



**Note:** This valve also available as an operator. Refer to following page.

## 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 proceeding page.

**Burst Pressure:** 10,000 PSI

**Leakage:** Bubbletight (with polymer sealing pins)

## ELECTRICAL CHARACTERISTICS

**Coil Voltage:** 6 to 825V AC 60 HZ. and 5 to 720V AC 50 HZ. – 1.8 to 265V DC

**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

**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 proceeding 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.

**Listings:** Most valves are UL and CSA listed.\*

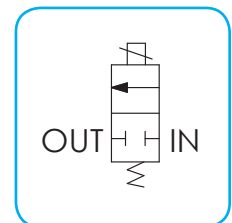
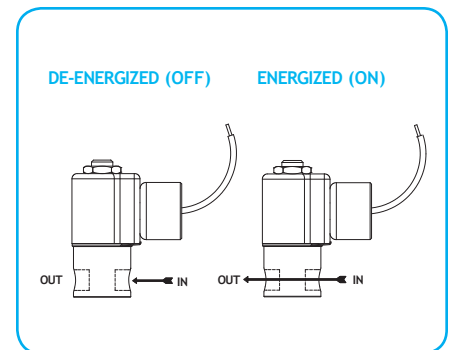
**Life Expectancy:** Millions of cycles, depending on application, lubrication, etc.

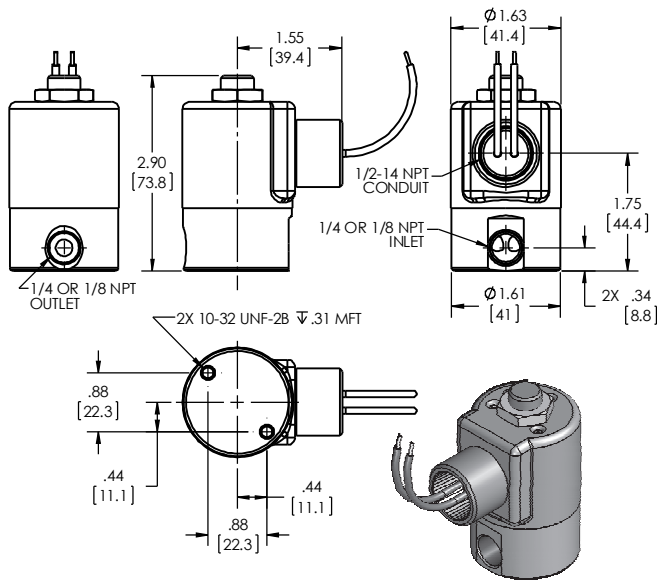
**Valve Weight:** Grommet Valve: 1.13 lbs, Conduit Valve: 1.19 lbs

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

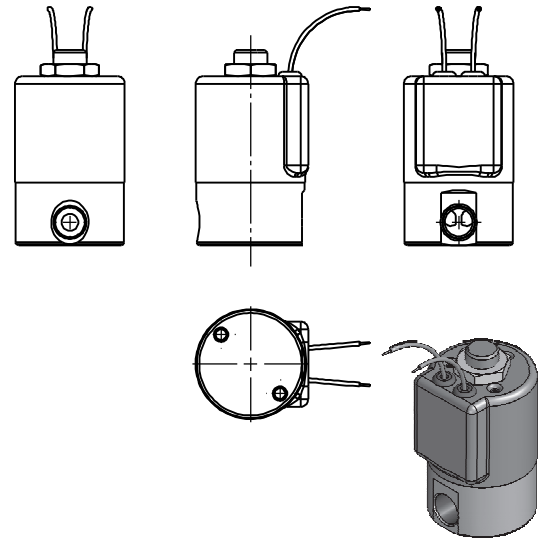
**Options:** Alternate Port Locations, Alternate Elastomers, Alternate Sealing Pin Materials, Spade Terminal Coil, and European Style DIN Coil\*

\* Consult representative or factory for options and specifications.





**SERIES 20  
MODEL H22  
2WNC  
CONDUIT CONNECTION**



**SERIES 20  
MODEL H22  
2WNC  
GROMMET HOUSING WITH LEADS**

## VALVE SPECIFICATIONS

GAS PRESSURE RATINGS				VALVE NUMBER			
AC	DC	ORIFICE SIZE N.C.	CV FACTOR N.C.	GROMMET HOUSING 1/8 NPT PORTS	1/4 NPT PORTS	CONDUIT HOUSING 1/8 NPT PORTS	1/4 NPT PORTS
5000*	5000*	.025	.010	H22M7DGM	H22M9DGM	H22M7DCM	H22M9DCM
3000*	3000*	1/32	.022	H22G7DGM	H22G9DGM	H22G7DCM	H22G9DCM
2500*	1500*	3/64	.041	H22H7DGMG	H22H9DGMG	H22H7DCMG	H22H9DCMG
1750*	500	1/16	.065	H22J7DGMG	H22J9DGMG	H22J7DCMG	H22J9DCMG
650*	100	3/32	.100	H22K7DGMG	H22K9DGMG	H22K7DCMG	H22K9DCMG

LIQUID PRESSURE RATINGS				VALVE NUMBER			
AC	DC	ORIFICE SIZE N.C.	CV FACTOR N.C.	GROMMET HOUSING 1/8 NPT PORTS	1/4 NPT PORTS	CONDUIT HOUSING 1/8 NPT PORTS	1/4 NPT PORTS
5000*	5000*	.025	.010	H22M7DGM	H22M9DGM	H22M7DCM	H22M9DCM
3000*	3000*	1/32	.022	H22G7DGM	H22G9DGM	H22G7DCM	H22G9DCM
1500*	1500*	3/64	.041	H22H7DGML	H22H9DGML	H22H7DCML	H22H9DCML
1000*	500	1/16	.065	H22J7DGML	H22J9DGML	H22J7DCML	H22J9DCML
300	100	3/32	.100	H22K7DGML	H22K9DGML	H22K7DCML	H22K9DCML

\* 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 (QH22J7DGMG 120/60)