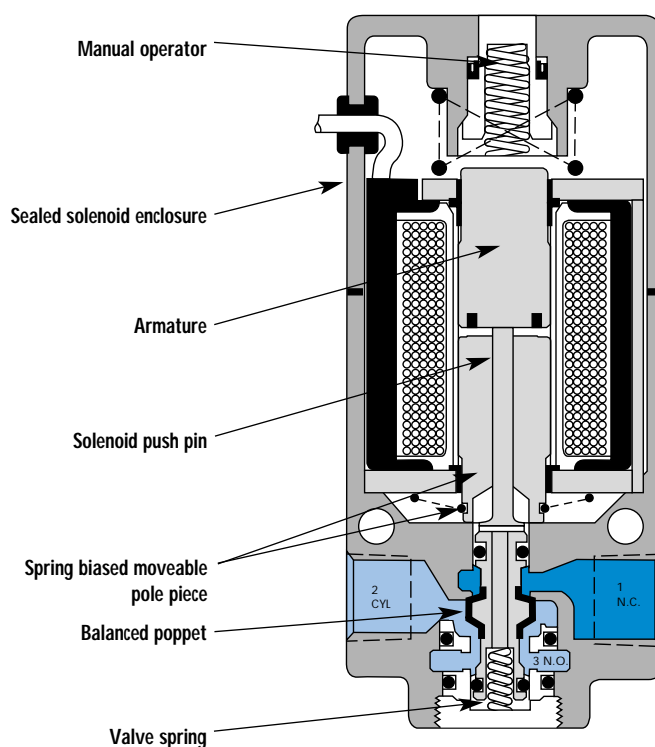


Individual mounting

inline	inline hazardous location

Manifold mounting

sub-base non "plug-in"	sub-base with pressure regulators	sub-base hazardous location



SERIES FEATURES

- The patented MACSOLENOID® with its non-burn out feature on AC service.
- Six valve functions with one Inline valve and four valve functions with one Manifold valve.
- A triple rated coil for 120/60, 110/50 or 24 VDC (6 Watt).
- Inline & add-a-unit manifold capability.
- Use on lube or non-lube service.
- Extremely rapid response and cycle rate.
- Various types of manual operators and electrical enclosures.
- Extremely long service life.
- Optional low wattage DC solenoids down to 1 watt.

APPLICATION CONVERSION PROCEDURE:

INDIVIDUAL MODELS

The balanced poppet design facilitates using the same valve for 6 functions with any port being connected to vacuum, pressure or plugged. Piping is shown in the chart below.

MANIFOLD MODELS

The interchangeable function plate between the valve body and base permits selection for 2- or 3-way, Normally Closed or Normally Open operation, instead of through piping as shown below in the Inlines. On 3-way applications, one function plate is used for both N.C. and N.O. When "3-C" is visible on the plate, the function will be N.C. When "3-O" is visible, the function is N.O. On 2-way applications, a separate plate is used and like the 3-way plate is marked "2-C" for N.C. and "2-O" on the other side for N.O. The 2-way plates block the exhaust at the valve, permitting the mixing in a stack of

3-ways and 2-ways. Changes within a stack from one function to another can be made without disturbing the plumbing.

SPECIAL APPLICATIONS:

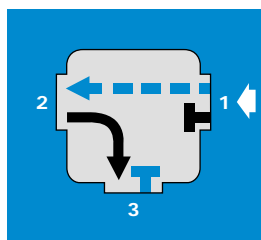
N.C. ONLY MODELS

A single purpose Normally Closed Only model is available for those applications where a greater tolerance for heavy concentrations of water, compressor products and other air line contaminants is desired.

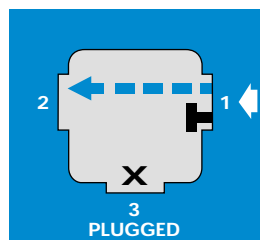
EXPLOSION PROOF MODELS

These models are designed to meet U.L. and C.S.A. standards for Division 1, Class I, Groups B, C, D and Class II, Groups E, F and G (NEMA equivalent to Class I is NEMA 7; Class II is NEMA 9). Explosion proof models are available in either inline or manifold versions but only with the no operator ("O") manual operator.

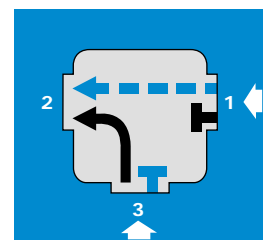
PIPING CHART FOR INDIVIDUAL MODELS



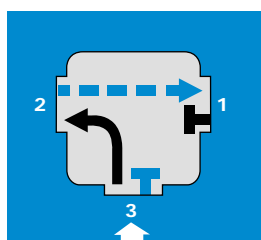
3 Way
Normally Closed



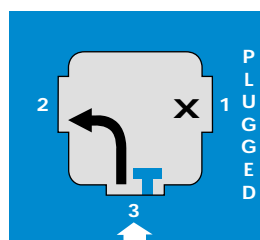
2 Way
Normally Closed



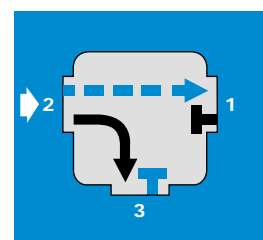
Selector



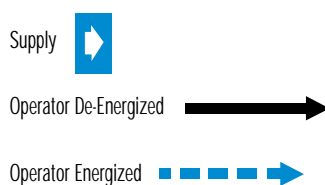
3 Way
Normally Open



2 Way
Normally Open



Diverter



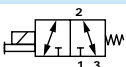
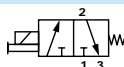
Function	Port size	Flow (Max)	Individual mounting
3/2 NO-NC, 2/2 NO-NC	1/8" - 1/4"	0.5 C _v	inline

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	Universal valve	NC only valve
		
1/8" NPTF	224B- XXYZZ	274B- XXYZZ
1/4" NPTF	225B- XXYZZ	275B- XXYZZ

SOLENOID OPERATOR ►

XX Y ZZ

XX	Voltage	Y	Manual operator	ZZ	Electrical connection
11	120/60, 110/50, 24 VDC (6.0 W)	1	Non-locking	JA	Square connector
12	240/60, 220/50	2	Locking	JC	Square connector with light
22	24/60, 24/50			BA	Flying leads (18")
52	24 VDC (2.5 W)			CA	Conduit 1/2" NPS
78	24 VDC (24.0 W)				
61	24 VDC (8.5 W)				

Notes:

CHANGING FROM NORMALLY CLOSED TO NORMALLY OPEN

Individual inline valves can be changed from normally closed to normally open by connecting the inlet to port 3 instead of port 1.

NORMALLY CLOSED ONLY MODELS

A single purpose Normally Closed only model is available for those applications where a greater tolerance for heavy concentrations of water, compressor products and other air line contaminants is desired. Model numbers are indicated above.

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	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 140°F (-18°C to 60°C)		
Flow (at 6 bar, ΔP=1bar) :	0.5 C _v		
Leak rate :	50 cm ³ /min		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	Consult factory		
Power :	~ Inrush : 33 VA Holding : 19.7 VA = 1 to 24 W		
Response times :	24 VDC (8.5 W)	Energize : 15 ms	De-energize : 5 ms
	120/60	Energize : 3-8 ms	De-energize : 3-13 ms

Spare parts :

- Solenoid operator (power ≥ 6 W) : D4-XXAAB, cover mounting screws 32222 and seal B5-6001.

Options :

- BSPP threads.

DIMENSIONS

Dimensions shown are metric (mm)

