





Type overview		
Туре		DN
F7125HDU		125
Technical data		
Functional	data Valve size [mm]	5" [125]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	-22250°F [-30120°C]
	Body Pressure Rating	ANSI Class Consistent with 125, 232 psi CWP
	Close-off pressure Δps	50 psi
	Flow characteristic	modified linear
	Servicing	maintenance-free
	Rangeability Sv	10:1 (for 3070° range)
	Flow Pattern	3-way Mixing/Diverting
	Leakage rate	0%
	Controllable flow range	90° rotation
	Cv	1022
	Maximum Velocity	12 FPS
	Lug threads	3/4-10 UNC
Mate	erials Valve body	Ductile cast iron ASTM A536
	Body finish	epoxy powder coating (blue RAL 5002)
	Spindle	416 stainless steel
	Seat	EPDM
	Pipe connection	for use with ANSI class 125/150 flanges
	Bearing	RPTFE

Di	me	nci	ior	
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Туре	DN	Weight	
F7125HDU	125	112.5 lb [51 kg]	

304 stainless steel

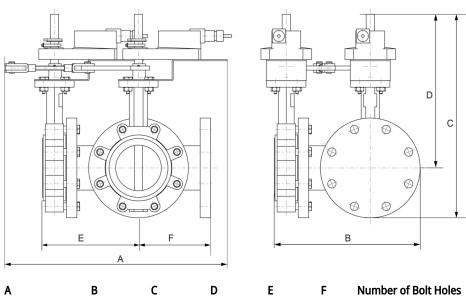
(2*GMB(X))

Disc

Non-Spring

Suitable actuators





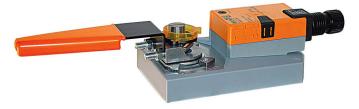
Valve with GM actuator

Α	В	С	D	E	F	Number of Bolt Holes
16.6" [422]	14.9" [379]	18.4" [467]	13.9" [354]	9.8" [248]	7.5" [191]	8

Technical data







Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
	Power consumption in operation	15 W
	Power consumption in rest position	4 W
	Transformer sizing	12 VA
	Electrical Connection	18 GA appliance cables, 3 ft [1 m], 10 ft [3 m] or 16ft [5 m], with 1/2" conduit connector
	Overload Protection	electronic throughout 095° rotation
Functional data	Operating range Y	210 V
	Operating range Y note	420 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)
	Input Impedance	100 k Ω for 210 V (0.1 mA), 500 Ω for 420 mA, 1500 Ω for PWM, On/Off and Floating poin
	Operating range Y variable	Start point 0.530 V
		End point 2.532 V
	Operating modes optional	variable (VDC, on/off, floating point)
	Position feedback U	210 V
	Position feedback U note	Max. 0.5 mA
	Position feedback U variable	VDC variable
	Direction of motion motor	selectable with switch 0/1
	Manual override	external push button
	Angle of rotation	Max. 95°
	Angle of rotation note	adjustable with mechanical stop
	Running Time (Motor)	150 s / 90°
	Running time motor note	constant, independent of load
	Running time motor variable	75290 s
	Noise level, motor	45 dB(A)
	Position indication	Mechanically, 3065 mm stroke
Safety data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02
		CE acc. to 2014/30/EU and 2014/35/EU
	UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
	Quality Standard	ISO 9001
	Ambient temperature	-22122°F [-3050°C]
		-22122 F [-3050 C] -40176°F [-4080°C]
	Storage temperature Ambient humidity	Max. 95% RH, non-condensing
	Servicing	maintenance-free
Weight	Weight	9.92 lb [4.5 kg]
Weight	neight	א כיבן מו זכי.כ





Materials Housing material Galvanized steel and plastic housing

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

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Δ	CCACC	ories
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Gateways	Description	Туре
	Gateway MP to BACnet MS/TP	UK24BAC
	Gateway MP to Modbus RTU	UK24MOD
	Gateway MP to LonWorks	UK24LON
Electrical accessories	Description	Туре
	Battery backup system, for non-spring return models	NSV24 US
	Battery, 12 V, 1.2 Ah (two required)	NSV-BAT
	Auxiliary switch 1 x SPDT add-on	S1A
	Auxiliary switch 2 x SPDT add-on	S2A
	Feedback potentiometer 140 Ω add-on, grey	P140A GR
	Feedback potentiometer 1 k Ω add-on, grey	P1000A GR
	Feedback potentiometer 10 kΩ add-on, grey	P10000A GR
	Feedback potentiometer 2.8 kΩ add-on, grey	P2800A GR
	Feedback potentiometer 500 Ω add-on, grey	P500A GR
	Feedback potentiometer 5 k Ω add-on, grey	P5000A GR
Service tools	Description	Туре
	Connection cable 10 ft [3 m], A: RJ11 6/4 ZTH EU, B: 3-pin Weidmüller and supply connection	ZK4-GEN
	Service Tool, with ZIP-USB function, for programmable and communicative Belimo actuators, VAV controller and HVAC performance devices	ZTH US

Electrical installation



Actuators with appliance cables are numbered.

A Provide overload protection and disconnect as required.

Actuators may also be powered by DC 24 V.

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

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

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

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

connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.

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

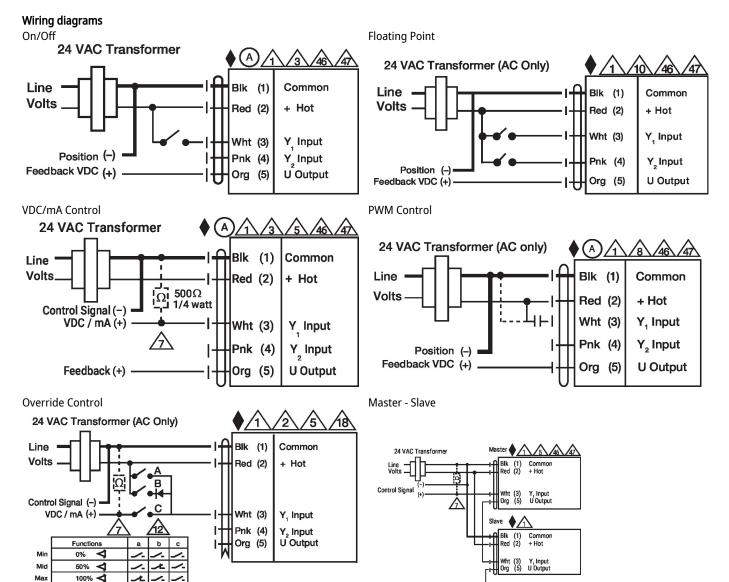
Amount Master-Slave wiring required for piggy-back applications. Feedback from Master to control input(s) of Slave(s).

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.





Control mode acc. to Y,