PV09 Series
The MAC Pulse Valve Series is designed to surpass the performance and reliability of existing pulse valve technology. The MAC solution utilizes a long life, bonded-spool design, instead of the traditional diaphragm style. MAC also uses a balanced pilot valve that isolates the solenoid from airline contamination. Available with integral solenoid pilot as well as bleed pilot configurations.

Direct Drop-in
The MAC Pulse Valve can conveniently be installed in virtually any application. A traditional 90˚ base or optional adapter plate allows the MAC valve to directly replace diaphragm technology with our bonded spool technology without disturbing existing plumbing. You can even use existing remote solenoids or our integral solenoid pilot for the ultimate performance and reliability.

Harsh Environment Compatible
An aluminum die-cast body, Viton® seals and an environmentally protected solenoid are standard features. These materials allow for a wide standard temperature rating and high degree of chemical resistance.

Maintenance
The MAC bonded spool pulse valves delivers lower cost of ownership through reduction in downtime and lower air consumption. When necessary, maintenance is simplified with available spool kits.

Repair Kits

<table>
<thead>
<tr>
<th>Kit</th>
<th>Repair Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viton®</td>
<td>K-PV003-05</td>
</tr>
<tr>
<td>93 Series spool kit</td>
<td>S-93002-05</td>
</tr>
</tbody>
</table>

Product Characteristics and Performance

<table>
<thead>
<tr>
<th>Flow</th>
<th>Temp Range Viton</th>
<th>Pressure Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Cv</td>
<td>-20°F - 230°F</td>
<td>40 - 120 PSI</td>
</tr>
<tr>
<td></td>
<td>-29°C - 110°C</td>
<td>2.75 - 8.27 bar</td>
</tr>
</tbody>
</table>
MAC Pulse Valve
PV09 Series

**Integral Pilot**
PV09B - XXX - 93P - DXXX - XXX = XXXX

**Remote Bleed**
PV09B - XXX - 93P - RBXX = XXXX

### Spool Type
- Base Only
- A N.C. Main W/Memory Spring
- Viton® Seals Thru-out

### Base Port Size & Thread Type
- 0 Basic Valve No Base
- A 2” NPTF MAC Base
- B 2 1/2” NPTF MAC Base
- C 2” BSPPL MAC Base
- D 2 1/2” BSPPL MAC Base
- E 2” BS PTR MAC Base
- F 2 1/2” BS PTR MAC Base

### Int / Ext Pilot
- 0 Base Only
- A Internal Pilot
- B Ext. Pilot NPTF threads
- C Ext. Pilot BSPPL threads
- D Ext. Pilot BS PTR threads
- E Int. Pilot BSPPL threads
- F Int. Pilot BS PTR threads

### Pilot Type
- Integral
- P Piped Exh.

### Remote Bleed
- 11 NPTF threads
- 14 BSPP PL threads
- 15 BS PTR threads

### Solenoid Valve Options
- DXX X - X XX

#### Voltage
- JA 120/60, 110/50
- JB 240/60, 220/50
- JD 100/60, 100/50, 110/60
- DA 24 VDC (5.4 W)
- EW 24 VDC (8.0 W)
- DB 12 VDC (5.4 W)
- DC 12 VDC (7.5 W)

#### Lead Wire Length
- A 18”
- B 24”
- C 36”
- D 48”
- E 72”
- F 96”
- J External Plug-In Lead

#### Manual Operator
- 1 Non Locking

#### Electrical Connector
- BA Grommet
- BK Grommet w/Diode
- CM Metal Conduit 1/2”
- CN Metal Conduit w/Ground 1/2”
- JA Square Plug-in
- JB Rectangular Plug-in
- JC Square Plug-in w/Light
- JD Rectangular Plug-in w/Light
- JJ Square Male Only
- JM Rectangular Male Only
- KA Mini Plug-in
- KB Mini Plug-in w/Diode
- KC Mini Plug-in w/LED & Diode
- KD Mini Plug-in w/Light
- KE Mini Plug-in w/Light & Diode
- KJ Mini Plug-in Male Only
- KK Mini Plug-in Male Only w/Diode

### Pilot Only Options - Bodies and Assemblies
- 93A-LP0-C0J-HP-DXXV-1XX=XXXX (Solenoid Operated Pilot Valve)
- HPA-DHXXV-YZZ=XXXX (Pilot to 93)
- 93A-LP0-C0J-HP-RBXX=XXXX (Bleed Pilot Valve)
- HPA-RBXX=XXXX (Pilot to RB 93)

### Modifications - One Selection Required
- PVVT Viton Seals, NPTF threads on pilot
- EVVT Viton Seals, BSPPL threads on pilot

### Spool Kits
- K-PV003-05 Viton (includes seals and spring)
MAC Pulse Valve
PV09 Series

1/4" TAPPED PORT
BOTH ENDS

2" TAPPED PORT
OR 2 1/2" TAPPED PORT
TYP.(2)

1/8" TAPPED PORT
BOTH ENDS

MAC 2" & 2.5" BASE

NOTE:
- "XX" IN PART NUMBER IS VOLTAGE CODE ONLY
AND DOES NOT AFFECT OVERALL DIMENSIONS

MAC Distributor Network