

## SPECIFICATIONS—2-WAY NORMALLY OPEN

### OPERATING CONDITIONS

**Media:** Air, water, and other fluids compatible with standard Buna seals. Hot water, steam gasoline, and many oils require special seal materials - Consult representative or factory. (Series 50 pressure ratings may change due to the viscosity of the liquid-consult factory for de-rating)

**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. Consult factory for specifics.

**Maximum Operating Pressure Differentials:** See Catalog listings.

**Burst Pressure:** Series 20, 30, 50 - 5000 PSI Series 70 - 4000 PSI

**Leakage:** Bubble tight for standard valves

**Vacuum:** To 5 Microns - Consult factory

### ELECTRICAL CHARACTERISTICS

**Coil Voltage:** Series 20 - 5 to 825 VAC 50-60 HZ. – 1.8 to 265V DC  
 Series 30 - 5.2 to 650 VAC 50-60 HZ. – 2 to 240V DC  
 Series 50 - 5.4 to 575 VAC 50-60 HZ. – 3.0 to 300V DC  
 Series 70 - 12 to 1050 VAC 50-60 HZ. – 2.5 to 220V DC

**Nominal Power:**

Series	D.C.	A.C.	Series	D.C.	A.C.
20	9.5	8.7 Watts	50	7.0	6.0 Watts
30	8.0	8.0 Watts	70	16.0	18.0 Watts

**Coil Construction:** Non-molded Class A, Molded and potted Class F. (Class H optional)

**Typical Response Time on Air:** 4 - 16 Milliseconds—all series

### MECHANICAL CHARACTERISTICS

**Body:** Stainless steel (standard) - Ser. 20, 50, & 70  
 Stainless steel (optional) - Ser. 30  
 Brass (standard) - Ser. 30  
 Brass (optional) - Ser. 20, 50, & 70 - Consult factory  
 Aluminum (optional) - Ser. 50 - Consult factory

**Orifice Diameter:** See catalog listings

**Porting:** See catalog listings

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

**Listings:** Most valves are U.L. and CSA listed - Consult factory for specifics.

## OPTIONS AVAILABLE: – 2 WAY NORMALLY OPEN

FOR ILLUSTRATED OPTIONS SEE PAGES 76-81

FOR FLOW CHARTS SEE PAGES 95-97

#### HOUSING OPTIONS—see page 78

**STRAIN RELIEF CONNECTOR**  
All Models

**SINGLE AUTOMOTIVE**  
All Models except 51

**DOUBLE AUTOMOTIVE**  
All Models except 51

**"AN" CONNECTOR**  
All Models

**SPLICE BOX HOUSING**  
All Models

**JIC HOUSING**  
Model 21

**YOKE**  
All Models

**MOUNTING BRACKET**  
All Models

#### COIL OPTIONS—see page 79

**MOLDED COIL**  
All Models

**THIRD WIRE GROUND**  
All conduit Models

#### POTTED COIL & HOUSING

All Models

**SPADE TERMINAL COIL - MOLDED**  
Models 21, 31, 51

**HIGH TEMPERATURE MOLDED COIL**  
All Models

**EUROPEAN DIN STYLE COIL**  
Models 21, 31

#### BODY OPTIONS—see page 80

**FINE METERING**  
Model 21

**METERING TO 1/32" ORIFICE**  
Model 21

**MANUAL OVERRIDE**  
21\*, 71

**METERED EX PORT**  
Models 21, 31  
Consult Factory

#### PORT OPTIONS—see page 81

**BOTTOM CAVITY PORT**  
All Models

**MANIFOLD MOUNT**  
All Models

**FLANGE MOUNT**  
Models 21, 71

#### MISCELLANEOUS OPTIONS—see page 76

**SILVER SHADING RING**  
All Models

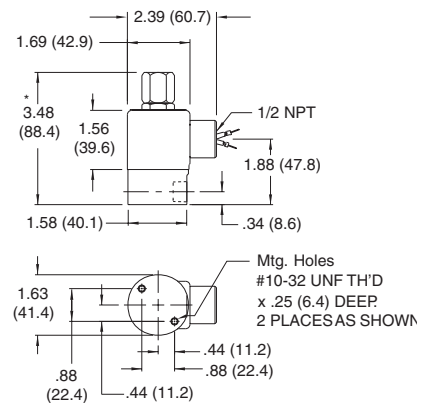
**ALUMINUM SHADING RING**  
All Models

**BUILT IN MUFFLER**  
All Models

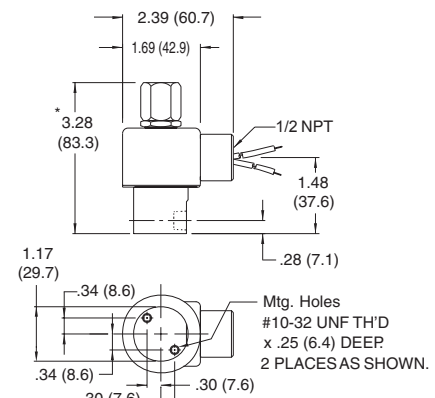
**UNIVERSAL MOUNTING BRACKET**  
Models 21, 31, 51

**Note:** Availability of certain options or combination of options may vary with quantity of units ordered - Consult representative or factory.

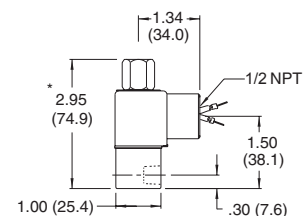
\* Not available over 250 psi



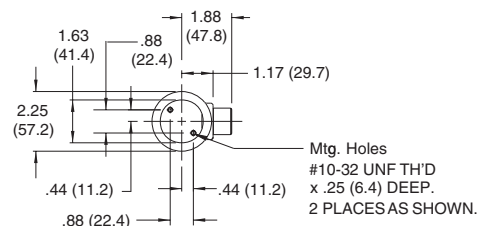
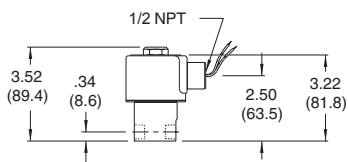
\* ADD .165 (4.2) FOR SPADE TERMINAL COIL OPTION



\* ADD .100 (2.5) FOR SPADE TERMINAL COIL OPTION



\* ADD .232 (5.9) FOR SPADE TERMINAL COIL OPTION



# SOLENOID VALVES . . .

## SERIES 20—MODEL 21

+MAX. OPER. PRESS. DIFF.		ORIFICE SIZE INLET EXH.	CV FACTOR INLET EXH.	VALVE NUMBER				REPAIR PACK WT. 0.25
AC	DC			GROMMET HOUSING Grommet Valve WT. 1.13 LB. 1/8 NPT PORTS		CONDUIT HOUSING Conduit Valve WT. 1.19 LB. 1/8 NPT PORTS		
*400 (700)*	400 (700)	1/32	.024	21G7XGV	21G9ZGV	21G7XCV	21G9ZCV	K21GDX
235 (500)	235 (500)	3/64	.053	21H7XGV	21H9ZGV	21H7XCV	21H9ZCV	K21HDX
150 (350)	150 (350)	1/16	.095	21J7XGV	21J9ZGV	21J7XCV	21J9ZCV	K21JDX
100 (150)	100 (150)	3/32	.156	21K7XGV	21K9ZGV	21K7XCV	21K9ZCV ✓	K21KDX
35 (40)	35 (40)	1/8	.201	*21N7XGV	*21N9ZGV	*21N7XCV	*21N9ZCV	K21NDX



2-WAY NORMALLY OPEN GROMMET



2-WAY NORMALLY OPEN CONDUIT

\*VALVES WITH 1/8 SLEEVE ORIFICE ARE UL LISTED ONLY

## SERIES 30—MODEL 31

+MAX. OPER. PRESS. DIFF.		ORIFICE SIZE INLET EXH.	CV FACTOR INLET EXH.	VALVE NUMBER				REPAIR PACK WT. 0.25
AC	DC			GROMMET HOUSING Grommet Valve WT. 0.75 LB. 1/8 NPT PORTS		CONDUIT HOUSING Conduit Valve WT. 0.81 LB. 1/8 NPT PORTS		
300	300	1/32	.024	31G5XGV	31G5XCV	31G5XCV	31G5XCV	K31GDX
175	175	3/64	.052	31H5XGV	31H5XCV	31H5XCV	31H5XCV	K31HDX
125	125	1/16	.095	31J5XGV	31J5XCV	31J5XCV	31J5XCV	K31JDX
75	75	3/32	.160	31K5XGV ✓	31K5XCV	31K5XCV	31K5XCV	K31KDX



2-WAY NORMALLY OPEN GROMMET



2-WAY NORMALLY OPEN CONDUIT

## SERIES 50—MODEL 51

+MAX. OPER. PRESS. DIFF.		ORIFICE SIZE INLET EXH.	CV FACTOR INLET EXH.	VALVE NUMBER				REPAIR PACK WT. 0.25
AC	DC			GROMMET HOUSING Grommet Valve WT. 0.38 LB. 1/8 NPT PORTS		CONDUIT HOUSING Conduit Valve WT. 0.44 LB. 1/8 NPT PORTS		
400	200	1/32	.020	51G8XGB	51G8XCB	51G8XCB	51G8XCB	K51GDX
200	100	3/64	.048	51H8XGB	51H8XCB	51H8XCB	51H8XCB	K51HDX
125	60	1/16	.075	51J8XGB ✓	51J8XCB	51J8XCB	51J8XCB	K51JDX
40	40	3/32	.150	51K8XGB	51K8XCB	51K8XCB	51K8XCB	K51KDX



2-WAY NORMALLY OPEN GROMMET



2-WAY NORMALLY OPEN CONDUIT

## SERIES 70—MODEL 71

+MAX. OPER. PRESS. DIFF.		ORIFICE SIZE INLET EXH.	CV FACTOR INLET EXH.	VALVE NUMBER				REPAIR PACK WT. 0.25
AC	DC			GROMMET HOUSING Grommet Valve WT. 2.00 LB. 1/4 NPT PORTS		CONDUIT HOUSING Conduit Valve WT. 2.06LB 1/4 NPT PORTS		
350	350	1/16	.09	71J9ZGV	71J9ZCV	71J9ZCV	71J9ZCV	K71JDX
250	250	3/32	.22	71K9ZGV	71K9ZCV	71K9ZCV	71K9ZCV	K71KDX
175	175	1/8	.35	71N9ZGV	71N9ZCV	71N9ZCV	71N9ZCV	K71NDX
125	125	5/32	.45	71O9ZGV	71O9ZCV	71O9ZCV	71O9ZCV	K71ODX
100	100	3/16	.50	71P9ZGV	71P9ZCV ✓	71P9ZCV	71P9ZCV	K71PDX



2-WAY NORMALLY OPEN GROMMET



2-WAY NORMALLY OPEN CONDUIT

WHEN ORDERING VALVES OR REPAIR PACKS ADD VOLTAGE AND FREQUENCY TO COMPLETE VALVE NUMBER.  
EXAMPLES: VALVE (71K9XGV-120/60) REPAIR PACK (K71KDX-AC) See repair pack reference page 82

†Ratings in brackets are optional extended ratings; consult factory

\*FKM SEALS NOT RECOMMENDED FOR PRESSURE ABOVE 500 PSI.

NOTE: The above checked (✓) Valves, but with optional molded coils, are most popular based on sales and likely to be in Distributor stock.