# HIGH FLOW UALUES



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

# Series 80 >> Model 818

Large Orifice, Internally Piloted —2-Way Normally Open 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 the two way normally open version range from 1/2" to 3" NPT, with pressure ratings from 3 to 100 PSI.

- Large orifice sizes for high flow applications.
- Body is made of brass forgings.
- Operate on differential pressure Internal Pilot.
- NPT threaded connections.
- Same coils and housings as our popular 20 Series.

#### **OPERATING CONDITIONS**

**Media:** Air, water, and oil. (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.

Minimum Operating Pressure Differentials: 3 PSI

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.)

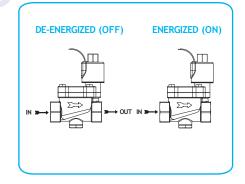
**Elastomers:** Nitrile (Buna) (Std.). Many other elastomers available.\* **Housing:** Grommet and 1/2" NPT conduit - many options available.\*

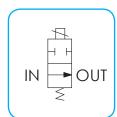
Life Expectancy: Millions of cycles, depending on application, lubrication, etc.

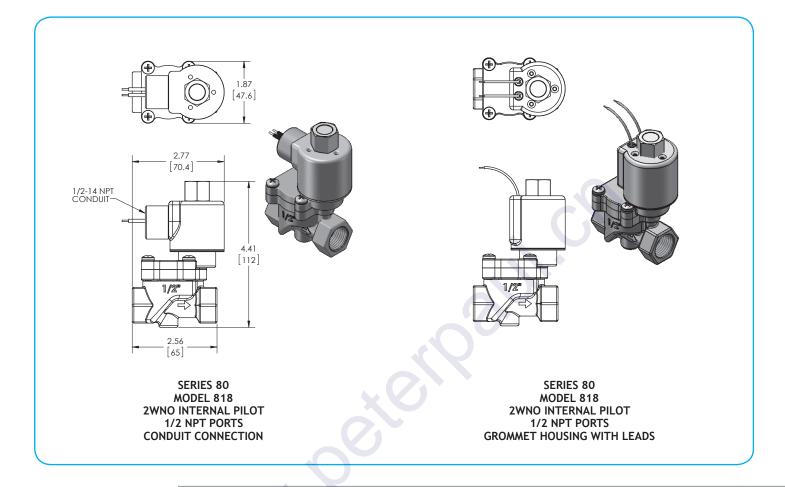
**Repair Packs:** See table on proceeding page.

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

 $^{st}$  Consult representative or factory for options and specifications.







## **VALVE SPECIFICATIONS**

MAX. OPER.						
PRESS. DIFF.		MIN. OPER.	ORIFICE SIZE	CV FACTOR	VALVE NUMBER	
AC	DC	PRESS. DIFF.	N.O.	N.O.	GROMMET HOUSING	CONDUIT HOUSING
150	150	3	1/2	4.0	818B12DGM	818B12DCM
200	200	3	3/4	5.8	818Y19DGM	818Y19DCM
200	200	3	1	13.0	818D13DGM	818D13DCM
200	200	3	1 1/2	29.0	818E14DGM	818E14DCM
200	200	3	2	46.0	818F16DGM	818F16DCM
200	200	3	3	98.0	818W18DGM	818W18DCM

### **ORDERING INFORMATION:**

WHEN ORDERING VALVES OR REPAIR PACKS ADD VOLTAGE AND FREQUENCY TO COMPLETE VALVE NUMBER. EXAMPLES: VALVE (818B12DCM 120/60) REPAIR PACK (K818BDD 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 ( $\underline{O}$ 818B12 $\underline{D}$ CM 120/60)