

Individual mounting

Inline	Sub-base non "plug-in"	Sub-base "plug-in"
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Series

34

Manifold mounting

Sub-base non "plug-in"	Sub-base "plug-in"
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400

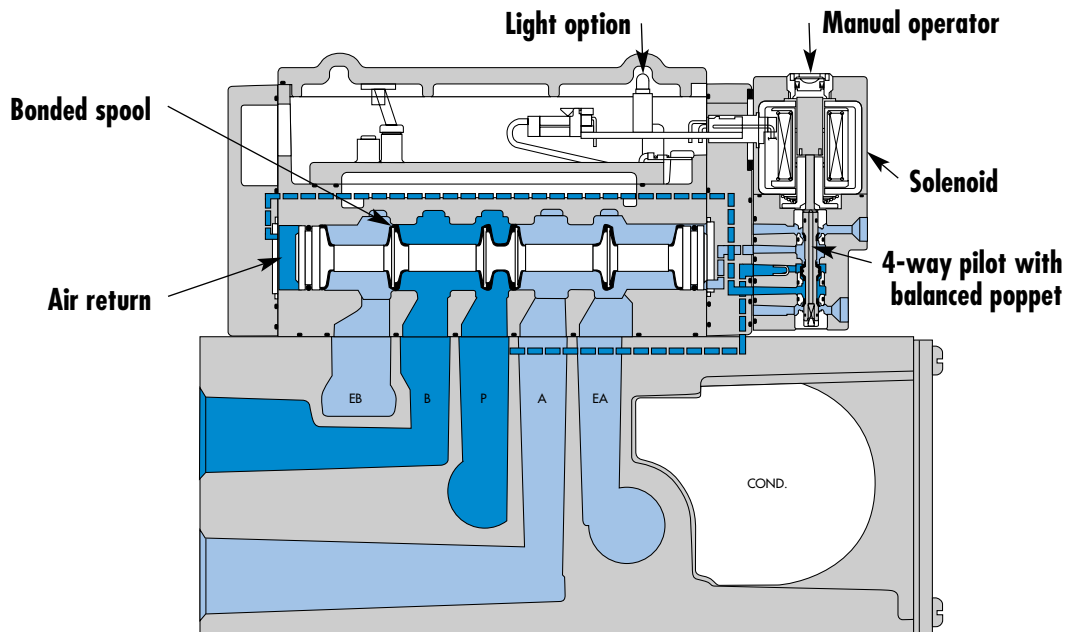
92

93

ISO 1

ISO 2

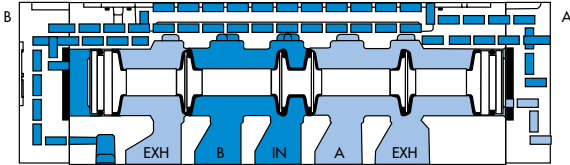
ISO 3



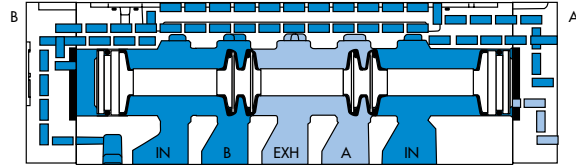
SERIES FEATURES

- Patented MACSOLENOID® for fastest possible response times and virtually burn-out proof AC solenoid operation.
- Optional low watt DC solenoids.
- Optional memory spring.
- Plug-in design of valves and bases for ease of maintenance.
- 2 position or 3 position valve configurations.

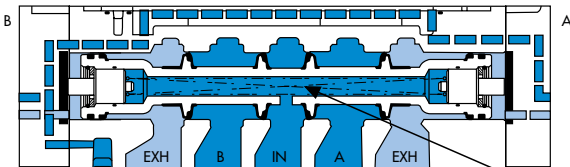
SPOOL CONFIGURATIONS



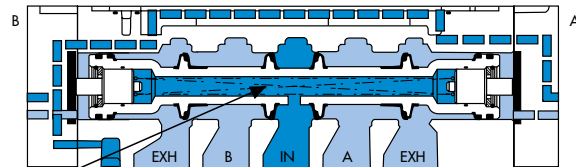
2 POSITION SINGLE PRESSURE
SHOWN WITH "B" OPERATOR ENERGIZED



2 POSITION DUAL PRESSURE
SHOWN WITH "B" OPERATOR ENERGIZED

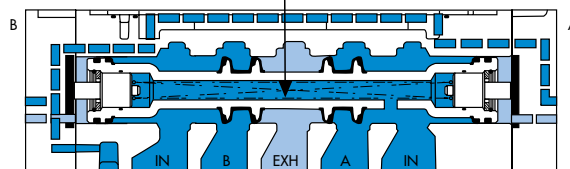


3 POSITION CLOSED CENTER



3 POSITION OPEN CENTER

SPRING CENTERING

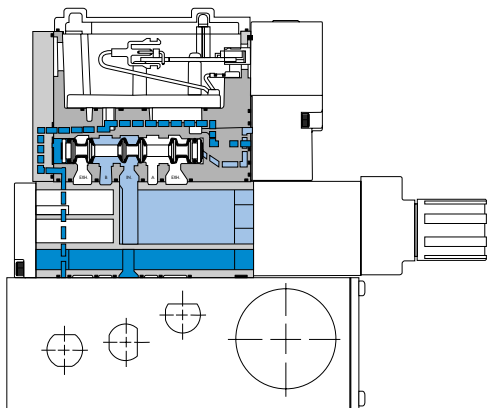


3 POSITION DUAL PRESSURE, PRESSURE CENTER

REGULATOR CONFIGURATIONS

SINGLE REGULATOR - SINGLE PRESSURE

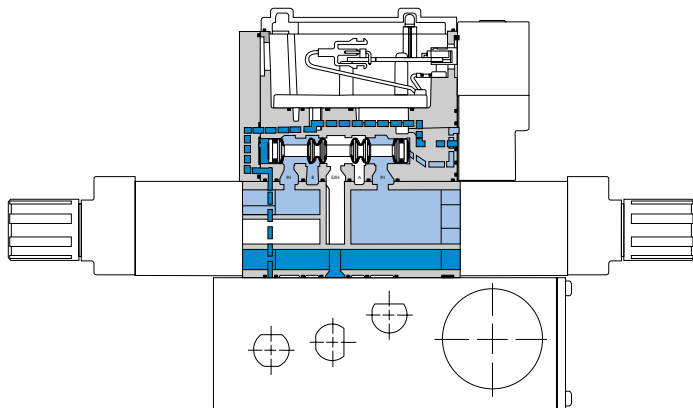
Pressure supplied to the individual or manifold base passes through the regulator. Regulated pressure is supplied to the pressure path of the valve.



MANIFOLD WITH REGULATOR - SINGLE PRESSURE

DUAL REGULATOR - DUAL PRESSURE

Pressure supplied from each regulator is divided in the block. Regulated pressure from "A" regulator supplies cylinder port "A". Regulated pressure from "B" regulator supplies cylinder port "B". Dual pressure regulators require dual pressure spool in valve.



MANIFOLD WITH REGULATOR - DUAL PRESSURE

Note: For both single and dual pressure, air supply to the pilot system is never regulated.



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Individual mounting	Series
5/2, 5/3	3/8" - 1/2"	3.8 C_v	Inline	

OPERATIONAL BENEFITS

1. Unique patented Macsolenoid® for fastest possible response times and virtually burn-out proof solenoid operation.
2. Balanced poppet 4-way pilot valve provides maximum shifting forces, precise repeatability and consistent operation.
3. Air only return. Optional memory spring is also available.
4. Optional low wattage DC solenoid down to 1 watt.
5. MAC spool and bore combination wipes away contamination, eliminates sticking and allows for use on non-lube service.

HOW TO ORDER

SINGLE PRESSURE MODELS

Port size	Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center
3/8" NPTF	Internal	93A-AJO-B0J-DM-Dxxx-xxx	93A-BJO-B0J-DM-Dxxx-xxx	93A-EJO-B0J-DM-Dxxx-xxx	93A-FJO-B0J-DM-Dxxx-xxx
1/2" NPTF	Internal	93A-AJO-C0J-DM-Dxxx-xxx	93A-BJO-C0J-DM-Dxxx-xxx	93A-EJO-C0J-DM-Dxxx-xxx	93A-FJO-C0J-DM-Dxxx-xxx
3/8" NPTF	External	93A-AJO-B0K-DM-Dxxx-xxx	93A-BJO-B0K-DM-Dxxx-xxx	93A-EJO-B0K-DM-Dxxx-xxx	93A-FJO-B0K-DM-Dxxx-xxx
1/2" NPTF	External	93A-AJO-C0K-DM-Dxxx-xxx	93A-BJO-C0K-DM-Dxxx-xxx	93A-EJO-C0K-DM-Dxxx-xxx	93A-FJO-C0K-DM-Dxxx-xxx

DUAL PRESSURE MODELS

Port size	Pilot air	5/2 Single operator	5/2 Double operator	5/3 Pressure center
3/8" NPTF	Internal	93A-CJ0-B0J-DM-Dxxx-xxx	93A-DJ0-B0J-DM-Dxxx-xxx	93A-HJ0-B0J-DM-Dxxx-xxx
1/2" NPTF	Internal	93A-CJ0-C0J-DM-Dxxx-xxx	93A-DJ0-C0J-DM-Dxxx-xxx	93A-HJ0-C0J-DM-Dxxx-xxx
3/8" NPTF	External	93A-CJ0-B0K-DM-Dxxx-xxx	93A-DJ0-B0K-DM-Dxxx-xxx	93A-HJ0-B0K-DM-Dxxx-xxx
1/2" NPTF	External	93A-CJ0-C0K-DM-Dxxx-xxx	93A-DJ0-C0K-DM-Dxxx-xxx	93A-HJ0-C0K-DM-Dxxx-xxx

SOLENOID OPERATOR >

DM-D XXX-XXX*

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

* Click here for other options available.

OPTIONS

Pilot exhaust : 93A-XJX-XXX-DM-Dxxx-xxx

- J** Standard pilot exhaust
- K** Pilot exhaust to main exhaust (use DU pilot)

Click here for other options available for the 93 series valves.

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400

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93

ISO 1

ISO 2

ISO 3



TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot: 20 to 150 PSI External Pilot: Vacuum to 150 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 :	3.8 C _v
Coil :	Class A continuous duty, #22 AWG x 18 leads
Voltage range :	-15% to +10% of nominal voltage
Protection :	Consult factory
Power :	~ Inrush 7.6 VA Holding: 4.8 VA = 1.8 to 12.7 W
Response times : (with 5.4 W coil)	Energize : 13 ms De-energize : 10 ms

Option : • BSPP threads

DIMENSIONS

Dimensions shown are metric (mm)

