### 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.
6. Burn-out proof solenoid on AC service.
7. Individual pressure control to each cylinder port.

### HOW TO ORDER

<table>
<thead>
<tr>
<th>Port size</th>
<th>Universal valve</th>
<th>NC only valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valve less base</td>
<td>250B-XXYZZ</td>
<td>280B-XXYZZ</td>
</tr>
<tr>
<td>1/4&quot; base NPTF</td>
<td>252B-XXYZZ</td>
<td>282B-XXYZZ</td>
</tr>
</tbody>
</table>

**Solenoid Operator**

- **XX**
  - Voltage
  - 11: 120/60, 110/50, 24 VDC (6.0 W)
  - 12: 240/60, 220/50
  - 22: 24/60, 24/50
  - 52: 24 VDC (2.5 W)
  - 78: 24 VDC (24.0 W)
  - 61: 24 VDC (8.5 W)

- **YY**
  - Manual operator
  - 1: Non-locking
  - 2: Locking

- **ZZ**
  - Electrical connection
  - JA: Square connector
  - JC: Square connector with light
  - BA: Flying leads (18")
  - CA: Conduit 1/2" NPS

* Other options available, see page 357.

Manifold fastening kit required: N-02003

**MODEL**

- **252B-**
  - 3-Way N.C. or N.O.
- **262B-**
  - 2-Way N.C. or N.O.
- **282B-**
  - 3-Way N.C. only

**INDIVIDUAL PRESSURE CONTROL TO EACH CYLINDER PORT**

In this version the common inlet pressure supplies each individual valve in the stack. This common pressure passes through a relieving type regulator mounted on the same base as the valve and is supplied through the function plate to the Normally Closed or Normally Open poppet position. Through use of the appropriate function plate on the 200 Series basic valve, the operation can be Normally Closed Or Normally Open, 3-way or 2-way except for 282B models which are Normally Closed only. The exhaust ("out") port is common. Operation of the valves then opens or closes the cylinder port (See schematic diagram next page).
## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid</td>
<td>Compressed air, vacuum, inert gases</td>
</tr>
<tr>
<td>Pressure range</td>
<td>Vacuum to 150 PSI</td>
</tr>
<tr>
<td>Lubrication</td>
<td>Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)</td>
</tr>
<tr>
<td>Filtration</td>
<td>40 µ</td>
</tr>
<tr>
<td>Temperature range</td>
<td>0°F to 140°F [-18°C to 60°C]</td>
</tr>
<tr>
<td>Flow (at 6 bar, ∆P=1bar)</td>
<td>0.4 Cv</td>
</tr>
<tr>
<td>Coil</td>
<td>General purpose class A, continuous duty, encapsulated</td>
</tr>
<tr>
<td>Voltage range</td>
<td>-15% to +10% of nominal voltage</td>
</tr>
<tr>
<td>Protection</td>
<td>Consult factory</td>
</tr>
<tr>
<td>Power</td>
<td>Inrush : 33 VA  Holding : 19.7 VA  = 1 to 24 W</td>
</tr>
<tr>
<td>Response times</td>
<td>24 VDC (8.5 W)  Energize : 15 ms  De-energize : 5 ms</td>
</tr>
<tr>
<td></td>
<td>120/60  Energize : 3-8 ms  De-energize : 3-13 ms</td>
</tr>
</tbody>
</table>

### Spare parts
- Solenoid operator (power ≥ 6 W): D4-XXAAB, cover mounting screws 32222 and seal B5-6001.
- Function plate: A2-7005.  
- Seal between bases (x2): 17016-01.  
- Tie-rod (x2): B4-9004.  
- Pressure regulator: PR02A-A0AA.

### Options
- BSP threads.  
- Explosion-proof model.  
- Isolation of inlet and/or exhaust.  
- Mod. PR80 (0-80 pressure range), Mod PR30 (0-30 pressure range)

## DIMENSIONS

Dimensions shown are metric (mm)

### Diagram

- 1/2" NPS conduit
- 1/8" NPTF gauge port
- 1/4" NPTF in & exh. ports both ends
- 5.7 dia. mtg. hole
- 128.9
- 110.5
- 65.0
- 51.5
- 20.5
- 19.0
- 148.2

Consult "Precautions" page 364 before use, installation or service of MAC Valves.
### 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.
6. Burn-out proof solenoid on AC service.
7. Selected pressure control to a single outlet.

### SELECTED PRESSURE CONTROL TO A SINGLE OUTLET

This version permits the alternate selection of any of the regulated pressures in the stack to one common outlet. With all valves de-energized the regulated pressure supplied to the Normally Open pressure port passes through the valves and out the corresponding port at the other end of the stack (Common Outlet Port). Pressure supplied to the common inlet port is regulated at each valve and blocked by the poppet of each valve. When a valve is shifted in the stack the Normally Open pressure is blocked and the regulated normally closed pressure of that valve is open to the common outlet. If two valves are energized at the same time the pressure at the common outlet would be that of the energized valve nearest the outlet. If the normally open pressure port is not used it is open to exhaust from the common outlet. The individual cylinder port in each base is non-operative. (See schematic diagram next page).
**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid</td>
<td>Compressed air, vacuum, inert gases</td>
</tr>
<tr>
<td>Pressure range</td>
<td>Vacuum to 150 PSI</td>
</tr>
<tr>
<td>Lubrication</td>
<td>Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)</td>
</tr>
<tr>
<td>Filtration</td>
<td>40 μ</td>
</tr>
<tr>
<td>Temperature range</td>
<td>0°F to 140°F (-18°C to 60°C)</td>
</tr>
<tr>
<td>Flow (at 6 bar, ∆P=1bar)</td>
<td>0.4 Cv</td>
</tr>
<tr>
<td>Coil</td>
<td>General purpose class A, continuous duty, encapsulated</td>
</tr>
<tr>
<td>Voltage range</td>
<td>-15% to +10% of nominal voltage</td>
</tr>
<tr>
<td>Protection</td>
<td>Consult factory</td>
</tr>
<tr>
<td>Power</td>
<td>- Inrush : 33 VA Holding : 19.7 VA</td>
</tr>
<tr>
<td></td>
<td>= 1 to 24 W</td>
</tr>
<tr>
<td>Response times</td>
<td>24 VDC (8.5 W) Energize : 15 ms De-energize : 5 ms</td>
</tr>
<tr>
<td></td>
<td>120/60 Energize : 3-8 ms De-energize : 3-13 ms</td>
</tr>
</tbody>
</table>

**Spare parts**

- Solenoid operator (power ≥ 6 W) : D4-XXAAB, cover mounting screws 32222 and seal BS-6001.
- Function plate : A2-7005.
- Seal between bases (x2) : 17016-01.
- Tie-rod (x2) : B4-9004.
- Pressure regulator : PR02A-00A.

**Options**

- BSPP threads.
- Explosion-proof model.
- Isolation of inlet and/or exhaust.
- Mod. PR80 (0-80 pressure range), Mod PR30 (0-30 pressure range)

**DIMENSIONS**

Dimensions shown are metric (mm)

Consult “Precautions” page 364 before use, installation or service of MAC Valves.