# GENERAL PURPOSE UALUES



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

# Series 20 >> Model 21

## 2-Way Normally Open

A complete line of valves with a great selection of options and exceptional proven performance. The standard in the field. Air, water, and other fluids are compatible with standard Buna seals. Hot water, steam, gasoline, and many oils require other seal materials.

- The flagship valve initially created for fluid power industry.
- · 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 are compatible with standard Buna seals. Hot water, steam, gasoline, and many oils require other 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 next page.

Burst Pressure: 5,000 PSI

Leakage: Bubble tight for standard valves.

Vacuum: To 5 Microns\*

#### **ELECTRICAL CHARACTERISTICS**

**Coil Voltage:** 6 to 825/60, 5 to 720/50 and 1.8 to 265/DC

Nominal Power: AC - 8.7 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

**Duty Cycle:** Continuous

#### MECHANICAL CHARACTERISTICS

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

Internal Components: Stainless Steel. Copper - AC Only.

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

Orifice Diameter: See table on next page.

**Porting:** Standard 1/8" and 1/4" NPT (other ports available).\* **Housing:** Grommet and 1/2" NPT conduit - many options available.\*

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

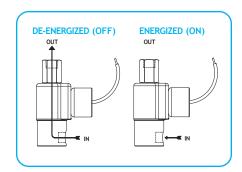
Life Expectancy: Millions of cycles, depending on application, lubrication, etc.

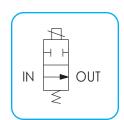
Valve Weight: Grommet Valve: 1.13 lb Conduit Valve: 1.19 lb

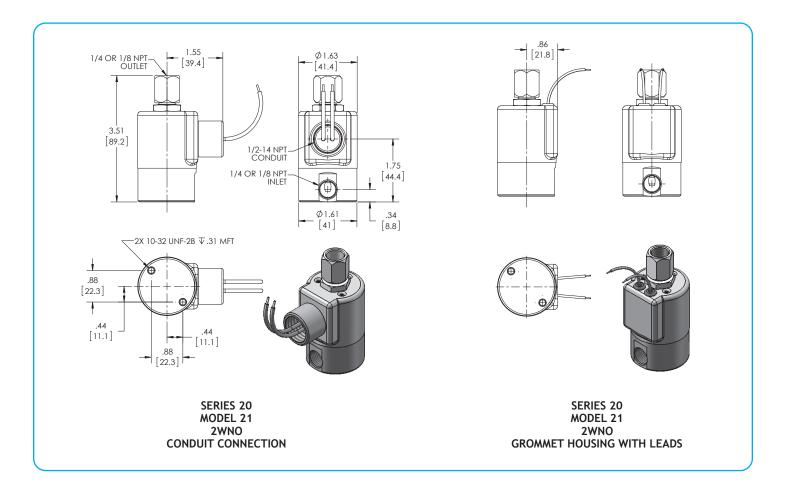
Repair Packs: See table on next page.

**Options:** Alternate Port Locations, Metering, Manual Override, Alternate Elastomers, Spade Terminal Coil, European Style DIN, Explosion Proof and Magnetic Latching Coil

\* Consult representative or factory for options and specifications.







### **VALVE SPECIFICATIONS**

MAX. OPER.			VALVE NUMBER				
PRESS. DIFF.+		ORIFICE SIZE	CV FACTOR	GROMMET HOUSING		CONDUIT HOUSING	
AC	DC	N.O.	N.O.	1/8 NPT PORTS	1/4 NPT PORTS	1/8 NPT PORTS	1/4 NPT PORTS
400 (700)*	400 (700)	* 1/32	.024	21G7XGM	21G9ZGM	21G7XCM	21G9ZCM
235 (500)	235 (500)	3/64	.053	21H7XGM	21H9ZGM	21H7XCM	21H9ZCM
150 (350)	150 (350)	1/16	.095	21J7XGM	21J9ZGM	21J7XCM	21J9ZCM
100 (150)	100 (150)	3/32	.156	21K7XGM	21K9ZGM	21K7XCM	21K9ZCM
35 (40)	35 (40)	1/8	.201	21N7XGM^	21N9ZGM^	21N7XCM^	21N9ZCM^

- ^ VALVES WITH 1/8 N.O. ORIFICE ARE UL LISTED ONLY
- \* FKM seals not recommended for pressure ratings above 500 PSI.
- + Ratings in brackets are optional extended ratings; consult factory.

## **ORDERING INFORMATION:**

WHEN ORDERING VALVES OR REPAIR PACKS ADD VOLTAGE AND FREQUENCY TO COMPLETE VALVE NUMBER. EXAMPLES: VALVE (21J9ZGM 120/60) REPAIR PACK (K21JDX 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 (Q21J9DGM 120/60)