

# HIGH FLOW VALVES



## Series 80 >> Model 827

### Large Orifice, Direct Lift – 2-Way Normally Closed Valve

Peter Paul offers a line of large orifice solenoid valves to address process industry requirements for high flow rate or quick dump and fill capacity. These AC or DC powered valves are also suited for low pressure gas and liquid applications. Port sizes for direct lift, two way normally closed versions range from 3/8" to 3/4" NPT, with pressure ratings from 0 to 100 PSI.

- Large orifice sizes for high flow applications.
- Body is made of brass forgings.
- Operates at low pressure without any differential pressure across the diaphragm – Direct Lift.
- NPT threaded connections.
- Same coils and housings as our popular 20 Series.
- Direct Lift model is available in Normally Closed Only.

## OPERATING CONDITIONS

**Media:** Air, water, and other fluids compatible with Buna seals. Hot water, steam, gasoline and many oils require special seal materials. Consult representative or factory. (Series 80 pressure ratings may change due to the viscosity of the liquid.)\*

**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.

**Leakage:** Bubble tight

## 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:** Non-molded Class A (Std.), Molded and Potted Class F or Class H (Opt.)

**Operating Speed:** Up to 100 CPM

**Duty Cycle:** Continuous

## MECHANICAL CHARACTERISTICS

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

**Internal Components:** Stainless Steel (Std.)

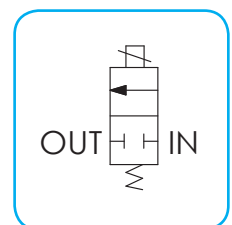
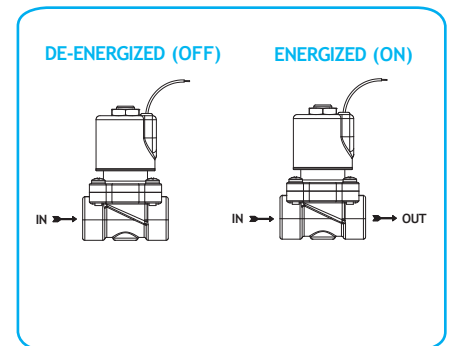
**Elastomers:** Nitrile (Buna) (Std.). Many other elastomers available.\*

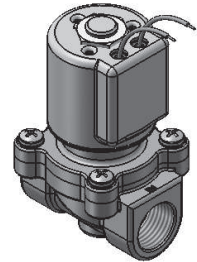
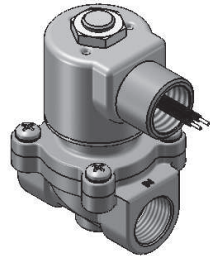
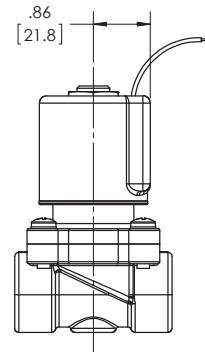
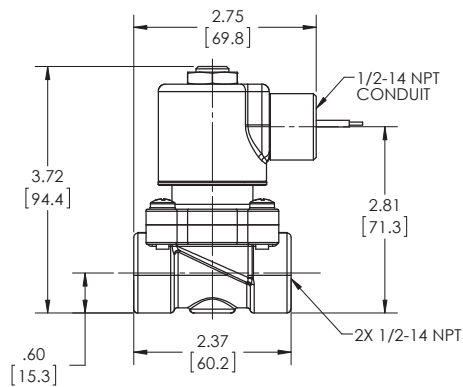
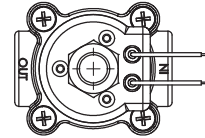
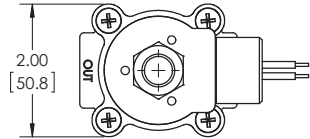
**Housing:** Grommet and 1/2" NPT conduit - many options available.\*

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

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

**Options:** Alternate Elastomers, Spade Terminal Coil, European Style DIN, Explosion Proof, Magnetic Latching Coil and Solid-State Timer for use with DIN Coil\*





**SERIES 80 MODEL 827  
CONDUIT CONNECTION  
2WNC DIRECT LIFT  
1/2" NPT PORTS**

**SERIES 80 MODEL 827  
GROMMET HOUSING WITH LEADS  
2WNC DIRECT LIFT  
1/2" NPT PORTS**

## VALVE SPECIFICATIONS

MAX. OPER. PRESS. DIFF.		MIN. OPER. PRESS. DIFF.	ORIFICE SIZE N.C.	CV FACTOR N.C.	VALVE NUMBER	
AC	DC				GROMMET HOUSING	CONDUIT HOUSING
100	40	0	1/2	4.0	827T20DGV	827T20DCV
100	40	0	1/2	4.0	827B12DGV	827B12DCV
100	30 (75)	0	3/4	5.8	827Y19DGV	827Y19DCV

WHEN ORDERING VALVES OR REPAIR PACKS ADD VOLTAGE AND FREQUENCY TO COMPLETE VALVE NUMBER. EXAMPLES: VALVE (827B12DGV 120/60) REPAIR PACK (K827BD-AC)