## HAZARDOUS LOCATION UALUES



# Series 20 >> Model E23

# Hazardous Location — 3-Way Normally Closed Valve (piped exhaust)

Peter Paul explosion proof valves are used where fire or explosion hazards exist due to the presence of flammable gases or vapors, flammable liquids, combustible dust, or easily ignitable fibers. Hazardous Location valves are recommended, or in some cases compulsory, where a high level of protection from explosion is required.

- Heavy duty and made of stainless steel.
- A real workhorse with proven performance.
- It has the greatest amount of options available of all the valves.
- Wide range of orifice sizes from 1/32" to 1/8".

#### OPERATING CONDITIONS

**Media:** Air, water, and other fluids compatible with standard Buna seals. Hot water, steam gasoline, and many oils require special seal materials. (Series 20 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.

Burst Pressure: 5000 PSI

Leakage: Bubble tight for standard valves.

Vacuum: To 5 Microns\*

#### **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 - 7.3 Watts DC - 9.5 Watts

Coil Construction: Molded Class F with third wire ground (Std.), Class H or Potted (Opt.)

Typical Response Time on Air: 4 - 16 Milliseconds

Operating Speed: Up to 600 CPM

**Duty Cycle:** Continuous

### **MECHANICAL CHARACTERISTICS**

Body: Stainless Steel (Std.)

Internal Components: Stainless Steel

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

Orifice Diameter: See table on proceeding page.

Porting: 1/8" and 1/4" NPT (others ports available).

Housing: Flame-Proof construction with 1/2" NPT conduit

Listings: Valves are UL listed and certified for Hazard Locations — Class I, Div 1, Group C and D - Class II, Div 1, Group E, F,

and G; Div 2, Groups C, D, E, F, and G.

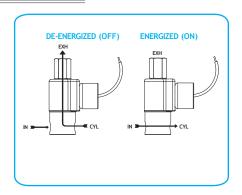
Life Expectancy: Millions of cycles, depending on application, lubrication, etc.

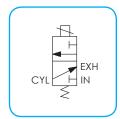
Valve Weight: 1.50 lbs

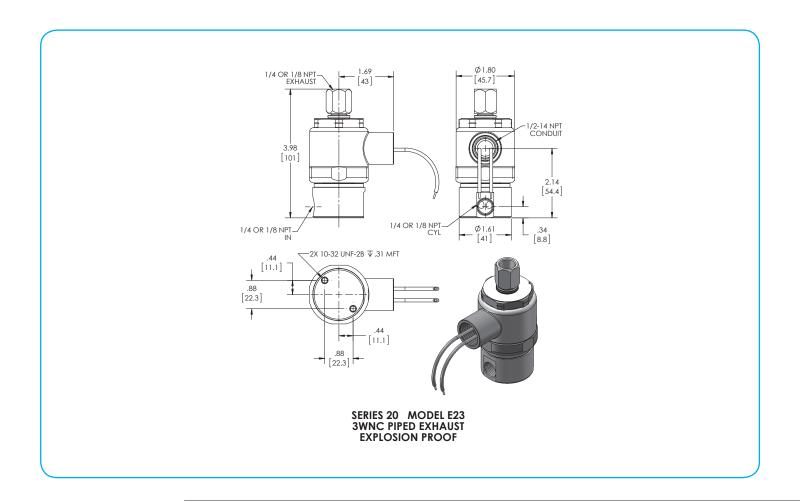
Repair Kits: See table on proceeding page.

Options: Alternate Port Locations, Metering, Manual Override, Alternate Elastomers\*

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







## **VALVE SPECIFICATIONS**

+ MAX. OPER. PRESS. DIFF.		ORIFICE SIZE		CV FACTOR		VALVE NUMBER	
PKESS. DIFF.		OKIFICE SIZE		CV FACTOR		VALVE NUMBER	
AC	DC	N.C.	N.O.	N.C.	N.O.	1/8 NPT PORTS	1/4 NPT PORTS
400	400	1/32	1/32	.024	.024	E23GG7XCCM	E23GG9ZCCM
150 (200)	150 (200)	3/64	1/16	.052	.095	E23HJ7XCCM	E23HJ9ZCCM
100 (135)	100 (135)	1/16	1/16	.095	.095	E23JJ7XCCM	E23JJ9ZCCM
100 (135)	100 (135)	1/16	3/32	.095	.156	E23JK7XCCM	E23JK9ZCCM
75 (100)	75 (100)	3/32	3/32	.156	.156	E23KK7XCCM	E23KK9ZCCM
50 (70)	50 (70)	1/8	3/32	.284	.156	E23NK7XCCM	E23NK9ZCCM
35 (40)	35 (40)	1/8	1/8	.284	.227	E23NN7XCCM ^	E23NN9ZCCM
20	20	3/16	3/32	.500	.156	E23PK7XCCM	E23PK9ZCCM
20	20	3/16	1/8	.500	.227	E23PN7XCCM ^	E23PN9ZCCM ^
15	_	1/4	3/32	.700	.156	E23RK7XCCM	E23RK9ZCCM ^
15	_	1/4	1/8	.700	.227	E23RN7XCCM ^	E23RN9ZCCM ^

<sup>^</sup> VALVES WITH 1/8 ORIFICE ARE NOT UL OR CSA LISTED

WHEN ORDERING VALVES OR REPAIR KITS ADD VOLTAGE AND FREQUENCY TO COMPLETE VALVE NUMBER. EXAMPLES: VALVE (E23KK9ZCCM-120/60) REPAIR KIT (2KE23KKZ-AC)