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Direct solenoid and solenoid pilot operated valves

Individual mounting

Inline

Air return

Manual operator

Solenoid

4-way pilot with balanced poppet

Bonded spool

SERIES FEATURES

- High force MACSOLENOID®.
- Optional low watt DC solenoids.
- Internal or external pilot.
- Normally open or normally closed function.
- Checked accumulator.
- May be plugged for 2-way operation.

Function	Port size	Flow [Max]	Individual mounting	Series
3/2 NO-NC, 2/2 NO-NC	1 1/2" - 2" - 2 1/2"	60.0 C_v	Inline	

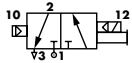
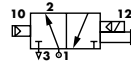
OPERATIONAL BENEFITS

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



33
34
36
32
37
38
52
67

HOW TO ORDER

Port size	Pilot air	Single Operator NC valve	Single Operator NO valve
			
1 1/2"	Internal	69A-A1-AAA-JXXX-XXX	69A-C1-AAA-JXXX-XXX
2"		69A-A1-BAA-JXXX-XXX	69A-C1-BAA-JXXX-XXX
2 1/2"		69A-A1-CAA-JXXX-XXX	69A-C1-CAA-JXXX-XXX
1 1/2"	External	69A-A1-AAB-JXXX-XXX	69A-C1-AAB-JXXX-XXX
2"		69A-A1-BAB-JXXX-XXX	69A-C1-BAB-JXXX-XXX
2 1/2"		69A-A1-CAB-JXXX-XXX	69A-C1-CAB-JXXX-XXX

69
44
46
42
47
48P

SOLENOID OPERATOR ➤

J **XXX-XXX*** (-G) Add "G" for ground

XX Voltage	X Lead wire length	X Manual operator	XX Electrical connection*
AA 120 VAC (5,4W)	0 No lead wire	1 Non-locking	BA Flying leads
DA 24 VDC (5,4W)	A 18"	2 Locking	GA MAC JAC Solenoid Plug-in
DB 12 VDC (5,4W)	B 24"		GG MAC JAC Solenoid Plug-in with rectifier
DC 24 VDC (2,4W)	C 36"		JB Rectangular connector
DD 12 VDC (2,4W)			JD Rectangular connector with light
			KA Mini square connector
			KD Mini square connector with light

* Other options available, see page 317.
Note : use "0" No lead wire for "J", "K" and "L" type electrical connectors.
AC voltage requires connector with rectifier.

48
400
92
93
ISO 01
ISO 02
ISO 1
ISO 2
ISO 3

OPTIONS

Pilot exhaust configuration:

69A-xx-xx X -JXXX-XXX
A Standard pilot exhaust
B Pilot exhaust out main exhaust
M Manifold O'Ring Mount

TECHNICAL DATA

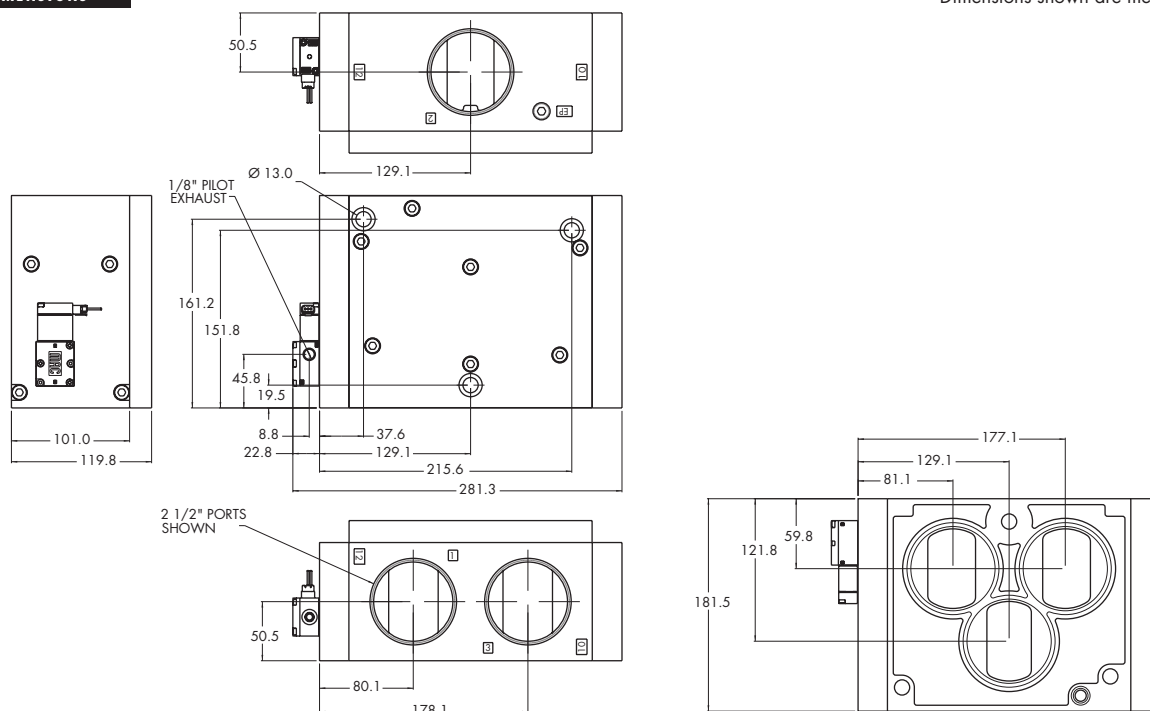
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 20 to 120 PSI External Pilot : Vacuum to 120 PSI
Pilot Pressure:	20 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Flow :	Cv 60.0
Coil :	Class A wire, #22 AWG x 18, continuous duty
Voltage range :	-15% to +10% of nominal voltage
Power :	5.4W – 2.4W – 1.8W

Options :

- BSPP threads

DIMENSIONS

Dimensions shown are metric (mm)





Codification table for voltages / Manual operators / Electrical connections

VALVE CODE ➤ $J \frac{XX}{1} \frac{X-X}{2 \ 3} \frac{XX}{4}$

OPTIONS AVAILABLE FOR

- Solenoid valves 36, 46, ISO 01 and ISO 02 Series

1. VOLTAGE		J-XX X-X XX	
J-XX X-X XX	VOLTAGE		
AA	120VAC (5.4W)	*JL	Square Connector with Rectifier with light
AC	24VAC (5.4W)	*JJ	Square Connector Male only (Plain)
DE	24VDC (1.8W)	*JB	Rectangular Connector
DF	12VDC (1.8W)	*JD	Rectangular Connector with light
DJ	24VDC (1.3W)	*JN	Rectangular Connector with diode
DL	12VDC (1.3W)	*JP	Rectangular Connector with MOV
DN	12VDC (0.5W)*	*JR	Rectangular Connector with diode/light
DR	12VDC (1.0W)*	*JS	Rectangular Connector with MOV/light
DS	24VDC (0.5W)*	*JT	Rectangular Connector with Rectifier
DU	24VDC (1.0W)*	*JU	Rectangular Connector with Rectifier with light
* Not available on 36 series universal valve		*JM	Rectangular Connector Male only (Plain)
		* Not available on manifold or stacking valves	
2. WIRE LENGTH		CONNECTORS FOR NON PLUG-IN VALVES	
J-XX X-X XX	WIRE LENGTH	MINI SQUARE PLUG-IN CONNECTORS	
A	18" coil leads	9.4 MM SPACING BETWEEN PINS	
B	24" coil leads	KA	Mini plug-in
C	36" coil leads	KB	Mini plug-in with diode
D	48" coil leads	KC	Mini plug-in with MOV
E	72" coil leads	KD	Mini plug-in with light
F	96" coil leads	KE	Mini plug-in with diode and light
P	Base plug-in	KF	Mini plug-in with MOV and light
O	No leads (use with J, K & L type connectors)	KG	Mini plug-in with rectifier
		KH	Mini plug-in with rectifier and light
		KJ	Mini plug-in – Male only
		KK	Mini plug-in with diode - Male only
		KL	Mini plug-in with MOV - Male only
		KM	Mini plug-in with light - Male only
		KN	Mini plug-in with diode and light – Male only
		KP	Mini plug-in with MOV and light – Male only
		KR	Mini plug-in with rectifier – Male only
		KS	Mini plug-in with rectifier and light – Male only
3. MANUAL OPERATOR		CONNECTORS FOR NON PLUG-IN VALVES	
J-XX X-X XX	MANUAL OPERATOR	MINI SQUARE PLUG-IN CONNECTORS	
0	No operator	8.0 MM SPACING BETWEEN PINS	
1	Non-locking recessed	ISO SPECIFICATION 15217	
2	Locking recessed	LA	Mini plug-in
3	Non-locking extended	LB	Mini plug-in with diode
4	Locking extended	LC	Mini plug-in with MOV
		LD	Mini plug-in with light
		LE	Mini plug-in with diode and light
		LF	Mini plug-in with MOV and light
		LG	Mini plug-in with rectifier
		LH	Mini plug-in with rectifier and light
		LJ	Mini plug-in – Male only
		LK	Mini plug-in with diode - Male only
		LL	Mini plug-in with MOV - Male only
		LM	Mini plug-in with light - Male only
		LN	Mini plug-in with diode and light – Male only
		LP	Mini plug-in with MOV and light – Male only
		LR	Mini plug-in with rectifier – Male only
		LS	Mini plug-in with rectifier and light – Male only
4. ELECTRICAL CONNECTION		CONNECTORS FOR PLUG-IN VALVES	
J-XX X-X XX	ELECTRICAL CONNECTION		
BA	Flying leads	J-XX X-X XX	
GA	MAC JAC solenoid plug-in	FA	Base plug-in
GB	MAC JAC solenoid plug-in with diode	FB	Base plug-in with diode
GC	MAC JAC solenoid plug-in with MOV	FC	Base plug-in with MOV
GD	MAC JAC solenoid plug-in with light	FD	Base plug-in with light
GE	MAC JAC solenoid plug-in with diode and light	FE	Base plug-in with diode and light
GF	MAC JAC solenoid plug-in with MOV and light	FF	Base plug-in with MOV and light
GG	MAC JAC solenoid plug-in with rectifier	FG	Base plug-in with rectifier
GH	MAC JAC solenoid plug-in with rectifier and light	FH	Base plug-in with rectifier and light
GJ	MAC JAC solenoid plug-in – Male only		
GK	MAC JAC solenoid plug-in with diode – Male only		
GL	MAC JAC solenoid plug-in with MOV – Male only		
GM	MAC JAC solenoid plug-in with light – Male only		
GN	MAC JAC solenoid plug-in with diode and light – Male only		
GP	MAC JAC solenoid plug-in with MOV and light – Male only		
GR	MAC JAC solenoid plug-in with rectifier – Male only		
GS	MAC JAC solenoid plug-in with rectifier and light – Male only		
*JA	Square Connector		
*JC	Square Connector with light		
*JE	Square Connector with diode		
*JF	Square Connector with MOV		
*JG	Square Connector with diode/light		
*JH	Square Connector with MOV/light		
*JK	Square Connector with Rectifier		

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