ARTISAN®
TECHNOLOGY GROUP

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

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

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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
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Expert team | Trust guarantee | 100% satisfaction

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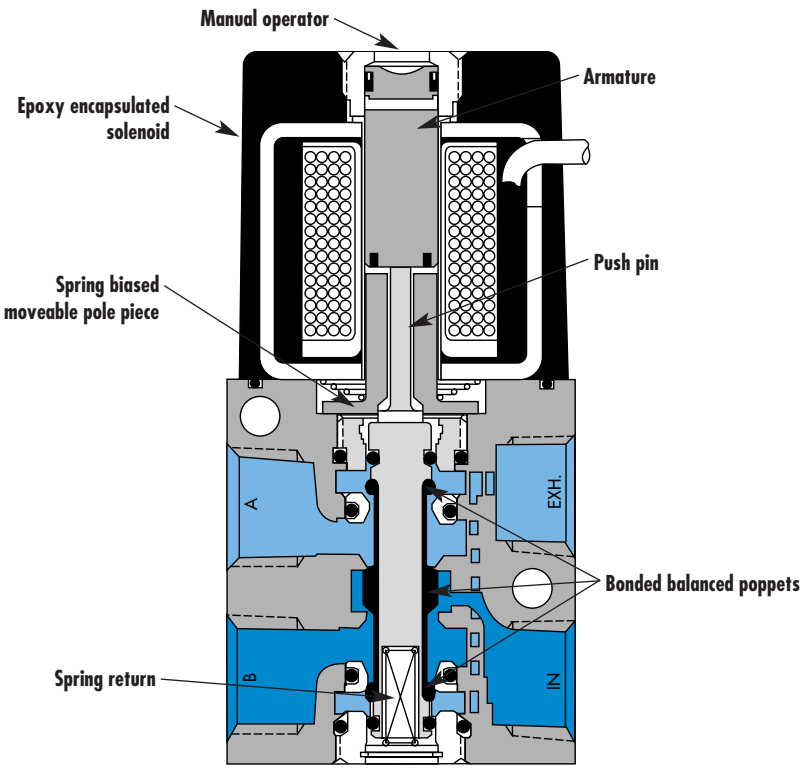
Find the *MAC 45A-GA1-DDDJ-1KG* at our website: *Click HERE*

Individual mounting

inline	sub-base non"plug-in"

Manifold mounting

stacking	sub-base non"plug-in"	sub-base with pressure regulators	sub-base with pressure regulators and flow controls



SERIES FEATURES

- Single and double solenoid or remote air.
- The patented MACSOLENOID® for fastest possible response times.
- Bonded balanced poppets for high flow, precise repeatability, and consistent operation.
- Balanced poppet design permits versatility in pipping. Valves can be piped as 4-way, 3-way or 2-way, normally closed or normally open or can be used for vacuum, diverter or selector applications.
- Use on lube or non-lube service.
- Extremely high cycle rates.
- Extremely long service life due to unique poppet cushions.
- Manual overrides as standard.
- Various solenoid enclosures and plug-in connectors
- Optional surge suppression available.
- Low wattage DC solenoids — down to 1.8 watts.
- Patented MACSOLENOID® — virtually burn-out proof on AC service.

Consult "Precautions" page 356 before use, installation or service of MAC Valves.

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100% OF PRODUCTION TESTED 100%

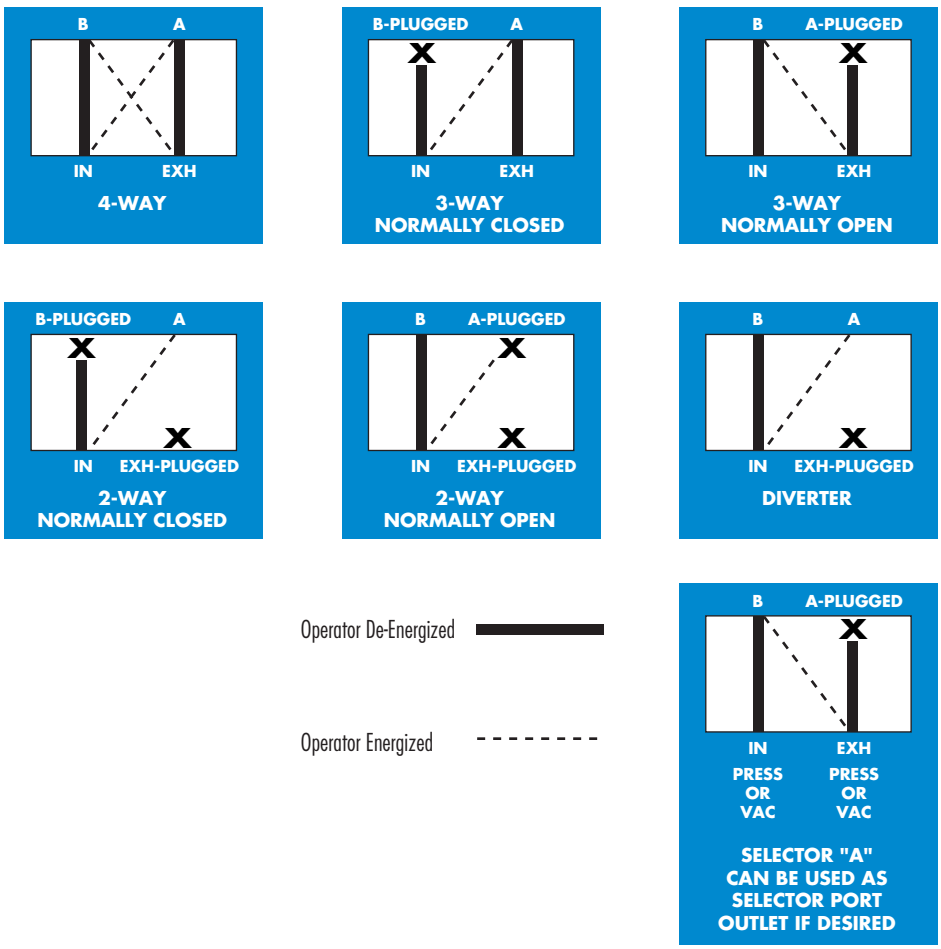
WARRANTY 18 MONTHS

VALVE CONFIGURATIONS AVAILABLE

- 2-position single and double solenoid or remote air.
- Single pressure (4 or 5 ports)
- Individual, stacking and manifold base mounted models.
- Integral individual exhaust flow controls with common exhaust port.
- Integral regulators and flow controls on manifolds.

SPECIAL APPLICATIONS :

The balanced poppet design facilities using the same valve for many functions and can be used for pressure, vacuum or plugged without the necessity of changing any parts. Pipping suggestions are shown in the chart below.



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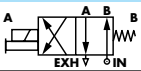
Function	Port size	Flow (Max)	Individual mounting	Series
4/2	**#10-32 - 1/8"**	**0.15 C_v**	inline	

OPERATIONAL BENEFITS

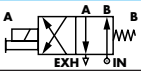
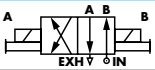
1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Burn-out proof solenoid on AC service.



HOW TO ORDER

Port size	Single operator	Double operator (Minimum DC wattage 5.4W)
		
1/8" NPTF	45A-AA1-D*xxx-xxx*	45A-GA1-D*xxx-xxx*
# 10-32 UNF	45A-AB1-D*xxx-xxx*	45A-GB1-D*xxx-xxx*

WITH INTEGRATED FLOW CONTROLS

Port size	Single operator	Double operator (Minimum DC wattage 5.4W)
		
1/8" NPTF	45A-AA2-D*xxx-xxx*	45A-GA2-D*xxx-xxx*
# 10-32 UNF	45A-AB2-D*xxx-xxx*	45A-GB2-D*xxx-xxx*

SOLENOID OPERATOR ➤ D ***XX X- X XX****

XX	Voltage
AA	120/60, 110/50
AB	240/60, 220/50
AC	24/60, 24/50
FB	24 VDC (1.8 W)
DA	24 VDC (5.4 W)
DF	24 VDC (12.7 W)

X	Wire length
A	18" (Flying leads)
J	Connector

X	Manual operator
1	Non-locking
2	Locking

XX	Electrical connection
KA	Square connector
KD	Square connector with light
JB	Rectangular connector
JD	Rectangular connector with light
BA	Flying leads

* Other options available, see page 353.

BOTTOM PORT OPTIONS (O'RING MOUNT)

45A-XXX-D *xxx-xxx*

- D-Sgl. oper. - All ports
- F-Sgl. oper. - "A" & "B" ports
- H-Dbl. oper. - All ports
- J-Dbl. oper. - "A" & "B" ports

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MAC

Series 45

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WARRANTY 18 MONTHS

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Vacuum to 120 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to 50°C)		
Flow (at 6 bar, ΔP=1bar) :	1.8 W : (0.1 C_v), 5.4 W : (0.15 C_v)		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	Consult factory		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	24 VDC (5.4 W)	Energize : 6 ms	De-energize : 2 ms
	120/60	Energize : 3-8 ms	De-energize : 2-7 ms

Spare parts :

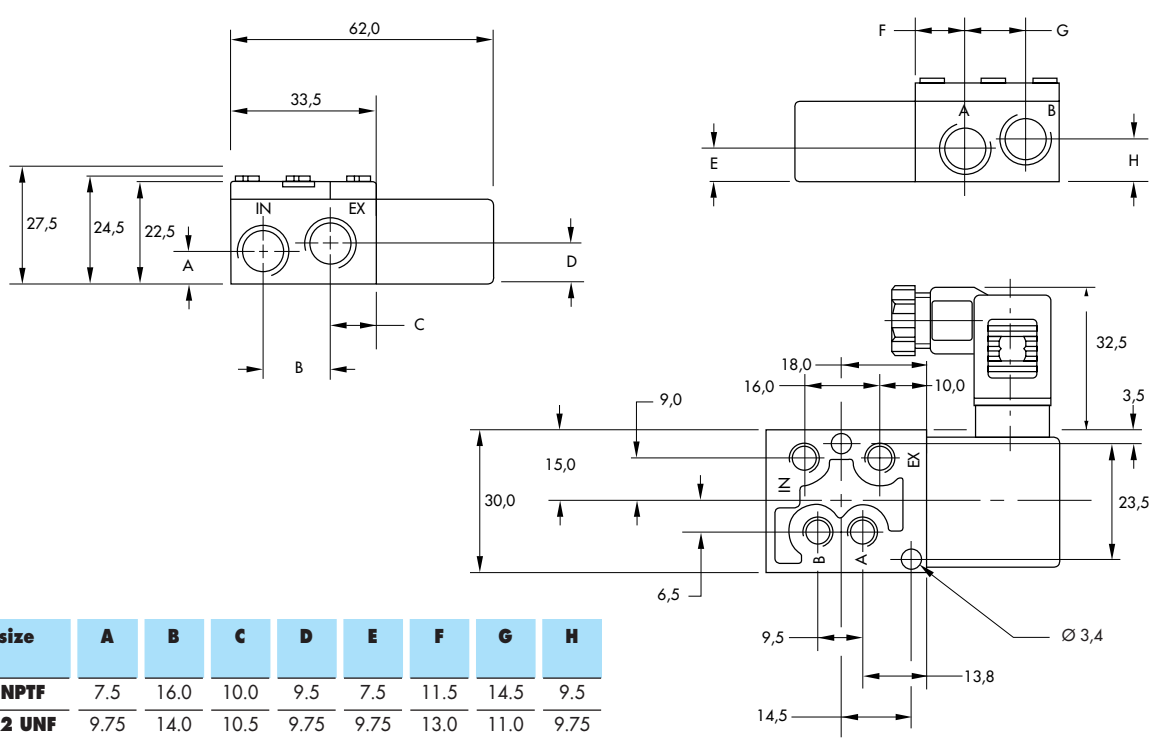
• Solenoid operator (power ≥ 5.4 W) : DXXX-XXX, including mounting screws 35013.
• Seal (between solenoid and valve body) : 16402. • Valve cover plate with flow controls : N-45002.

Options :

• BSPP threads. • High flow up to 0.23 C_V, according to wattage and high flow Mod. • NAMUR interface - 45A-FA1DXXX-XXX and required NAMUR adapter kit: N-45028-03 (for 3-way operation) - N-45028-04 (for 4-way operation).

DIMENSIONS

Dimensions shown are metric (mm)



Port size	A	B	C	D	E	F	G	H
1/8" NPTF	7.5	16.0	10.0	9.5	7.5	11.5	14.5	9.5
# 10-32 UNF	9.75	14.0	10.5	9.75	9.75	13.0	11.0	9.75

Consult "Precautions" page 356 before use, installation or service of MAC Valves.

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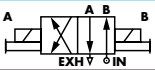
Function	Port size	Flow (Max)	Individual mounting	Series
4/2	**#10-32 - 1/8"**	**0.13 C_v**	sub-base non"plug-in"	

OPERATIONAL BENEFITS

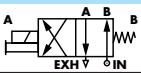
1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Burn-out proof solenoid on AC service.



HOW TO ORDER

Port size	Single operator	Double operator (Minimum DC wattage 5,4W)
		
Valve less base	45A-L00-D*xxx-xxx*	45A-N00-D*xxx-xxx*
1/8" NPTF base	45A-LAA-D*xxx-xxx*	45A-NAA-D*xxx-xxx*
#10-32 UNF base	45A-LBA-D*xxx-xxx*	45A-NBA-D*xxx-xxx*

WITH INTEGRATED FLOW CONTROLS

Port size	Single operator	Double operator (Minimum DC wattage 5,4W)
		
Valve less base	45A-L00-D*xxx-xxx*	45A-N00-D*xxx-xxx*
1/8" NPTF base	45A-LAB-D*xxx-xxx*	45A-NAB-D*xxx-xxx*
#10-32 UNF base	45A-LBB-D*xxx-xxx*	45A-NBB-D*xxx-xxx*

SOLENOID OPERATOR ➤ D *XX X- X XX**

XX	Voltage
AA	120/60, 110/50
AB	240/60, 220/50
AC	24/60, 24/50
FB	24 VDC (1.8 W)
DA	24 VDC (5.4 W)
DF	24 VDC (12.7 W)

X	Wire length
A	18" (Flying leads)
J	Connector

X	Manual operator
1	Non-locking
2	Locking

XX	Electrical connection
KA	Square connector
KD	Square connector with light
BA	Flying leads

* Other options available, see page 353.

OPTIONS

45A-LAA-D *xxx-xxx*

└ Substitute "J" for 1/8" bottom cylinder ports

Consult "Precautions" page 356 before use, installation or service of MAC Valves.

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Series 45

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WARRANTY 18 MONTHS

TECHNICAL DATA

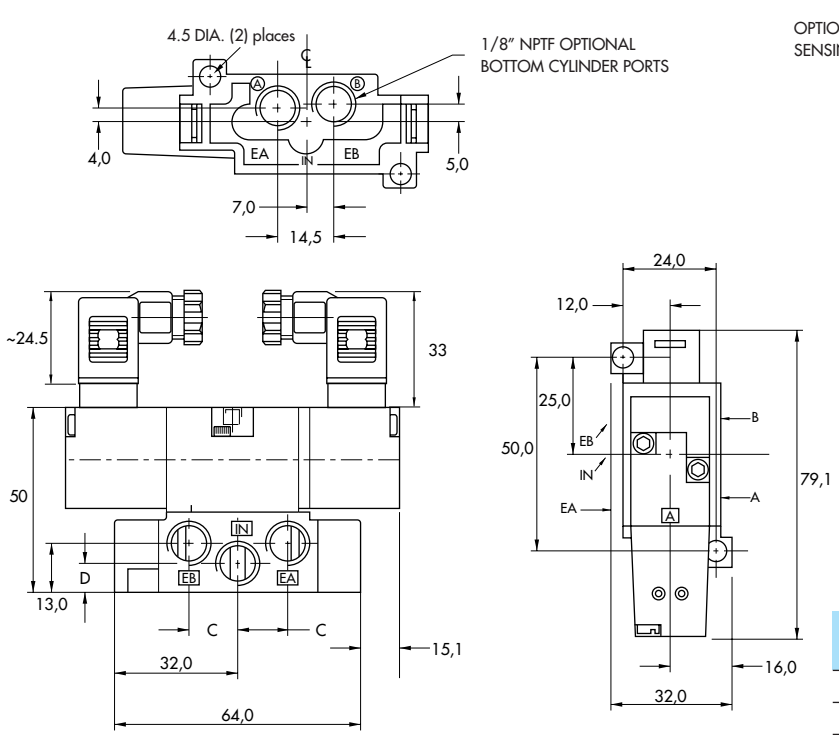
Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Vacuum to 120 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to 50°C)		
Flow (at 6 bar, ΔP=1bar) :	1.8 W : (0.11 C_V), 5.4 W : (0.13 C_V)		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	Consult factory		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	24 VDC (5.4 W)	Energize : 6 ms	De-energize : 2 ms
	120/60	Energize : 3-8 ms	De-energize : 2-7 ms

Spare parts : • Solenoid operator (power ≥ 5.4 W) : DXXX-XXX, including mounting screws 35013.
• Seal (between solenoid and valve body) : 16402. • Seal between base and valve : 16453. • Flow control : N-45018.

Options : • BSPP threads. • High flow up to 0.20 C_V, according to wattage and high flow mod.

DIMENSIONS

Dimensions shown are metric (mm)



Port size	A	B	C	D
1/8" NPTF	16.0	8.0	13.0	8.0
# 10-32 UNF	12.0	6.0	15.0	10.0

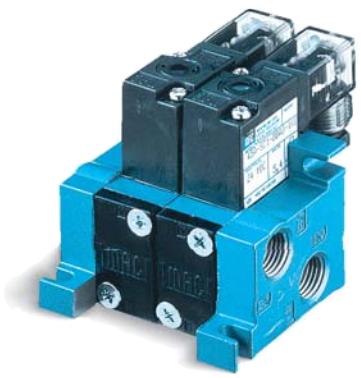
Consult "Precautions" page 356 before use, installation or service of MAC Valves.

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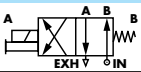
Function	Port size	Flow (Max)	Manifold mounting	Series
4/2	**# 10-32 - 1/8"**	**0.20 C_v**	stacking	

OPERATIONAL BENEFITS

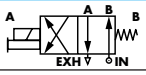
1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Burn-out proof solenoid on AC service.



HOW TO ORDER

Port size	Single operator	Double operator (Minimum DC wattage 5,4W)
		
1/8" NPTF	45A-SA1-D*xxx-xxx*	45A-TA1-D*xxx-xxx*
# 10-32 UNF	45A-SB1-D*xxx-xxx*	45A-TB1-D*xxx-xxx*

WITH INTEGRATED FLOW CONTROLS

Port size	Single operator	Double operator
		
1/8" NPTF	45A-SA2-D*xxx-xxx*	45A-TA2-D*xxx-xxx*
# 10-32 UNF	45A-SB2-D*xxx-xxx*	45A-TB2-D*xxx-xxx*

SOLENOID OPERATOR ➤ D ***XX X- X XX****

XX	Voltage
AA	120/60, 110/50
AB	240/60, 220/50
AC	24/60, 24/50
FB	24 VDC (1.8 W)
DA	24 VDC (5.4 W)
DF	24 VDC (12.7 W)

X	Wire length
A	18" (Flying leads)
J	Connector

X	Manual operator
1	Non-locking
2	Locking

XX	Electrical connection
KA	Square connector
KD	Square connector with light
BA	Flying leads

* Other options available, see page 353.

End plate kit required (Port size 1/4" NPTF) : M-45001-01.

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MAC

Series 45

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WARRANTY 18 MONTHS

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Vacuum to 120 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to 50°C)		
Flow (at 6 bar, ΔP=1bar) :	1.8 W : (0.14 C_V), 5.4 W : (0.2 C_V)		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	Consult factory		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	24 VDC (5.4 W)	Energize : 6 ms	De-energize : 2 ms
	120/60	Energize : 3-8 ms	De-energize : 2-7 ms

Spare parts :

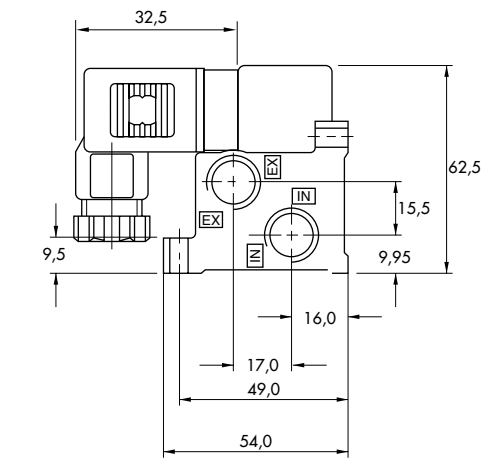
- Solenoid operator (power ≥ 5.4 W) : DXXX-XXX, including mounting screws 35013.
- Seal (between solenoid and valve body) : 16402. • Seal between valves : 16422. • Tie-rod (x2) : 19813.
- Valve cover plate with flow controls : N-45004.
- Inlet & exhaust isolator : N-45005. Inlet isolator : N-45006. Exhaust isolator : N-45007

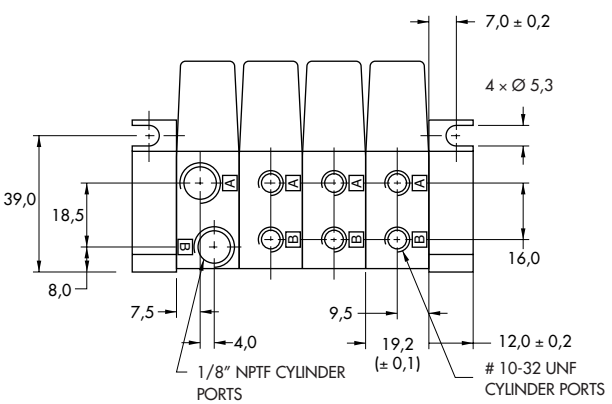
Options :

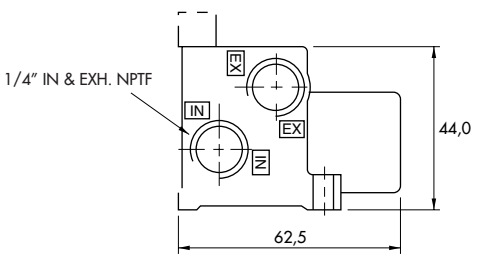
- BSPP threads. • High flow up to 0.3 C_V, according to wattage and high flow mod.

DIMENSIONS

Dimensions shown are metric (mm)







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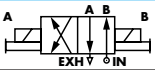
Function	Port size	Flow (Max)	Manifold mounting	Series
4/2	**# 10-32 - 1/8"**	**0.11 C_v**	sub-base non"plug-in"	

OPERATIONAL BENEFITS

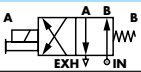
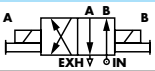
1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Burn-out proof solenoid on AC service.



HOW TO ORDER

Port size	Single operator	Double operator (Minimum DC wattage 5.4W)
		
Valve less base	45A-L00-D*xxx-xxx*	45A-N00-D*xxx-xxx*
1/8" NPTF base	45A-LAC-D*xxx-xxx*	45A-NAC-D*xxx-xxx*
# 10-32 UNF base	45A-LBC-D*xxx-xxx*	45A-NBC-D*xxx-xxx*

WITH INTEGRATED FLOW CONTROLS

Port size	Single operator	Double operator (Minimum DC wattage 5.4W)
		
Valve less base	45A-L00-D*xxx-xxx*	45A-N00-D*xxx-xxx*
1/8" NPTF base	45A-LAD-D*xxx-xxx*	45A-NAD-D*xxx-xxx*
# 10-32 UNF base	45A-LBD-D*xxx-xxx*	45A-NBD-D*xxx-xxx*

SOLENOID OPERATOR ➤ D *XX X- X XX**

XX	Voltage
AA	120/60, 110/50
AB	240/60, 220/50
AC	24/60, 24/50
FB	24 VDC (1.8 W)
DA	24 VDC (5.4 W)
DF	24 VDC (12.7 W)

X	Wire length
A	18" (Flying leads)
J	Connector

X	Manual operator
1	Non-locking
2	Locking

XX	Electrical connection
KA	Square connector
KD	Square connector with light
BA	Flying leads

* Other options available, see page 353.

End plate kit required (Port size 1/4" NPTF) : M-45008-01

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MAC

Series 45

100% OF PRODUCTION TESTED 100%

WARRANTY 18 MONTHS

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Vacuum to 120 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to 50°C)		
Flow (at 6 bar, ΔP=1bar) :	1.8 W : (0.09 C_V), 5.4 W : (0.11 C_V)		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	Consult factory		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	24 VDC (5.4 W)	Energize : 6 ms	De-energize : 2 ms
	120/60	Energize : 3-8 ms	De-energize : 2-7 ms

Spare parts :

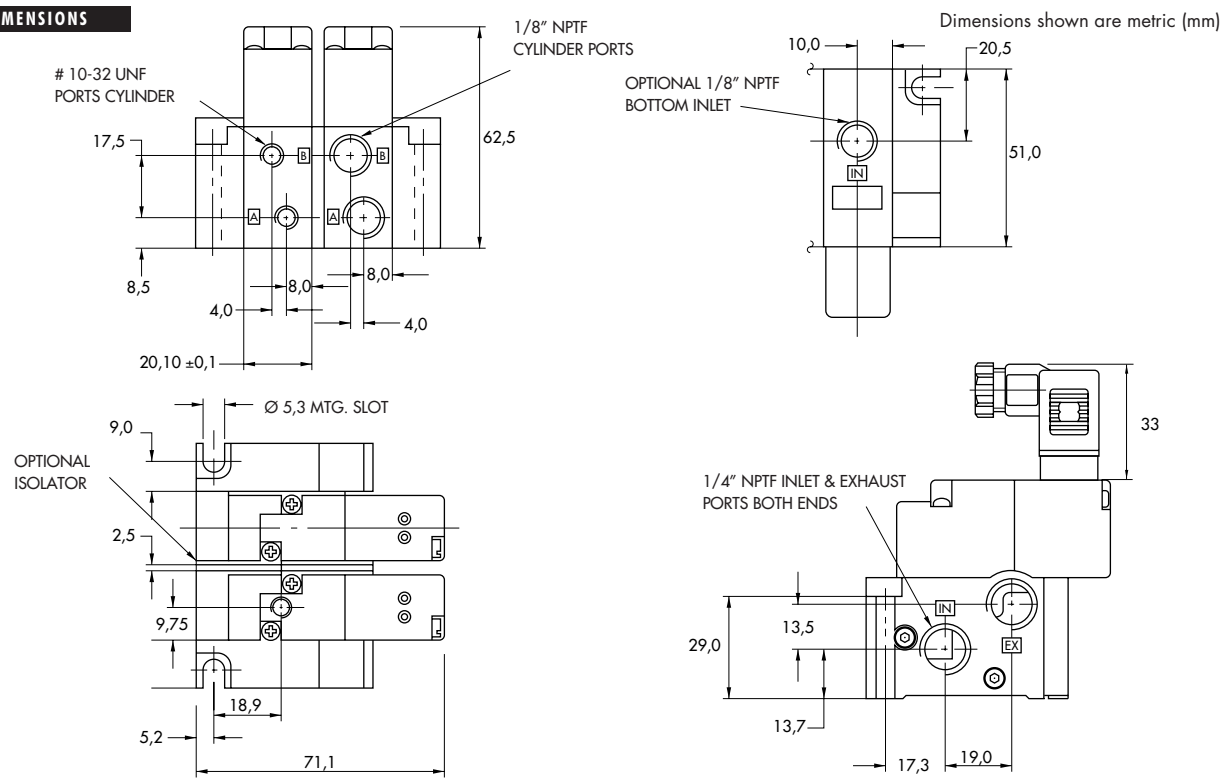
• Solenoid operator (power ≥ 5.4 W) : DXXX-XXX, including mounting screws 35013.
• Seal (between solenoid and valve body) : 16402. • Seal between base and valve : 16453. • Seal between bases : 16455.
• Tie-rod (x2) : 19753. • Side cover plate with flow controls : N-45016.
• Inlet & exhaust isolator : N-45008. • Inlet isolator : N-45009. • Exhaust isolator : N-45010.

Options :

• BSPP threads. • High flow up to 0.18 C_V, according to wattage and high flow Mod. • Bottom inlet : specify Mod. 0210.

DIMENSIONS

Dimensions shown are metric (mm)



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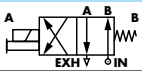
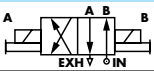
Function	Port size	Flow (Max)	Manifold mounting	Series
4/2	**# 10-32 - 1/8"**	**0.11 C_v**	sub-base with pressure regulators	

OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Burn-out proof solenoid on AC service.



HOW TO ORDER

Port size	Single operator	Double operator (Minimum DC wattage 5,4W)
		
Valve less base	45A-L00-D***xxx-xxx***	45A-N00-D***xxx-xxx***
1/8" NPTF base	45A-LAJ-D***xxx-xxx***	45A-NAJ-D***xxx-xxx***
# 10-32 UNF base	45A-LBJ-D***xxx-xxx***	45A-NBJ-D***xxx-xxx***

SOLENOID OPERATOR ➤ D ***XX X- X XX****

XX	Voltage
AA	120/60, 110/50
AB	240/60, 220/50
AC	24/60, 24/50
FB	24 VDC (1.8 W)
DA	24 VDC (5.4 W)
DF	24 VDC (12.7 W)

X	Wire length
A	18" (Flying leads)
J	Connector

X	Manual operator
1	Non-locking
2	Locking

XX	Electrical connection
KA	Square connector
KD	Square connector with light
BA	Flying leads

* Other options available, see page 353.

End plate kit required (Port size 1/4" NPTF) : M-45008-01.
Options (with gauge port) : Single operator : replace L by M.
Double operator : replace N by P.

REGULATOR OPTIONS

45A-XXJ-D ***xxx-xxx*** ("J" is for Adj. knob)
- Replace with "E" for slotted stem
- Replace with "G" for locking slotted stem

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MAC

Series 45

100% OF PRODUCTION TESTED 100%

WARRANTY 18 MONTHS

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Vacuum to 120 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to 50°C)		
Flow (at 6 bar, ΔP=1bar) :	1.8 W : (0.09 C_V), 5.4 W : (0.11 C_V)		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	Consult factory		
Power :	~ Inrush : 10.9 VA = 1.8 to 12.7 W	Holding : 7.7 VA	
Response times :	24 VDC (5.4 W)	Energize : 6 ms	De-energize : 2 ms
	120/60	Energize : 3-8 ms	De-energize : 2-7 ms

Spare parts :

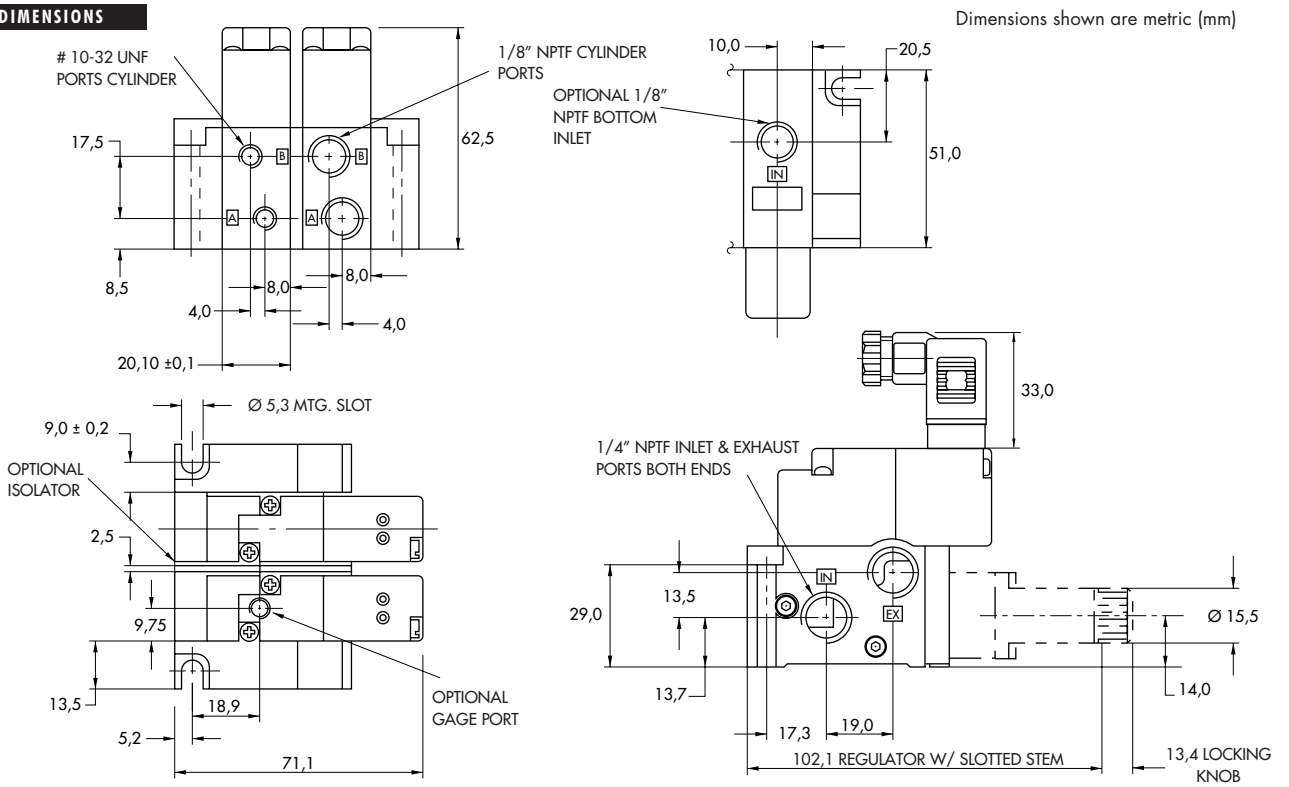
• Solenoid operator (power ≥ 5.4 W) : DXXX-XXX, including mounting screws 35013.
• Seal (between solenoid and valve body) : 16402. • Seal between base and valve : 16453. • Seal between bases : 16455.
• Tie-rod (x2) : 19753. • Pressure regulator : 45A-00R (Adj. Knob), 45A-00L (Slotted Stem), 45A-00M (Locking Slotted Stem).
• Inlet & exhaust isolator : N-45008. • Inlet isolator : N-45009. • Exhaust isolator : N-45010.

Options :

• BSPP threads. • High flow up to 0.18 C_V, according to wattage and high flow mod. • Bottom inlet : specify Mod. 0210.

DIMENSIONS

Dimensions shown are metric (mm)



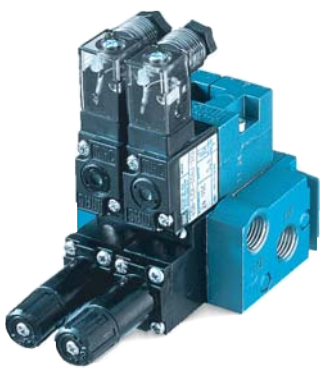
Consult "Precautions" page 356 before use, installation or service of MAC Valves.

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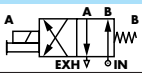
Function	Port size	Flow (Max)	Manifold mounting	Series
4/2	**# 10-32 - 1/8"**	**0.11 C_v**	sub-base with pressure regulators and flow controls	

OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Burn-out proof solenoid on AC service.



HOW TO ORDER

Port size	Single operator	Double operator (Minimum DC wattage 5,4W)
		
Valve less base	45A-L00-D***xxx-xxx***	45A-N00-D***xxx-xxx***
1/8" NPTF base	45A-LAK-D***xxx-xxx***	45A-NAK-D***xxx-xxx***
# 10-32 UNF base	45A-LBK-D***xxx-xxx***	45A-NBK-D***xxx-xxx***

SOLENOID OPERATOR ➤ D ***XX X- X XX****

XX	Voltage
AA	120/60, 110/50
AB	240/60, 220/50
AC	24/60, 24/50
FB	24 VDC (1.8 W)
DA	24 VDC (5.4 W)
DF	24 VDC (12.7 W)

X	Wire length
A	18" (Flying leads)
J	Connector

X	Manual operator
1	Non-locking
2	Locking

XX	Electrical connection
KA	Square connector
KD	Square connectorwith light
BA	Flying leads

* Other options available, see page 353.

End plate kit required (Port size 1/4" NPTF) : M-45008-01.
Options (with gauge port) : Single operator : replace L by M
Double operator : replace N by P.

REGULATOR AND F.C. OPTIONS

45A-XXK-D ***xxx-xxx*** ("K" option is for Adj. knob and F.C.)
- Replace with "F" for slotted stem and F.C.
- Replace with "H" for locking slotted stem and F.C.

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MAC

Series 45

100% OF PRODUCTION TESTED 100%

WARRANTY 18 MONTHS

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Vacuum to 120 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to 50°C)		
Flow (at 6 bar, ΔP=1bar) :	1.8 W : (0.09 C_V), 5.4 W : (0.11 C_V)		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	Consult factory		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	24 VDC (5.4 W)	Energize : 6 ms	De-energize : 2 ms
	120/60	Energize : 3-8 ms	De-energize : 2-7 ms

Spare parts :

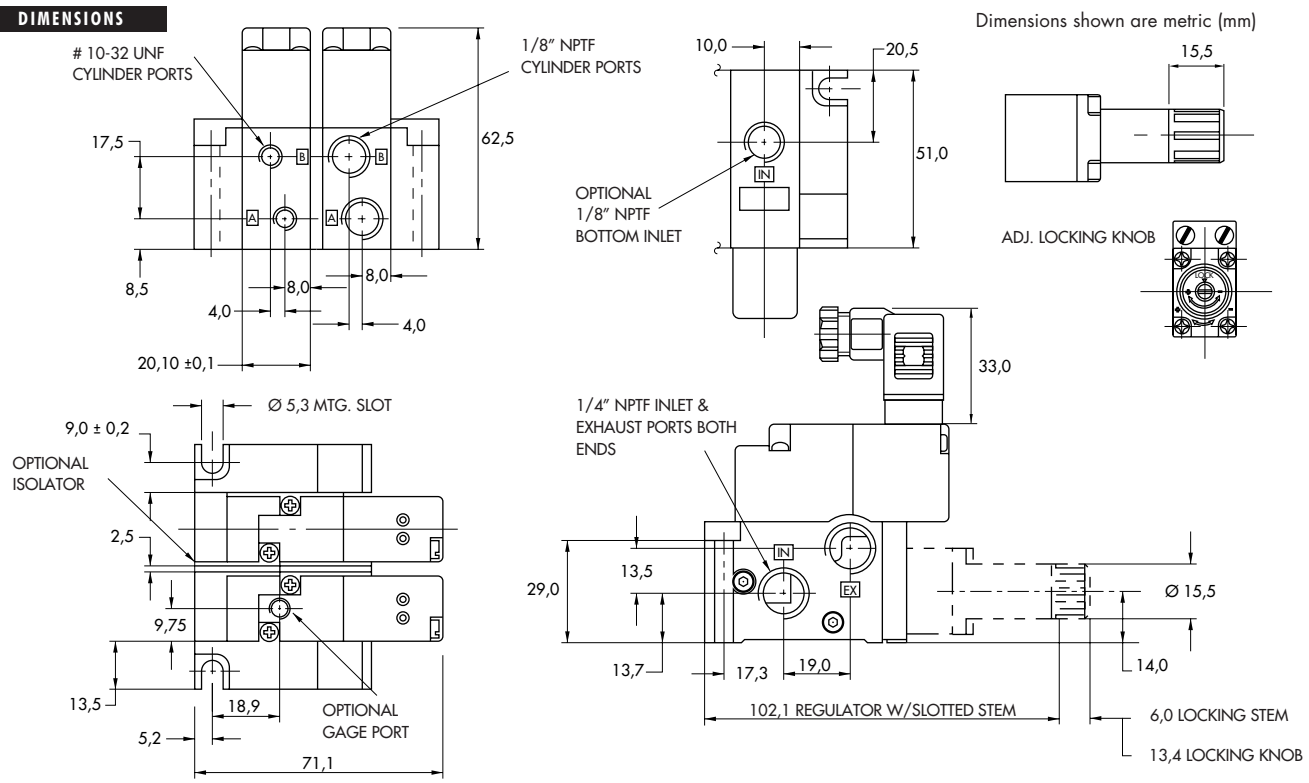
- Solenoid operator (power ≥ 5.4 W) : DXXX-XXX, including mounting screws 35013.
- Seal (between solenoid and valve body) : 16402. • Seal between base and valve : 16453. • Seal between bases : 16455.
- Tie-rod (x2) : 19753. • Pressure regulator with flow controls : 45A-00N (Slotted Stem), 45A-00P (Locking Slotted Stem), 45A-00S(Adj. Knob). • Inlet & exhaust isolator : N-45008. • Inlet isolator : N-45009. • Exhaust isolator : N-45010.

Options :

- BSPP threads. • High flow up to 0.18 C_V, according to wattage and high flow Mod. • Bottom inlet : specify Mod. 0210.

DIMENSIONS

Dimensions shown are metric (mm)



Consult "Precautions" page 356 before use, installation or service of MAC Valves.

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HOW TO ORDER

BODY OPTIONS / SOLENOID OPTIONS

35A - X X X - (DXXX - XXX) - FM

BODY TYPE

Inline
- ***A*** Individual Inline
- ***D*** Indiv. Inline w/2 Manifold Mount Ports

Manifold
- ***E*** Manifold Body (N.C. Only)
- ***G*** Manifold Body w/Gage Port (N.C. Only)

PORT SIZE

- ***O*** Manifold Body Only
- ***B*** #10-32 UNF (Inline Only)
- ***D*** M5 (Inline Only)

VALVE FUNCTION/MANIFOLD TYPE

- ***O*** Manifold Body Only
- ***B*** 3 way N.C. Only (Inline)

Note : there is no manifold base for the 35 series.
The manifold valve can only mount to a circuit bar, see note below

BODY OPTIONS / SOLENOID OPTIONS

45A - X X X - (DXXX - XXX) - FM

BODY TYPE

Inline
- ***A*** 4 Port Body
- ***B*** 5 Port Body
- ***D*** 4 Port Body "O" Ring Mount -All Bottom Ports
- ***E*** 5 Port Body "O" Ring Mount -3 Bottom Ports Inlet and Cylinders
- ***F*** 4 Port Body "O" Ring Mount-Bottom Cylinder Ports Only

Base Mount
- ***O*** For Base Only - No Valve
- ***L*** Base Mount Body
- ***M*** Base Mount Body with Gage Port

PORT SIZE

- ***O*** Manifold Body Only
- ***A*** 1/8" NPT
- ***B*** #10-32 UNF
- ***C*** 1/8" BSPPL
- ***D*** M5 (Metric)
- ***F*** #10-32 UNF Bottom Ports
- ***G*** M5 Bottom Ports
- ***H*** "O" Ring Mount Ports
- ***J*** 1/8" NPT Bottom Ports
- ***K*** 1/8" BSPPL Bottom Ports

VALVE FUNCTION/MANIFOLD TYPE

Inline
- ***1*** No Flow Controls

Bases - Regulators
- ***O*** Valve Only - No Base
- ***A*** Individual Base
- ***C*** Manifold Base
- ***E*** Manifold w/Regulator w/Slotted Stem
- ***G*** Manifold w/Regulator w/Locking Slotted Stem
- ***J*** Manifold w/Regulator w/Locking Knob

MANIFOLD MOUNT ACCESSORIES

M-45008-01	End Plate Kit
16455	Pressure Seal Between Manifold
19753	Tie Rod
N-45008	Isolator Kit - Inlet and Exhaust
N-45009	Isolator Kit - Inlet only
N-45010	Isolator Kit - Exhaust only
N-45015	End Cover Plate - Plain
N-45016	End Cover Plate w/Flow Controls
N-45017	Flow Control Needle Assembly

SOLENOID OPTIONS

D - X X X - X X X - FM

VOLTAGE

- ***FR*** 12VDC (0.6 W)
- ***FS*** 24VDC (0.6 W)

LEAD LENGTH

- ***A*** 18" Leads
- ***B*** 24" Leads
- ***C*** 36" Leads
- ***D*** 48" Leads
- ***E*** 72" Leads
- ***J**** 6" Leads

*Use "J" for external plug-in connectors

MANUAL OPERATOR

- ***0*** No operator
- ***1*** Non-locking Recessed
- ***2*** Locking Recessed
- ***3*** Non-locking Extended
- ***4*** Locking Extended

ELECTRICAL CONNECTION

- ***BA*** Grommet
- ***CA*** Conduit 1/2" NPS†
- ***CM*** Metal Conduit 1/2" NPS†
- ***CN*** Metal Conduit w/grd. 1/2" NPS†

External Plug-in
- ***FM*** Plug-in (For ECD & ECE Bar)
- ***JB*** Rectangular Plug-in†
- ***JM*** Rectangular Male only†
- ***KA*** Mini Plug-in
- ***KJ*** Mini Plug-in Male only
- ***TA*** Dual Tabs (.110) Plain
- ***TJ*** Dual Tabs (.110) Plain

† Available on individual valves and circuit bars.

NOTE : For valves mounted to a circuit bar reference MAC circuit bar Catalog for ordering info.
For the 35 series circuit bar, use MOD FM01 after circuit bar part number.

Consult "Precautions" page 356 before use, installation or service of MAC Valves.

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Codification table for voltages / Wire length / Manual operators / Electrical connections

VALVE CODE ➤ $-D\underset{1}{XX}\,\underset{2}{X}\,-\,\underset{3}{X}\,\underset{4}{XX}$

OPTIONS AVAILABLE FOR
- Solenoid valves 35, 45 and 82 Series

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OPTIONS

1. VOLTAGE

-D XX X -X XX	VOLTAGE
AA	120/60, 110/50
AB	240/60, 220/50
AC	24/60, 24/50
AD	24/60
AE	200/60
AF	240/50
AG	100/50, 100/60, 110/60
DA	24 VDC (5.4 W)
DB	12 VDC (5.4 W)
DC	12 VDC (7.5 W)
DD	24 VDC (7.3 W)
DE	12 VDC (12.7 W) - CLSFonly
DF	24 VDC (12.7 W) - CLSF only
DK	110 VDC (4.7 W)
DL	64 VDC (6 W)
DM	36 VDC (5.3 W)
DN	6 VDC (6 W)
DP	48 VDC (5.8 W)
DU	24 VDC (6 W)
EA	12 VDC (6 W)
FA	12 VDC (1.8 W)
FB	24 VDC (1.8 W)
FE	12 VDC (2.4 W)
FF	24 VDC (2.4 W)

2. WIRE LENGTH

-D XX X -X XX	WIRE LENGTH
A	18″
B	24″
C	36″
D	48″
E	72″
F	96″
J	For external plug-in connector (“J”, “K” & “T” type electrical connection)
P	For plug-in valves (82 Series only)

Consult “Precautions” page 356 before use, installation or service of MAC Valves.

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3. MANUAL OPERATOR

-D XX X -X XX	MANUAL OPERATOR
0	No operator
1	Non-locking recessed
2	Locking recessed
3	Non-locking extended
4	Locking extended

4. ELECTRICAL CONNECTION

-D XX X -X XX	ELECTRICAL CONNECTION
BA	Flying leads
BK	BA with protection diode
BL	BA with protection varistor (M.O.V.)
** CA	1/2" NPS conduit
** CM	1/2" NPS metal conduit
** CN	1/2" NPS metal conduit w/ground
JB	Rectangular connector
JD	Rectangular connector with light
JM	Rectangular connector, male only
KA	Square connector
KB	Square connector with protection diode
KC	Square connector with protection varistor (M.O.V.)
KD	Square connector with light
KE	Square connector with light and protection diode
KF	Square connector with light and protection varistor (M.O.V.)
KG	Square connector with LED light & diode
KJ	Square connector (male only)
KK	Square connector with protection diode (male only)
KL	Square connector with protection varistor (male only) (M.O.V.)
*** MA	Electrical common conduit
TA	Dual tabs
TB	TA with protection diode
TD	TA with light
TE	TA with light and protection diode
TJ	Dual tabs (male only)
TK	TJ with protection diode
TM	TJ with light
TN	TJ with light and protection diode
DA*	Plug-in connector
DK*	DA with protection diode
DL*	DA with protection varistor (M.O.V.)

* To be used with 82 Series only

** Inline valves only for 35 & 45 series. No restrictions for 82 series.

*** Stacking valves only for 35 & 45 series. Conduit end plate kit required, one per stack.

35 series : M-35002-01

45 series : M-45005-01

Consult "Precautions" page 356 before use, installation or service of MAC Valves.

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