Series 20 >> Model H22

High Pressure — 2-Way Normally Closed Valve

When the valve coil is energized, the plunger is drawn towards the sleeve end stop. The plunger is allowed to accelerate freely for a short distance before it makes contact with the shoulder of the sealing pin. Upon contact it imparts considerable force on the pin causing it to lift the seat. A return spring provides the return force, directly on the pin, to seal the orifice when the coil is de-energized. The valve must be mounted 30 degrees of vertical and is for use on air and other non-corrosive gases, water and oil.

- Kel-F pin sealing element.
- Orifice guides the sealing pin for perfect alignment.
- Simple construction...only three moving parts.

**OPERATING CONDITIONS**

**Media:** Air and other non-corrosive gases, water and oil.

**Filtration:** Down to 60 microns or less is recommended.

**Valve Temperature Range:** Standard Valves - 0°F (-18°C) to 104°F (40°C) ambient; 0°F (-18°C) to 150°F (65°C) media. Optional Valves - can tolerate much higher or much lower ambient and media temperatures.*

**Maximum Operating Pressure Differentials:** See table on next page.

**Burst Pressure:** 10,000 PSI

**Leakage:** Bubble tight (with polymer sealing pins)

**ELECTRICAL CHARACTERISTICS**

**Coil Voltage:** 6 to 825VAC 60 HZ. and 5 to 720VAC 50 HZ. — 1.8 to 265VDC

**Nominal Power:** AC — 7.7 Watts, DC — 9.5 Watts

**Coil Construction:** Molded (Std.), Non-molded Class A and Potted Class F, (Class H optional)

**Typical Response Time on Air:** 4 - 16 Milliseconds

**Operating Speed:** Up to 600 CPM with gas media

**Duty Cycle:** Continuous

**MECHANICAL CHARACTERISTICS**

**Body:** Stainless Steel (Std.) or Brass (Opt.)

**Internal Components:** Stainless Steel. Copper - AC Only.

**Elastomers:** Nitrile (Buna) (Std.). Many other elastomers available.*

**Sealing Pin:** Kel-F (Std.), Delrin®, Teflon®, Nylon, PEEK, Radel®, Ultem®, 303 Stainless Steel (Opt.)

**Orifice Diameter:** See table on next page.

**Porting:** 1/8” NPT and 1/4” NPT (other ports available).*

**Housing:** Grommet and 1/2” NPT conduit - many options available.*

**Mounting:** Must be mounted within 30° of vertical.

**Life Expectancy:** Millions of cycles, depending on application, lubrication, etc.

**Valve Weight:** Grommet Valve: 1.13 lbs, Conduit Valve: 1.19 lbs

**Repair Packs:** See table on next page.

**Options:** Alternate Port Locations, Alternate Elastomers, Alternate Sealing Pin Materials, Spade Terminal Coil, and European Style DIN Coil*

* Consult representative or factory for options and specifications.
**VALVE SPECIFICATIONS**

### GAS PRESSURE RATINGS

<table>
<thead>
<tr>
<th>AC</th>
<th>DC</th>
<th>ORIFICE SIZE</th>
<th>CV FACTOR</th>
<th>GROMMET HOUSING</th>
<th>VALVE NUMBER</th>
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<tbody>
<tr>
<td>5000*</td>
<td>5000*</td>
<td>.025</td>
<td>.010</td>
<td>H22M7DGM</td>
<td>H22M9DGM</td>
</tr>
<tr>
<td>3000*</td>
<td>3000*</td>
<td>.3/32</td>
<td>.022</td>
<td>H22G7DGM</td>
<td>H22G9DGM</td>
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<tr>
<td>2500*</td>
<td>1500*</td>
<td>.3/64</td>
<td>.041</td>
<td>H22H7DGMG</td>
<td>H22H9DGMG</td>
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<tr>
<td>1750*</td>
<td>500</td>
<td>1/16</td>
<td>.065</td>
<td>H22J7DGMG</td>
<td>H22J9DGMG</td>
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<tr>
<td>650*</td>
<td>100</td>
<td>3/32</td>
<td>.100</td>
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### LIQUID PRESSURE RATINGS

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* FKM seals not recommended for pressure above 500 psi.

**ORDERING INFORMATION:**

WHEN ORDERING VALVES OR REPAIR PACKS ADD VOLTAGE AND FREQUENCY TO COMPLETE VALVE NUMBER. EXAMPLES: VALVE (H22J7DGMG 120/60) REPAIR PACK (KH22JD AC)

WHEN ORDERING OPERATORS ADD THE LETTER “O” TO THE FRONT OF THE VALVE NUMBER, REPLACE BODY PORT NUMBER WITH THE LETTER “D”: EXAMPLE: OPERATOR (OH22J7DGMG 120/60)