



5-year warranty

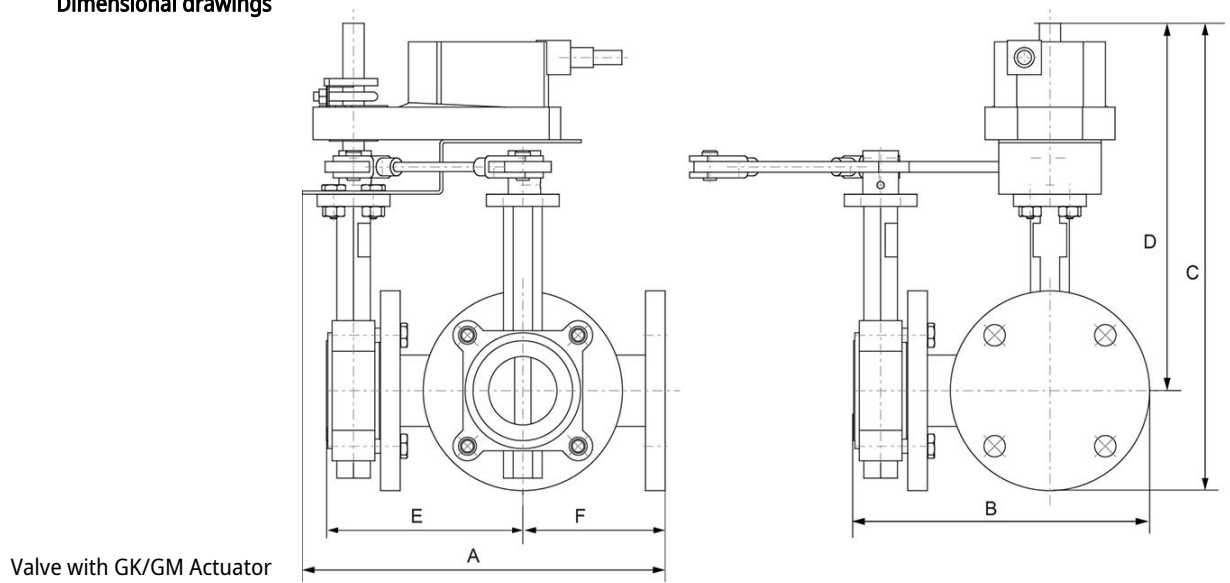


Technical data

<b>Functional data</b>	Valve Size	3" [80]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	-22...250°F [-30...120°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 30...70° range)
	Flow Pattern	3-way Mixing/Diverting
	Leakage rate	0%
	Controllable flow range	90° rotation
	Cv	302
	Maximum Velocity	12 FPS
	Lug threads	5/8-11 UNC
<b>Materials</b>	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
	Disc	304 stainless steel
<b>Suitable actuators</b>	Non-Spring	GMB(X)

Dimensions

Dimensional drawings



Type

DN

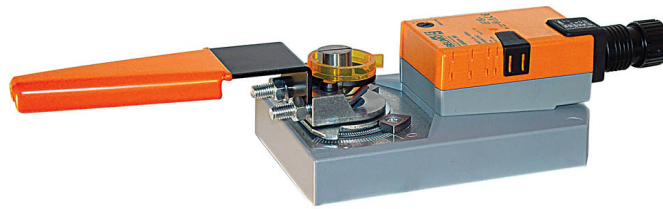
Weight [kg]  
[kg]

F780HDU

80

23

A	B	C	D	E	F	Number of Bolt Holes
13.4" [340]	11.2" [284]	16.8" [426]	13.1" [334]	7.4" [187]	5.5" [140]	4



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Technical data

<b>Electrical data</b>	Nominal voltage	AC 100...240 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	6 W
	Power consumption in rest position	2 W
	Electrical Connection	1/2" conduit connector, screw terminals
	Overload Protection	electronic throughout 0...95° rotation
<b>Functional data</b>	Input Impedance	500 Ω
	Position feedback U	2...10 V
	Position feedback U note	Max. 0.5 mA
	Direction of motion motor	selectable with switch 0/1
	Manual override	external push button
	Angle of rotation	90°, adjustable with mechanical stop
	Angle of rotation note	adjustable with mechanical stop
	Running Time (Motor)	35 s, constant, independent of load
	Running time motor note	constant, independent of load
	Noise level, motor	60 dB(A)
Position indication	Mechanically, pluggable	
<b>Safety data</b>	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; Listed to UL 2043 - suitable for use in air plenums per Section 300.22(c) of the NEC and Section 602.2 of the IMC
	Quality Standard	ISO 9001
	Ambient temperature	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
	Ambient humidity	Max. 95% RH, non-condensing
	Servicing	maintenance-free
	<b>Weight</b>	Weight
<b>Materials</b>	Housing material	UL94-5VA

Product features

**Mode of operation** SY9~12 Replacement Handwheel

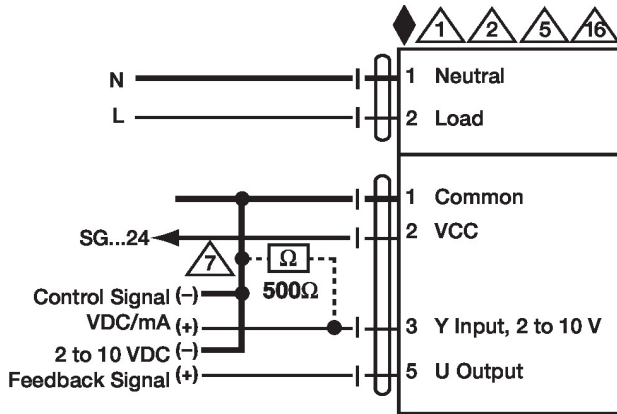
Electrical installation



- Provide overload protection and disconnect as required.
- Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- Only connect common to negative (-) leg of control circuits.
- Actuators are provided with a numbered screw terminal strip instead of a cable.
- 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.

**Wiring diagrams**

2...10 V / 4...20 mA Control AC 100...240 V



**Dimensions**