBD	BBS Clamp, DIN11866 Line A with notch
BBE	Eccen. BBS Clamp DIN11866 Line A with notch
BBF	BBS Clamp , DIN11866 Line B with notch
BBG	Eccen. BBS Clamp, DIN11866 Line B with notch
BBH	BBS Flange small, DIN11866 Line A Flange with notch
BBK	BBS Flange small, DIN11866 Line B Flange with notch
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.
A	Basic version
B	Pressure test (tube) + type test (containment) + EN10204 3.1 certificate
C	Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
D	Pressure test (tube) + cleaned from oil+grease (wetted parts) + type test (containment) + EN10204 3.1 certificate
F	Purge + pressure test (tube) + type test (containment) + EN10204 3.1 certificate
G	CoC surface finish meas. + ASME BPE certificate
H	CoC surface finish + Ferrite meas. + ASME BPE certificate

J Surface finish meas. + EN10204 3.1 certificate
K Surface finish + Ferrite meas. + EN10204 3.1 certificate
L Surface finish meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

M Surface finish + Ferrite meas. + type test (containment) + pressure test (tube) + EN10204 3.1 certificate

P Surface finish + Ferrite meas. + cleaned from oil+grease (wetted parts) + EN10204 3.1 certificate

R Surface finish + Ferrite meas.+ pressure test (tube) + type test (containment) + Cleaned from oil+grease (wetted parts)+ EN10204 3.1 certificate
S IQ/OQ documentation + CoC surface finish + Ferrite meas. + ASME BPE certificate
T IQ/OQ documentation + surface finish + Ferrite meas. + EN10204 3.1 certificate
U IQ/OQ documentation

Calibration:
9 Special version, TSP-no. to be spec.
A 0.1%, 0.0005g/cc
B 0.1%, 0.0005g/cc+Spec.Density
C 0.1% 5-pt, 0.0005g/cc
D 0.1% 5-pt, 0.0005g/cc+Spec.Density
G 0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H 0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language

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DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

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Kägenstrasse 2
CH - 4153 Reinach

Promass 83S15, DN15 1/2"

Coriolis mass flowmeter

83S15-

71036037

SPK: DDA



Promass 83S15, DN15 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. Steel 0.8um
C	Stainl. Steel 0.8um, mat. certificate (wetted parts)
H	Stainl. Steel 0.8um, CRN approval
K	Stainl. Steel 0.8um, CRN approval, mat. certificate (wetted parts)

Process Connection:

D2Z	PN40, EN1092-1-B1 (DIN2501) flange
AAZ	Cl.150, flange ANSI B16.5
ABZ	Cl.300, flange ANSI B16.5
NDZ	20K, flange JIS B2220
NGZ	40K, flange JIS B2220
FTM	Tri-Clamp for Pipe size, 3A
FUG	Tri-Clamp 1/2", 3A
FAB	Tri-Clamp 1", 3A
FMD	DIN11851, 3A
FGD	DIN11851 Rd28x1/8", 3A
FLH	Nut DIN11864-1A, 3A
FKG	Flange DIN11864-2A, 3A
FWA	Clamp DIN11864-3A, 3A
FJG	ISO2853, 3A
FSD	SMS1145, 3A
FDW	Clamp DIN32676, 3A
FEA	Clamp ISO2852, 3A
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

9	Special version, TSP-no. to be spec.
A	Basic version
B	pressure test (tube) + type test (containment)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube) + type test (containment)
F	Purge + Pressure test (tube) + type test (containment)

Calibration:

9	Special version, TSP-no. to be spec.
A	0.1%, 0.0005g/cc
B	0.1%, 0.0005g/cc+Spec.Density
C	0.1% 5-pt, 0.0005g/cc
D	0.1% 5-pt, 0.0005g/cc+Spec.Density
G	0.1% 5-pt, 0.0005g/cc, traceable ISO/IEC17025
H	0.1% 5-pt, 0.0005g/cc+Spec.Density, + traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Housing:

A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft cable
F Remote, field IP67 NEMA4X + 20m/65ft cable
R Compact stainless + Polycarbonate window, IP67 NEMA4X
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
7 Remote, field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature:

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

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Kägenstrasse 2
CH - 4153 Reinach

Output; Input:

A	4-20mA SIL HART + frequency
B	4-20mA SIL HART + freq. + 2x relay
F	PROFIBUS PA, Ex-i
G	FOUNDATION Fieldbus, Ex-i
H	PROFIBUS PA
J	PROFIBUS DP
K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In, modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In, modules exchangeable
7	Modbus RS485 + 2x relay + stat.In, modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In, modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In, modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In, modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In, modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In, modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In, modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out, modules exchangeable
3	4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83E15, DN15 1/2"

Coriolis mass flowmeter

83E15-

50103754

SPK: DDB



Promass 83E15, DN15 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
C	Stainl. steel, mat. certificate (wetted parts)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N	PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N	PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5

NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, Flange EN1092-1-B1 (DIN2501)
CWS	12-VCO-4 (3/4"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.2%, 0.0005g/cc
C	0.2% 5-pt, 0.0005g/cc
G	0.2% 5-pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8	Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9	Special version, TSP-no. to be spec.
A	Compact IP67 NEMA4X, Aluminium
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable

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Cable Entry:

9	Special version, TSP-no. to be spec.
A	Gland M20 (EEx d > thread M20)
B	Thread NPT 1/2
C	Thread G 1/2
F	Gland G 1/2, Ex d Shimada
K	Bus plug + gland M20
L	Bus plug + thread NPT 1/2
M	Bus plug + thread G 1/2
Q	2 x Bus plug + gland M20
R	2 x Bus plug + thread NPT 1/2
S	2 x Bus plug + thread G 1/2
X	Not used, sensor only

Power Supply; Display:

7	85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
8	20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
A	85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL
B	20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL
C	85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D	20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E	85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F	20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN
G	85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H	20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X	Sensor only
9	Special version, TSP-no. to be spec.

Adjustment; Software Feature

A	Default liquid; Basic version
B	Default gas; Basic version
C	Default liquid; Concentration measurement
E	Default liquid; Advanced diagnostics
D	Default gas; Advanced diagnostics
J	Default liquid; Batching
K	Default gas; Batching
L	Default liquid; Batching + Concentration measurement
N	Default liquid; Batching + Advanced diagnostics
R	Default liquid; Advanced diagnostics + Concentration measurement
T	Default liquid; Batching + Diagnostics+ Concentration measurement
X	Sensor only
9	Special version, TSP-no. to be spec.

Output; Input:

A	4-20mA SIL HART + frequency
B	4-20mA SIL HART + freq. + 2x relay
F	PROFIBUS PA, Ex-i
G	FOUNDATION Fieldbus, Ex-i
H	PROFIBUS PA
J	PROFIBUS DP
K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7	Modbus RS485 + 2x relay + stat.In modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable

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L	4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Dosimass 8BE25, DN25 1" OEM

Coriolis mass flowmeter for filling applications (compact version)
Housing in stainless steel

8BE25-

50105273

SPK: DDB



Dosimass 8BE25, DN25 1" OEM

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
C	stainl. steel, mat. certificate (wetted parts)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1 B1 DIN2501) flange
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A 316L/1.4404
FTD	Tri-Clamp, 0.4um 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FDD	DIN32676, 0.4um 3A, 316L/1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test:

9	Special version, TSP-no. to be spec.
A	Basic version
B	Pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)

Calibration:

0	Without, (+/-5% o.r.)
A	0.3% + confirmation
B	0.15% + protocol
9	Special version, TSP-no. to be spec.

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
G	FM/CSA General Purpose

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H ATEX II 3G EEx n IIC

Housing:
9 Special version, TSP-no. to be spec.
B Compact IP67 NEMA4X, stainless

Cable Entry:
1 Adapter RSE8 8pol. -> 8pol. 5 wire 24VDC, pulse, status
2 Adapter RSE4 8pol. -> 4pol. 4 wire 24VDC, pulse
3 Adapter, RSE5 8pol. -> 5pol. 5 wire 24VDC, pulse
4 Direct connection RSE8, without adapter 24VDC, pulse, status, service
9 Special version, TSP-no. to be spec.

Power Supply:
1 20-30 VDC
9 Special version, TSP-no. to be spec.

Software Feature:
9 Special version, TSP-no. to be spec.
A Basic version

Output; Input:
1 Pulse max. 10kHz and status; passive
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

Promass 80E15, DN15 1/2"

Coriolis mass flowmeter

80E15-

50102568

SPK: DDB



Promass 80E15, DN15 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
R2S PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
FTS Tri-Clamp, 316L/1.4404
CWS 12-VCO-4 (3/4"), 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FUA Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUW Tri-Clamp 1/2", 316L/1.4404
FUD Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404

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FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW DIN11864-2A, 316L/1.4404
FKA DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
A Basic version
B pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube)
5 CRN approval
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.

Calibration:
9 Special version, TSP-no. to be spec.
A 0.25%, 0.0005g/cc
C 0.25% 5-Pt, 0.0005g/cc
G 0.25% 5-Pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex d IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

Endress+Hauser Consult AG
Kägenstrasse 2
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7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq, = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80E40, DN40 1 1/2"

Coriolis mass flowmeter

80E40-

50102570

SPK: DDB



Promass 80E40, DN40 1 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404

FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW DIN11864-2A, 316L/1.4404
FKA DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
A Basic version
B pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube)
5 CRN approval
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.

Calibration:
9 Special version, TSP-no. to be spec.
A 0.25%, 0.0005g/cc
C 0.25% 5-Pt, 0.0005g/cc
G 0.25% 5-Pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex d IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:

A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq, = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80E50, DN50 2"

Coriolis mass flowmeter

80E50-

50102571

SPK: DDB



Promass 80E50, DN50 2"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate

Process Connection:

D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

D7S PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5

ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.25%, 0.0005g/cc
C	0.25% 5-Pt, 0.0005g/cc
G	0.25% 5-Pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex d IIC

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8	Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9	Special version, TSP-no. to be spec.
A	Compact IP67 NEMA4X, Aluminium
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:

9	Special version, TSP-no. to be spec.
A	Gland M20 (EEx d > thread M20)

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B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq, = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83E08, DN8 3/8"

Coriolis mass flowmeter

83E08-

50103753

SPK: DDB



Promass 83E08, DN8 3/8"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5

ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, Flange EN1092-1-B1 (DIN2501)
CVS	8-VCO-4 (1/2"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.2%, 0.0005g/cc
C	0.2% 5-pt, 0.0005g/cc
G	0.2% 5-pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8	Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9	Special version, TSP-no. to be spec.
A	Compact IP67 NEMA4X, Aluminium
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable

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F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:

A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable

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E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83E25, DN25 1"

Coriolis mass flowmeter

83E25-

50103755

SPK: DDB



Promass 83E25, DN25 1"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW DIN11864-2A, 316L/1.4404
FKA DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
A Basic version

B pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube)
5 CRN approval
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.

Calibration:
9 Special version, TSP-no. to be spec.
A 0.2%, 0.0005g/cc
C 0.2% 5-pt, 0.0005g/cc
G 0.2% 5-pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN

F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:
A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I Ethernet
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

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CH - 4153 Reinach

Promass 83E40, DN40 1 1/2"

Coriolis mass flowmeter

83E40-

50103756

SPK: DDB



Promass 83E40, DN40 1 1/2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
C	Stainl. steel, mat. certificate (wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.2%, 0.0005g/cc
C	0.2% 5-pt, 0.0005g/cc
G	0.2% 5-pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC

K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL
B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL
C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN
G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

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Output; Input:

A	4-20mA SIL HART + frequency
B	4-20mA SIL HART + freq. + 2x relay
F	PROFIBUS PA, Ex-i
G	FOUNDATION Fieldbus, Ex-i
H	PROFIBUS PA
J	PROFIBUS DP
K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7	Modbus RS485 + 2x relay + stat.In modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 83E50, DN50 2"

Coriolis mass flowmeter

83E50-

50103757

SPK: DDB



Promass 83E50, DN50 2"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
C	Stainl. steel, mat. certificate (wetted parts)
P	Stainl. steel, PED Cat.III
R	Stainl. steel, PED Cat.III, mat. certificate

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N	PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N	PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange

D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.2%, 0.0005g/cc
C	0.2% 5-pt, 0.0005g/cc
G	0.2% 5-pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
K	NEPSI Ex dia IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S	NEPSI Ex deia IIC
U	TIIS Ex dia IIC

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8	Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9	Special version, TSP-no. to be spec.
A	Compact IP67 NEMA4X, Aluminium
C	Remote, wall IP67 NEMA4X + 10m/30ft cable
D	Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E	Remote, field IP67 NEMA4X + 10m/30ft Cable
F	Remote, field IP67 NEMA4X + 20m/65ft Cable

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Cable Entry:

9	Special version, TSP-no. to be spec.
A	Gland M20 (EEx d > thread M20)
B	Thread NPT 1/2
C	Thread G 1/2
F	Gland G 1/2, Ex d Shimada
K	Bus plug + gland M20
L	Bus plug + thread NPT 1/2
M	Bus plug + thread G 1/2
Q	2 x Bus plug + gland M20
R	2 x Bus plug + thread NPT 1/2
S	2 x Bus plug + thread G 1/2
X	Not used, sensor only

Power Supply; Display:

7	85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
8	20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
A	85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL
B	20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL
C	85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D	20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E	85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F	20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN
G	85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H	20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X	Sensor only
9	Special version, TSP-no. to be spec.

Adjustment; Software Feature

A	Default liquid; Basic version
B	Default gas; Basic version
C	Default liquid; Concentration measurement
E	Default liquid; Advanced diagnostics
D	Default gas; Advanced diagnostics
J	Default liquid; Batching
K	Default gas; Batching
L	Default liquid; Batching + Concentration measurement
N	Default liquid; Batching + Advanced diagnostics
R	Default liquid; Advanced diagnostics + Concentration measurement
T	Default liquid; Batching + Diagnostics+ Concentration measurement
X	Sensor only
9	Special version, TSP-no. to be spec.

Output; Input:

A	4-20mA SIL HART + frequency
B	4-20mA SIL HART + freq. + 2x relay
F	PROFIBUS PA, Ex-i
G	FOUNDATION Fieldbus, Ex-i
H	PROFIBUS PA
J	PROFIBUS DP
K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7	Modbus RS485 + 2x relay + stat.In modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable

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CH - 4153 Reinach

L	4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass 80E08, DN8 3/8"

Coriolis mass flowmeter

80E08-

50102567

SPK: DDB



Promass 80E08, DN8 3/8"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
C	Stainl. steel, mat. certificate (wetted parts)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
CVS	8-VCO-4 (1/2"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUW	Tri-Clamp 1/2", 316L/1.4404
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

A Basic version
B pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube)
5 CRN approval
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.

Calibration:
9 Special version, TSP-no. to be spec.
A 0.25%, 0.0005g/cc
C 0.25% 5-Pt, 0.0005g/cc
G 0.25% 5-Pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex d IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq, = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Dosimass 8BE15, DN15 1/2" OEM

Coriolis mass flowmeter for filling applications (compact version)
Housing in stainless steel

8BE15-

50105272

SPK: DDB



Dosimass 8BE15, DN15 1/2" OEM

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C stainl. steel, mat. certificate (wetted parts)

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1 B1 DIN2501) flange
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A 316L/1.4404
FTD Tri-Clamp, 0.4um 3A, 316L/1.4404
FWW Tri-Clamp 3/4", 1.4404/316L
FWA Tri-Clamp 3/4", 0.8um/150grit 3A, 316L 1.4404
FUW Tri-Clamp 1/2", 316L/1.4404
FUA Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUD Tri-Clamp 1/2", 0.4um 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FDD DIN32676, 0.4um 3A, 316L/1.4404
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
999 Special version, TSP-no. to be spec.

Additional Test:
9 Special version, TSP-no. to be spec.
A Basic version
B Pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Calibration:
0 Without, (+/-5% o.r.)
A 0.3% + confirmation
B 0.15% + protocol
9 Special version, TSP-no. to be spec.

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
G FM/CSA General Purpose
H ATEX II 3G EEx n IIC

Housing:
9 Special version, TSP-no. to be spec.
B Compact IP67 NEMA4X, stainless

Cable Entry:
1 Adapter RSE8 8pol. -> 8pol. 5 wire 24VDC, pulse, status
2 Adapter RSE4 8pol. -> 4pol. 4 wire 24VDC, pulse
3 Adapter, RSE5 8pol. -> 5pol. 5 wire 24VDC, pulse
4 Direct connection RSE8, without adapter 24VDC, pulse, status, service
9 Special version, TSP-no. to be spec.

Power Supply:
1 20-30 VDC
9 Special version, TSP-no. to be spec.

Software Feature:
9 Special version, TSP-no. to be spec.
A Basic version

Output; Input:
1 Pulse max. 10kHz and status; passive
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

Promass 80E25, DN25 1"

Coriolis mass flowmeter

80E25-
50102569

SPK: DDB



Promass 80E25, DN25 1"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220

NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW DIN11864-2A, 316L/1.4404
FKA DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
A Basic version
B pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube)
5 CRN approval
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.

Calibration:
9 Special version, TSP-no. to be spec.
A 0.25%, 0.0005g/cc
C 0.25% 5-Pt, 0.0005g/cc
G 0.25% 5-Pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
K NEPSI Ex dia IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
S NEPSI Ex deia IIC
U TIIS Ex d IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20

L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq, = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 80E80, DN80 3"

Coriolis mass flowmeter

80E80-

71090376

SPK: DDB



Promass 80E80, DN80 3"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.25%, 0.0005g/cc
C	0.25% 5-Pt, 0.0005g/cc
G	0.25% 5-Pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
M	NEPSI Ex dia IIC.
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q	NEPSI Ex deia IIC.
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T	NEPSI Ex deia IIB

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3	Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4	Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6	Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7	Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8	Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9	Special version, TSP-no. to be spec.
A	Compact IP67 NEMA4X, Aluminium

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq, = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
X Sensor only
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 83E80, DN80 3"

Coriolis mass flowmeter

83E80-

71090377

SPK: DDB



Promass 83E80, DN80 3"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel

C Stainl. steel, mat. certificate (wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

D7S PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NDS 10K, SUS316L, flange JIS B2220
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW DIN11864-2A, 316L/1.4404
FKA DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
A Basic version
B pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube)
5 CRN approval
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.

Calibration:
9 Special version, TSP-no. to be spec.
A 0.2%, 0.0005g/cc
C 0.2% 5-pt, 0.0005g/cc
G 0.2% 5-pt, 0.0005g/cc, traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J ATEX II 3G EEx n IIB
L NEPSI Ex dia IIB
M *NEPSI Ex dia IIC.
O XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q NEPSI Ex deia IIC.
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T NEPSI Ex deia IIB

Housing:

1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. + 20m/65ft cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. + 20m/65 ft cable, HE = harsh environment
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
C Remote, wall IP67 NEMA4X + 10m/30ft cable
D Remote, Wall IP67 NEMA4X+ 20m/65ft cable
E Remote, field IP67 NEMA4X + 10m/30ft Cable
F Remote, field IP67 NEMA4X + 20m/65ft Cable

Cable Entry:

9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2
X Not used, sensor only

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL
A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL
B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL
C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN
G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
X Sensor only
9 Special version, TSP-no. to be spec.

Output; Input:

A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i

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H	PROFIBUS PA
J	PROFIBUS DP
K	FOUNDATION Fieldbus
Q	Modbus RS485
R	4-20mA SIL HART + 0/4-20mA, active Ex-i
S	4-20mA SIL HART active + freq., Ex-i, freq. = passive
T	4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U	4-20mA SIL HART + 0/4-20mA, passive Ex-i
V	PROFIBUS DP + 2x relay + stat.In modules exchangeable
P	PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7	Modbus RS485 + 2x relay + stat.In modules exchangeable
N	Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C	4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D	4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E	4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L	4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M	4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W	4-20mA SIL HART + 2x 20mA + relay modules exchangeable
0	4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2	4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3	4-20mA SIL HART + relay + 20mA (1x out, 1x in), modules exchangeable
4	4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5	4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6	4-20mA SIL HART + stat.In + 20mA (1x out, 1x in), modules exchangeable
I	Ethernet
X	Sensor only
9	Special version, TSP-no. to be spec.

>>Marking:

Z1	Tagging (TAG), see additional spec.
Z2	Bus address, see additional spec.

Promass E 200 / TB2, 8E2B08, DN8 3/8"



Coriolis mass flowmeter
Continous process control of liquid and gases in standard applications
2-wire technology offering multivariable measurement with application specific setup.
Easy installation and low cost of ownership.

8E2B08-

71108509

SPK: DDB

Promass E 200 / TB2, 8E2B08, DN8 3/8"

Approval:

AA	Non-hazardous area
BB	ATEX II1/2G Ex ia IIC
BC	ATEX II1/2G Ex ia/d IIC
BD	ATEX II 1/3G Ex ic[ia] IIC
BG	ATEX II3G Ex nA II
BH	ATEX II3G Ex ic IIC
BJ	ATEX II2G Ex ia IIC
BK	ATEX II2G Ex d[ia] IIC
B2	ATEX II 1/2G Ex ia IIC, II2D Ex tb IIIC
B3	ATEX II 1/2G Ex ia/d IIC, II2D Ex tb IIIC
C2	CSA C/US IS Cl.I,II,III Div. 1 Gr.A-G,
C3	CSA C/US XP Cl.I,II,III Div.1 Gr.A-G,
C4	CSA C/US NI Cl.I Div.2 Gr. ABCD,
IB	IECEx Z0/Z1 Ex ia IIC
IC	IECEx Z0/Z1 Ex ia/d IIC
ID	IEC Ex Z0/Z2 Ex ic[ia] IIC
IG	IECEx Z2 II3G Ex nA II
IH	IECEx Z2 II3G Ex ic IIC
IJ	IECEx Z1 Ex ia IIC
IK	IECEx Z1 Ex d[ia] IIC

I4 IECEx Z0/Z1 Ex ia IIC; IECEx Z21 Ex tb IIIC
I5 IECEx Z0/Z1 Ex ia/d IIC; IECEx Z21 Ex tb IIIC
99 Special version, TSP-no. to be spec.

Output:
9 Special version, TSP-no. to be spec.
C 4-20mA HART, 4-20mA
X Sensor only

Display; Operation:
9 Special version, TSP-no. to be spec.
A W/o; via communication
C SD02 4-line; push buttons + data backup function
X Sensor only

Housing:
9 Special version, TSP-no. to be spec.
B GT18 dual compartment, 316L
C GT20 dual compartment, Alu coated
X Sensor only

Electrical Connection:
9 Special version, TSP-no. to be spec.
A Gland M20, IP66/67 NEMA4X
B Thread M20, IP66/67 NEMA4X
C Thread G1/2, IP66/67 NEMA4X
D Thread NPT1/2, IP66/67 NEMA4X
I Plug M12, IP66/67
M Plug 7/8", IP66/67
X Sensor only

Measuring Tube Material; Finish:
9 Special version, TSP-no. to be spec.
A 1.4539/904L
B 1.4539/904L, 0.8um, 32u-in, Mechanical polish, 3-A
C 1.4539/904L, 0.4um, 16u-in, Mechanical polish, 3-A

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
R2S PN40 DN25, 316L/1.4404, Flange EN1092-1-B1 (DIN2501)
CVS 8-VCO-4 (1/2"), 316L/1.4404
FTS Tri-Clamp, 316L/1.4404
FUW Tri-Clamp 1/2", 316L/1.4404
FMW DIN11851, 316L/1.4404
FLW DIN11864-1A, 316L/1.4404
FKW DIN11864-2A, 316L/1.4404
FJW ISO2853, 316L/1.4404
FSW SMS1145, 316L/1.4404
999 Special version, TSP-no. to be spec.

Calibration Flow:
1 0.25% Mass
2 0.25% Mass 5-point
3 0.25% Mass 5-point, traceable ISO/IEC17025
9 Special version, TSP-no. to be spec.

>Display Operation Language:
AA English
AB German
AC French
AD Spanish

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CH - 4153 Reinach

AE Italian
AF Dutch
AL Japanese

>>Application Package:
E9 Special version, TSP-no. to be spec.
EA HistoROM extended function Event + data logging

>>Service:
H9 Special version, TSP-no. to be spec.
HA Cleaned from oil+grease (wetted parts)

>>Test, Certificate:
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate
K9 Special version, TSP-no. to be spec.
KA EN10204-2.1 Declaration of compliance
KB EN10204-2.2 Test report

>>Additional Approval:
L9 Special version, TSP-no. to be spec.
LD CRN

>>Sensor Options:
M9 Special version, TSP-no. to be spec.

>>Accessories Mounted:
N9 Special version, TSP-no. to be spec.

>>Accessories Enclosed:
P9 Special version, TSP-no. to be spec.

>Firmware Version:
78 01.00.zz, HART, DevRev01

>>Tagging:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass E 200 / TB2, 8E2B15, DN15 1/2"



Coriolis mass flowmeter
Continous process control of liquid and gases in standard applications
2-wire technology offering multivariable measurement with application specific setup.
Easy installation and low cost of ownership.

8E2B15-

71108511

SPK: DDB

Promass E 200 / TB2, 8E2B15, DN15 1/2"

Approval:
AA Non-hazardous area
BB ATEX II1/2G Ex ia IIC
BC ATEX II1/2G Ex ia/d IIC
BD ATEX II 1/3G Ex ic[ia] IIC
BG ATEX II3G Ex nA II
BH ATEX II3G Ex ic IIC
BJ ATEX II2G Ex ia IIC
BK ATEX II2G Ex d[ia] IIC
B2 ATEX II 1/2G Ex ia IIC, II2D Ex tb IIIC
B3 ATEX II 1/2G Ex ia/d IIC, II2D Ex tb IIIC
C2 CSA C/US IS Cl.I,II,III Div. 1 Gr.A-G,
C3 CSA C/US XP Cl.I,II,III Div.1 Gr.A-G,
C4 CSA C/US NI Cl.I Div.2 Gr. ABCD,
IB IECEx Z0/Z1 Ex ia IIC
IC IECEx Z0/Z1 Ex ia/d IIC
ID IEC Ex Z0/Z2 Ex ic[ia] IIC
IG IECEx Z2 II3G Ex nA II
IH IECEx Z2 II3G Ex ic IIC

IJ IECEx Z1 Ex ia IIC
IK IECEx Z1 Ex d[ia] IIC
I4 IECEx Z0/Z1 Ex ia IIC; IECEx Z21 Ex tb IIIC
I5 IECEx Z0/Z1 Ex ia/d IIC; IECEx Z21 Ex tb IIIC
99 Special version, TSP-no. to be spec.

Output:
9 Special version, TSP-no. to be spec.
C 4-20mA HART, 4-20mA
X Sensor only

Display; Operation:
9 Special version, TSP-no. to be spec.
A W/o; via communication
C SD02 4-line; push buttons + data backup function
X Sensor only

Housing:
9 Special version, TSP-no. to be spec.
B GT18 dual compartment, 316L
C GT20 dual compartment, Alu coated
X Sensor only

Electrical Connection:
9 Special version, TSP-no. to be spec.
A Gland M20, IP66/67 NEMA4X
B Thread M20, IP66/67 NEMA4X
C Thread G1/2, IP66/67 NEMA4X
D Thread NPT1/2, IP66/67 NEMA4X
I Plug M12, IP66/67
M Plug 7/8", IP66/67
X Sensor only

Measuring Tube Material; Finish:
9 Special version, TSP-no. to be spec.
A 1.4539/904L
B 1.4539/904L, 0.8um, 32u-in, Mechanical polish, 3-A
C 1.4539/904L, 0.4um, 16u-in, Mechanical polish, 3-A

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
R2S PN40 DN25, 316L/1.4404, Flange EN1092-1-B1 (DIN2501)
CWS 12-VCO-4 (3/4"), 316L/1.4404
FTS Tri-Clamp, 316L/1.4404
FUW Tri-Clamp 1/2", 316L/1.4404
FMW DIN11851, 316L/1.4404
FLW DIN11864-1A, 316L/1.4404
FKW DIN11864-2A, 316L/1.4404
FJW ISO2853, 316L/1.4404
FSW SMS1145, 316L/1.4404
999 Special version, TSP-no. to be spec.

Calibration Flow:
1 0.25% Mass
2 0.25% Mass 5-point
3 0.25% Mass 5-point, traceable ISO/IEC17025
9 Special version, TSP-no. to be spec.

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Kägenstrasse 2
CH - 4153 Reinach

>Display Operation Language:

AA English
AB German
AC French
AD Spanish
AE Italian
AF Dutch
AL Japanese

>>Application Package:

E9 Special version, TSP-no. to be spec.
EA HistoROM extended function Event + data logging

>>Service:

H9 Special version, TSP-no. to be spec.
HA Cleaned from oil+grease (wetted parts)

>>Test, Certificate:

JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate
K9 Special version, TSP-no. to be spec.
KA EN10204-2.1 Declaration of compliance
KB EN10204-2.2 Test report

>>Additional Approval:

L9 Special version, TSP-no. to be spec.
LD CRN

>>Sensor Options:

M9 Special version, TSP-no. to be spec.

>>Accessories Mounted:

N9 Special version, TSP-no. to be spec.

>>Accessories Enclosed:

P9 Special version, TSP-no. to be spec.

>Firmware Version:

78 01.00.zz, HART, DevRev01

>>Tagging:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass E 200 / TB2, 8E2B25, DN25 1"

Coriolis mass flowmeter
Continous process control of liquid and gases in standard applications
2-wire technology offering multivariable measurement with application specific setup.
Easy installation and low cost of ownership.

8E2B25-

71108512

SPK: DDB



Promass E 200 / TB2, 8E2B25, DN25 1"

Approval:

AA Non-hazardous area
BB ATEX II1/2G Ex ia IIC
BC ATEX II1/2G Ex ia/d IIC
BD ATEX II 1/3G Ex ic[ia] IIC
BG ATEX II3G Ex nA II
BH ATEX II3G Ex ic IIC
BJ ATEX II2G Ex ia IIC
BK ATEX II2G Ex d[ia] IIC
B2 ATEX II 1/2G Ex ia IIC, II2D Ex tb IIIC
B3 ATEX II 1/2G Ex ia/d IIC, II2D Ex tb IIIC
C2 CSA C/US IS Cl.I,II,III Div. 1 Gr.A-G,
C3 CSA C/US XP Cl.I,II,III Div.1 Gr.A-G,

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C4 CSA C/US NI Cl.I Div.2 Gr. ABCD,
IB IECEx Z0/Z1 Ex ia IIC
IC IECEx Z0/Z1 Ex ia/d IIC
ID IEC Ex Z0/Z2 Ex ic[ia] IIC
IG IECEx Z2 II3G Ex nA II
IH IECEx Z2 II3G Ex ic IIC
IJ IECEx Z1 Ex ia IIC
IK IECEx Z1 Ex d[ia] IIC
I4 IECEx Z0/Z1 Ex ia IIC; IECEx Z21 Ex tb IIIC
I5 IECEx Z0/Z1 Ex ia/d IIC; IECEx Z21 Ex tb IIIC
99 Special version, TSP-no. to be spec.

Output:
9 Special version, TSP-no. to be spec.
C 4-20mA HART, 4-20mA
X Sensor only

Display; Operation:
9 Special version, TSP-no. to be spec.
A W/o; via communication
C SD02 4-line; push buttons + data backup function
X Sensor only

Housing:
9 Special version, TSP-no. to be spec.
B GT18 dual compartment, 316L
C GT20 dual compartment, Alu coated
X Sensor only

Electrical Connection:
9 Special version, TSP-no. to be spec.
A Gland M20, IP66/67 NEMA4X
B Thread M20, IP66/67 NEMA4X
C Thread G1/2, IP66/67 NEMA4X
D Thread NPT1/2, IP66/67 NEMA4X
I Plug M12, IP66/67
M Plug 7/8", IP66/67
X Sensor only

Measuring Tube Material; Finish:
9 Special version, TSP-no. to be spec.
A 1.4539/904L
B 1.4539/904L, 0.8um, 32u-in, Mechanical polish, 3-A
C 1.4539/904L, 0.4um, 16u-in, Mechanical polish, 3-A

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FMW DIN11851, 316L/1.4404
FLW DIN11864-1A, 316L/1.4404
FKW DIN11864-2A, 316L/1.4404
FJW ISO2853, 316L/1.4404
FSW SMS1145, 316L/1.4404
999 Special version, TSP-no. to be spec.

Calibration Flow:
1 0.25% Mass
2 0.25% Mass 5-point

3 0.25% Mass 5-point, traceable ISO/IEC17025
9 Special version, TSP-no. to be spec.

>Display Operation Language:
AA English
AB German
AC French
AD Spanish
AE Italian
AF Dutch
AL Japanese

>>Application Package:
E9 Special version, TSP-no. to be spec.
EA HistoROM extended function Event + data logging

>>Service:
H9 Special version, TSP-no. to be spec.
HA Cleaned from oil+grease (wetted parts)

>>Test, Certificate:
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate
K9 Special version, TSP-no. to be spec.
KA EN10204-2.1 Declaration of compliance
KB EN10204-2.2 Test report

>>Additional Approval:
L9 Special version, TSP-no. to be spec.
LD CRN

>>Sensor Options:
M9 Special version, TSP-no. to be spec.

>>Accessories Mounted:
N9 Special version, TSP-no. to be spec.

>>Accessories Enclosed:
P9 Special version, TSP-no. to be spec.

>Firmware Version:
78 01.00.zz, HART, DevRev01

>>Tagging:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass E 200 / TB2, 8E2B40, DN40 1-1/2"



Coriolis mass flowmeter
Continous process control of liquid and gases in standard applications
2-wire technology offering multivariable measurement with application specific setup.
Easy installation and low cost of ownership.

8E2B40-

71108513

SPK: DDB

Promass E 200 / TB2, 8E2B40, DN40 1-1/2"

Approval:
AA Non-hazardous area
BB ATEX II1/2G Ex ia IIC
BC ATEX II1/2G Ex ia/d IIC
BD ATEX II 1/3G Ex ic[ia] IIC
BG ATEX II3G Ex nA II
BH ATEX II3G Ex ic IIC
BJ ATEX II2G Ex ia IIC
BK ATEX II2G Ex d[ia] IIC
B2 ATEX II 1/2G Ex ia IIC, II2D Ex tb IIIC
B3 ATEX II 1/2G Ex ia/d IIC, II2D Ex tb IIIC

C2 CSA C/US IS Cl.I,II,III Div. 1 Gr.A-G,
C3 CSA C/US XP Cl.I,II,III Div.1 Gr.A-G,
C4 CSA C/US NI Cl.I Div.2 Gr. ABCD,
IB IECEx Z0/Z1 Ex ia IIC
IC IECEx Z0/Z1 Ex ia/d IIC
ID IEC Ex Z0/Z2 Ex ic[ia] IIC
IG IECEx Z2 II3G Ex nA II
IH IECEx Z2 II3G Ex ic IIC
IJ IECEx Z1 Ex ia IIC
IK IECEx Z1 Ex d[ia] IIC
I4 IECEx Z0/Z1 Ex ia IIC; IECEx Z21 Ex tb IIIC
I5 IECEx Z0/Z1 Ex ia/d IIC; IECEx Z21 Ex tb IIIC
99 Special version, TSP-no. to be spec.

Output:
9 Special version, TSP-no. to be spec.
C 4-20mA HART, 4-20mA
X Sensor only

Display; Operation:
9 Special version, TSP-no. to be spec.
A W/o; via communication
C SD02 4-line; push buttons + data backup function
X Sensor only

Housing:
9 Special version, TSP-no. to be spec.
B GT18 dual compartment, 316L
C GT20 dual compartment, Alu coated
X Sensor only

Electrical Connection:
9 Special version, TSP-no. to be spec.
A Gland M20, IP66/67 NEMA4X
B Thread M20, IP66/67 NEMA4X
C Thread G1/2, IP66/67 NEMA4X
D Thread NPT1/2, IP66/67 NEMA4X
I Plug M12, IP66/67
M Plug 7/8", IP66/67
X Sensor only

Measuring Tube Material; Finish:
9 Special version, TSP-no. to be spec.
A 1.4539/904L
B 1.4539/904L, 0.8um, 32u-in, Mechanical polish, 3-A
C 1.4539/904L, 0.4um, 16u-in, Mechanical polish, 3-A

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FMW DIN11851, 316L/1.4404
FLW DIN11864-1A, 316L/1.4404
FKW DIN11864-2A, 316L/1.4404
FJW ISO2853, 316L/1.4404
FSW SMS1145, 316L/1.4404
999 Special version, TSP-no. to be spec.

Calibration Flow:
1 0.25% Mass
2 0.25% Mass 5-point

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3 0.25% Mass 5-point, traceable ISO/IEC17025
9 Special version, TSP-no. to be spec.

>Display Operation Language:
AA English
AB German
AC French
AD Spanish
AE Italian
AF Dutch
AL Japanese

>>Application Package:
E9 Special version, TSP-no. to be spec.
EA HistoROM extended function Event + data logging

>>Service:
H9 Special version, TSP-no. to be spec.
HA Cleaned from oil+grease (wetted parts)

>>Test, Certificate:
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate
K9 Special version, TSP-no. to be spec.
KA EN10204-2.1 Declaration of compliance
KB EN10204-2.2 Test report

>>Additional Approval:
L9 Special version, TSP-no. to be spec.
LB PED Cat.III pressure test (tube)
LC PED Cat.III mat. certificate, (wetted parts) + pressure test (tube)
LD CRN

>>Sensor Options:
M9 Special version, TSP-no. to be spec.

>>Accessories Mounted:
N9 Special version, TSP-no. to be spec.

>>Accessories Enclosed:
P9 Special version, TSP-no. to be spec.

>Firmware Version:
78 01.00.zz, HART, DevRev01

>>Tagging:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass E 200 / TB2, 8E2B50, DN50 2"



Coriolis mass flowmeter
Continous process control of liquid and gases in standard applications
2-wire technology offering multivariable measurement with application specific setup.
Easy installation and low cost of ownership.

8E2B50-

71108514

SPK: DDB

Promass E 200 / TB2, 8E2B50, DN50 2"

Approval:
AA Non-hazardous area
BB ATEX II1/2G Ex ia IIC
BC ATEX II1/2G Ex ia/d IIC
BD ATEX II 1/3G Ex ic[ia] IIC
BG ATEX II3G Ex nA II
BH ATEX II3G Ex ic IIC
BJ ATEX II2G Ex ia IIC
BK ATEX II2G Ex d[ia] IIC

B2 ATEX II 1/2G Ex ia IIC, II2D Ex tb IIIC
B3 ATEX II 1/2G Ex ia/d IIC, II2D Ex tb IIIC
C2 CSA C/US IS Cl.I,II,III Div. 1 Gr.A-G,
C3 CSA C/US XP Cl.I,II,III Div.1 Gr.A-G,
C4 CSA C/US NI Cl.I Div.2 Gr. ABCD,
IB IECEx Z0/Z1 Ex ia IIC
IC IECEx Z0/Z1 Ex ia/d IIC
ID IEC Ex Z0/Z2 Ex ic[ia] IIC
IG IECEx Z2 II3G Ex nA II
IH IECEx Z2 II3G Ex ic IIC
IJ IECEx Z1 Ex ia IIC
IK IECEx Z1 Ex d[ia] IIC
I4 IECEx Z0/Z1 Ex ia IIC; IECEx Z21 Ex tb IIIC
I5 IECEx Z0/Z1 Ex ia/d IIC; IECEx Z21 Ex tb IIIC
99 Special version, TSP-no. to be spec.

Output:
9 Special version, TSP-no. to be spec.
C 4-20mA HART, 4-20mA
X Sensor only

Display; Operation:
9 Special version, TSP-no. to be spec.
A W/o; via communication
C SD02 4-line; push buttons + data backup function
X Sensor only

Housing:
9 Special version, TSP-no. to be spec.
B GT18 dual compartment, 316L
C GT20 dual compartment, Alu coated
X Sensor only

Electrical Connection:
9 Special version, TSP-no. to be spec.
A Gland M20, IP66/67 NEMA4X
B Thread M20, IP66/67 NEMA4X
C Thread G1/2, IP66/67 NEMA4X
D Thread NPT1/2, IP66/67 NEMA4X
I Plug M12, IP66/67
M Plug 7/8", IP66/67
X Sensor only

Measuring Tube Material; Finish:
9 Special version, TSP-no. to be spec.
A 1.4539/904L
B 1.4539/904L, 0.8um, 32u-in, Mechanical polish, 3-A
C 1.4539/904L, 0.4um, 16u-in, Mechanical polish, 3-A

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

D7S PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NDS 10K, SUS316L, flange JIS B2220
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FMW DIN11851, 316L/1.4404
FLW DIN11864-1A, 316L/1.4404

FKW DIN11864-2A, 316L/1.4404
FJW ISO2853, 316L/1.4404
FSW SMS1145, 316L/1.4404
999 Special version, TSP-no. to be spec.

Calibration Flow:
1 0.25% Mass
2 0.25% Mass 5-point
3 0.25% Mass 5-point, traceable ISO/IEC17025
9 Special version, TSP-no. to be spec.

>Display Operation Language:
AA English
AB German
AC French
AD Spanish
AE Italian
AF Dutch
AL Japanese

>>Application Package:
E9 Special version, TSP-no. to be spec.
EA HistoROM extended function Event + data logging

>>Service:
H9 Special version, TSP-no. to be spec.
HA Cleaned from oil+grease (wetted parts)

>>Test, Certificate:
JA EN10204-3.1 material (wetted parts), inspection certificate
JB EN10204-3.1 pressure test (tube), inspection certificate
K9 Special version, TSP-no. to be spec.
KA EN10204-2.1 Declaration of compliance
KB EN10204-2.2 Test report

>>Additional Approval:
L9 Special version, TSP-no. to be spec.
LB PED Cat.III pressure test (tube)
LC PED Cat.III mat. certificate, (wetted parts) + pressure test (tube)
LD CRN

>>Sensor Options:
M9 Special version, TSP-no. to be spec.

>>Accessories Mounted:
N9 Special version, TSP-no. to be spec.

>>Accessories Enclosed:
P9 Special version, TSP-no. to be spec.

>Firmware Version:
78 01.00.zz, HART, DevRev01

>>Tagging:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Dosimass 8BE08, DN08 3/8" OEM

Coriolis mass flowmeter for filling applications (compact version)
Housing in stainless steel

8BE08-

50105271

SPK: DDB



Dosimass 8BE08, DN08 3/8" OEM

Measuring Tube Material:
9 Special version, TSP-no. to be spec.

A Stainl. steel
C stainl. steel, mat. certificate (wetted parts)

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1 B1 DIN2501) flange
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A 316L/1.4404
FTD Tri-Clamp, 0.4um 3A, 316L/1.4404
FWW Tri-Clamp 3/4", 1.4404/316L
FWA Tri-Clamp 3/4", 0.8um/150grit 3A, 316L 1.4404
FUW Tri-Clamp 1/2", 316L/1.4404
FUA Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUD Tri-Clamp 1/2", 0.4um 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FDD DIN32676, 0.4um 3A, 316L/1.4404
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
999 Special version, TSP-no. to be spec.

Additional Test:
9 Special version, TSP-no. to be spec.
A Basic version
B Pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)

Calibration:
0 Without, (+/-5% o.r.)
A 0.3% + confirmation
B 0.15% + protocol
9 Special version, TSP-no. to be spec.

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
G FM/CSA General Purpose
H ATEX II 3G EEx n IIC

Housing:
9 Special version, TSP-no. to be spec.
B Compact IP67 NEMA4X, stainless

Cable Entry:
1 Adapter RSE8 8pol. -> 8pol. 5 wire 24VDC, pulse, status
2 Adapter RSE4 8pol. -> 4pol. 4 wire 24VDC, pulse
3 Adapter, RSE5 8pol. -> 5pol. 5 wire 24VDC, pulse
4 Direct connection RSE8, without adapter 24VDC, pulse, status, service
9 Special version, TSP-no. to be spec.

Power Supply:
1 20-30 VDC
9 Special version, TSP-no. to be spec.

Software Feature:
9 Special version, TSP-no. to be spec.
A Basic version

Output; Input:
1 Pulse max. 10kHz and status; passive
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

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Promass 40E08, DN8 3/8"

Coriolis mass flowmeter

40E08-

50097050

SPK: DDF



Promass 40E08, DN8 3/8"

Measuring Tube Material:

9	Special version, TSP-no. to be spec.
A	Stainl. steel
C	Stainl. steel, mat. certificate (wetted parts)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
CVS	8-VCO-4 (1/2"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.5% + confirmation
C	0.5%, 3-pt + protocol
E	0.5% 3-pt, traceable ISO/IEC17025

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Approval:
- 9 Special version, TSP-no. to be spec.
- A Non-hazardous area
- B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
- D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
- H ATEX II 3G EEx n IIC
- N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
- R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
- U TIIS Ex dia IIC

Housing:
- 1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
- 9 Special version, TSP-no. to be spec.
- A Compact IP67 NEMA4X, Aluminium

Cable Entry:
- 9 Special version, TSP-no. to be spec.
- A Gland M20 (EEx d > thread M20)
- B Thread NPT 1/2
- C Thread G 1/2
- F Gland G 1/2, Ex d Shimada
- X Not used, sensor only

Power Supply; Display:
- 0 85-260VAC; w/o display, remote configuration
- 1 20-55VAC / 16-62VDC; w/o display remote configuration
- 4 85-260VAC; 2-line; with display FR,ES,IT,NL,PT,DE,EN
- 5 20-55VAC / 16-62VDC; 2-line; + display, FR,ES,IT,NL,PT,DE,EN
- X Sensor only
- 9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
- 9 Special version, TSP-no. to be spec.
- A Default liquid; Basic version
- B Default gas; Basic version
- X Sensor only

Output; Input:
- 9 Special version, TSP-no. to be spec.
- A 4-20mA HART + frequency
- D 4-20mA HART + freq. + status+stat.In,
- S 4-20mA HART active + freq. passive, Ex-i
- T 4-20mA HART + freq., passive, Ex-i
- X Sensor only

>>Marking:
- Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

Promass 40E50, DN50 2"

Coriolis mass flowmeter

40E50-

50097054

SPK: DDF



Promass 40E50, DN50 2"

Measuring Tube Material:
- 9 Special version, TSP-no. to be spec.
- A Stainl. steel
- C Stainl. steel, mat. certificate (wetted parts)
- P Stainl. steel, PED Cat.III
- R Stainl. steel, PED Cat.III, mat. certificate

Endress+Hauser Consult AG
Kägenstrasse 2
CH - 4153 Reinach

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N	PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D3S	PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N	PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange
D7S	PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NDS	10K, SUS316L, flange JIS B2220
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.5% + confirmation
C	0.5%, 3-pt + protocol
E	0.5% 3-pt, traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
U	TIIS Ex dia IIC

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
9	Special version, TSP-no. to be spec.
A	Compact IP67 NEMA4X, Aluminium

Cable Entry:

9	Special version, TSP-no. to be spec.
A	Gland M20 (EEx d > thread M20)
B	Thread NPT 1/2

C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
0 85-260VAC; w/o display, remote configuration
1 20-55VAC / 16-62VDC; w/o display remote configuration
4 85-260VAC; 2-line; with display FR,ES,IT,NL,PT,DE,EN
5 20-55VAC / 16-62VDC; 2-line; + display, FR,ES,IT,NL,PT,DE,EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
9 Special version, TSP-no. to be spec.
A 4-20mA HART + frequency
D 4-20mA HART + freq. + status+stat.In,
S 4-20mA HART active + freq. passive, Ex-i
T 4-20mA HART + freq., passive, Ex-i
X Sensor only

>>Marking:
Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

Promass 40E40, DN40 1 1/2"

Coriolis mass flowmeter

40E40-

50097053

SPK: DDF



Promass 40E40, DN40 1 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404

FKW DIN11864-2A, 316L/1.4404
FKA DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
999 Special version, TSP-no. to be spec.

Additional Test, certificate:
A Basic version
B pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube)
5 CRN approval
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.

Calibration:
9 Special version, TSP-no. to be spec.
A 0.5% + confirmation
C 0.5%, 3-pt + protocol
E 0.5% 3-pt, traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
0 85-260VAC; w/o display, remote configuration
1 20-55VAC / 16-62VDC; w/o display remote configuration
4 85-260VAC; 2-line; with display FR,ES,IT,NL,PT,DE,EN
5 20-55VAC / 16-62VDC; 2-line; + display, FR,ES,IT,NL,PT,DE,EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
9 Special version, TSP-no. to be spec.
A 4-20mA HART + frequency
D 4-20mA HART + freq. + status+stat.In,
S 4-20mA HART active + freq. passive, Ex-i
T 4-20mA HART + freq., passive, Ex-i
X Sensor only

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Kägenstrasse 2
CH - 4153 Reinach

>>Marking:

Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

Promass 40E25, DN25 1"

Coriolis mass flowmeter

40E25-

50097052

SPK: DDF



Promass 40E25, DN25 1"

Measuring Tube Material:

9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)

Process Connection:

D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220
NHS 63K, SUS316L, flange JIS B2220
FTS Tri-Clamp, 316L/1.4404
FTA Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW DIN11851, 316L/1.4404
FMA DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW DIN11864-1A, 316L/1.4404
FLA DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW DIN11864-2A, 316L/1.4404
FKA DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW ISO2853, 316L/1.4404
FJA ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW SMS1145, 316L/1.4404
FSA SMS1145, 0.8um/150grit 3A, 316L/1.4404
999 Special version, TSP-no. to be spec.

Additional Test, certificate:

A Basic version
B pressure test (tube)
C Cleaned from oil+grease (wetted parts)
D Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S marine certificate
T marine certificate + pressure test (tube)
5 CRN approval
6 CRN approval + pressure test (tube)
9 Special version, TSP-no. to be spec.

Calibration:

9 Special version, TSP-no. to be spec.
A 0.5% + confirmation
C 0.5%, 3-pt + protocol

E 0.5% 3-pt, traceable ISO/IEC17025

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
U TIIS Ex dia IIC

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
0 85-260VAC; w/o display, remote configuration
1 20-55VAC / 16-62VDC; w/o display remote configuration
4 85-260VAC; 2-line; with display FR,ES,IT,NL,PT,DE,EN
5 20-55VAC / 16-62VDC; 2-line; + display, FR,ES,IT,NL,PT,DE,EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
9 Special version, TSP-no. to be spec.
A 4-20mA HART + frequency
D 4-20mA HART + freq. + status+stat.In,
S 4-20mA HART active + freq. passive, Ex-i
T 4-20mA HART + freq., passive, Ex-i
X Sensor only

>>Marking:
Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

Promass 40E15, DN15 1/2"

Coriolis mass flowmeter

40E15-

50097051

SPK: DDF



Promass 40E15, DN15 1/2"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)

Process Connection:

D2S	PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N	PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D4S	PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S	PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N	PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange
D8S	PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS	Cl.150, 316L/1.4404, flange ANSI B16.5
ABS	Cl.300, 316L/1.4404, flange ANSI B16.5
ACS	Cl.600, 316L/1.4404, flange ANSI B16.5
NES	20K, SUS316L, flange JIS B2220
NGS	40K, SUS316L, flange JIS B2220
NHS	63K, SUS316L, flange JIS B2220
R2S	PN40 DN25, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
CWS	12-VCO-4 (3/4"), 316L/1.4404
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FUW	Tri-Clamp 1/2", 316L/1.4404
FUA	Tri-Clamp 1/2", 0.8um/150grit 3A, 316L 1.4404
FUD	Tri-Clamp 1/2", 0.4um/240grit 3A, 316L 1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.5% + confirmation
C	0.5%, 3-pt + protocol
E	0.5% 3-pt, traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
B	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H	ATEX II 3G EEx n IIC
N	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
U	TIIS Ex dia IIC

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
9	Special version, TSP-no. to be spec.
A	Compact IP67 NEMA4X, Aluminium

Cable Entry:

9	Special version, TSP-no. to be spec.

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A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
F Gland G 1/2, Ex d Shimada
X Not used, sensor only

Power Supply; Display:
0 85-260VAC; w/o display, remote configuration
1 20-55VAC / 16-62VDC; w/o display remote configuration
4 85-260VAC; 2-line; with display FR,ES,IT,NL,PT,DE,EN
5 20-55VAC / 16-62VDC; 2-line; + display, FR,ES,IT,NL,PT,DE,EN
X Sensor only
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:
9 Special version, TSP-no. to be spec.
A 4-20mA HART + frequency
D 4-20mA HART + freq. + status+stat.In,
S 4-20mA HART active + freq. passive, Ex-i
T 4-20mA HART + freq., passive, Ex-i
X Sensor only

>>Marking:
Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

Promass 40E80, DN80 3"

40E80-

71090373

SPK: DDF



Promass 40E80, DN80 3"

Measuring Tube Material:
9 Special version, TSP-no. to be spec.
A Stainl. steel
C Stainl. steel, mat. certificate (wetted parts)
P Stainl. steel, PED Cat.III
R Stainl. steel, PED Cat.III, mat. certificate

Process Connection:
D2S PN40, 316L/1.4404, EN1092-1-B1 (DIN2501) flange
D2N PN40, NAMUR NE132 insertion length 316L/1.4404,EN1092-1-B1 (DIN2501) flange
D3S PN63, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D4S PN100, 316L/1.4404, EN1092-1-B2 (DIN2501) flange
D6S PN40 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D6N PN40 groove,NAMUR NE132 insertion length 316L/1.4404,EN1092-1-D (DIN2512N) flange

D7S PN63 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
D8S PN100 groove, 316L/1.4404, EN1092-1-D (DIN2512N) flange
AAS Cl.150, 316L/1.4404, flange ANSI B16.5
ABS Cl.300, 316L/1.4404, flange ANSI B16.5
ACS Cl.600, 316L/1.4404, flange ANSI B16.5
NDS 10K, SUS316L, flange JIS B2220
NES 20K, SUS316L, flange JIS B2220
NGS 40K, SUS316L, flange JIS B2220

NHS	63K, SUS316L, flange JIS B2220
FTS	Tri-Clamp, 316L/1.4404
FTA	Tri-Clamp, 0.8um/150grit 3A, 316L/1.4404
FTD	Tri-Clamp, 0.4um/240grit 3A, 316L/1.4404
FMW	DIN11851, 316L/1.4404
FMA	DIN11851, 0.8um/150grit 3A, 316L 1.4404
FLW	DIN11864-1A, 316L/1.4404
FLA	DIN11864-1A, 0.8um/150grit 3A, 316L 1.4404
FKW	DIN11864-2A, 316L/1.4404
FKA	DIN11864-2A, 0.8um/150grit 3A, 316L 1.4404
FJW	ISO2853, 316L/1.4404
FJA	ISO2853, 0.8um/150grit 3A, 316L/1.4404
FSW	SMS1145, 316L/1.4404
FSA	SMS1145, 0.8um/150grit 3A, 316L/1.4404
999	Special version, TSP-no. to be spec.

Additional Test, certificate:

A	Basic version
B	pressure test (tube)
C	Cleaned from oil+grease (wetted parts)
D	Cleaned from oil+grease (wetted parts) + Pressure test (tube)
S	marine certificate
T	marine certificate + pressure test (tube)
5	CRN approval
6	CRN approval + pressure test (tube)
9	Special version, TSP-no. to be spec.

Calibration:

9	Special version, TSP-no. to be spec.
A	0.5% + confirmation
C	0.5%, 3-pt + protocol
E	0.5% 3-pt, traceable ISO/IEC17025

Approval:

9	Special version, TSP-no. to be spec.
A	Non-hazardous area
C	ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
E	ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
F	ATEX II 2GD+ IECEx Z1,21 Ex dia IIC. Ex tD A21 Z= Zone
G	ATEX II 2GD+ IECEx Z1,21 Ex deia IIC. Ex tD A21 Z= Zone
J	ATEX II 3G EEx n IIB
L	NEPSI Ex dia IIB
M	NEPSI Ex dia IIC.
O	XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD+. Zone 1
P	XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
Q	NEPSI Ex deia IIC.
R	FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2
T	NEPSI Ex deia IIB

Housing:

1	Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
A	Compact IP67 NEMA4X, Aluminium

Cable Entry:

9	Special version, TSP-no. to be spec.
A	Gland M20 (EEx d > thread M20)
B	Thread NPT 1/2
C	Thread G 1/2
F	Gland G 1/2, Ex d Shimada
X	Not used, sensor only

Power Supply; Display:

0	85-260VAC; w/o display, remote configuration
1	20-55VAC / 16-62VDC; w/o display remote configuration
4	85-260VAC; 2-line; with display FR,ES,IT,NL,PT,DE,EN
5	20-55VAC / 16-62VDC; 2-line; + display, FR,ES,IT,NL,PT,DE,EN
X	Sensor only
9	Special version, TSP-no. to be spec.

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Adjustment; Software Feature

9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version
X Sensor only

Output; Input:

9 Special version, TSP-no. to be spec.
A 4-20mA HART + frequency
D 4-20mA HART + freq. + status+stat.In,
S 4-20mA HART active + freq. passive, Ex-i
T 4-20mA HART + freq., passive, Ex-i
X Sensor only

>>Marking:

Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

Promass 83, retro fit kit In/Output

A retrofit kit consists of an instruction sheet, meter documentation, retrofit label, connection label and the exchangeable I/O modules.

DK8UI-

50105049

SPK: DDR

Promass 83, retro fit kit In/Output

Exist. I/O Modul:

V PROFIBUS DP + 2x relay + stat.In
P PROFIBUS DP + 20mA + freq.+ stat.In
7 Modbus RS485 + 2x relay + stat.In
N Modbus RS485 + 20mA +freq.+stat.In
C 4-20mA SIL HART + freq. + 2x relay
D 4-20mA SIL HART + freq.+ relay+stat.In
E 4-20mA SIL HART + 20mA+ relay+stat.In
L 4-20mA SIL HART + 2x relay + stat.In
M 4-20mA SIL HART + 2x freq. + stat.In
W 4-20mA SIL HART + 2x 20mA + relay
0 4-20mA SIL HART + 2x 20mA + stat.In
2 4-20mA SIL HART + freq.+relay+20mA out
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in)
4 4-20mA SIL HART + freq.+relay+20mA In
5 4-20mA SIL HART + freq.+20mA in+stat.In
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in)

New I/O Modul:

V PROFIBUS DP + 2x relay + stat.In
P PROFIBUS DP + 20mA + freq.+ stat.In
7 Modbus RS485 + 2x relay + stat.In
N Modbus RS485 + 20mA +freq.+stat.In
C 4-20mA SIL HART + freq. + 2x relay
D 4-20mA SIL HART + freq.+ relay+stat.In
E 4-20mA SIL HART + 20mA+ relay+stat.In
L 4-20mA SIL HART + 2x relay + stat.In
M 4-20mA SIL HART + 2x freq. + stat.In
W 4-20mA SIL HART + 2x 20mA + relay
0 4-20mA SIL HART + 2x 20mA + stat.In
2 4-20mA SIL HART + freq.+relay+20mA out
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in)
4 4-20mA SIL HART + freq.+relay+20mA In
5 4-20mA SIL HART + freq.+20mA in+stat.In
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in)

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CH - 4153 Reinach

Approval:

A Non-hazardous area
B ATEX
N FM/CSA

Promass 83, software package

Software kit

DK8SO-

50096456

SPK: DDR

Promass 83, software package

Software Feature:

A Advanced diagnostics
B Batching
C Concentration measurement

Promass 80/83/84A, Mounting kit

Adapters to different process connections. For connecting to the Cajon 4-VCO-4 couplings.
Set includes two adapters.

DK8MS-

50096679

SPK: DDS

Promass 80/83/84A, Mounting kit

Nominal Diameter:

A1 DN1 1/24"
A2 DN2 1/12"
A4 DN4 1/8"

Process Connection:

99 Special version, TSP-no. to be spec.
A1 Adapter NPTF 1/4, stainl. steel
A2 Adapter NPTF 1/4, Alloy C-22
B3 SWAGELOK 1/8 , stainl. steel
C3 SWAGELOK 1/4 , stainl. steel
D1 PN40 DN15, 316L, 904L wetted parts Flange EN 1092-1 B1 (DIN2501)
D2 PN40 DN15, 316L, wetted parts Alloy C-22, flange EN 1092-1 B1 (DIN2501)
E1 PN40 DN15 groove 316L 904L wetted parts Flange EN 1092-1 D (DIN2521N)
E2 PN40 DN15 groove 316L wetted parts Alloy C-22, flange EN 1092-1 D (DIN2521N)
F1 Cl.150 316L, 904L wetted parts Flange ANSI B16.5
F2 Cl.150 316L, Alloy C-22 wetted parts Flange ANSI B16.5
G1 Cl.300 316L, 904L wetted parts Flange ANSI B16.5
G2 Cl.300 316L, Alloy C-22 wetted parts Flange ANSI B16.5
H1 10K 1.4539/904L, wetted parts Flange JIS B2220
H2 10K SUS316L, wetted parts Alloy C-22 Flange JIS B2220
H3 20K 1.4539/904L, wetted parts Flange JIS B2220
H4 20K SUS316L, wetted parts Alloy C-22 Flange JIS B2220

Additional Test, certificate:

9 Special version, TSP-no. to be spec.
A Basic version
B Mat. certificate (wetted parts)

Seal:

1 O-ring, Viton

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2 O-ring, EPDM
3 O-ring, Silicone
4 O-ring, Kalrez
9 Special version, TSP-no. to be spec.

Cubemass, mounting kit

Adapters for different process connection standards.
To be connected to the Cajon couplings.

DK8CS-

71103557

SPK: DDS

Cubemass, mounting kit

Nominal diameter:
01 DN1 1/24"
02 DN2 1/12"
04 DN4 1/8"
06 DN6 1/4"

Process connection:
M9 Special version, TSP-no. to be spec.
MB 2 x adapter NPT 1/4" stainl. steel
MC 2 x adapter NPT 1/2" stainl. steel
MD 2 x adapter, flange EN1092-1 B1 (DIN2501), PN40 DN15 316L/904L, wetted parts
ME 2 x adapter, flange ANSI B16.5 Cl. 150 316L/904L, wetted parts
MF 2 x adapter, flange ANSI B16.5 Cl. 300 316L/904L, wetted parts
MG 2 x adapter, flange JIS B2220 10K 1.4539/904L, wetted parts

Seal:
M1 2 x O-Ring, Viton
M2 2 x O-Ring, EPDM
M3 2 x O-Ring, Silicone
M4 2 x O-Ring, Kalrez
M9 Special version, TSP-no. to be spec.

>>Accessory enclosed:
MA Universal mounting plate for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

Mounting plate Cubemass packed

Universal mounting plate
for fixing the flowmeter to various surfaces, such as walls, switchboards etc.

71123816

SPK: DDS

Mounting plate Cubemass packed

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Kägenstrasse 2
CH - 4153 Reinach

Promass sensor, heating jacket

Heating medium (e.g. water, steam)

DK8HJ-

50107256

SPK: DDS

Promass sensor, heating jacket

Diameter:

M1	DN1 1/24"
M2	DN2 1/12"
M4	DN4 1/8"
M8	DN8 3/8"
15	DN15 1/2"
16	DN15 1/2" FB
25	DN25 1"
26	DN25 1" FB
40	DN40 1 1/2"
41	DN40 1 1/2" FB
50	DN50 2"
80	DN80 3"
1H	DN100 4"
1F	DN150 6"
99	Special version, TSP-no. to be spec.

Sensor:

9	Special version, TSP-no. to be spec.
A	Promass A
E	Promass E
F	Promass F, standard temperature
H	Promass H, S, P
I	Promass I
M	**Promass M
T	Promass F, high temperature

Heating Jacket Material:

9	Special version, TSP-no. to be spec.
S	Stainl. steel 316Ti

Heating Fluid Connection:

9	Special version, TSP-no. to be spec.
G	G 1/2"ISO 228/1, Rp 1/2" ISO7/1 Female thread
H	G 3/4"ISO 228/1, Rp 3/4" ISO7/1 Female thread
J	Adapter NPT, DN01-04
K	Adapter NPT, DN08-40
L	Adapter NPT, DN40FB-150
M	Adapter Cl. 150, 316L/1.4404, DN01-40
N	Adapter Cl. 150, 316L/1.4404, DN40FB-150
P	Adapter Cl. 300, 316L/1.4404, DN01-40
Q	Adapter Cl. 300, 316L/1.4404, DN40FB-150
R	Adapter PN40, 316L/1.4404, DN01-40
S	Adapter PN40, 316L/1.4404, DN40FB-150

Additional Test, certificat:

0	w/o
1	Mat. certificate (wetted parts) + pressure test
9	Special version, TSP-no. to be spec.

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Transmitter 80/83/84, mounting set

DK8WM-

50096768

SPK: DDS

Transmitter 80/83/84, mounting set

Application:

9	Special version, TSP-no. to be spec.
A	Remote, wall / pipe mounting, panel
B	Remote, field; Pipe 3/4 - 3"

Promass conversion kit

The conversion kit includes all necessary parts except the transmitter which must be ordered separately. Serial number of device to be upgraded is absolutely necessary for ordering. Conversion of a compact version for Cl.I Div.1/Atex II 2G must be carried out at Flowtec (no conversion kit available).

DK8UP-

50102484

SPK: DDS

Promass conversion kit

Application:

0	80/83 compact, Alu > 80/83 remote
A	60/63 remote > 80/83 remote
B	60/63 compact > 80/83 remote
D	60/63 compact > 80/83 compact, Alu
E	60/63 compact > 80/83 compact, SS

Sensor 80/83/84A, post mounting kit

DK8AS-

50096769

SPK: DDS

Sensor 80/83/84A, post mounting kit

Nominal Diameter:

A1	DN1 1/24"
A2	DN2 1/12"
A4	DN4 1/8"

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Promass 80/83/84A, seal set DN 2 1/12"

A set includes 2 seals

DKS02-

50096865

SPK: DDV

Promass 80/83/84A, seal set DN 2 1/12"

Seal:

9 Special version, TSP-no. to be spec.
A 10x O-ring, Viton
B 10x O-ring, EPDM
C 10x O-ring, silicone
E 1x O-ring, Kalrez

**Promass M, seal set DN8 3/8"

A set includes 2 seals

DKS08-

50096867

SPK: DDV

**Promass M, seal set DN8 3/8"

Seal:

9 Special version, TSP-no. to be spec.
A 10x O-ring, Viton
B 10x O-ring, EPDM
C 10x O-ring, silicone
D 1x O-ring, FEP encapsulated
E 1x O-ring, Kalrez
F 10x flat gasket, silicone FDA
G 10x flat gasket, EPDM FDA

**Promass M, seal set DN15 1/2"

A set includes 2 seals

DKS15-

50096868

SPK: DDV

**Promass M, seal set DN15 1/2"

Seal:

9 Special version, TSP-no. to be spec.
A 10x O-ring, Viton
B 10x O-ring, EPDM
C 10x O-ring, silicone
D 1x O-ring, FEP encapsulated
E 1x O-ring, Kalrez
F 10x flat gasket, silicone FDA
G 10x flat gasket, EPDM FDA

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Promass 80/83/84A, seal set DN 4 1/8"

A set includes 2 seals

DKS04-
50096866

SPK: DDV

Promass 80/83/84A, seal set DN 4 1/8"

Seal:

9 Special version, TSP-no. to be spec.
A 10x O-ring, Viton
B 10x O-ring, EPDM
C 10x O-ring, silicone
E 1x O-ring, Kalrez

**Promass M, seal set DN40 1-1/2"

A set includes 2 seals

DKS40-
50096870

SPK: DDV

**Promass M, seal set DN40 1-1/2"

Seal:

9 Special version, TSP-no. to be spec.
A 10x O-ring, Viton
B 10x O-ring, EPDM
C 10x O-ring, silicone
D 1x O-ring, FEP encapsulated
E 1x O-ring, Kalrez
F 10x flat gasket, silicone FDA
G 10x flat gasket, EPDM FDA

**Promass M, seal set DN50 2"

A set includes 2 seals

DKS50-
50096871

SPK: DDV

**Promass M, seal set DN50 2"

Seal:

9 Special version, TSP-no. to be spec.
A 10x O-ring, Viton
B 10x O-ring, EPDM
C 10x O-ring, silicone
D 1x O-ring, FEP encapsulated
E 1x O-ring, Kalrez
F 10x flat gasket, silicone FDA

G 10x flat gasket, EPDM FDA

**Promass M, seal set DN80 3"

A set includes 2 seals

DKS80-
50096872

SPK: DDV

**Promass M, seal set DN80 3"

Seal:
9 Special version, TSP-no. to be spec.
A 10x O-ring, Viton
B 10x O-ring, EPDM
C 10x O-ring, silicone
D 1x O-ring, FEP encapsulated
E 1x O-ring, Kalrez
F 10x flat gasket, silicone FDA
G 10x flat gasket, EPDM FDA

Promass 80/83/84A, seal set DN 1 1/24"

A set includes 2 seals

DKS01-
50096900

SPK: DDV

Promass 80/83/84A, seal set DN 1 1/24"

Seal:
9 Special version, TSP-no. to be spec.
A 10x O-ring, Viton
B 10x O-ring, EPDM
C 10x O-ring, silicone
E 1x O-ring, Kalrez

**Promass M, seal set DN25 1"

A set includes 2 seals

DKS25-
50096869

SPK: DDV

**Promass M, seal set DN25 1"

Seal:
9 Special version, TSP-no. to be spec.
A 10x O-ring, Viton
B 10x O-ring, EPDM
C 10x O-ring, silicone
D 1x O-ring, FEP encapsulated
E 1x O-ring, Kalrez

F 10x flat gasket, silicone FDA
G 10x flat gasket, EPDM FDA

Promass 83, transmitter

83XXX-

50096766

SPK: DDW

Promass 83, transmitter

Sensor:
XXX 83F/83M/83A/83I/83S/83P/83H/83E

Version:
XXX Transmitter only

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
4 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
6 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
J ATEX II 3G EEx n IIB
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. without cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. without cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. w/o cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. without cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless
C Remote, wall IP67 NEMA4X, w/o cable
E Remote IP67, Alu, w/o cable

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2
Q 2 x Bus plug + gland M20
R 2 x Bus plug + thread NPT 1/2
S 2 x Bus plug + thread G 1/2

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Kägenstrasse 2
CH - 4153 Reinach

Power Supply; Display:

7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 4-line + Touch control WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 4-line + Touch control, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 4-line + Touch control SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 4-line + Touch control, SEA= language JA+ID+EN
E 85-260VAC; EES, 4-line + Touch control EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 4-line + Touch control, EES= language SV+FI+NO+RU+PL+CS+EN

G 85-260VAC; CN, 4-line + Touch control, CN= language ZH + EN
H 20-55VAC / 16-62VDC; CN, 4-line + Touch control, CN= language ZH + EN
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

A Default liquid; Basic version
B Default gas; Basic version
C Default liquid; Concentration measurement
E Default liquid; Advanced diagnostics
D Default gas; Advanced diagnostics
J Default liquid; Batching
K Default gas; Batching
L Default liquid; Batching + Concentration measurement
N Default liquid; Batching + Advanced diagnostics
R Default liquid; Advanced diagnostics + Concentration measurement
T Default liquid; Batching + Diagnostics+ Concentration measurement
9 Special version, TSP-no. to be spec.

Output; Input:

A 4-20mA SIL HART + frequency
B 4-20mA SIL HART + freq. + 2x relay
F PROFIBUS PA, Ex-i
G FOUNDATION Fieldbus, Ex-i
H PROFIBUS PA
J PROFIBUS DP
K FOUNDATION Fieldbus
Q Modbus RS485
R 4-20mA SIL HART + 0/4-20mA, active Ex-i
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA SIL HART passive + freq., Ex-i, freq. = passive
U 4-20mA SIL HART + 0/4-20mA, passive Ex-i
V PROFIBUS DP + 2x relay + stat.In modules exchangeable
P PROFIBUS DP + 20mA + freq.+ stat.In modules exchangeable
7 Modbus RS485 + 2x relay + stat.In, modules exchangeable
N Modbus RS485 + 20mA +freq.+stat.In modules exchangeable
C 4-20mA SIL HART + freq. + 2x relay M= modules exchangeable
D 4-20mA SIL HART + freq.+ relay+stat.In modules exchangeable
E 4-20mA SIL HART + 20mA+ relay+stat.In modules exchangeable
L 4-20mA SIL HART + 2x relay + stat.In modules exchangeable
M 4-20mA SIL HART + 2x freq. + stat.In modules exchangeable
W 4-20mA SIL HART + 2x 20mA + relay, modules exchangeable
0 4-20mA SIL HART + 2x 20mA + stat.In modules exchangeable
2 4-20mA SIL HART + freq.+relay+20mA out modules exchangeable
3 4-20mA SIL HART + relay + 20mA, (1x out, 1x in), modules exchangeable
4 4-20mA SIL HART + freq.+relay+20mA in, modules exchangeable
5 4-20mA SIL HART + freq.+20mA in+stat.In modules exchangeable
6 4-20mA SIL HART + stat.In + 20mA, (1x out, 1x in), modules exchangeable
I Ethernet
9 Special version, TSP-no. to be spec.

>>Marking:

Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

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Kägenstrasse 2
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>>>Marking: (optional)

Transmitter Promass 200 / TB2

Main electronic module

8X2BXX-

71112203

SPK: DDW

Transmitter Promass 200 / TB2

Approval:

AA	Non-hazardous area
BB	ATEX II1/2G Ex ia IIC
BC	ATEX II1/2G Ex ia/d IIC
BD	ATEX II 1/3G Ex ic[ia] IIC
BG	ATEX II3G Ex nA II
BH	ATEX II3G Ex ic IIC
BJ	ATEX II2G Ex ia IIC
BK	ATEX II2G Ex d[ia] IIC
B2	ATEX II 1/2G Ex ia IIC, II2D Ex tb IIIC
B3	ATEX II 1/2G Ex ia/d IIC, II2D Ex tb IIIC
IB	IECEx Z0/Z1 Ex ia IIC
IC	IECEx Z0/Z1 Ex ia/d IIC
ID	IEC Ex Z0/Z2 Ex ic[ia] IIC
IG	IECEx Z2 II3G Ex nA II
IH	IECEx Z2 II3G Ex ic IIC
IJ	IECEx Z1 Ex ia IIC
IK	IECEx Z1 Ex d[ia] IIC
I4	IECEx Z0/Z1 Ex ia IIC; IECEx Z21 Ex tb IIIC
I5	IECEx Z0/Z1 Ex ia/d IIC; IECEx Z21 Ex tb IIIC
99	Special version, TSP-no. to be spec.

Output:

9	Special version, TSP-no. to be spec.
C	4-20mA HART, 4-20mA

Display; Operation:

9	Special version, TSP-no. to be spec.
A	W/o; via communication
C	SD02 4-line; push buttons +

Housing:

9	Special version, TSP-no. to be spec.
B	GT18 dual compartment, 316L
C	GT20 dual compartment, Alu coated

Electrical Connection:

9	Special version, TSP-no. to be spec.
A	Gland M20, IP66/68 NEMA4X/6P
B	Thread M20, IP66/68 NEMA4X/6P
C	Thread G1/2, IP66/68 NEMA4X/6P
D	Thread NPT1/2, IP66/68 NEMA4X/6P
I	Plug M12, IP66/68
M	Plug 7/8", IP66/68

>Display Operation Language:

AA	English
AB	German
AC	French
AD	Spanish
AE	Italian
AF	Dutch

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>>Application Package:
E9 Special version, TSP-no. to be spec.
EA HistoROM extended function Event + data logging

>>Test, Certificate:
K9 Special version, TSP-no. to be spec.
KA EN10204-2.1 Declaration of compliance
KB EN10204-2.2 Test report

>>Additional Approval:
L9 Special version, TSP-no. to be spec.

>>Accessories Mounted:
N9 Special version, TSP-no. to be spec.

>>Accessories Enclosed:
P9 Special version, TSP-no. to be spec.

>Firmware Version:
78 01.00.zz, HART, DevRev01

>>Tagging:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

Promass 40, transmitter

40XXX-

50097055

SPK: DDW

Promass 40, transmitter

Sensor:
XXX 40E

Version:
XXX Transmitter only

Approval:
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC T-amb.
9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium

Cable Entry:
9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2

Power Supply; Display:
0 85-260VAC; w/o display
1 20-55VAC / 16-62VDC; w/o display
4 85-260VAC; 2-line
5 20-55VAC / 16-62VDC; 2-line
9 Special version, TSP-no. to be spec.

Adjustment; Software Feature

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9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version

Output; Input:
9 Special version, TSP-no. to be spec.
A 4-20mA HART + frequency
D 4-20mA HART + freq. + status+stat.In,
S 4-20mA HART active + freq. passive, Ex-i
T 4-20mA HART + freq., passive, Ex-i

>>Marking:
Z1 Tagging (TAG), see additional spec.

>>>Marking: (optional)

Promass 80, transmitter

80XXX-

50096765

SPK: DDW

Promass 80, transmitter

Sensor:
XXX 80F/80M/80A/80I/80S/80P/80H/80E

Version:
XXX Transmitter only

Approval:
3 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIC Z= Zone
4 ATEX II 1/2GD+ IECEx Z0/1,21 Ex dia IIB Z= Zone
5 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIC Z= Zone
6 ATEX II 1/2GD+ IECEx Z0/1,21 Ex deia IIB Z= Zone
9 Special version, TSP-no. to be spec.
A Non-hazardous area
B ATEX II 2GD+ IECEx Z1,21 Ex dia IIC Ex tD A21 Z= Zone
C ATEX II 2GD+ IECEx Z1,21 Ex dia IIB Ex tD A21 Z= Zone
D ATEX II 2GD+ IECEx Z1,21 Ex deia IIC Ex tD A21 Z= Zone
E ATEX II 2GD+ IECEx Z1,21 Ex deia IIB Ex tD A21 Z= Zone
H ATEX II 3G EEx n IIC
J ATEX II 3G EEx n IIB
N XP FM Cl.I Div.1/CSA Cl.I Div.1, ABCD + Zone 1
P XP FM Cl.I Div.1/CSA Cl.I Div.1, CD + Zone 1
R FM NI Cl.I Div.2/CSA Cl.I Div.2, ABCD + Zone 2

Housing:
1 Compact IP67 NEMA4X, Alu, -40oC/oF T-amb.
2 Compact IP67 NEMA4X, stainless, -40oC/oF T-amb.
3 Remote, wall IP67 NEMA4X,-40oC/oF T-amb. without cable
4 Compact IP67 NEMA 4X, Alu, HE, -40oC/oF T-amb., HE = harsh environment
5 Compact IP67 NEMA4X, stainless, HE -40oC/oF T-amb., HE = harsh environment
6 Remote, wall IP67 NEMA4X, HE, -40oC/oF T-amb. without cable, HE = harsh environment

7 Remote,field IP67 NEMA4X,-40oC/oF T-amb. w/o cable
8 Remote, field IP67 NEMA4X, HE, -40oC/oF T-amb. without cable, HE = harsh environment

9 Special version, TSP-no. to be spec.
A Compact IP67 NEMA4X, Aluminium
B Compact IP67 NEMA4X, stainless, IP67
C Remote, wall IP67 NEMA4X, w/o cable
E Remote IP67, Alu, w/o cable

Cable Entry:

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9 Special version, TSP-no. to be spec.
A Gland M20 (EEx d > thread M20)
B Thread NPT 1/2
C Thread G 1/2
K Bus plug + gland M20
L Bus plug + thread NPT 1/2
M Bus plug + thread G 1/2

Power Supply; Display:
7 85-260VAC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

8 20-55VAC / 16-62VDC; WEA, w/o display, Remote configuration, WEA= language DE+EN+FR+IT+ES+PT+NL

A 85-260VAC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

B 20-55VAC / 16-62VDC; WEA, 2-line + push buttons, WEA= language DE+EN+FR+IT+ES+PT+NL

C 85-260VAC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
D 20-55VAC / 16-62VDC; SEA, 2-line + push buttons, SEA= language JA+ID+EN
E 85-260VAC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN
F 20-55VAC / 16-62VDC; EES, 2-line + push buttons, EES= language SV+FI+NO+RU+PL+CS+EN

9 Special version, TSP-no. to be spec.

Adjustment; Software Feature
9 Special version, TSP-no. to be spec.
A Default liquid; Basic version
B Default gas; Basic version

Output; Input:
A 4-20mA SIL HART + frequency
D 4-20mA SIL HART + freq.+ status+stat.In
H PROFIBUS PA
S 4-20mA SIL HART active + freq., Ex-i, freq. = passive
T 4-20mA HART passive + freq., Ex-ix frreq. = passive
8 4-20mA SIL HART + 20mA + freq. + stat.In
9 Special version, TSP-no. to be spec.

>>Marking:
Z1 Tagging (TAG), see additional spec.
Z2 Bus address, see additional spec.

>>>Marking: (optional)

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