

## SPECIFICATIONS—3-WAY DIRECTIONAL CONTROL

### 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  
 Brass (standard) - Ser. 30  
 Brass (optional) - Ser. 20, 50, & 70 - Consult factory  
 Aluminum (optional) - Ser. 50 - Consult factory

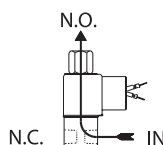
**Orifice Diameter:** See catalog listings

**Porting:** See catalog listings

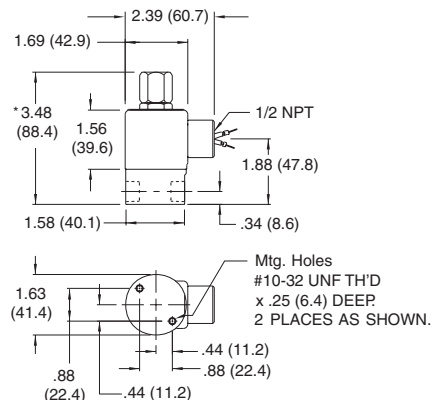
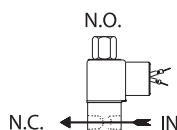
**Housing:** Grommet & 1/2" NPT conduit - many options available.

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

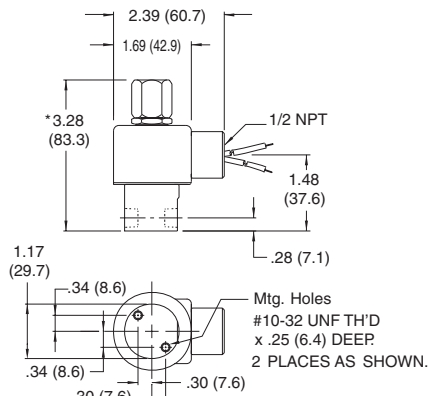
DE-ENERGIZED



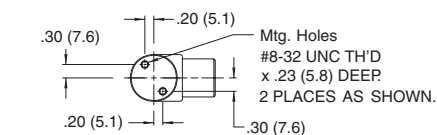
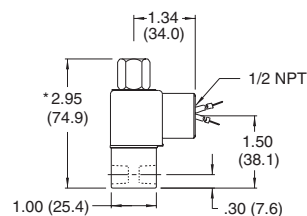
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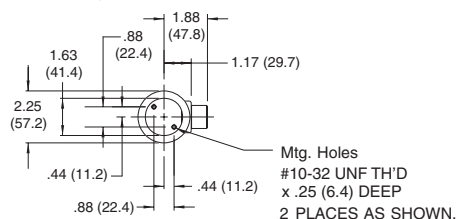
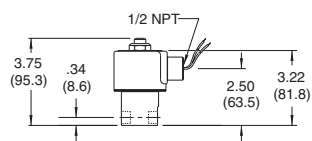
\*ADD .165 (4.2) FOR SPADE TERMINAL COIL OPTION



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



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



## OPTIONS AVAILABLE: – 3 WAY DIRECTIONAL CONTROL

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 55

#### DOUBLE AUTOMOTIVE

All Models except 55

#### “AN” CONNECTOR

All Models

#### SPLICE BOX HOUSING

All Models

#### JIC HOUSING

Model 25

#### 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 25, 35, 55

#### HIGH TEMPERATURE MOLDED COIL

All Models

#### EUROPEAN DIN STYLE COIL

Models 25, 35

### BODY OPTIONS—see page 80

#### METERING TO 1/8" ORIFICE

Models 25, 35, 55

#### METERING TO 3/16" ORIFICE

Model 75

#### METERED BYPASS

Model 25

#### MANUAL OVERRIDE

Models 25\*, 75

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

### PORT OPTIONS—see page 81

#### BOTTOM ORIFICE PORT

All Models

#### BOTTOM CAVITY PORT

All Models

#### PORT 90° LEFT

All Models except 55

#### MANIFOLD MOUNT

All Models

#### FLANGE MOUNT

Models 25, 75

#### PORT 90° RIGHT

All Models except 55

### MISCELLANEOUS OPTIONS—see page 76

#### SILVER SHADING RING

All Models

#### ALUMINUM SHADING RING

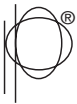
All Models

#### BUILT IN MUFFLER

All Models

#### UNIVERSAL MOUNTING BRACKET

Models 25, 35, 55



**PETER  
PAUL**

# SOLENOID VALVES . . .

## SERIES 20—MODEL 25

+MAX. OPER. PRESS. DIFF.		ORIFICE SIZE		CV FACTOR		GROMMET HOUSING		CONDUIT HOUSING		REPAIR PACK WT. 0.25
AC	DC	INLET	EXH.	INLET	EXH.	1/2 NPT PORTS	1/4 NPT PORTS	1/2 NPT PORTS	1/4 NPT PORTS	
500	500	1/32*	1/32	.024*	.024	25GG7XGV	25GG9ZGV	25GG7XCV	25GG9ZCV	K25GGX
235 (400)	235 (300)	3/64*	3/64	.052*	.052	25HH7XGV	25HH9ZGV	25HH7XCV	25HH9ZCV	K25HHX
200 (225)	200 (200)	1/16*	3/64	.095*	.052	25JH7XGV	25JH9ZGV	25JH7XCV	25JH9ZCV	K25JHX
150 (225)	150 (200)	1/16*	1/16	.095*	.095	25JJ7XGV ✓	25JJ9ZGV	25JJ7XCV	25JJ9ZCV	K25JJX
100 (150)	100 (125)	3/32*	3/32	.156*	.156	25KK7XGV	25KK9ZGV	25KK7XCV	25KK9ZCV	K25KKX
100 (125)	100	1/8*	3/32	.284*	.156	25NK7XGV	25NK9ZGV	25NK7XCV	25NK9ZCV	K25NKX
35 (40)	35 (40)	1/8*	1/8	.284*	.201	25NN7XGV	25NN9ZGV	25NN7XCV	25NN9ZCV	K25NNX

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



3-WAY DIRECTIONAL CONTROL GROMMET



3-WAY DIRECTIONAL CONTROL CONDUIT

## SERIES 30—MODEL 35

+MAX. OPER. PRESS. DIFF.		ORIFICE SIZE		CV FACTOR		GROMMET HOUSING		CONDUIT HOUSING		REPAIR PACK WT. 0.25
AC	DC	INLET	EXH.	INLET	EXH.	1/2 NPT PORTS	1/4 NPT PORTS	1/2 NPT PORTS	1/4 NPT PORTS	
300	300	1/32*	1/32	.024*	.024	35GG5XGV		35GG5XCV		K35GGX
175	175	3/64*	1/16	.052*	.095	35HJ5XGV ✓		35HJ5XCV		K35HJX
125	125	1/16*	1/16	.095*	.095	35JJ5XGV		35JJ5XCV		K35JJX
75	75	3/32*	3/32	.160*	.160	35KK5XGV		35KK5XCV		K35KKX
50	50	1/8*	3/32	.275*	.160	35NK5XGV		35NK5XCV		K35NKX



3-WAY DIRECTIONAL CONTROL GROMMET



3-WAY DIRECTIONAL CONTROL CONDUIT

## SERIES 50—MODEL 55

+MAX. OPER. PRESS. DIFF.		ORIFICE SIZE		CV FACTOR		GROMMET HOUSING		CONDUIT HOUSING		REPAIR PACK WT. 0.25
AC	DC	INLET	EXH.	INLET	EXH.	1/2 NPT PORTS	1/4 NPT PORTS	1/2 NPT PORTS	1/4 NPT PORTS	
300	200	1/32*	1/32	.022*	.020	55GG8XGB		55GG8XCB		K55GGX
200	100	3/64*	3/64	.055*	.048	55HH8XGB		55HH8XCB		K55HHX
100	50	1/16*	1/16	.075*	.075	55JJ8XGB ✓		55JJ8XCB		K55JJX
75	25	3/32*	1/16	.156*	.075	55KJ8XGB		55KJ8XCB		K55KJX
75	40	3/32*	3/32	.156*	.150	55KK8XGB		55KK8XCB		K55KKX
45	25	1/8*	3/32	.230*	.150	55NK8XGB		55NK8XCB		K55NKX



3-WAY DIRECTIONAL CONTROL GROMMET



3-WAY DIRECTIONAL CONTROL CONDUIT

## SERIES 70—MODEL 75

+MAX. OPER. PRESS. DIFF.		ORIFICE SIZE		CV FACTOR		GROMMET HOUSING		CONDUIT HOUSING		REPAIR PACK WT. 0.25
AC	DC	INLET	EXH.	INLET	EXH.	1/2 NPT PORTS	1/4 NPT PORTS	1/2 NPT PORTS	1/4 NPT PORTS	
350	350	1/16*	1/16	.09*	.09	75JJ9ZGV		75JJ9ZCV		K75JJX
250	250	3/32*	3/32	.22*	.22	75KK9ZGV		75KK9ZCV		K75KKX
175	175	1/8*	1/8	.35*	.35	75NN9ZGV		75NN9ZCV		K75NNX
125	125	5/32*	5/32	.45*	.45	75009ZGV ✓		75009ZCV		K7500X
100	100	3/16*	3/16	.50*	.50	75PP9ZGV		75PP9ZCV		K75PPX



3-WAY DIRECTIONAL CONTROL GROMMET



3-WAY DIRECTIONAL CONTROL CONDUIT

WHEN ORDERING VALVES OR REPAIR PACKS ADD VOLTAGE AND FREQUENCY TO COMPLETE VALVE NUMBER.  
EXAMPLES: VALVE (75KK9ZGV-120/60) REPAIR PACK (K75KKX-AC) See repair pack reference page 82

\*Normally closed orifice

†Ratings in brackets are optional extended ratings; consult factory

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