# Date created, 12/06/2017 - Subject to change. © Belimo Aircontrols (USA), Inc.

# F6125HDU, 5", 2-Way Butterfly Valve Resilient Seat, 304 Stainless Steel Disc

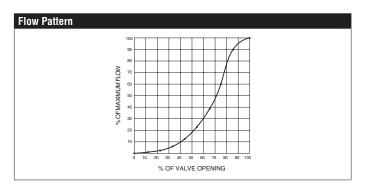








Technical DataServicechilled, hot water, up to 60% glycolFlow Characteristicmodified equal percentageControllable Flow Range90° rotationSize [mm]5" [125]End Fittingfor use with ansi class 125/150 flangesBodyductile iron ASTM A536Body Finishepoxy powder coatedStem PackingEPDM (lubricated)SeatEPDMShaft416 stainless steelBushingsRPTFEDisc304 stainless steelBody Pressure Rating [psi]ANSI 125, standard class BNumber of Bolt Holes8Lug Threads3/4-10 UNCMedia Temperature Range (Water)-22°F to 250°F [-30°C to 120°C]Close-Off Pressure50 psiRangeability10:1 (for 30° to 70° range)Maximum Velocity12 FPSCv1022Weight19 lb [8.6 kg]Leakage0%		
Flow Characteristic modified equal percentage  Controllable Flow Range 90° rotation  Size [mm] 5" [125]  End Fitting for use with ansi class 125/150 flanges  Body ductile iron ASTM A536  Body Finish epoxy powder coated  Stem Packing EPDM (lubricated)  Seat EPDM  Shaft 416 stainless steel  Bushings RPTFE  Disc 304 stainless steel  Body Pressure Rating [psi] ANSI 125, standard class B  Number of Bolt Holes 8  Lug Threads 3/4-10 UNC  Media Temperature Range (Water)  Close-Off Pressure 50 psi  Rangeability 10:1 (for 30° to 70° range)  Maximum Velocity 12 FPS  Cv 1022  Weight 19 lb [8.6 kg]	Technical Data	
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Shaft 416 stainless steel  Bushings RPTFE  Disc 304 stainless steel  Body Pressure Rating [psi] ANSI 125, standard class B  Number of Bolt Holes 8  Lug Threads 3/4-10 UNC  Media Temperature Range (Water)  Close-Off Pressure 50 psi  Rangeability 10:1 (for 30° to 70° range)  Maximum Velocity 12 FPS  Cv 1022  Weight 19 lb [8.6 kg]	Stem Packing	EPDM (lubricated)
Bushings RPTFE  Disc 304 stainless steel  Body Pressure Rating [psi] ANSI 125, standard class B  Number of Bolt Holes 8  Lug Threads 3/4-10 UNC  Media Temperature Range (Water)  Close-Off Pressure 50 psi  Rangeability 10:1 (for 30° to 70° range)  Maximum Velocity 12 FPS  Cv 1022  Weight 19 lb [8.6 kg]	Seat	EPDM
Disc 304 stainless steel  Body Pressure Rating [psi] ANSI 125, standard class B  Number of Bolt Holes 8  Lug Threads 3/4-10 UNC  Media Temperature Range (Water)  Close-Off Pressure 50 psi  Rangeability 10:1 (for 30° to 70° range)  Maximum Velocity 12 FPS  Cv 1022  Weight 19 lb [8.6 kg]	Shaft	416 stainless steel
Body Pressure Rating [psi] ANSI 125, standard class B  Number of Bolt Holes 8  Lug Threads 3/4-10 UNC  Media Temperature Range (Water)  Close-Off Pressure 50 psi  Rangeability 10:1 (for 30° to 70° range)  Maximum Velocity 12 FPS  Cv 1022  Weight 19 lb [8.6 kg]	Bushings	RPTFE
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Lug Threads  Media Temperature Range (Water)  Close-Off Pressure  Rangeability  Maximum Velocity  Cv  19 lb [8.6 kg]	Body Pressure Rating [psi]	ANSI 125, standard class B
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Maximum Velocity         12 FPS           Cv         1022           Weight         19 lb [8.6 kg]	Close-Off Pressure	50 psi
Cv         1022           Weight         19 lb [8.6 kg]	Rangeability	10:1 (for 30° to 70° range)
Weight 19 lb [8.6 kg]	Maximum Velocity	12 FPS
	Cv	1022
Leakage 0%	Weight	19 lb [8.6 kg]
	Leakage	0%
Servicing maintenance free	Servicing	maintenance free



# **Application**

Valve is designed for use in ANSI flanged piping systems to meet the needs of bi-directional high flow HVAC hydronic applications with 0% leakage. Typical applications include cooling tower bypass, primary flow change-over systems, and large air handler coil control.

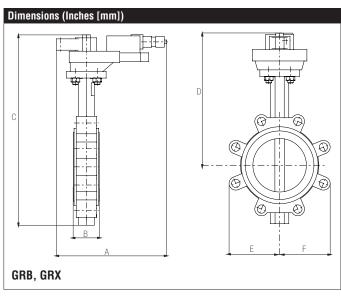
## **Jobsite Note**

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

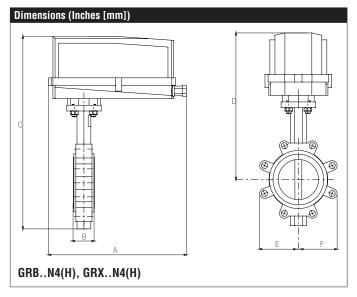
Flow/C	v							
Cv 10°	Cv 20°	Cv 30°	Cv 40°	Cv 50°	Cv 60°	Cv 70°	Cv 80°	Cv 90°
0.5	29	61	133	237	392	620	930	1022

**Suitable Actuators** 

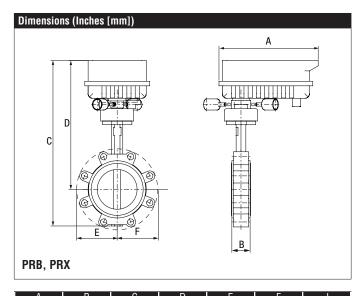
Gartabio riotalatoro					
	Non-Spring				
F6125HDU	GRB(X), PRB(X)				



Α	В	С	D	Е	F
15.51"	2.21" [56.1]	11.8" [300]	11.81"	4.48"	[114]
[394]			[300]		



Α	В	С	D	E	F
14.1" [358]	2.21" [56.1]	19.57"	15.00"	4.48"	[114]
		[497]	[381]		



A	l R	l l	U	E	Г	J
11.95"	2.21"	19.93"	15.52"	4.48"	[114]	30.87"
[303.5]	[56.1]	[506.2]	[394.2]			[784]

# **GRX24-3**On/Off Floating Point, Non-Spring Return, 24 V





	REG. EQUIP.
Technical Data	
Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%
Power Consumption Running	4 W
Power Consumption Holding	2 W
Transformer Sizing	6 VA (class 2 power source)
Electrical Connection	3ft [1m], 18 GA plenum rated cable with 1/2" conduit connector protected NEMA 2 (IP54)
Overload Protection	electronic throughout 0° to 95° rotation
Operating Range Y	on/off, floating point
Input Impedance	600 Ω
Angle of Rotation	90°, 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
Ambient Temperature Range	-22°F to 122°F [-30°C to 50°C]
Storage Temperature Range	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2, IP54, UL Enclosure Type 2
Housing Material	UL94-5VA
Agency Listings†	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)
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	3.4 lbs [1.55 kg]
Degree of Protection IEC/EN	IP54



### Wiring Diagrams



# X INSTALLATION NOTES



Actuators with appliance cables are numbered.



Provide overload protection and disconnect as required.



Actuators may be connected in parallel. Power consumption and input impedance must be observed.



Actuators may also be powered by 24 VDC.



Actuators Hot wire must be connected to the control board common. Only connect common to neg. (-) leg of control circuits. Terminal models (-T) have no-feedback.



Actuators with plenum cable do not have numbers; use color codes



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.

