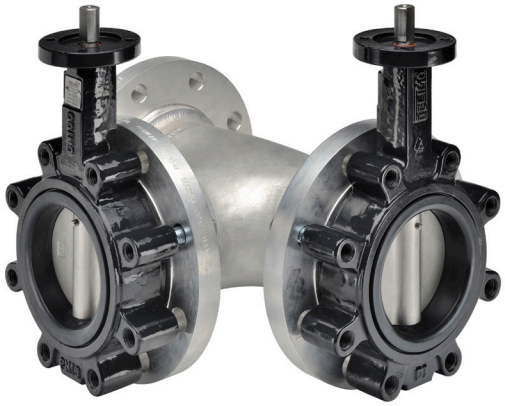
F7150HDU, 6”, 3-Way Butterfly Valve

Resilient Seat, 304 Stainless Steel Disc



Application

These valves are designed to meet the needs of HVAC and commercial applications requiring bubble tight shut-off for liquids. Typical applications include chiller insolation, cooling tower isolation, change-over systems, large air handler coil control, bypass and process control applications. The large Cv values provide for an economical control valve solution for larger flow applications.

Jobsite Note

Valve assembly should be stored in a weather protected area prior to installation. Reference the butterfly valve installation instruction for additional information.

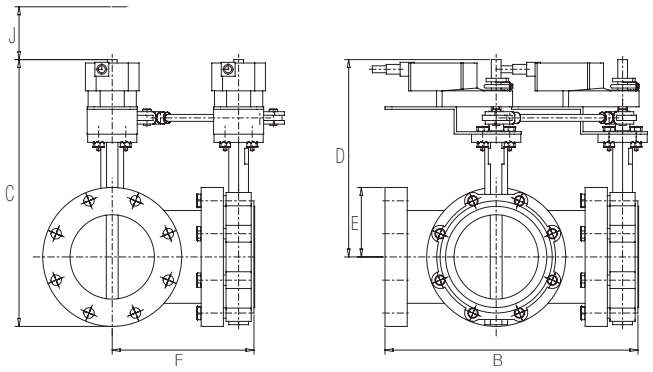
Technical Data	
Media	chilled, hot water, up to 60% glycol
Flow characteristic	modified linear
Controllable flow range	90° rotation
Valve Size	6 “ [150]
Type of End Fitting	for use with ANSI class 125/150 flanges
Housing	ductile iron ASTM A536
Surface treatment	epoxy powder coated
Seat	EPDM
Stem	416 stainless steel
Bearing	RPTFE
Disc	304 stainless steel
Body Pressure Rating	232 psi CWP
ANSI Class	Consistent with 125
Number of Bolt Holes	8
Lug threads	3/4-10 UNC
Close-Off Pressure	50 psi
Rangeability Sv	10:1 (for 30° to 70° range)
Maximum Velocity	12 FPS
Cv	1579
Weight	140 lb [62 kg]
Leakage rate	0%
Maintenance	maintenance free

Flow/Cv								
Cv 10°	Cv 20°	Cv 30°	Cv 40°	Cv 50°	Cv 60°	Cv 70°	Cv 80°	Cv 90°
0.8	45	95	205	366	605	958	1437	1579

Suitable Actuators

	Non-Spring
F7150HDU	2*GMB(X)

Dimensions (Inches [mm])

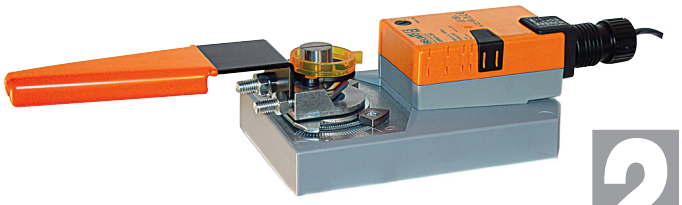


2*GK, 2*GM

A	B	C	D	E	F	J
24.30” [515]	18.25” [463]	20.6” [523.2]	15.00” [381]	5.5” [140]	10.25” [260]	7.8” [198]

2*GMX24-MFT-X1

Modulating, Non-Spring Return, 24 V, Multi-Function Technology®



2 YEAR WARRANTY

Technical Data	
Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%
Power consumption in operation	15 W
Power consumption in rest position	4 W
Transformer sizing	14 VA (class 2 power source)
Electrical Connection	3ft [1m], 10ft [3m] or 16ft [5m] 18 GA appliance cables, with 1/2" conduit connector
Overload Protection	electronic throughout 0° to 95° rotation
Operating Range	DC 2...10 V (default), 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off)
Operating range Y variable	starting point DC 0.5...30 V end point DC 2.5...32 V
Input Impedance	100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and On/Off
Position Feedback	DC 2...10 V, Max. 0.5 mA, VDC variable
Angle of rotation	Max. 95°, adjustable with mechanical stop
direction of rotation motor	reversible with built-in switch
Position indication	reflective visual indicator (snap on)
Manual override	external push button
Running time motor	150 sec, constant, independent of load
Ambient humidity	5 to 95% RH non condensing (EN 60730-1)
Ambient temperature	-22...122 °F [-30...50 °C]
Non-operating temperature	-40...176 °F [-40...80 °C]
Degree of Protection	IP54, NEMA 2
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC
Noise level, motor	<45 dB (A)
Maintenance	maintenance free
Quality Standard	ISO 9001
Weight	9.9 lb [4.5 kg]

†Rated Impulse Voltage 800V, Type action 1, Control Pollution Degree 3.

Wiring Diagrams

INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.

1 Provide overload protection and disconnect as required.

3 Actuators may also be powered by 24 VDC.

5 Only connect common to negative (-) leg of control circuits.

7 A 500 Ω resistor (ZG-R01) converts the 4 to 20 mA control signal to 2 to 10 VDC.

8 Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line.

10 For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.

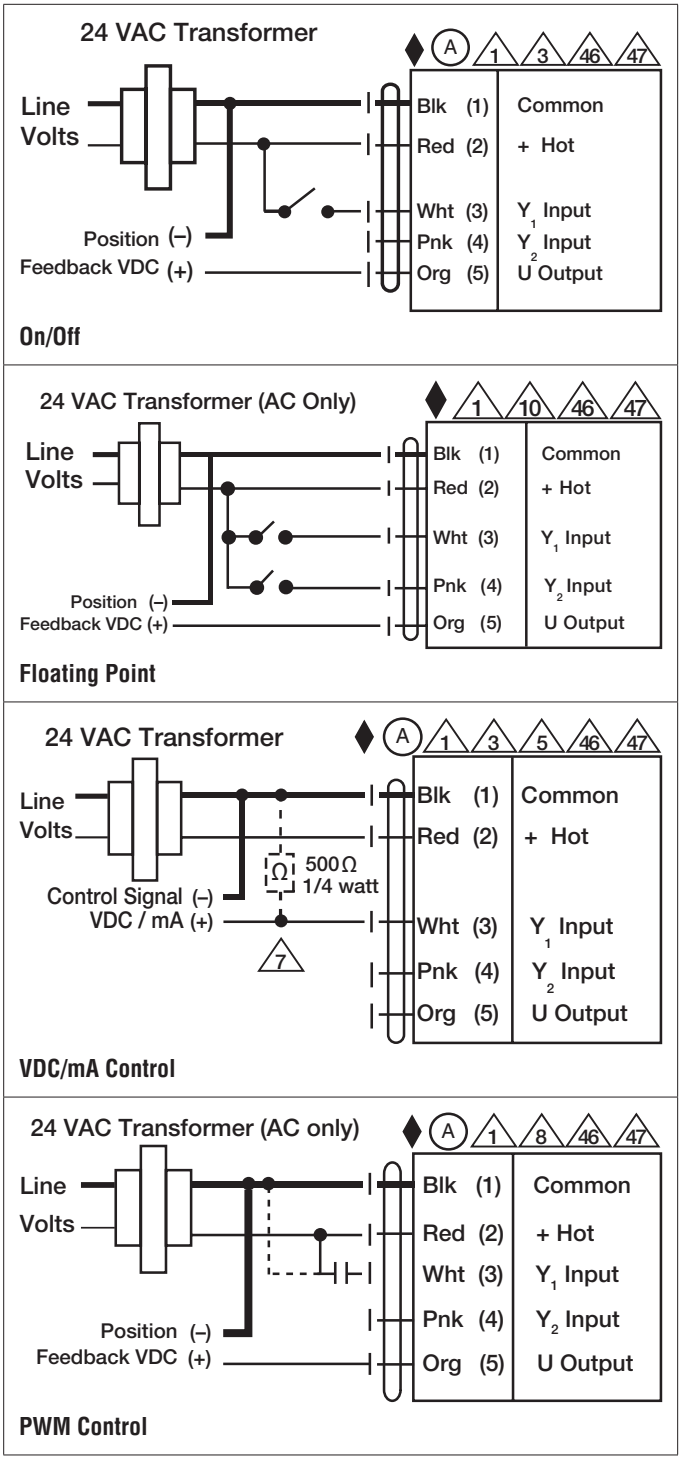
46 Actuators may be controlled in parallel. Current draw and input impedance must be observed.

47 Master-Slave wiring required for piggy-back applications. Feedback from Master to control input(s) of Slave(s).

◆ Meets cULus requirements without the need of an electrical ground connection.

WARNING! LIVE ELECTRICAL COMPONENTS!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



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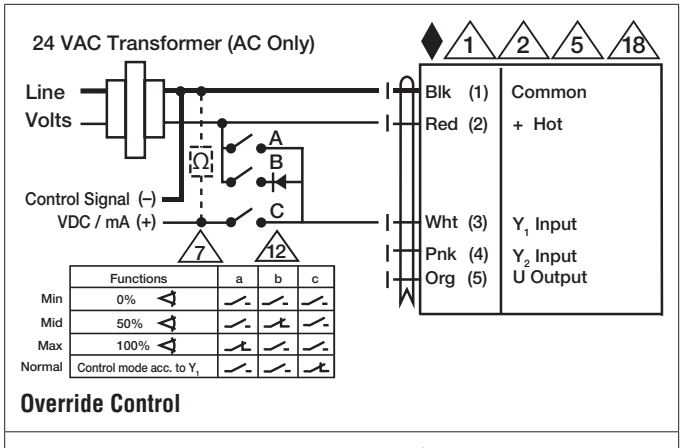
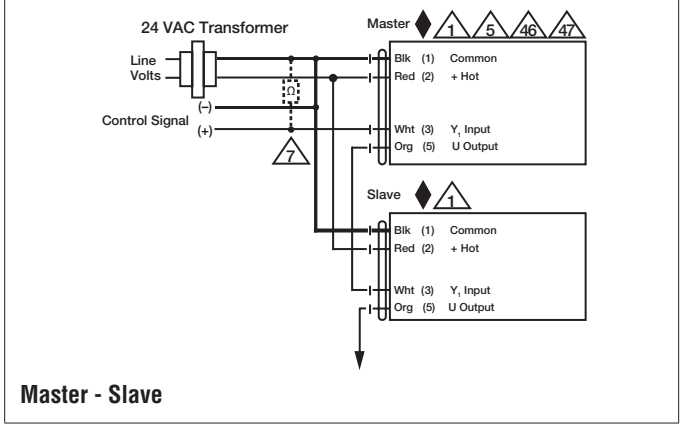


Override Control



Master - Slave