

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

# Series 80 >> Model 828

#### Large Orifice, Internally Piloted – 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 internal pilot, two way normally closed versions range from 1/2" to 3" NPT, with pressure ratings from 3 to 200 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 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 -  $0^{\circ}F$  (-18 $^{\circ}C$ ) to 104 $^{\circ}F$  (40 $^{\circ}C$ ) ambient;  $0^{\circ}F$  (-18 $^{\circ}C$ ) to 150 $^{\circ}F$  (65 $^{\circ}C$ ) 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.\*

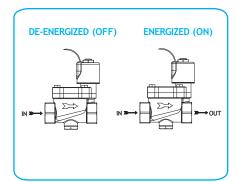
Housing: Grommet and 1/2" NPT conduit - many options available.\*

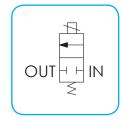
Life Expectancy: Millions of cycles, depending on application, lubrication, etc.

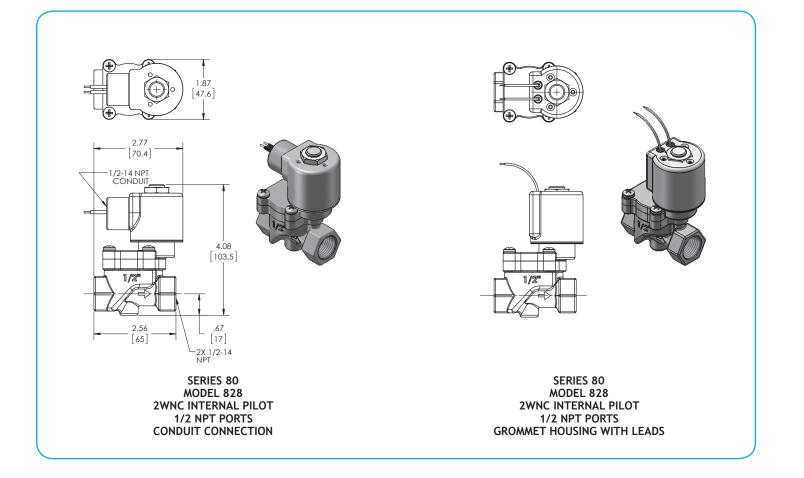
Repair Packs: See table on proceeding page.

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

\* Consult representative or factory for options and specifications.







## **VALVE SPECIFICATIONS**

20020031/24.0828B12DGM828B12D20020033/45.8828Y19DGM827Y19D2002003113.0828D13DGM828D13D200200311/229.0828E14DGM828E14D2002003246.0828F16DGM828F16D200200321/276.0828W17DGM828W17DGM		OPER. 5. DIFF.	MIN. OPER.	ORIFICE SIZE	CV FACTOR	VALVE NUMBER	
20020033/45.8828Y19DGM827Y19D2002003113.0828D13DGM828D13D20020031 1/229.0828E14DGM828E14D2002003246.0828F16DGM828F16D20020032 1/276.0828W17DGM828W17D	AC	DC	PRESS. DIFF.	N.C.	N.C.	GROMMET HOUSING	CONDUIT HOUSING
2002003113.0828D13DGM828D13D20020031 1/229.0828E14DGM828E14D2002003246.0828F16DGM828F16D20020032 1/276.0828W17DGM828W17D	200	200	3	1/2	4.0	828B12DGM	828B12DCM
20020031 1/229.0828E14DGM828E14D2002003246.0828F16DGM828F16D20020032 1/276.0828W17DGM828W17DGM	200	200	3	3/4	5.8	828Y19DGM	827Y19DCM
200         200         3         2         46.0         828F16DGM         828F16D           200         200         3         2 1/2         76.0         828W17DGM         828W17DGM	200	200	3	1	13.0	828D13DGM	828D13DCM
200 200 3 2 1/2 76.0 828W17DGM 828W17E	200	200	3	1 1/2	29.0	828E14DGM	828E14DCM
	200	200	3	2	46.0	828F16DGM	828F16DCM
200 200 3 3 98.0 828W18DGM 828W18D	200	200	3	2 1/2	76.0	828W17DGM	828W17DCM
	200	200	3	3	98.0	828W18DGM	828W18DCM

#### **ORDERING INFORMATION:**

WHEN ORDERING VALVES OR REPAIR PACKS ADD VOLTAGE AND FREQUENCY TO COMPLETE VALVE NUMBER. EXAMPLES: VALVE (828B12DGM 120/60) REPAIR PACK (K828B12DD 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 (<u>0</u>828B12<u>D</u>GM 120/60)