ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Fujikin FPR-UDDF-71-9.52-2-NL* at our website: *Click HERE*

CAT:No.711-01E-C

FINE series PURE
MEGA series



FPR-UDDF-71-6.35-NL

FPR-SD-71-6.35

Safety & Clean Technology

Fujikin Incorporated

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Safety & Cleanan Technology

MEGA-ONE LA



MEGA-ONE LS

MEGA-ONE LM

MEGA-ONE HQ

MEGA-ONE HM

MEGA-MINI LA

MEGA-MINI HA

MEGA-M LV

MEGA-M LM

MEGA-ONE LC

Fujikin's Class 1 cleanrooms feature cutting-edge technology throughout, and must exceed the most rigorous standards for cleanliness. Products manufactured in this environment are therefore guaranteed to meet the most stringent requirements and to be of the highest quality worldwide.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



INDEX

MEGA series

MEGA-ONE

MEGA-ONE LA ·····3
(Pneumatically-Actuated Valves)
MEGA-ONE LS ·····7
(1/4 Turn Switch Valve)
MEGA-ONE LM ·····11
(Round-Handle Valve with Indicator)
MEGA-ONE HQ ·····15
(1/4 Turn High-Pressure Switch Valve)
MEGA-ONE HM ·····19
(Round-Handle High-Pressure Valve with Indicator)

MEGA-MINI

MEGA-MINI LA ·····23
(Compact Pneumatically-Actuated Valve)
MEGA-NINI HA ·····27
(Compact Pneumatically-Actuated High-Pressure Valve)

MEGA-M

MEGA-M LV ·····31
(Flow Control Valve with Micrometer Handle)
MEGA-M LM ·····35
(Round Handle Valve with Indicator)

MEGA-ONE CHECK VALVES

MEGA-ONE LC ·····39

OPTIONS

Additional Information·····41
Comparison Table ·····42

Fujikin Incorporated

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MEGA — ONE LA

Low-Pressure Pneumatically-Actuated Valves

The MEGA-ONE LA is a pneumatically-actuated diaphragm valve for ultra-pure, flammable, or toxic fluid lines for all types of semiconductor equipment and facilities.

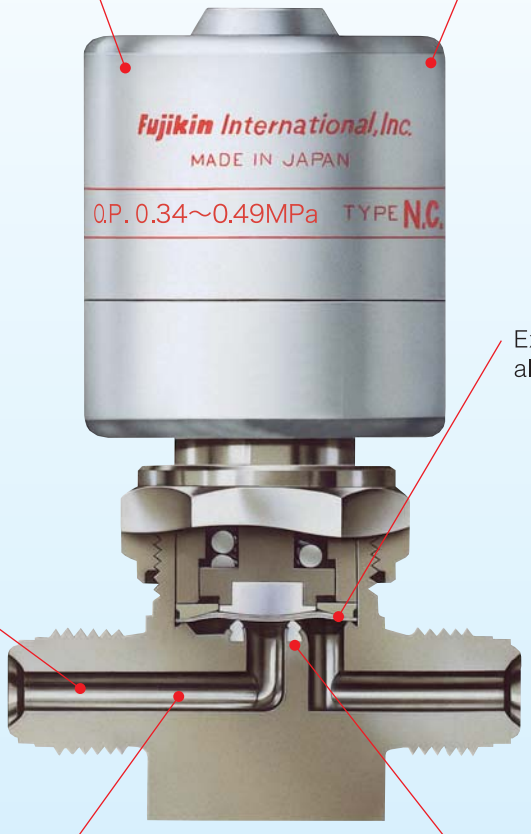
The direct diaphragm construction makes the MEGA-ONE LA an industry standard valve with superior sealing performance, remarkable durability, and compactness, while being particle-free and dead-space free.

Colored caps differentiate between normally open (blue) and normally closed (red) valves, thereby simplifying recognition.



N.O. N.C.

The actuator features a unique rotation mechanism, allowing for actuation pressure to be supplied from any desired direction for both normally open and normally closed valves.



Extremely-durable nickel-cobalt alloy diaphragm

Excellent gas displacement characteristics, (1.48cc total volume for male UJR version).

All wetted surfaces undergo an EP treatment as standard. UP treatment is optional.

Standard seat material is PCTFE. Polyimide/PFA seat material is also available.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

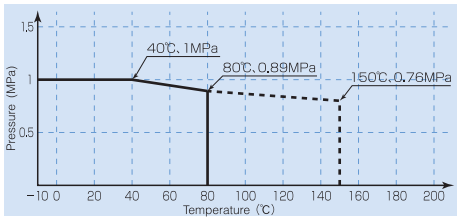
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Actuation Pressure	Connection
	6.35 (1/4")	1MPa 145 psi	−10～+80°C 14～176 °F	0.25	0.34～0.49 MPa 48～70 psi	UJR, UPG®, F900, Tube Stub
	9.52 (3/8")			0.6		

- All valves are helium leak tested. Vacuum method/results: External leakage: < $5x10^{-12}$ Pa•m^3/sec. Seat leakage: < $5x10^{-12}$ Pa•m^3/sec
- Demonstrated superior durablilty - over 4 million cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	Nickel-cobalt alloy
	Seat Packing	PCTFE
	Actuator	A5056

Temperature/Pressure Rating



PCTFE Seat Polyimide/PFA Seat

PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FPR-UDDF□-71□-6.35□-NL-□-□

A
- FP : Normally open
- FPR : Normally closed

B
- Stainless steel direct diaphragm valve

C
- TB : Added only for 3-port valves
- CL : 2-way, corner left valve

D
- 7 : UJR / UPG® end-connection,
- 9 : F900 end-connection
- 5 : Tube stub end-connection

E
- 1 : 1MPa maximum operating pressure

F
- RS2 : With proximity sensor*
- LS : With limit switch*

G
- End-Connection Sizes
- 6.35 : 1/4" OD
- 9.52 : 3/8" OD
- 12.7 : 1/2" OD (UJR connections have a 9.52 port diameter)

H
- Blank : Male UJR on both ends
- −2 : Female UJR on both ends
- −3 : UJR male inlet / Female UJR outlet
- UG : UPG® end-connection
- BW : Butt weld

I
- Blank : PCTFE seat
- PI : Polyimide seat*
- PA : PFA seat*
- UP : UP treatment*
- PS : Cr_2O_3 treatment*

J

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

DIMENSIONS

Figure 1

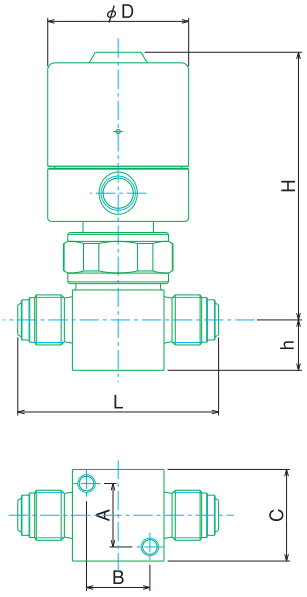


Figure 2

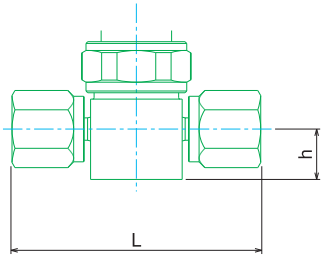


Figure 3

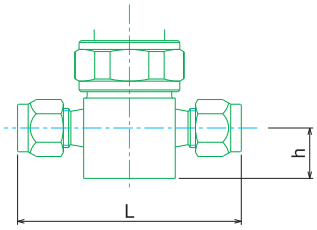
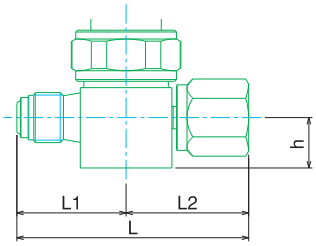


Figure 4



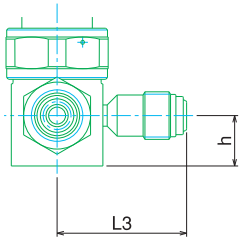


Figure 5

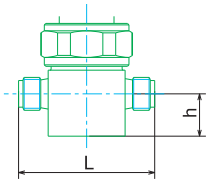
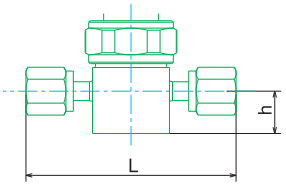


Figure 6



(Unit : mm)

Part Number	Figure	L	L1	L2	L3	h	H	D	A	B	C
FP(R)-UDDF-71-6.35-NL	1	57				14.3	75	40	18	18	26
FP(R)-UDDF-71-6.35-2-NL	2	70.6				14.3	75	40	18	18	26
FP(R)-UDDF-71-9.52-NL	1	76.2				11.1	87.5(82)	50	20.2	20.2	35
FP(R)-UDDF-71-9.52-2-NL	2	83				12.7	87.5(82)	50	20.2	20.2	35
FP(R)-UDDFTB-71-6.35-NL	4	65.7	31	34.7	38.1	14.3	76	40	18	18	26
FP(R)-UDDFTB-71-9.52-NL	4	79.2	37.7	41.5	43.1	12.7	87.5(82)	50	20.2	20.2	35
FP(R)-UDDFTB-71-9.52×6.35-NL	4	69.9	31.8	38.1	38.1	12.7	80.5	40	18	18	26
FP(R)-UDDF-91-6.35-NL	3	63.5				14.3	75	40	18	18	26
FP(R)-UDDF-91-9.52-NL	3	80				12.7	87.5(82)	50	20.2	20.2	35
FP(R)-UDDF-91-12.7-NL	3	86				12.7	87.5(82)	50	20.2	20.2	35
FP(R)-UDDF-71-6.35UG	5	46				14.3	75	40	18	18	26
FP(R)-UDDF-71-6.35UG-2	6	71				14.3	75	40	18	18	26
FP(R)-UDDF-71-9.52UG	5	57				11.1	87.5(82)	50	20.2	20.2	35
FP(R)-UDDF-71-9.52UG-2	6	86				12.7	87.5(82)	50	20.2	20.2	35

( ) Brackets indicate dimensions for normally closed valves. See Figure 1 for dimension keys not shown in other Figures.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

OPTIONS

Block Valve

FBDV-6.35-2B3-316LP-AQK

Block valve design allows for:
- Compact tubing arrangement
- Dead-space free configuration

In addition to our standard 2-actuator, 3-port block, we also offer custom block valves according to customer's specifications.





Proximity Sensor

FPR-UDDF-71RS2-9.52

An electrical signal confirms open or closed position of valve. The non-contact proximity sensor offers unsurpassed safety.

Limit Switch

FPR-UDDF-71LS-6.35-NL

An electrical signal confirms open or closed position of valve.





Other

FPR-UDDF-51-6.35BW-NL-KAG

Tube stub length may be ordered according to customer specifications.

IGS Valves

FPR-UDDFA-21-6.35UGF-APD

MEGA series valves are also available in 1.125" and 1.5" W-Seal for surface-mount Integrated Gas Systems.



Photos are samples of each product type.

MEGA — ONE LS

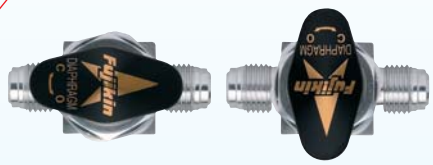
Low Pressure Switch Type Manual Valves

The MEGA-ONE LS is a quarter turn diaphragm valve for ultra-pure, flammable, or toxic fluid lines in various types of semiconductor manufacturing equipment and facilities.

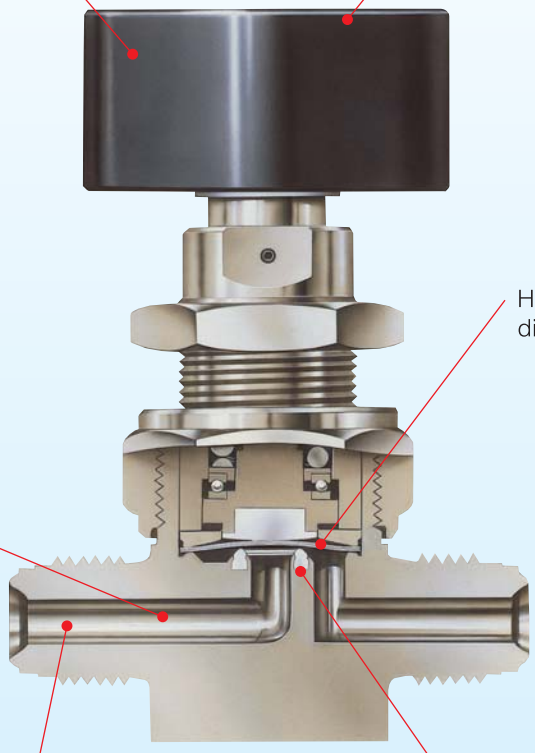
Unique features include an internal spring that assures uniform sealing performance and a direct diaphragm construction that makes the MEGA-ONE LS an industry standard valve with superior sealing performance, remarkable durability, compactness, and particle and dead-space free performance.

Various color handles are available to facilitate fluid identification.

Valve open or closed position is easily visible at a glance.



Open Closed



Highly durable nickel-cobalt alloy diaphragm,

Excellent gas displacement characteristics, (1.48cc total volume for male UJR version).

All wetted surfaces undergo an EP treatment as standard. UP treatment is optional.

Standard seat material is PCTFE. Polyimide/PFA seat material is also available.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

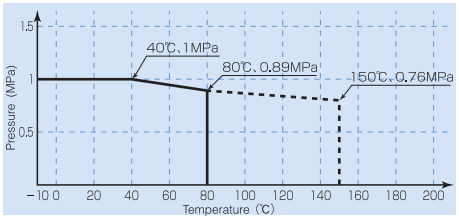
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Connection
	6.35 (1/4")	1MPa 145 psi	−10～+80°C 14～176°F	0.25	UJR, UPG®, F900, Tube Stub
	9.52 (3/8")			0.6	

●All valves are helium leak tested. Vacuum method results: External Leakage < $5x10^{-12}$ Pa•m^3/sec. Seat Leakage: < $5x10^{-12}$ Pa•m^3/sec
●Demonstrated superior durability - over 20,000 cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	Nickel-cobalt alloy
	Seat Packing	PCTFE
	Handle	Nylon 6

Temperature/Pressure Rating



PCTFE Seat Polyimide/PFA Seat

PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FUDDF L□-71-6.35□-NL-□-□

A
A : Stainless steel direct diaphragm valve

B
L : Quarter turn handle

C
TB : Added only for 3-port valves
CL : 2-way, corner left valve

D
7 : UJR / UPG® end-connection,
9 : F900 end-connection
5 : Tube stub end-connection

E
1 : 1MPa maximum operating pressure

F
End-Connection Sizes
6.35 : 1/4" OD
9.52 : 3/8" OD
12.7 : 1/2" OD (UJR connections have a 9.52 port diameter)

G
Blank : Male UJR on both ends
−2 : Female UJR on both ends
−3 : UJR male inlet / Female UJR outlet
UG : UPG® end-connection
BW : Butt weld

H
Blank : PCTFE seat
PI : Polyimide seat*
PA : PFA seat*

I
UP : UP treatment*
PS : Cr_2O_3 treatment*

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DIMENSIONS

Figure 1

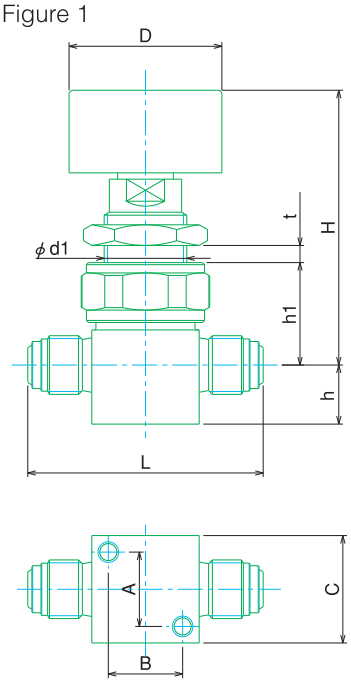


Figure 2

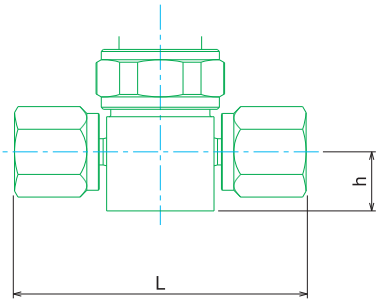


Figure 3

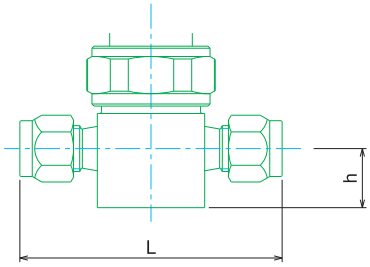


Figure 4

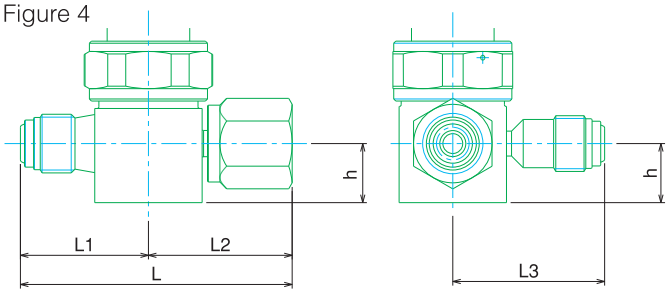


Figure 5

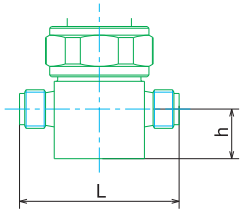
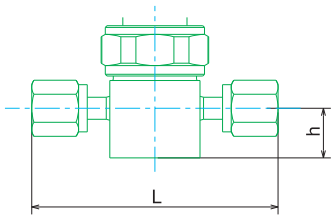


Figure 6



(Unit：mm)

Part Number	Figure	L	L1	L2	L3	h	H	h1	d1	t	D	A	B	C
FUDDFL-71-6.35-NL	1	57				14.3	67.5	23.5	20.5	7	37	18	18	26
FUDDFL-71-6.35-2-NL	2	70.6				14.3	67.5	23.5	20.5	7	37	18	18	26
FUDDFL-71-9.52-NL	1	76.2				11.1	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFL-71-9.52-2-NL	2	83				12.7	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFLTB-71-6.35-NL	4	65.7	31	34.7	38.1	14.3	68.5	24.5	20.5	7	37	18	18	26
FUDDFLTB-71-9.52-NL	4	79.2	37.7	41.5	43.1	12.7	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFLTB-71-9.52×6.35-NL	4	69.9	31.8	38.1	38.1	12.7	72	28	20.5	7	37	18	18	26
FUDDFL-91-6.35-NL	3	63.5				14.3	67.5	23.5	20.5	7	37	18	18	26
FUDDFL-91-9.52-NL	3	80				12.7	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFL-91-12.7-NL	3	86				12.7	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFL-71-6.35UG	5	46				14.3	67.5	23.5	20.5	7	37	18	18	26
FUDDFL-71-6.35UG-2	6	71				14.3	67.5	23.5	20.5	7	37	18	18	26
FUDDFL-71-9.52UG	5	57				11.1	88.8	31.5	24.5	10	50	20.2	20.2	35
FUDDFL-71-9.52UG-2	6	86				12.7	88.8	31.5	24.5	10	50	20.2	20.2	35

※ See Figure 1 for dimension keys not shown in other Figures.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

OPTIONS

Handle Colors

GT-HL-FDDFL-※

A letter in place of "※" indicates handle color:
Blue=B、Green=G、Yellow=Y、Red=R





FBDL-6.35-0B3-2P-EJH

Block Valve

Block valve design allows for:
- Compact tubing arrangement
- Dead-space free configuration

In addition to our standard 2-actuator, 3-port block, we also offer custom block valves according to customer's specifications.

Lock Out / Tag Out Device

HL-C-FUDDFL-71L-6.35

May be optionally added to valves as a safety precaution.





GT-IP-FUDDFL

Open / Closed Faceplate

An indicating faceplate can be installed as an option to facilitate in the recognition of open or closed valve position.

Other

FUDDFL-51-6.35BW-KLG

Tube stub length may be ordered according to customer specifications.





FUDDFL-21-6.35UGF-APD

IGS Valves

MEGA series valves are also available in 1.125" and 1.5" W-Seal for surface-mount Integrated Gas Systems.

Photos are samples of each product type.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MEGA — ONE LM

Low-Pressure Manual Valve

The MEGA-ONE LM offers manual operation for ultra-pure, flammable, or toxic fluid lines in various types of semiconductor manufacturing equipment and facilities.

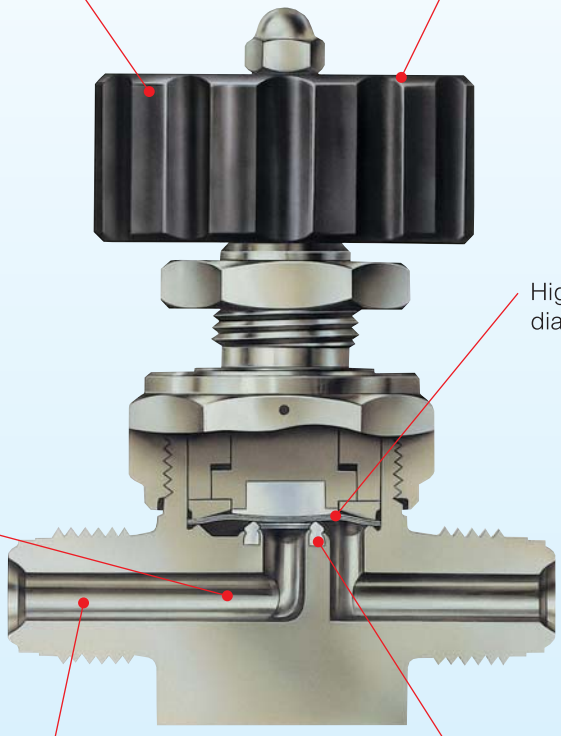
Direct diaphragm construction makes the MEGA-ONE LM an industry standard valve with superior sealing performance, remarkable durability, compactness, and particle and dead-space free performance.

Various color handles are available to facilitate fluid identification.

Valve open or closed position is easily visible at a glance.



Open Closed



Highly durable nickel-cobalt alloy diaphragm,

Excellent gas displacement characteristics, (1.48cc total volume for male UJR version).

All wetted surfaces undergo an EP treatment as standard. UP treatment is optional.

Standard seat material is PCTFE. Polyimide/PFA seat material is also available.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

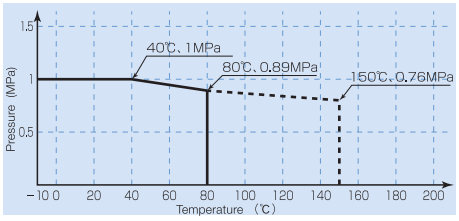
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Connection
	6.35 (1/4")	1MPa 145 psi	−10～+80°C 14～176°F	0.3	UJR, UPG®, F900, Tube Stub
	9.52 (3/8")			0.65	

●All valves are helium leak tested. Vacuum method results: External Leakage < $5x10^{-12}$ Pa•m^3/sec. Seat Leakage: < $5x10^{-12}$ Pa•m^3/sec
●Demonstrated superior durability - over 20,000 cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	Nickel-cobalt alloy
	Seat Packing	PCTFE
	Handle	A5056B

Temperature/Pressure Rating



PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FUDDF □-71G-6.35□-NL-□ □

A
Stainless steel direct diaphragm valve

B
TB : Added only for 3-port valves
CL : 2-way, corner left valve

C
7 : UJR / UPG® end-connection,
9 : F900 end-connection
5 : Tube stub end-connection

D
1 : 1MPa maximum operating pressure

E
G : Open/Closed Indicator

F
End-Connection Sizes
6.35 : 1/4" OD
9.52 : 3/8" OD
12.7 : 1/2" OD (UJR connections have a 9.52 port diameter)

G
Blank : Male UJR on both ends
− 2 : Female UJR on both ends
− 3 : UJR male inlet / Female UJR outlet
UG : UPG® end-connection
BW : Butt weld

H
Blank : PCTFE seat
PI : Polyimide seat*
PA : PFA seat*

I
UP : UP treatment*
PS : Cr_2O_3 treatment*

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DIMENSIONS

Figure 1

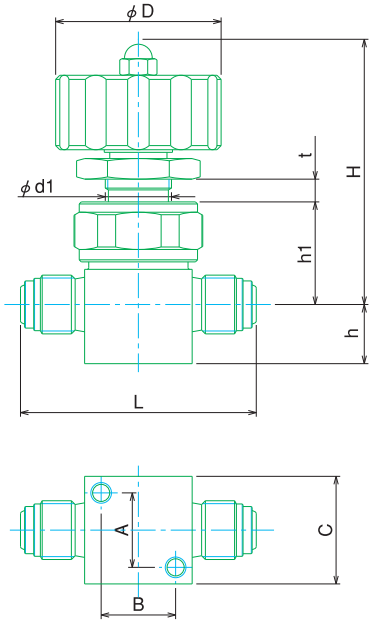


Figure 2

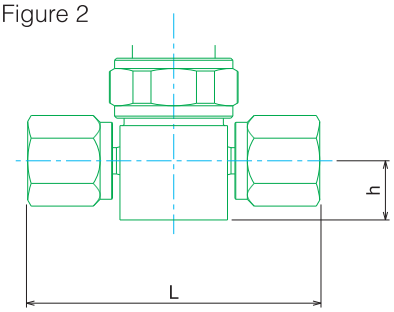


Figure 3

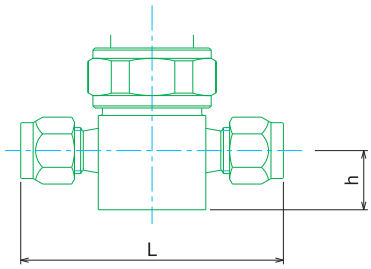


Figure 4

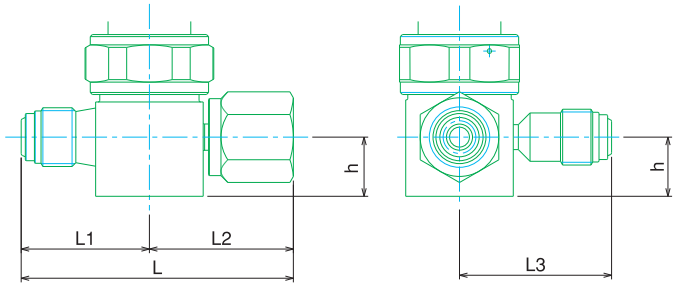


Figure 5

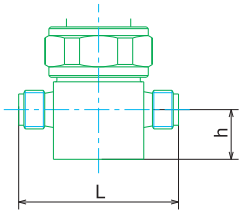
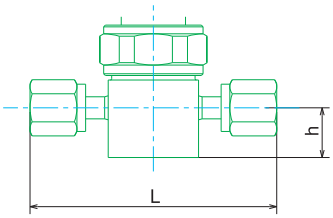


Figure 6



(Unit：mm)

Part Number	Figure	L	L1	L2	L3	h	H	h1	d1	t	D	A	B	C
FUDDF-71G-6.35-NL	1	57				14.3	62	23.8	16.5	5.5	40	18	18	26
FUDDF-71G-6.35-2-NL	2	70.6				14.3	62	23.8	16.5	5.5	40	18	18	26
FUDDF-71G-9.52-NL	1	76.2				11.1	71.4	31.5	20.5	5.5	40	20.2	20.2	35
FUDDF-71G-9.52-2-NL	2	83				12.7	71.4	31.5	20.5	5.5	40	20.2	20.2	35
FUDDFTB-71G-6.35-NL	4	65.7	31	34.7	38.1	14.3	63	24.8	16.5	5.5	40	18	18	26
FUDDFTB-71G-9.52-NL	4	79.2	37.7	41.5	43.1	12.7	71.4	31.5	20.5	5.5	40	20.2	20.2	35
FUDDFTB-71G-9.52×6.35-NL	4	69.9	31.8	38.1	38.1	12.7	66.5	28.3	16.5	5.5	40	18	18	26
FUDDF-91G-6.35-NL	3	63.5				14.3	62	23.8	16.5	5.5	40	18	18	26
FUDDF-91G-9.52-NL	3	80				12.7	71.4	31.5	20.5	5.5	40	20.2	20.2	35
FUDDF-91G-12.7-NL	3	86				12.7	71.4	31.5	20.5	5.5	40	20.2	20.2	35
FUDDF-71G-6.35UG	5	46				14.3	62	23.8	16.5	5.5	40	18	18	26
FUDDF-71G-6.35UG-2	6	71				14.3	62	23.8	16.5	5.5	40	18	18	26
FUDDF-71G-9.52UG	5	57				11.1	71.4	31.5	20.5	5.5	40	20.2	20.2	35
FUDDF-71G-9.52UG-2	6	86				12.7	71.4	31.5	20.5	5.5	40	20.2	20.2	35

※ See Figure 1 for dimension keys not shown in other Figures.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

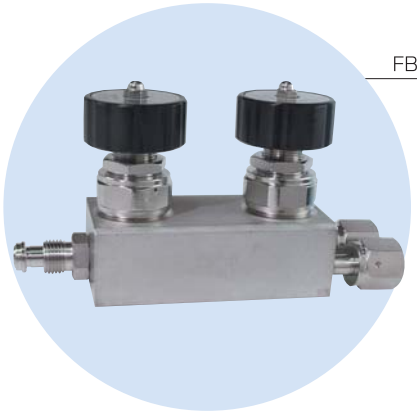
OPTIONS

Handle Colors

GT-HL-FUDDF-※

A letter in place of "※" indicates handle color:
Blue=B、Green=G、Yellow=Y、Red=R





Block Valve

FBDL-6.35-0B3-2P-CJL

Block valve design allows for:
- Compact tubing arrangement
- Dead-space free configuration

In addition to our standard 2-actuator, 3-port block, we also offer custom block valves according to customer's specifications.

3-Port Distribution Valve

FUDDFTB-51G-12.7×9.52JR-NL-FHZ

Used for facility bulk gas lines, and can support all line sizes.





Other

FUDDF-51G-6.35BW-KAG

Tube stub length may be ordered according to customer specifications.

Photos are samples of each product type.

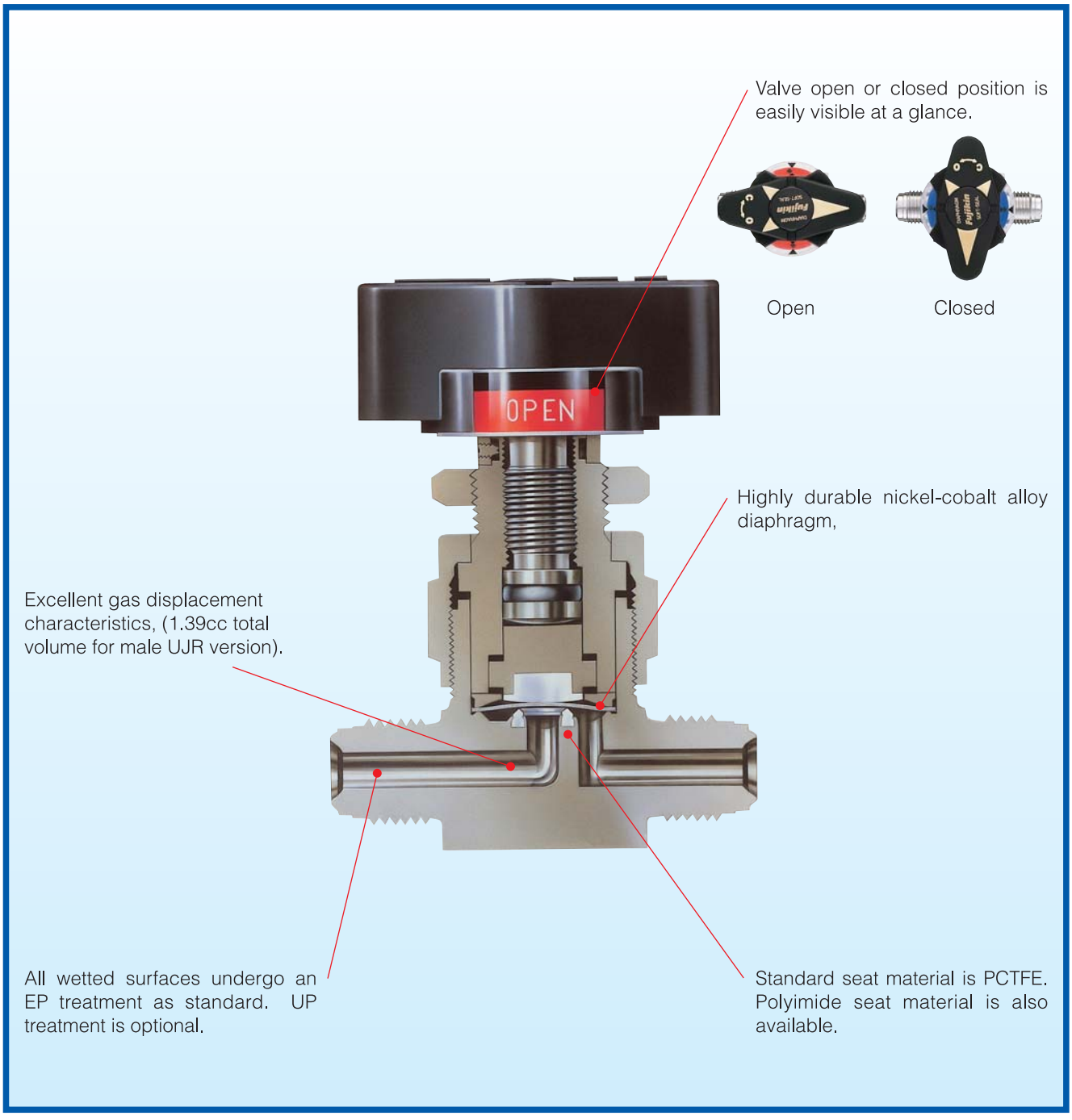
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MEGA — ONE HQ

High-Pressure Manual Valve

The MEGA-ONE HQ is a quarter-turn, open/closed valve for ultra-pure, flammable, or toxic fluid lines in various types of semiconductor manufacturing equipment and facilities.

Direct diaphragm construction makes the MEGA-ONE HQ an industry standard valve with superior sealing performance, remarkable durability, compactness, and particle and dead-space free performance.



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

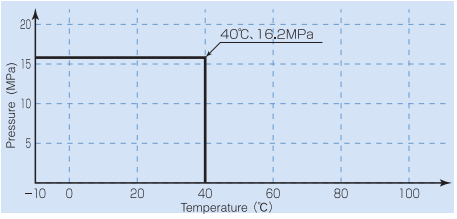
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Connection
	6.35 (1/4") 9.52 (3/8")	16.2 MPa 2,350 psi	−10～+40°C 14～104 °F	0.1	UJR, UPG®, F900, Tube Stub

●All valves are helium leak tested. Vacuum method results: External Leakage < $5x10^{-12}$ Pa•m^3/sec. Seat Leakage: < $5x10^{-12}$ Pa•m^3/sec
●Demonstrated superior durability - over 20,000 cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	Nickel-cobalt alloy
	Seat Packing	PCTFE
	Handle	Nylon 66

Temperature/Pressure Rating



PCTFE Seat Polyimide Seat

PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FUDDF L□-716G-6.35□-□-□

A Stainless steel direct diaphragm valve

B L : Quarter-turn open/closed type handle

C TB : Added only for 3-port valves*
CL : 2-way, corner left valve

D 7 : UJR / UPG® end-connection,
9 : F900 end-connection*
5 : Tube stub end-connection*

E 16 : 16.2MPa maximum operating pressure

F G : Open/Closed Indicator

G End-Connection Sizes
6.35 : 1/4" OD
9.52 : 3/8" OD
12.7 : 1/2" OD (UJR connections have a 9.52 port diameter)

H Blank : Male UJR on both ends
− 2 : Female UJR on both ends
− 3 : UJR male inlet / Female UJR outlet
UG : UPG® end-connection
BW : Butt weld*

I PI : Polyimide seat*

J UP : UP treatment*
PS : Cr_2O_3 treatment*

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DIMENSIONS

Figure 1

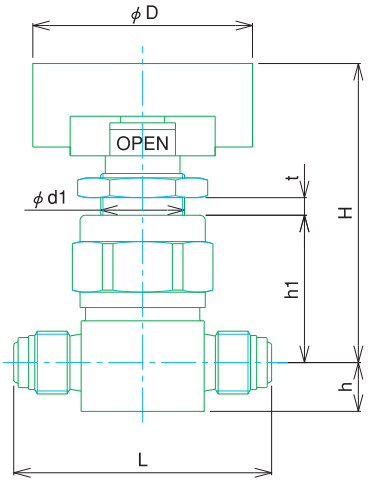


Figure 2

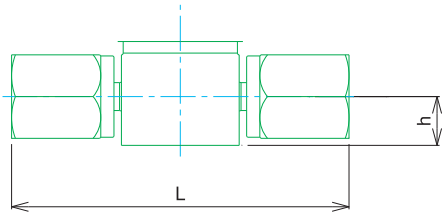
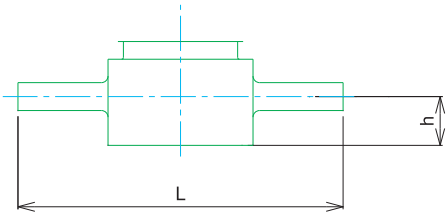


Figure 3



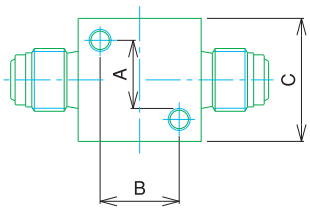


Figure 4

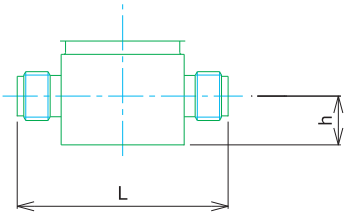
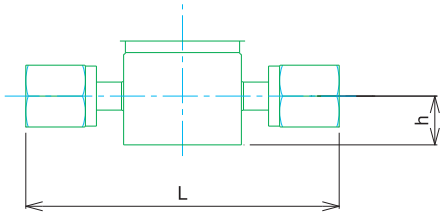


Figure 5



(Unit : mm)

Part Number	Figure	L	H	h	h1	t	A	B	C	D	d1
FUDDFL-716G-6.35	1	58.7	67	11.1	32.5	4	18	18	28	50	19.2
FUDDFL-716G-6.35-2	2	76.2	67	11.1	32.5	4	18	18	28	50	19.2
FUDDFL-716G-9.52	1	76.2	70.5	11.1	36	4	18	18	28	50	19.2
FUDDFL-516G-6.35BW	3	74	67	11.1	32.5	4	18	18	28	50	19.2
FUDDFL-716G-6.35UG	4	48	67	11.1	32.5	4	18	18	28	50	19.2
FUUDFL-716G-6.35UG-2	5	71	67	11.1	32.5	4	18	18	28	50	19.2
FUDDFL-716G-9.52UG	4	50	67	11.1	32.5	4	18	18	28	50	19.2

※ See Figure 1 for dimension keys not shown in other Figures.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

OPTIONS

High-Pressure Gas Certification

Safety is assured for special high-pressure and toxic gas lines. This valve is tested and approved by a Japanese Government Agency for various high-pressure applications. The valve couplings may also be certified and approved in the same manner. Specific customer specifications may also be accomodated.





FUDDFL-516G-6.35BW-DUE

Other

Tube stub length may be ordered according to customer specifications.

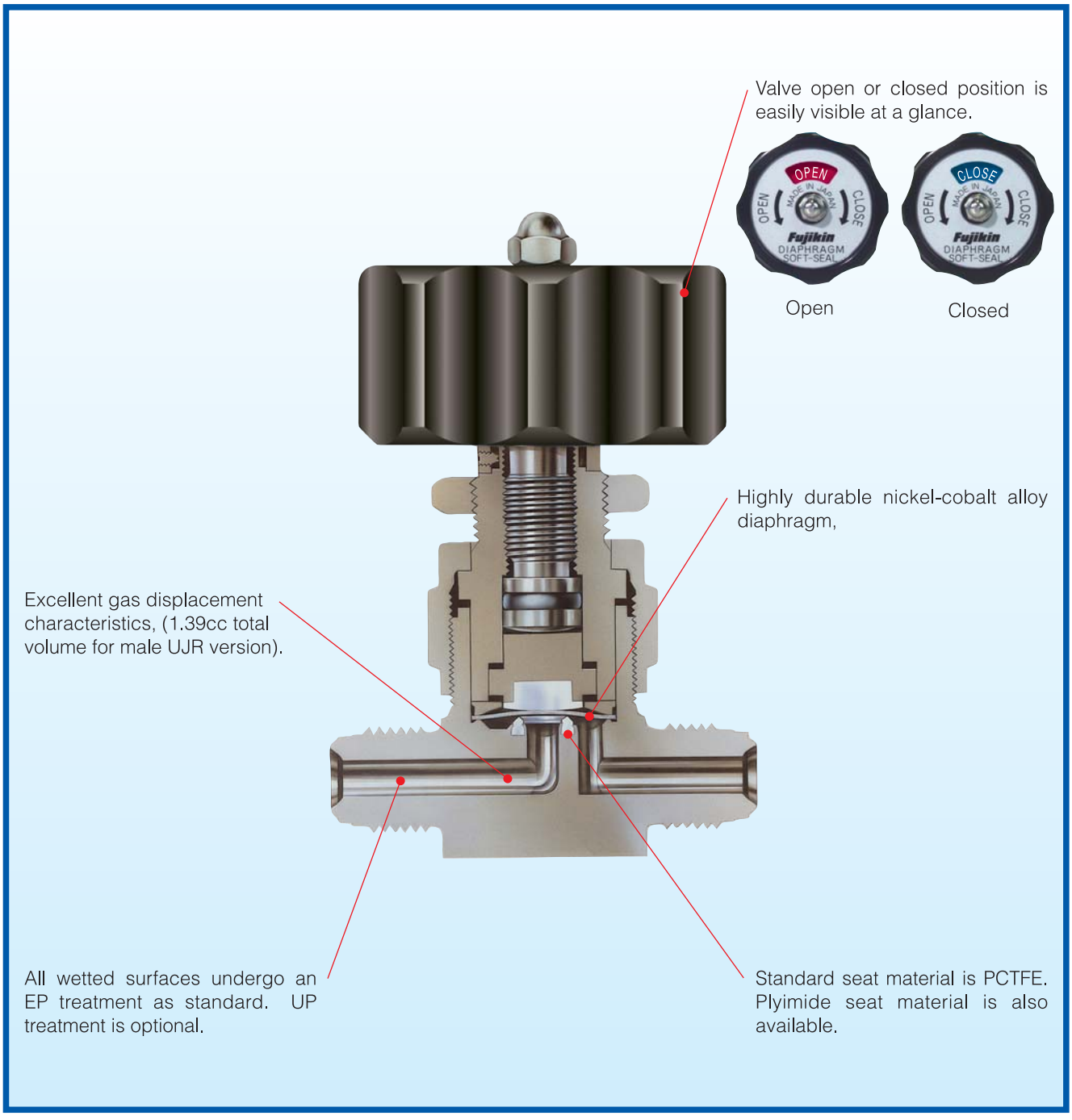
Photos are samples of each product type.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MEGA — ONE HM

High-Pressure Round Handle Manual Valve

The MEGA-ONE HM is a manual operation diaphragm valve for ultra-pure, flammable, or toxic fluid lines in various types of semiconductor manufacturing equipment and facilities.
Direct diaphragm construction makes the MEGA-ONE HM an industry standard valve with superior sealing performance, remarkable durability, compactness, and particle and dead-space free performance.



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

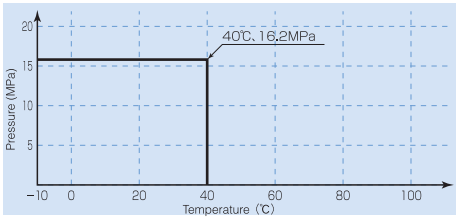
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Connection
	6.35 (1/4") 9.52 (3/8")	16.2 MPa 2,350 psi	−10～+40°C 14～104 °F	0.1	UJR, UPG®, F900, Tube Stub

●All valves are helium leak tested. Vacuum method results: External Leakage < $5x10^{-12}$ Pa•m^3/sec. Seat Leakage: < $5x10^{-12}$ Pa•m^3/sec
●Demonstrated superior durability - over 20,000 cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	Nickel-cobalt alloy
	Seat Packing	PCTFE
	Handle	A5056B

Temperature/Pressure Rating



PCTFE Seat ---- Polyimide Seat

PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FUDDF □-716G-6.35□-□-□

A
A : Stainless steel direct diaphragm valve

B
T B : Added only for 3-port valves*
C L : 2-way, corner left valve

C
7 : UJR / UPG® end-connection,
9 : F900 end-connection*
5 : Tube stub end-connection*

D
1 6 : 16.2MPa maximum operating pressure

E
G : Open/Closed Indicator

F
End-Connection Sizes
6.35 : 1/4" OD
9.52 : 3/8" OD
12.7 : 1/2" OD (UJR connections have a 9.52 port diameter)

G
Blank : Male UJR on both ends
− 2 : Female UJR on both ends
− 3 : UJR male inlet / Female UJR outlet
U G : UPG® end-connection
B W : Butt weld*

H
Blank : PCTFE seat
P I : Polyimide seat*

I
U P : UP treatment*
P S : Cr_2O_3 treatment*

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DIMENSIONS

Figure 1

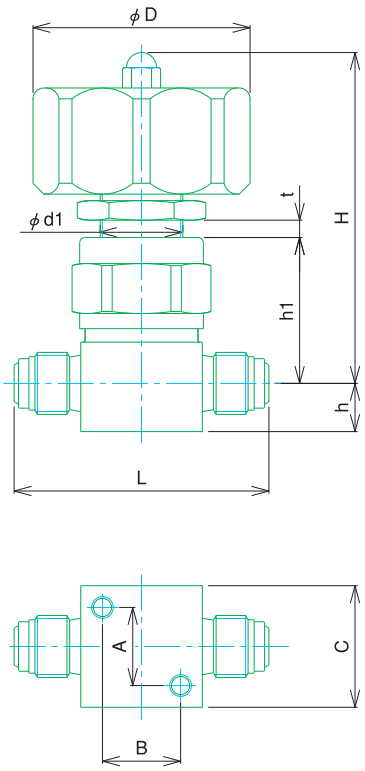


Figure 2

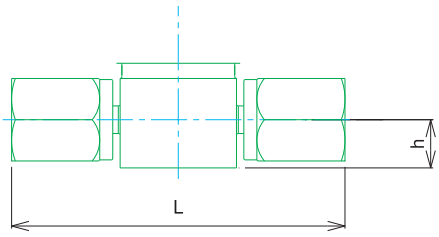


Figure 3

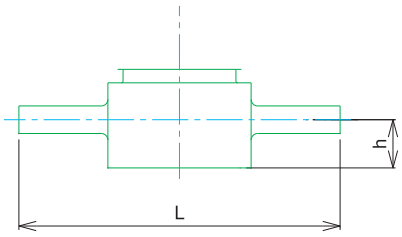


Figure 4

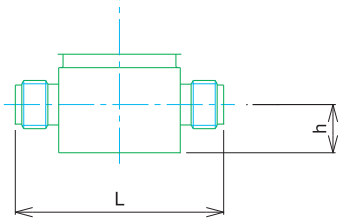
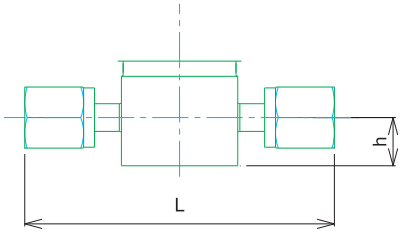


Figure 5



(Unit : mm)

Part Number	Figure	L	H	h	h1	t	A	B	C	D	d1
FUDDF-716G-6.35	1	58.7	75.2	11.1	32.5	4	18	18	28	50	19.2
FUDDF-716G-6.35-2	2	76.2	75.2	11.1	32.5	4	18	18	28	50	19.2
FUDDF-716G-9.52	1	76.2	78.7	11.1	36	4	18	18	28	50	19.2
FUDDF-516G-6.35BW	3	76.2	75.2	11.1	32.5	4	18	18	28	50	19.2
FUDDF-716G-6.35UG	4	48	75.2	11.1	32.5	4	18	18	28	50	19.2
FUUDF-716G-6.35UG-2	5	71	75.2	11.1	32.5	4	18	18	28	50	19.2
FUDDF-716G-9.52UG	4	50	75.2	11.1	32.5	4	18	18	28	50	19.2

※ See Figure 1 for dimension keys not shown in other Figures.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

OPTIONS

High-Pressure Gas Certification

Safety is assured for special high-pressure and toxic gas lines. This valve is tested and approved by a Japanese Government Agency for various high-pressure applications. The valve couplings may also be certified and approved in the same manner. Specific customer specifications may also be accomodated.





FUDDF-516G-6.35BW

Other

Tube stub length may be ordered according to customer specifications.

Photos are samples of each product type.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MEGA-MINI LA

Compact Low-Pressure Pneumatically-Actuated Valve

The MEGA-MINI LA offers pneumatic operation for ultra-pure, flammable, or toxic fluid lines in various types of semiconductor manufacturing equipment and facilities.
Direct diaphragm construction makes the MEGA-MINI LA an industry standard valve with superior sealing performance, remarkable durability, compactness, and particle and dead-space free performance.

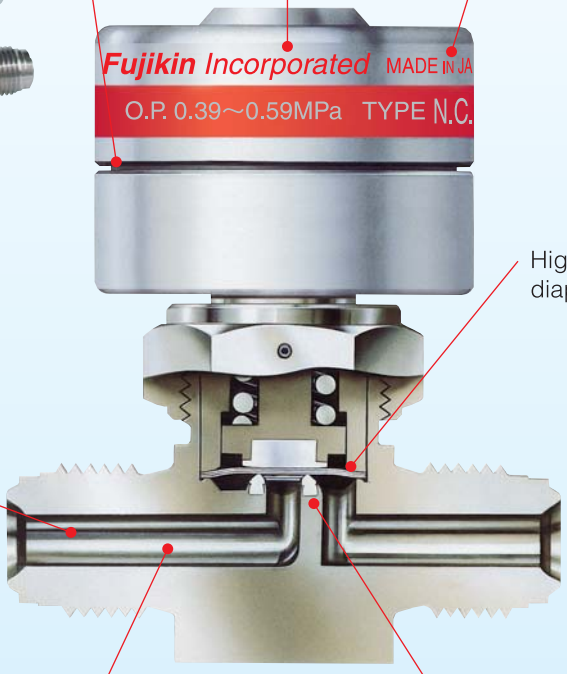
Colored caps differentiate between normally open (blue) and normally closed (red) valves, thereby simplifying recognition.



N.O. N.C.

Small ϕ35mm actuator offers space savings without sacrificing performace.

The actuator features a unique rotation mechanism, allowing for actuation pressure to be supplied from any desired direction for both normally open and normally closed valves.



Highly durable nickel-cobalt alloy diaphragm,

Excellent gas displacement characteristics, (0.84cc total volume for male UJR version).

All wetted surfaces undergo an EP treatment as standard. UP treatment is optional.

Standard seat material is PCTFE. Polyimide/PFA seat material is also available.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

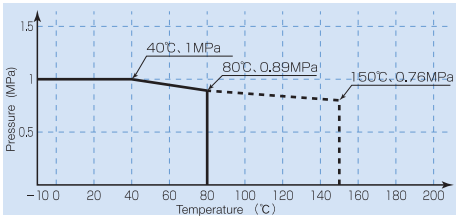
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Actuation Pressure	Connection
	6.35 (1/4")	1MPa 145 psi	−10～+80°C 14～176°F	0.1	0.39～0.59 MPa 56～86 psi	UJR, UPG®, F900, Tube Stub

●All valves are helium leak tested. Vacuum method/results: External leakage: < $5x10^{-12}$ Pa•m^3/sec. Seat leakage: < $5x10^{-12}$ Pa•m^3/sec
●Demonstrated superior durablilty - over 4 million cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	Nickel-cobalt alloy
	Seat Packing	PCTFE
	Actuator	A5056

Temperature/Pressure Rating



PCTFE Seat Polyimide/PFA Seat

PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FPR-SD□-71□-6.35□-□-□

A
F P : Normally open
F P R : Normally closed

B
Stainless steel compact direct diaphragm valve

C
T B : Added only for 3-port valves
C L : 2-way, corner left valve

D
7 : UJR / UPG® end-connection,
5 : Tube stub end-connection*

E
1 : 1MPa maximum operating pressure

F
R S 2 : With proximity sensor*
L S : With limit switch*

G
End-Connection Sizes
6.35 : 1/4" OD

H
Blank : Male UJR on both ends
− 2 : Female UJR on both ends
− 3 : UJR male inlet / Female UJR outlet
U G : UPG® end-connection
B W : Butt weld*

I
Blank : PCTFE seat
P I : Polyimide seat*
P A : PFA seat*

J
J
P S : Cr_2O_3 treatment*

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DIMENSIONS

Figure 1

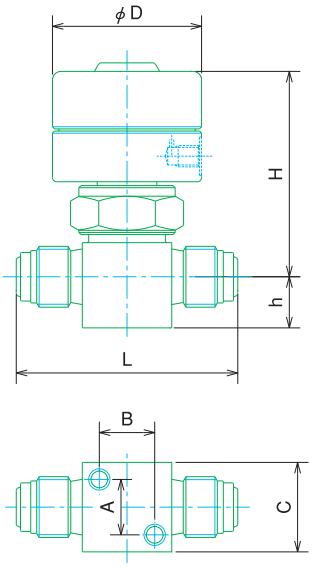


Figure 2

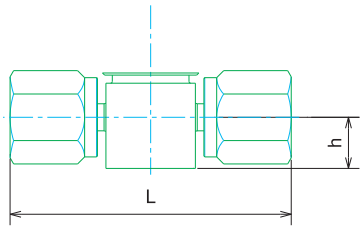


Figure 3

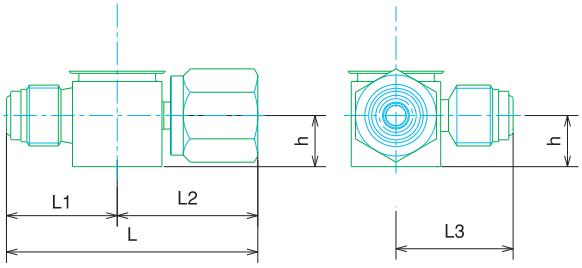


Figure 4

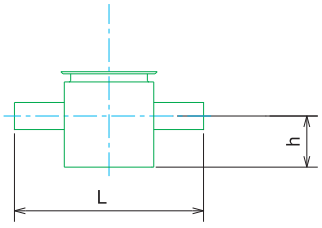


Figure 5

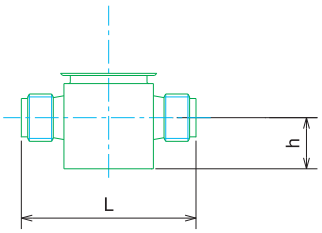
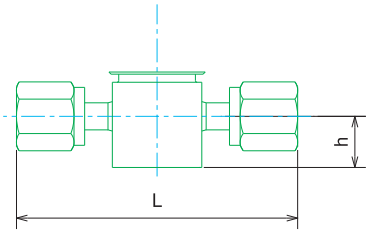


Figure 6



(Unit：mm)

Part Number	Figure	D	L	H	h	A	B	C	L1	L2	L3
FP(R)-SD-71-6.35	1	35	52	50.5	12	13	13	21			
FP(R)-SD-71-6.35-2	2	35	66	50.5	12	13	13	21			
FP(R)-SDTB-71-6.35	3	35	59	50.5	12	13	13	21	26	33	27.5
FP(R)-SD-51-6.35BW-FFL	4	35	44.4	50.5	12	13	13	21			
FP(R)-SD-71-6.35UG	5	35	41	50.5	12	13	13	21			
FP(R)-SD-71-6.35UG-2	6	35	66	50.5	12	13	13	21			

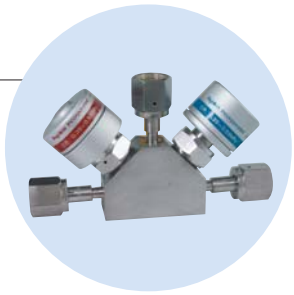
※ See Figure 1 for dimension keys not shown in other Figures.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

OPTIONS

Block Valve

FBSDV-6.35-2B3-BGB



Block valve design allows for:
- Compact tubing arrangement
- Dead-space free configuration

In addition to our standard 2-actuator, 3-port block, we also offer custom block valves according to customer's specifications.

Proximity Sensor

FPR-SD-71RS2-6.35



An electrical signal confirms open or closed position of valve. The non-contact proximity sensor offers unsurpassed safety.



FPR-SD-71LS-6.35

Limit Switch

An electrical signal confirms open or closed position of valve.

Other

A variety of configurations are possible.



FPR-SD-51-6.35-FFL



FPR-SDCR-71-6.35-ANU



FPR-SDXR-71-6.35-2



FPR-SDA-21-6.35UGF-APD

IGS Valves

MEGA series valves are also available in 1.125" and 1.5" W-Seal for surface-mount Integrated Gas Systems.

Photos are samples of each product type.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MEGA-MINI HA

Compact High-Pressure Pneumatically Actuated Valve

The MEGA-MINI HA offers pneumatic operation for high-pressure ultra-pure, flammable, or toxic fluid lines in various types of semiconductor manufacturing equipment and facilities.
Direct diaphragm construction makes the MEGA-MINI HA an industry standard valve with superior sealing performance, remarkable durability, compactness, and particle and dead-space free performance.

Colored caps differentiate between normally open (blue) and normally closed (red) valves, thereby simplifying recognition.



N.C. N.O.

Unique actuator design results in a highly-compact pneumatic valve for high-pressure applications.



Highly durable nickel-cobalt alloy diaphragm,

Excellent gas displacement characteristics, (0.92cc total volume for male UJR version).

All wetted surfaces undergo a UP treatment as standard.

Standard seat material is PCTFE. Polyimide seat material is also available.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

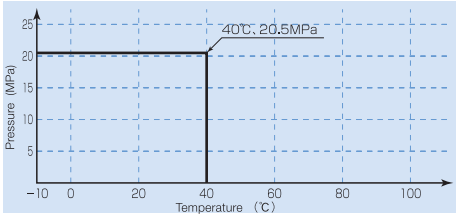
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Actuation Pressure	Connection
	6.35 (1/4")	20.5 MPa 2,973 psi	−10～+40°C 14～104 °F	0.05	0.39～0.59 MPa 56～86 psi	UJR, UPG®, F900, Tube Stub

●All valves are helium leak tested. Vacuum method/results: External leakage: < $5x10^{-12}$ Pa•m^3/sec. Seat leakage: < $5x10^{-12}$ Pa•m^3/sec
●Demonstrated superior durablilty - over 400,000 cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	Nickel-cobalt alloy
	Seat Packing	PCTFE
	Actuator	A5056

Temperature/Pressure Rating



PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FPR-SD□-7 21-6.35□-316LP-□-□

A
FP : Normally open
FPR : Normally closed

B
Stainless steel compact direct diaphragm valve

C
TB : Added only for 3-port valves
CL : 2-way, corner left valve

D
7 : UJR / UPG® end-connection,
5 : Tube stub end-connection

E
21 : 20.5 MPa maximum operating pressure

F
End-Connection Sizes
6.35 : 1/4" OD

G
Blank : Male UJR on both ends
−2 : Female UJR on both ends
UG : UPG® end-connection
BW : Butt weld

H
Blank : PCTFE seat
PI : Polyimide seat*

I
PS : Cr_2O_3 treatment*

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DIMENSIONS

Figure 1

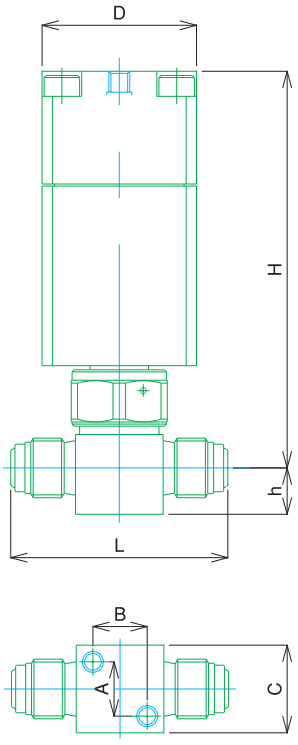


Figure 2

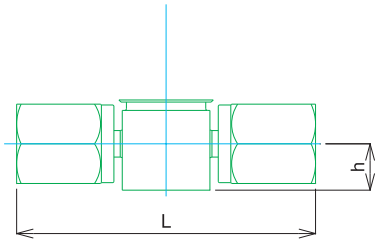


Figure 3

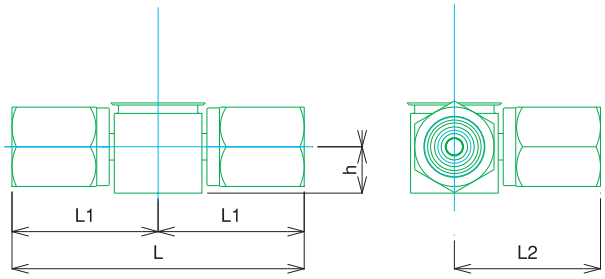


Figure 4

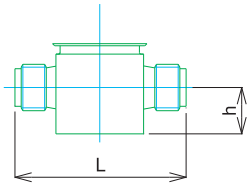


Figure 5

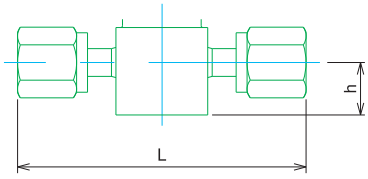
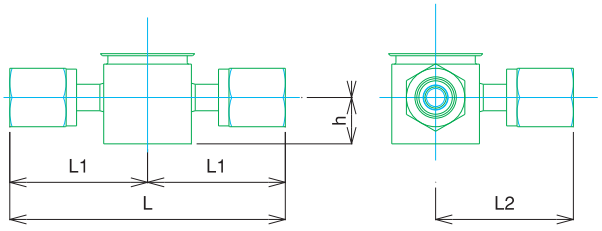


Figure 6



(Unit : mm)

Part Number	Figure	L	H	h	A	B	C	D	L1	L2
FPR-SD-721-6.35-316LP	1	52	95	11.1	13	13	21	37		
FPR-SD-721-6.35-2-316LP	2	71.6	95	11.1	13	13	21	37		
FP-SDTB-721-6.35-2-316LP	3	71.6	95	11.1	13	13	21	37	35.8	35.8
FPR-SD-721-6.35UG	4	41	95	11.1	13	13	21	37		
FPR-SD-721-6.35UG-2	5	66	95	11.1	13	13	21	37		
FPR-SDTB-721-6.35UG-2	6	66	95	11.1	13	13	21	37	33	33

※ See Figure 1 for dimension keys not shown in other Figures.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

OPTIONS

Block Valve

FBSDV-721-6.35-2B3-316LP-BHB

Block valve design allows for:
- Compact tubing arrangement
- Dead-space free configuration

In addition to our standard 2-actuator, 3-port block, we also offer custom block valves according to customer's specifications.





High-Pressure Gas Certification

Safety is assured for special high-pressure and toxic gas lines. This valve is tested and approved by a Japanese Government Agency for various high-pressure applications. The valve couplings may also be certified and approved in the same manner. Specific customer specifications may also be accomodated.

Limit Switch

FPR-SD-721LS-6.35-316LP

An electrical signal confirms open or closed position of valve.





Other

FPR-SD-521-6.35BW-316LP-FFL

A variety of configurations are possible.

Photos are samples of each product type.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

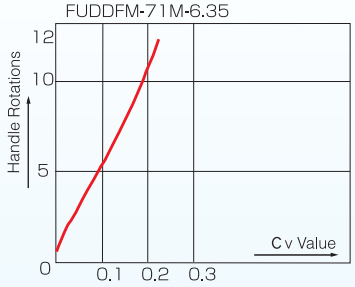
MEGA — M LV

All-Metal Direct Diaphragm Flow Control Valve

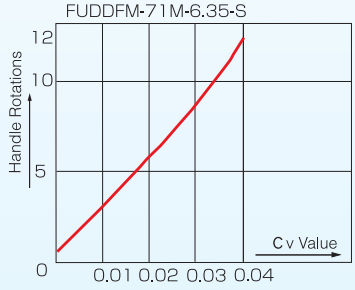
The MEGA-M LV is a highly-accurate flow control valve for ultra-pure, flammable, or toxic fluid lines in various types of semiconductor manufacturing equipment and facilities.

All-metal direct diaphragm construction is free of plastic materials and offers superior sealing performance, remarkable durability, compactness, and particle and dead-space free performance. A short-stroke coupled with a unique micrometer control has made the MEGA-M LV an industry standard valve by which all others are compared for precise manual control.

Cv Curve
FUDDFM-71M-6.35



Cv Curve
FUDDFM-71M-6.35-S



Micrometer handle utilizes a unique design to enable precise control.



The use of a metal seat allows for all wetted surfaces to be metallic.

Excellent gas displacement characteristics, (1.38 cc total volume for male UJR version).

All wetted surfaces undergo a UP treatment as standard.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

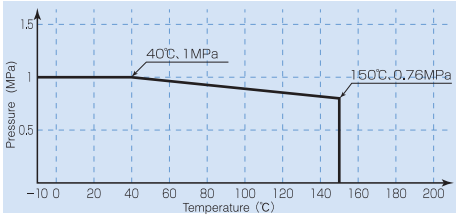
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Orifice Diameter	Connection
	6.35 (1/4")	1MPa 145 psi	−10～+150°C 14～302 °F	0.2 0.03	4.5 1.0	UJR, UPG®, F900, Tube Stub

●All valves are helium leak tested. Vacuum method/results: External leakage: < 5×10^{-12} Pa•m^3/sec. Seat leakage: <1/100 of rated Cv
●Demonstrated superior durablilty - over 1,000 cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	Nickel-cobalt alloy
	Handle	A5056B

Temperature/Pressure Rating



PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FUDDF M-71M-6.35☐-☐-☐

A
Stainless steel direct diaphragm valve

B
Metal Seat

C
7 : UJR / UPG® end-connection

D
1 : 1 MPa maximum operating pressure

E
M : Micrometer handle

F
End-Connection Sizes
6.35 : 1/4" OD

G
Blank : Male UJR on both ends
− 2 : Female UJR on both ends
U G : UPG® end-connection
B W : Butt weld*

H
Blank : Cv-0.2
S : Cv-0.03

I
P S : Cr_2O_3 treatment*

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DIMENSIONS

Figure 1

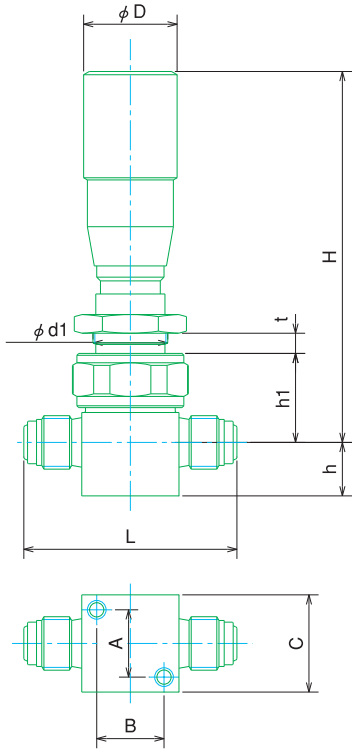


Figure 2

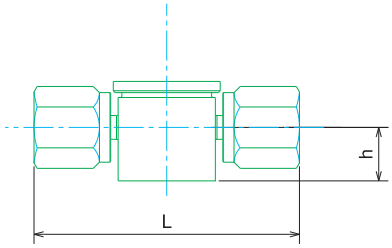


Figure 3

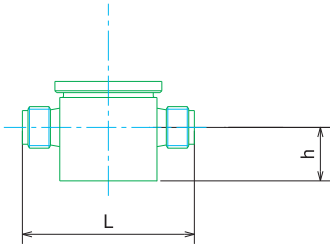
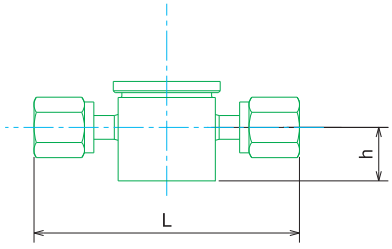


Figure 4



(Unit：mm)

Part Number	Figure	D	L	H	h	t	h1	d1	A	B	C
FUDDFM-71M-6.35	1	25	57	105	14.3	5.5	23.8	20.5	18	18	26
FUDDFM-71M-6.35-2	2	25	70.6	105	14.3	5.5	23.8	20.5	18	18	26
FUDDFM-71M-6.35UG	3	25	46	105	14.3	5.5	23.8	20.5	18	18	26
FUDDFM-71M-6.35UG-2	4	25	71	105	14.3	5.5	23.8	20.5	18	18	26

※ See Figure 1 for dimension keys not shown in other Figures.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

OPTIONS

Fixed Position Cap

FUDDFM-71MC-6.35

Prevents inadvertent change of setting.





FUSDM-21M-6.35-UGF-APD

IGS Valves

MEGA series valves are also available in 1.125" and 1.5" W-Seal for surface-mount Integrated Gas Systems.

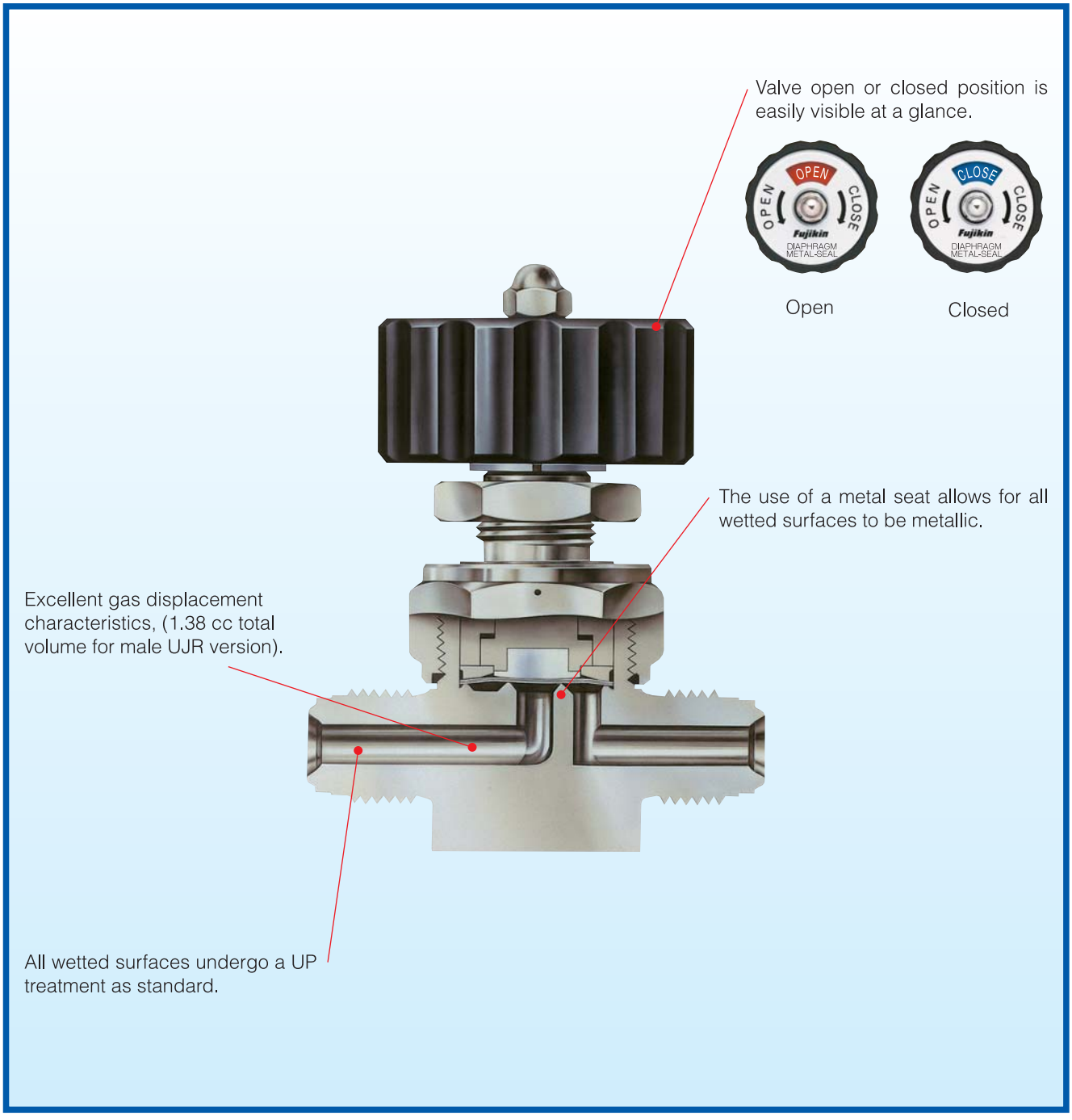
Photos are samples of each product type.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MEGA — M LM

All-Metal Direct Diaphragm Valve

The MEGA-M L M is a stop valve for ultra-pure, flammable, or toxic fluid lines in various types of semiconductor manufacturing equipment and facilities.
All-metal direct diaphragm construction is free of plastic materials and offers superior sealing performance, remarkable durability, compactness, and particle and dead-space free performance.



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

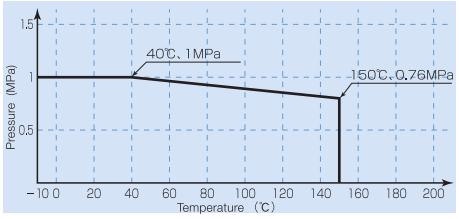
SPECIFICATIONS

Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Connection
	6.35 (1/4")	1MPa 145 psi	−10～+150°C 14～302 °F	0.3	UJR, UPG® Tube Stub
	9.52 (3/8")			0.65	

●All valves are helium leak tested. Vacuum method/results: External leakage: < $5x10^{-12}$ Pa•m^3/sec. Seat leakage: <1/100 of rated Cv
●Demonstrated superior durablilty - over 20,000 cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	Nickel-cobalt alloy
	Handle	A5056

Temperature/Pressure Rating



PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FUDDF M-71G-6.35☐-☐

A
Stainless steel direct diaphragm valve

B
Metal Seat

C
7 : UJR / UPG® end-connection

D
1 : 1 MPa maximum operating pressure

E
G : Open / closed indicator

F
End-Connection Sizes
6.35 : 1/4" OD

G
Blank : Male UJR on both ends
− 2 : Female UJR on both ends
UG : UPG® end-connection
BW : Butt weld*

H
PS : Cr_2O_3 treatment*

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DIMENSIONS

Figure 1

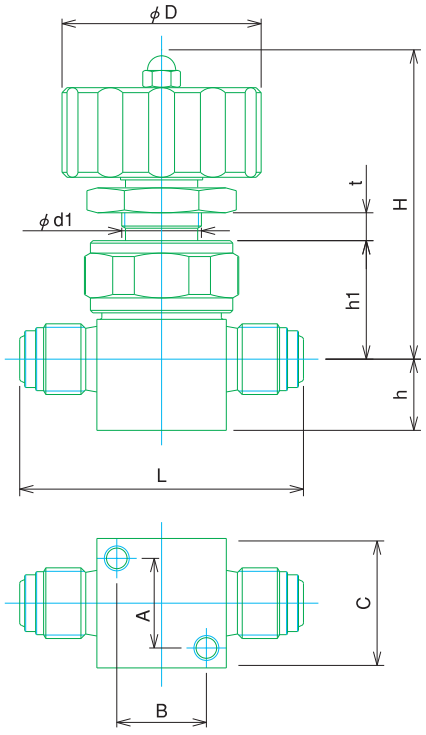


Figure 2

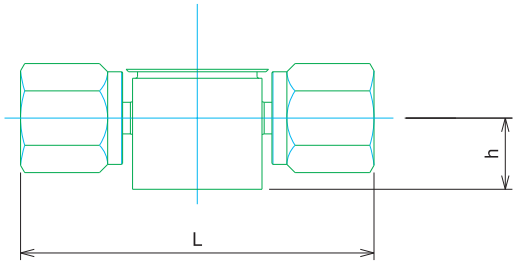


Figure 3

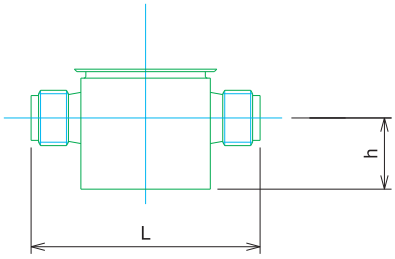
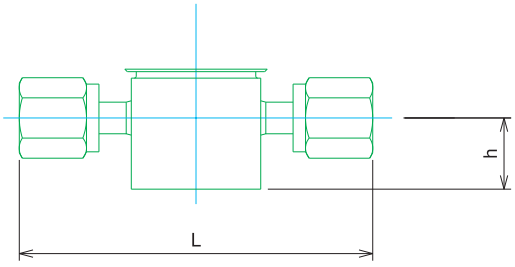


Figure 4



(Unit：mm)

Part Number	Figure	D	L	H	h	t	h1	d1	A	B	C
FUDDFM-71G-6.35	1	40	57	62	14.3	5.5	23.8	16.5	18	18	26
FUDDFM-71G-6.35-2	2	40	70.6	62	14.3	5.5	23.8	16.5	18	18	26
FUDDFM-71G-6.35UG	3	40	46	62	14.3	5.5	23.8	16.5	18	18	26
FUDDFM-71G-6.35UG-2	4	40	71	62	14.3	5.5	23.8	16.5	18	18	26

※ See Figure 1 for dimension keys not shown in other Figures.

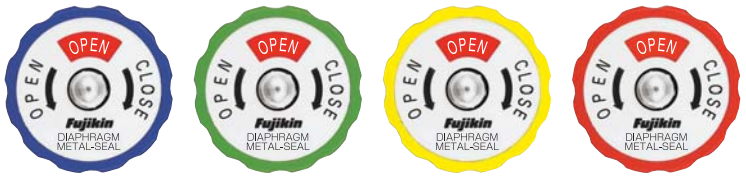
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

OPTIONS

Handle Colors

GT-HL-FUDDFM-※

A letter in place of "※" indicates handle color:
Blue=B、Green=G、Yellow=Y、Red=R



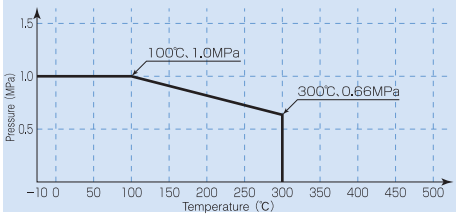
High-Temperature

FWBR-71-6.35

An all-metal actuator allows for use in services up to 300 ˚C.



Temperature/Pressure Rating



Photos are samples of each product type.

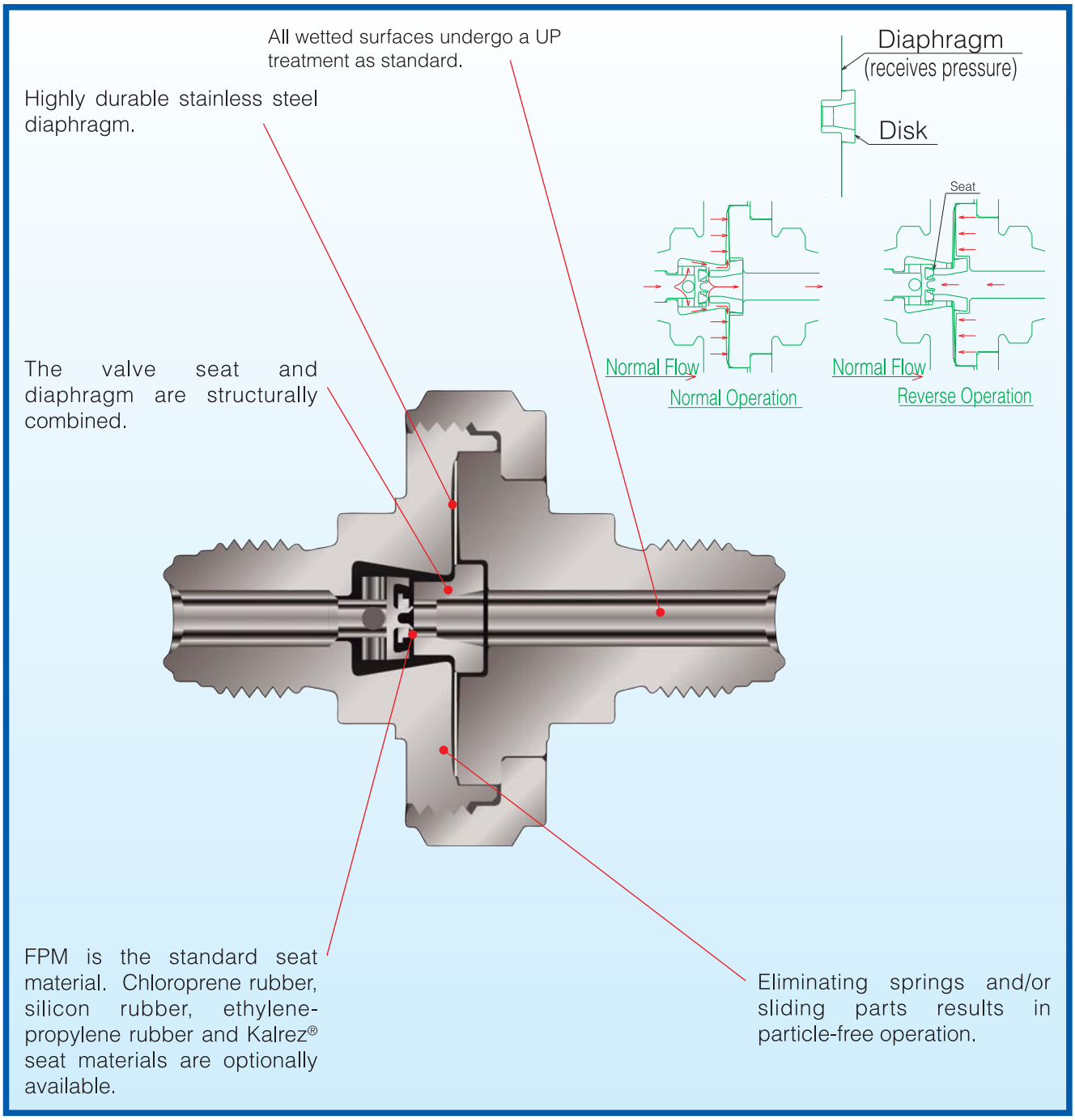
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MEGA — ONE LC

Diaphragm Check Valve

The MEGA-ONE LC is a diaphragm check valve for ultra-pure, flammable, or toxic fluid lines in various types of semiconductor manufacturing equipment and facilities.
By utilizing a diaphragm construction, the effective surface area is larger, and therefore operates effectively even at low flows and/or low differential pressures. Additionally, shut-off at extremely low pressures is also assured.

The elimination of internal springs and sliding components results in particle-free operation.



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

SPECIFICATIONS

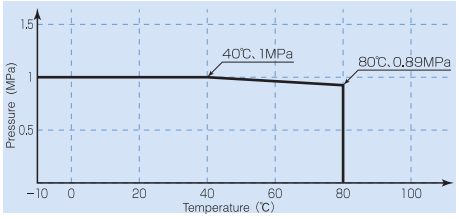
Specification	Nominal Diameter	Maximum Operating Pressure	Fluid Temperature Range	Maximum Cv	Cracking Pressure	Back Pressure	Connection
	6.35 (1/4")	1MPa 145 psi	−10～+80°C 14～176 °F	0.2 (0.0294 MPa maximum pressure loss)	2.26KPa 0.33 psi	0.01MPa 1.45 psi	UJR, UPG®

●All valves are helium leak tested. Vacuum method/results: External leakage: < 5×10^{-12} Pa•m^3/sec. Seat leakage: <1/100 of rated Cv
●Demonstrated superior durablilty - over 100,000 cycles (actual test results).

Materials	Part	Material
	Body	SUS316L
	Diaphragm	SUS316L
	Seat Packing	FPM*

*Chloroprene, silicon, etylene-propylene and Kalrez® optionally available.

Temperature/Pressure Rating



PART NUMBER DESIGNATION

Please use the part number designations below when placing an order.

FUCDF-71-6.35 □-□

A
Stainless steel direct check valve

B
7 : UJR / UPG® end connections

C
1 : 1MPa maximum operating pressure

D
End-Connection Sizes
6.35 : 1/4OD

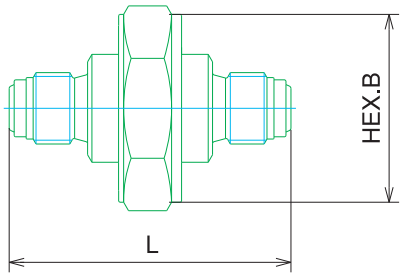
E
UG : UPG® end-connection

F
CR : Chloroprene rubber
SI : Silicon rubber
ER : Ethylene-propylene rubber
KA : Kalrez®
(Select an appropriate material to match temperature and fluid type.)

* Optional or made to order.

Actual shipped products may have additional designations (such as #A, #B) in the part number. These indicate production history and do not indicate a change in function or dimensions.

DIMENSIONS



(Unit : mm)

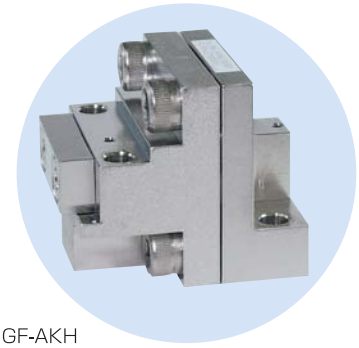
Part Number	B	L
FUCDF-71-6.35	38	56.4

Kalrez® is a registered trademark of DuPont Dow Elastomers

OPTIONS

IGS Diaphragm Check Valve

Fujikin Integrated Gas system check valves are included in the MEGA series.



FUCDF-21-6.35UGF-AKH

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

SUPPLEMENTARY INFORMATION

●Inner Surface Treatment

1. Products with ULTRA EXTREME PURE（UP）Special Internal Treatment

By utilizing a special polishing technology to first remove work-affected and work-hardened layers from the metal surfaces, UP treated products attain an exceedingly pure metal surface having an extremely uniform passivated film. The surface roughness is kept below 0.7 mm Ry, with an average roughness being 0.1mm or less. Additionally, final cleaning is performed in a Class 1 cleanroom to completely remove particles and impurities, and to assure a thoroughly clean product.

The UP treatment is compatible with Hastelloy® and other corrosion resistant materials. The UP treatment is standard on the MEGA-MINI and MEGA-M series products, and is optionally available on MEGA-ONE series products.

2. Products with Cr_2O_3 Treatment（CRPS）

100% Cr_2O_3 treated products have a Cr_2O_3 film - passivation layer - formed on the stainless steel surface through a special base layer treatment and heat treatment. This offers:

1. Superior corrosion resistance as compared to halogen-based gases.
2. Less outgassing of moisture, etc.; with the excellent dry-down characteristics of the material, equipment start-up time can be shortened.
3. Non-catalytic behavior is observed with hydrogen compound gases - such as SiH_4 and B_2H_6 - which decompose at low temperatures through surface catalytic effect. This enables stable delivery to the point of use.

3. Products with BK Treatment（CRPX）

A BK treatment involves heat-treating the mirror-finish stainless steel surface under an inert gas environment. Components that undergo a BK treatment are imparted with a high Cr concentration layer on the upper-most surface. Products that undergo a BK treatment are more corrosion resistant, evidence less outgassing, and have excellent dry-down characteristics.

4. Products with Fluorine Passivation（FP）

FP products are given a chemically stable fluorine passivation layer by causing a reaction between the stainless steel surface and F_2 gas when heat treatment is applied. Recent advancements in micro-fabrication technology and the increased use of excimer laser steppers has required an increase in F_2 use as well. Since F_2 gas is extremely reactive - and will react with stainless steel surfaces - it will get consumed and therefore affect the F_2 concenteration. This, in turn, affects the oscillation frequency of the excimer laser.

●SEAT MATERIALS

1. PCTFE（polytetrafluoroethylene）

Standard seat material on MEGA-ONE series and MEGA-MINI series products.

2. PI（polyimide）、PA（PFA）

A recommended option for non-standard temeratures and fluids.

●BODY AND DIAPHRAGM MATERIALS

Hastelloy®

For services that require excepional corrosion resistance, Hastelloy C-22® bodies and diaphragms may be specified as an optional material.

●PROXIMITY SENSORS AND LIMIT SWITCHES

When open or closed position verification is required on pneumatically actuated valves, proximity sensors or limit switches that output an electrical signal to an external unit are optionally available. Valves with a limit switch may be substitued for proximity sensor valves.

●HANDLE COLORS

Handles may be specified in a wide variety of optional colors.

Hastelloy® is a registered trademark of Haynes International.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MEGA SERIES COMPARISON TABLE

		MEGA-ONE					MEGA-MINI		MEGA-M		MEGA-ONE
		LA	LS	LM	HQ	HM	LA	HA	LV	LM	LC
PRESSURE TYPE	High-Pressure				●	●		●			
	High-Pressure (Japan Certification)				▲	▲		▲			
NOMINAL DIAMETER	6.35 (1/4")	●	●	●	●	●	●	●	●	●	●
	9.52 (3/8")	●	●	●	●	●	●			●	
	12.7 (1/2")	▲※1	▲※1	▲※1							
CONNECTION	UJR	●	●	●	●	●	●	●	●	●	●
	UPG	●	●	●	●	●	●	●	●	●	●
	F900	●	●	●	▲	▲					
	Tube Stub	▲	▲	▲	▲	▲	▲	▲	▲	▲	
INNER SURFACE TREATMENT	EP	●	●	●	●	●					
	UP	▲	▲	▲	▲	▲	●	●	●	●	●
	CRPX	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	CRPS	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	FD	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
BODY MATERIAL	SUS316L	●	●	●	●	●	●		▲	▲	●
	SUS316L (Double-Melt)	▲	▲	▲	▲	▲	▲	●	●	●	
	Hastelloy®	▲	▲	▲	▲	▲	▲	▲	▲	▲	
DIAPHRAGM MATERIAL	Nickel-Cobalt Alloy	●	●	●	●	●	●	●	●	●	●
	Hastelloy®	▲	▲	▲	▲	▲	▲	▲			
SEAT MATERIAL	PCTFE	●	●	●	●	●	●	●			
	PI	▲	▲	▲	▲	▲	▲	▲			※2
	PA	▲	▲	▲			▲				
OTHER	Proximity Sensor	▲					▲				
	Limit Switch	▲					▲	▲			
	Handle Color		▲	▲						▲	

● : Standard Option
▲ : Optional
※1 : Installed only when F900 is selected as the end-connection.
※2 : FPM (fluoro rubber) is standard seat material; chloroprene rubber, silicon rubber, ethylene-propylene rubber and Kalrez® may be optionally specified.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Fujikin®



Fujikin® Carp® Group

URL http://www.fujikin.co.jp/ E-mail info@fujikin.co.jp



The Year 2005
The 1st Monozukuri (manufacturing) Nippon Grand Awards
: Excellence Prize

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP