

Individual mounting

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

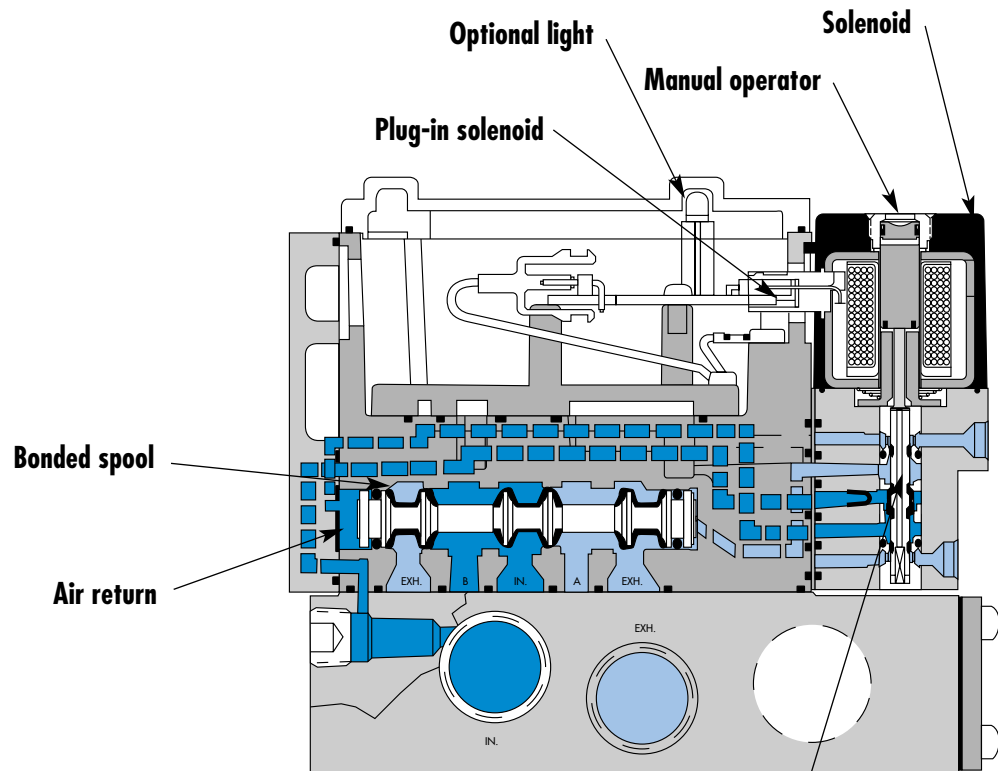
Series

34

Manifold mounting

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

36



32

37

38

52

67

44

46

42

47

48

400

92

93

ISO 1

ISO 2

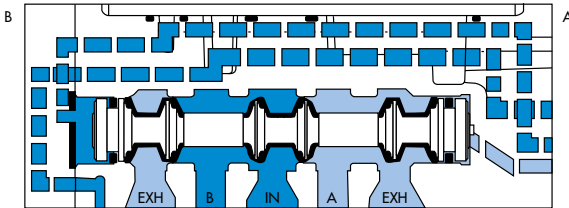
ISO 3

4-way pilot with balanced poppet

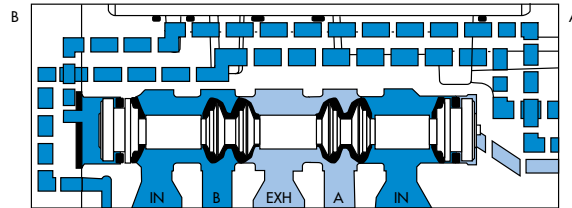
**SERIES FEATURES**

- Patented MACSOLENOID<sup>®</sup> 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.

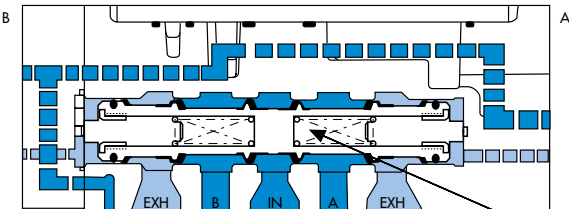
**SPOOL CONFIGURATIONS**



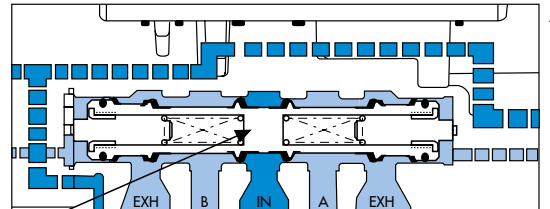
2 POSITION SINGLE PRESSURE  
SHOWN WITH "B" OPERATOR ENERGIZED



2 POSITION DUAL PRESSURE  
SHOWN WITH "B" OPERATOR ENERGIZED

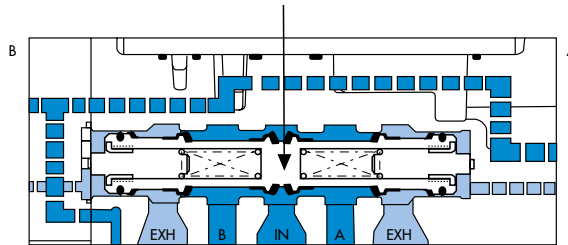


3 POSITION CLOSED CENTER



3 POSITION OPEN CENTER

**SPRING CENTERING**



3 POSITION SINGLE PRESSURE, PRESSURE CENTER

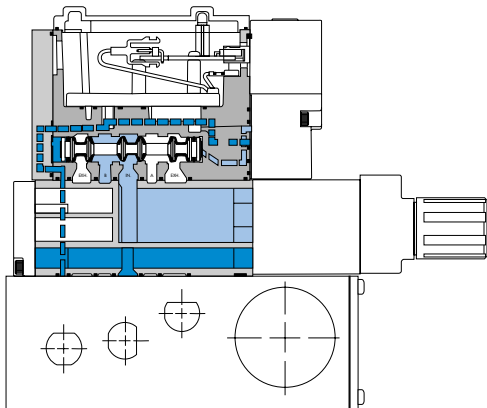
**REGULATOR CONFIGURATIONS**

**SINGLE REGULATOR - SINGLE PRESSURE**

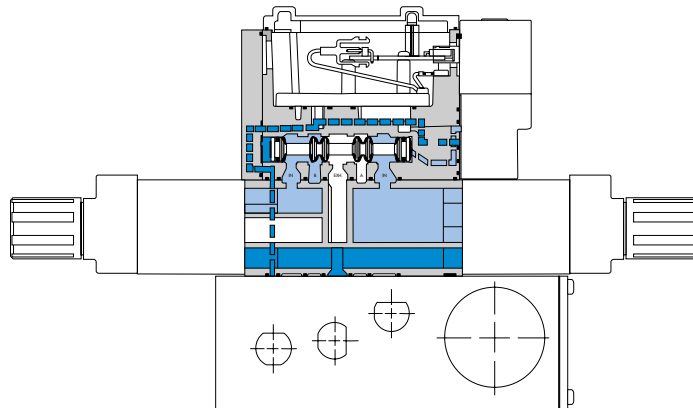
Pressure supplied to the individual or manifold base passes through the regulator. Regulated pressure is supplied to the pressure path of the valve.

**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 - SINGLE PRESSURE**



**MANIFOLD WITH REGULATOR - DUAL PRESSURE**

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

Function	Port size	Flow [Max]	Individual mounting	Series
<b>5/2, 5/3</b>	<b>1/8" - 1/4" - 3/8"</b>	<b>1.2 C<sub>v</sub></b>	Sub-base non "plug-in"	

### OPERATIONAL BENEFITS






1. The 4-way pilot develops maximum shifting forces 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 seal spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow; short and consistent response times.



34  
36  
32  
37  
38  
52  
67  
44


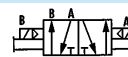
### HOW TO ORDER

#### SINGLE PRESSURE MODELS

Port size	Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
						
<b>Valve less base</b>		92B-ABA-000-DM-Dxxx-xxx	92B-BBA-000-DM-Dxxx-xxx	92B-EBA-000-DM-Dxxx-xxx	92B-FBA-000-DM-Dxxx-xxx	92B-GBA-000-DM-Dxxx-xxx
<b>1/8" NPTF</b>		92B-ABA-AAG-DM-Dxxx-xxx	92B-BBA-AAG-DM-Dxxx-xxx	92B-EBA-AAG-DM-Dxxx-xxx	92B-FBA-AAG-DM-Dxxx-xxx	92B-GBA-AAG-DM-Dxxx-xxx
<b>1/4" NPTF</b>	Internal	92B-ABA-BAG-DM-Dxxx-xxx	92B-BBA-BAG-DM-Dxxx-xxx	92B-EBA-BAG-DM-Dxxx-xxx	92B-FBA-BAG-DM-Dxxx-xxx	92B-GBA-BAG-DM-Dxxx-xxx
<b>3/8" NPTF</b>		92B-ABA-CAG-DM-Dxxx-xxx	92B-BBA-CAG-DM-Dxxx-xxx	92B-EBA-CAG-DM-Dxxx-xxx	92B-FBA-CAG-DM-Dxxx-xxx	92B-GBA-CAG-DM-Dxxx-xxx
<b>1/8" NPTF</b>		92B-ABA-AAH-DM-Dxxx-xxx	92B-BBA-AAH-DM-Dxxx-xxx	92B-EBA-AAH-DM-Dxxx-xxx	92B-FBA-AAH-DM-Dxxx-xxx	92B-GBA-AAH-DM-Dxxx-xxx
<b>1/4" NPTF</b>	External	92B-ABA-BAH-DM-Dxxx-xxx	92B-BBA-BAH-DM-Dxxx-xxx	92B-EBA-BAH-DM-Dxxx-xxx	92B-FBA-BAH-DM-Dxxx-xxx	92B-GBA-BAH-DM-Dxxx-xxx
<b>3/8" NPTF</b>		92B-ABA-CAH-DM-Dxxx-xxx	92B-BBA-CAH-DM-Dxxx-xxx	92B-EBA-CAH-DM-Dxxx-xxx	92B-FBA-CAH-DM-Dxxx-xxx	92B-GBA-CAH-DM-Dxxx-xxx

46  
42  
47  
48  
400

#### DUAL PRESSURE MODELS (REQUIRE SANDWICH REGULATOR – SEE "REGULATORS" SECTION)

Port size	Pilot air	5/2 Single operator	5/2 Double operator
			
<b>Valve less base</b>		92B-CBA-000-DM-Dxxx-xxx	92B-DBA-000-DM-Dxxx-xxx
<b>1/8" NPTF</b>		92B-CBA-AAG-DM-Dxxx-xxx	92B-DBA-AAG-DM-Dxxx-xxx
<b>1/4" NPTF</b>	Internal	92B-CBA-BAG-DM-Dxxx-xxx	92B-DBA-BAG-DM-Dxxx-xxx
<b>3/8" NPTF</b>		92B-CBA-CAG-DM-Dxxx-xxx	92B-DBA-CAG-DM-Dxxx-xxx
<b>1/8" NPTF</b>		92B-CBA-AAH-DM-Dxxx-xxx	92B-DBA-AAH-DM-Dxxx-xxx
<b>1/4" NPTF</b>	External	92B-CBA-BAH-DM-Dxxx-xxx	92B-DBA-BAH-DM-Dxxx-xxx
<b>3/8" NPTF</b>		92B-CBA-CAH-DM-Dxxx-xxx	92B-DBA-CAH-DM-Dxxx-xxx

93  
ISO 1  
ISO 2  
ISO 3

#### SOLENOID OPERATOR >

### DM-D xxx-xxx\*

Above models are shown with side ports.

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

\* Click here for other options available.

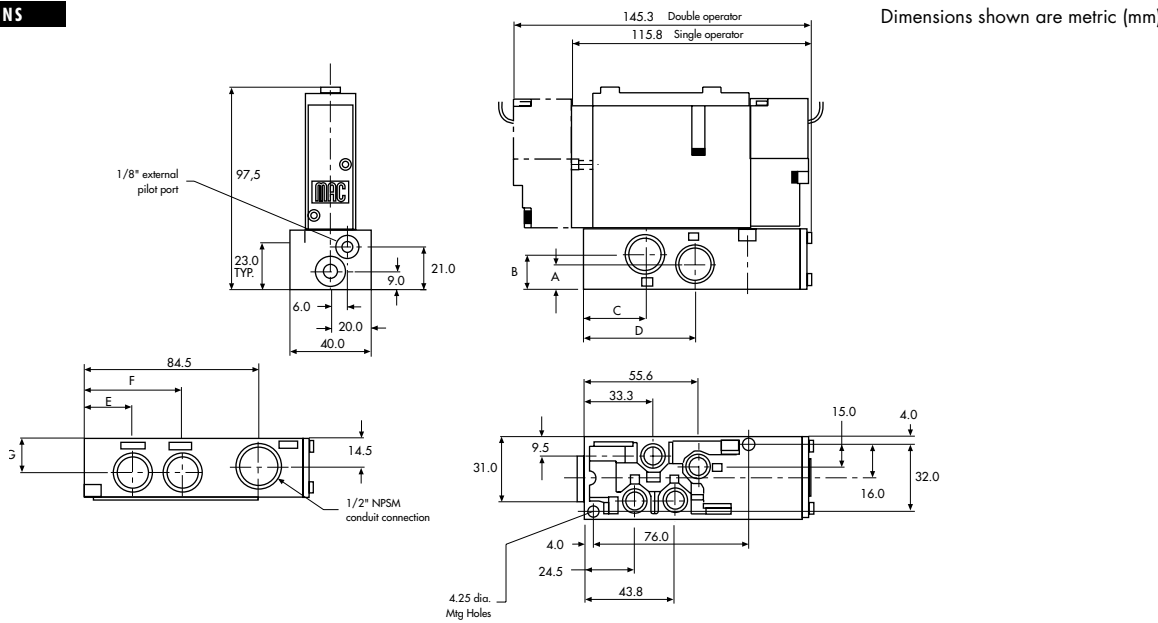
Click here for other options available for the 92 series valves.

**TECHNICAL DATA**

<b>Fluid :</b>	Compressed air, vacuum, inert gases
<b>Pressure range :</b>	Internal pilot : 20 to 120 PSI      3 position : 35 to 120 PSI External pilot : vacuum to 120 PSI      3 position : 35 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>	1/8": (1.0 C <sub>v</sub> ) – 1/4": (1.1 C <sub>v</sub> ) – 3/8": (1.2 C <sub>v</sub> )
<b>Coil :</b>	Class A continuous duty, #22 AWG x 18 lead wire
<b>Voltage range :</b>	-1.5% to +10% of nominal voltage
<b>Protection :</b>	Consult factory
<b>Power :</b>	~Inrush 7.6 VA      Holding : 4.8 VA = 1.8 to 12.7 W
<b>Response times :</b>	24V=5.4W      Energize : 8 ms      De-energize : 7 ms 120/60      Energize : 7-13 ms      De-energize : 12-20 ms

- Options :      • BSPP threads • Sandwich flow control: FC92B-CA
- Spare parts :      • Pilot valve DM-Dxxx-xxx • Valve blanking plate: M-92002  
                             • Pressure seal between valve and base : 16543. • Mounting screws valve to base (X2) : 35050.

**DIMENSIONS**



DIM.	A	B	C	D	E	F	G
1/8"	12.5	18.0	31.0	54.0	23.5	46.5	18.0
1/4"	12.5	18.0	31.0	54.0	23.5	46.5	18.0
3/8"	12.0	17.0	30.0	54.0	23.5	47.5	17.0