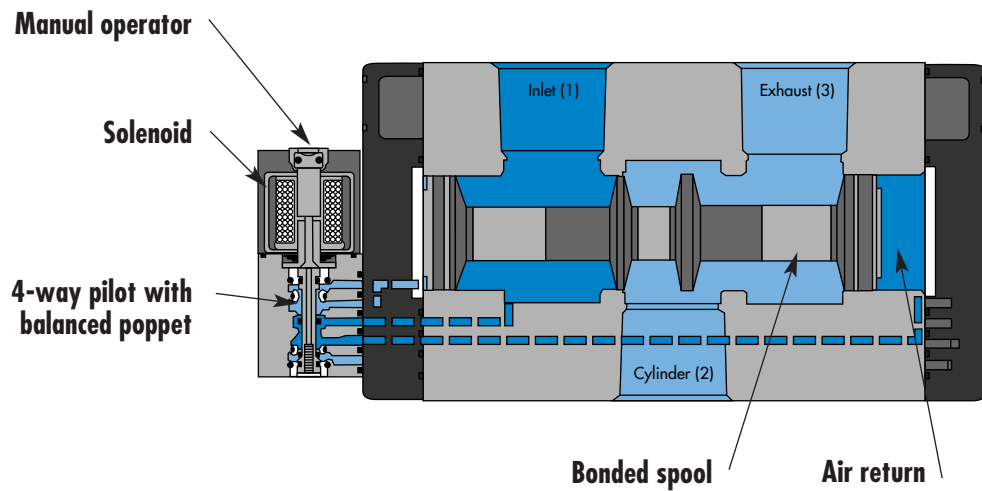


Individual mounting

Inline
--------

Series

- 33
- 34
- 36
- 32
- 37
- 38
- 52
- 67



- 69
- 44
- 46
- 42
- 47
- 48P
- 48
- 400
- 92

**SERIES FEATURES**

- Patented MACSOLENOID® for fastest possible response times and virtually burn-out proof AC solenoid operation.
- Optional low watt DC solenoids.
- Normally closed or normally open valve function.
- Optional universal spool.
- Internal or external pilot.
- Optional memory spring.
- Checked accumulator.
- Optional pilot exhaust to main valve exhaust.
- May be plugged for 2-way operation.

- 93
- ISO 01
- ISO 02
- ISO 1
- ISO 2
- ISO 3

Function	Port size	Flow [Max]	Individual mounting	Series
<b>3/2 NO-NC, 2/2 NO-NC</b>	<b>3/4" - 1"</b>	<b>20.0 C<sub>v</sub></b>	Inline	

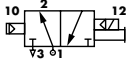
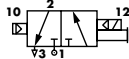
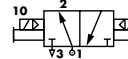
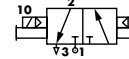
### OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting force both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.



33  
34  
36  
32  
37  
38  
52  
**67**

### HOW TO ORDER

Port size	Pilot air	Single Operator		Double Operator	
		NO Valve	NC Valve	NO Valve	NC Valve
					
<b>3/4" NPTF</b>	Internal	67A-Cx-AAA-DM-Dxxx-xxx	67A-Ax-AAA-DM-Dxxx-xxx	67A-Dx-AAA-DM-Dxxx-xxx	67A-Bx-AAA-DM-Dxxx-xxx
<b>1" NPTF</b>		67A-Cx-BAA-DM-Dxxx-xxx	67A-Ax-BAA-DM-Dxxx-xxx	67A-Dx-BAA-DM-Dxxx-xxx	67A-Bx-BAA-DM-Dxxx-xxx
<b>3/4" NPTF</b>	External	67A-Cx-AAB-DM-Dxxx-xxx	67A-Ax-AAB-DM-Dxxx-xxx	67A-Dx-AAB-DM-Dxxx-xxx	67A-Bx-AAB-DM-Dxxx-xxx
<b>1" NPTF</b>		67A-Cx-BAB-DM-Dxxx-xxx	67A-Ax-BAB-DM-Dxxx-xxx	67A-Dx-BAB-DM-Dxxx-xxx	67A-Bx-BAB-DM-Dxxx-xxx

69  
44  
46  
42  
47  
48P

### SOLENOID OPERATOR >

### DM-D xxx-xxx\*

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<b>JA</b> 110/50, 120/60 (2.9W)	<b>A</b> 18"	<b>1</b> Non-locking recessed	<b>KA</b> Square connector
<b>JB</b> 220/50, 240/60 (2.9W)	<b>B</b> 24"	<b>2</b> Locking recessed	<b>KD</b> Square connector with light
<b>JC</b> 24/60 (2.9W)	<b>J</b> Connector		<b>JB</b> Rectangular connector
<b>FB</b> 24 VDC (1.8W)			<b>JD</b> Rectangular connector with light
<b>DA</b> 24 VDC (5.4W)			<b>BA</b> Flying leads
<b>DF</b> 24 VDC (12.7W)			

\* Other options available, see page 309.

48  
400  
92

### OPTIONS

Spool type :

67A-**XX**-AAA-DM-Dxxx-xxx

- G** Single operator universal spool
- H** Double operator universal spool

Port configuration :

67A-XX-**AXA**-DM-Dxxx-xxx

- A** Standard pilot exhaust
- B** Pilot exhaust to main exhaust\*
- C** Pilot exhaust out adapter\*
- \* Must use DU pilot. Replace DM with DU

Mounting style :

67A-XX-**XAA**-DM-Dxxx-xxx

- G** O-Ring mount

Spool return :

67A-**XX**-AAA-DM-Dxxx-xxx

- 1** Standard return
- 2** Standard return with memory spring (for use with single operator only)

Pilot style :

67A-XX-AAA-**DM**-Dxxx-xxx

- M** Pilot exhaust muffled
- P** Pilot exhaust piped (#10-32)
- U** Pilot exhaust to main exhaust

93

ISO 01  
ISO 02  
ISO 1  
ISO 2  
ISO 3

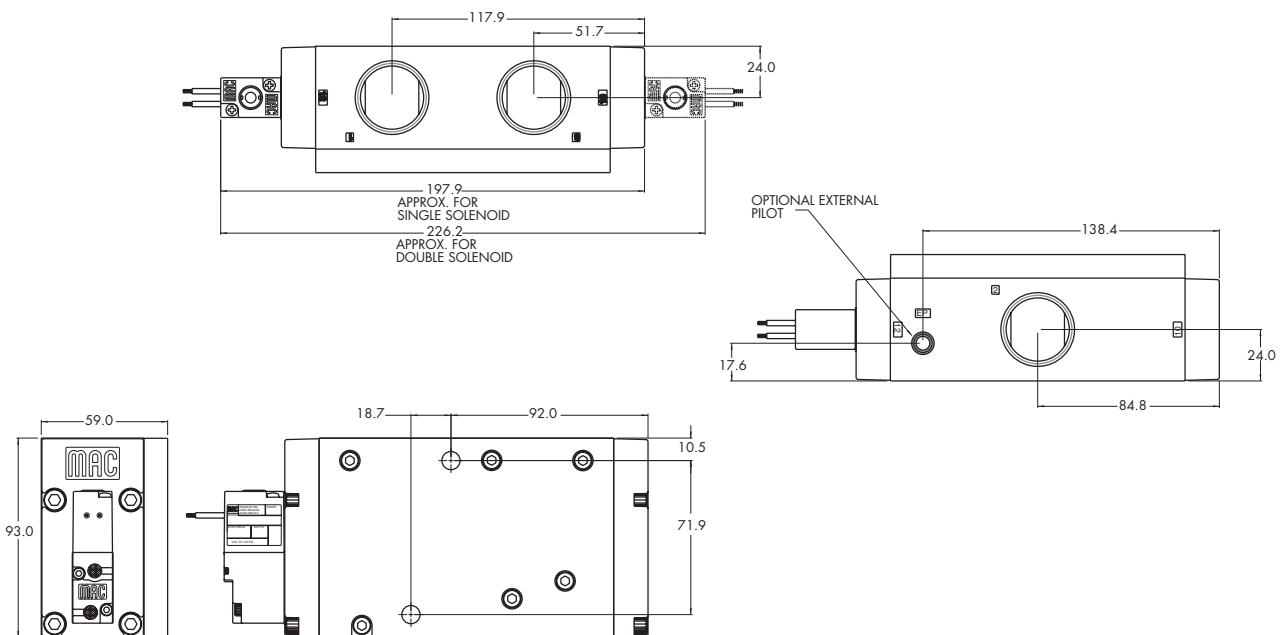
**TECHNICAL DATA**

<b>Fluid :</b>	Compressed air, vacuum, inert gases
<b>Pressure range :</b>	Internal Pilot : 20 to 120 PSI External Pilot : Vacuum to 120 PSI
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
<b>Filtration :</b>	40 μ
<b>Temperature range :</b>	0°F to 120°F (-18°C to +50°C)
<b>Flow :</b>	3/4" : (14.5 C <sub>v</sub> ) – 1" : (20.0 C <sub>v</sub> )
<b>Coil :</b>	Class A continuous duty, #22 AWG x 18 lead wires
<b>Voltage range :</b>	-15% to +10% of nominal voltage
<b>Protection :</b>	Consult factory
<b>Power :</b>	~ Inrush : 7.6 VA    Holding : 4.8 VA = 12.7 to 1.0 W
<b>Response times : (with 5.4 W coil)</b>	Energize : 29 ms De-energize : 21 ms

Options :                    • BSPP threads

**DIMENSIONS**

Dimensions shown are metric (mm)





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**Codification table for voltages / Manual operator / Electrical connection**

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VALVE CODE > **-DM- D XX X-X XX**  
**1 2 3 4**

**OPTIONS AVAILABLE FOR**

- Pilot operated valves 52, 67, 92, 93, 400, ISO1, ISO2, ISO3 Series

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**1. VOLTAGE**

D-XX X-X XX	VOLTAGE
DA	24 VDC (5.4W)
DB	12 VDC (5.4W)
DC	12 VDC (7.5W)
DD	24 VDC (7.3W)
DE	12 VDC (12.7W)
DF	24 VDC (12.7W)
DK	110 VDC (4.7W)
DJ	28 VDC (5.2W)
DL	64 VDC (6.0W)
DM	36 VDC (5.3W)
DN	6 VDC (6.0W)
DR	90 VDC (6.6W)
DS	110 VDC (7.3W)
DT	75 VDC (5.6W)
DP	48 VDC (5.8W)
FA	12 VDC (1.8W)
FB	24 VDC (1.8W)
FE	12 VDC (2.4W)
FF	24 VDC (2.4W)
JA	120/60, 110/50 (2.9W)
JB	240/60, 220/50 (2.9W)
JC	24/60, 24/50 (3.7W)
JD	100/60, 100/50, 110/60 (3.9W)
JE	220/60 (3.4W)
JF	240/50 (2.8W)
JG	200/60, 200/50 (3.9W)

**2. WIRE LENGTH**

D-XX X-X XX	WIRE LENGTH
0	No wires
A	18"
B	24"
C	36"
D	48"
E	72"
F	96"

**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 (grommet)
BK*	BA with protection diode
BL*	BA with protection varistor
BM**	Flying leads (solenoid plug-in)
BN**	BM with protection diode
BP**	BM with protection varistor
BG**	BM with ground
BH**	BM with protection diode & ground
BJ**	BM with protection varistor & ground
CA*	1/2" NPS conduit with flying leads
CM*	1/2" NPS metal conduit with flying leads
CN*	1/2" NPS metal conduit with flying leads & ground
JB	Rectangular connector
JD	JB with light
JM	Rectangular connector (male only)
KA	Mini square connector
KB	KA with protection diode
KC	KA with protection varistor
KD	KA with light
KE	KA with light and protection diode
KF	KA with light and protection varistor
KG	KA with light & diode
KJ	Mini square connector (male only)
KK	KJ with protection diode (male only)
KL	KJ with protection varistor (male only)
TA	Dual tabs with receptacles
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

\* From Lead wire length options choose A through F

\*\* From Lead wire length options choose 0 through F

Note: When coil is above 30 volts, a ground wire is required. Applies to options with flying leads.