ELIMO

B3 Series, 3-Way, Characterized Control Valve Chrome Plated Brass Ball and Brass Stem







Service chilled or hot water, 60% glycol Flow characteristic A-port equal percentage B-port modified for constant common port flow Controllable Flow Range 75° Sizes ½", ¾" Type of end fitting NPT female ends Materials: Body Body forged brass, nickel plated Ball chrome plated brass Stem nickel plated brass Seats PTFE Characterizing disc Tefzel® Packing 2 EPDM 0-rings, lubricated Body pressure rating 600 psi Media temp. range 0°F to 250°F [-18°C to 120°C] Close off pressure 200 psi Maximum differential pressure (ΔP) 50 psi for typical applications Leakage 0% for A to AB <2.0% for B to AB External leakage according to EN 12266-1:2003 C _V rating A-port: see product chart for values		
Flow characteristic A-port equal percentage B-port modified for constant common port flow Controllable Flow Range 75° Sizes ½", ¾" Type of end fitting NPT female ends Materials: Body Ball chrome plated brass Stem nickel plated brass Stem Seats PTFE Characterizing disc Packing Packing Body pressure rating 600 psi Media temp. range O°F to 250°F [-18°C to 120°C] Close off pressure Maximum differential pressure (ΔP) Leakage 0% for A to AB <2.0% for B to AB External leakage according to EN 12266-1:2003 A-port: see product chart for values	Technical Data	
B-port modified for constant common port flow Controllable Flow Range 75° Sizes ½", ¾" Type of end fitting NPT female ends Materials: Body Ball Chrome plated brass Stem Inckel plated brass Seats PTFE Characterizing disc Packing Packing Foresure rating Foresure	Service	chilled or hot water, 60% glycol
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Controllable Flow Range Sizes 75° Sizes 7ye of end fitting NPT female ends Materials: Body Ball Chrome plated brass Stem nickel plated brass Seats PTFE Characterizing disc Packing Packing Characterizing Seds PTFE Characterizing Chrome plated brass NPTFE Characterizing Chrome plate		B-port modified for constant common port
Sizes ½", ¾" Type of end fitting NPT female ends Materials: Body Ball chrome plated brass Stem nickel plated brass Seats PTFE Characterizing disc Tefzel® Packing 2 EPDM 0-rings, lubricated Body pressure rating 600 psi Media temp. range 0°F to 250°F [-18°C to 120°C] Close off pressure 200 psi Maximum differential pressure (ΔP) 50 psi for typical applications Leakage 0% for A to AB <2.0% for B to AB		flow
Type of end fitting Materials: Body Ball Chrome plated brass Stem Seats PTFE Characterizing disc Packing Body pressure rating Media temp. range Close off pressure Maximum differential pressure (ΔP) Leakage Cy rating NPT female ends forged brass, nickel plated brass PTFE Tefzel® 2 EPDM 0-rings, lubricated 800 psi Mo-rings, lubricated Sop psi F-18°C to 120°C] Close off pressure 200 psi Maximum differential pressure (ΔP) Leakage O% for A to AB <2.0% for B to AB External leakage according to EN 12266-1:2003 A-port: see product chart for values	Controllable Flow Range	75°
Materials: Body forged brass, nickel plated Ball chrome plated brass Stem nickel plated brass Seats PTFE Characterizing disc Tefzel® Packing 2 EPDM 0-rings, lubricated Body pressure rating 600 psi Media temp. range 0°F to 250°F [-18°C to 120°C] Close off pressure 200 psi Maximum differential pressure (ΔP) 50 psi for typical applications Leakage 0% for A to AB <2.0% for B to AB	Sizes	1/2", 3/4"
Body Ball chrome plated brass Stem nickel plated brass Seats PTFE Characterizing disc Packing 2 EPDM 0-rings, lubricated Body pressure rating 600 psi Media temp. range 0°F to 250°F [-18°C to 120°C] Close off pressure 200 psi Maximum differential pressure (ΔP) Leakage 0% for A to AB <2.0% for B to AB External leakage according to EN 12266-1:2003 C _V rating A-port: see product chart for values	Type of end fitting	NPT female ends
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Close off pressure 200 psi Maximum differential pressure (ΔP) 50 psi for typical applications Leakage 0% for A to AB <2.0% for B to AB	Body pressure rating	600 psi
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<2.0% for B to AB External leakage according to EN 12266-1:2003 C _V rating A-port: see product chart for values	pressure (∆P)	
External leakage according to EN 12266-1:2003 C _V rating A-port: see product chart for values	Leakage	0% for A to AB
C _v rating A-port: see product chart for values		<2.0% for B to AB
	External leakage	according to EN 12266-1:2003
I= 1	C _v rating	A-port: see product chart for values
B-port: 70% of A to AB C _v		B-port: 70% of A to AB C _v

Tefzel® is a registered trademark of DuPont

Dimensions OCEST-LOSSI-ANIENTEN A A

	Valve Nor	ninal Size	Dimensions (Inches [mm])			
Valve Body	Inches	DN [mm]	Α	В	С	
B307B-B311B	1/2"	15	2.41" [61.1]	1.39" [35.2]	1.20" [30.6]	
B312B-B316B	1/2"	15	2.38" [60.4]	1.78" [45.2]	1.29" [32.8]	
B317B-B321B	3/4"	20	2.73" [69.3]	1.87" [47.4]	1.47" [37.3]	

Flow Patter	'no				
FIUW Faller	119				
A	Three-way Mixing	"B" Por be piped bypass	to the	Three-way Divert	AB
Characterizi Disc (where applica	ible)	Port Disc All 3-way models)	Characterizi Disc (where applic	<u> </u>	B Port Disc (All 3-way models)

Application

This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable or constant flow.

* (Not for use in change over applications)

	Valve Nominal Size		Type	Suitable Actuators			S
Cv	Inches DN [m		3-way NPT Non-Sprir		Spring	ig Spring	
0.3	1/2	15	B307B				
0.46	1/2	15	B308B				
8.0	1/2	15	B309B				
1.2	1/2	15	B310B				
1.9	1/2	15	B311B				
3	1/2	15	B312B			Series	ies
4.7	1/2	15	B313B			Ser	LF Series
10	1/2	15	B315B		4	E	造
16	1/2	15	B316B				
4.7	3/4	20	B317B				
7.4	3/4	20	B318B				
14	3/4	20	B320B				
24	3/4	20	B321B				

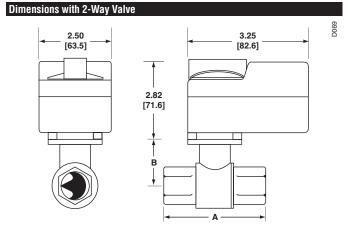
^{*}Models without characterizing disc











	Valve Nominal Size		Dimensions (Inches [mm])
Valve Body	Inches	DN [mm]	Α	В
B207(B)-B211(B)	1/2"	15	2.41" [61.1]	1.39" [35.2]
B212(B)-B215(B)	1/2"	15	2.38" [60.4]	1.78" [45.2]
B217(B)-B221(B)	3/4"	20	2.73" [69.3]	1.87" [47.4]

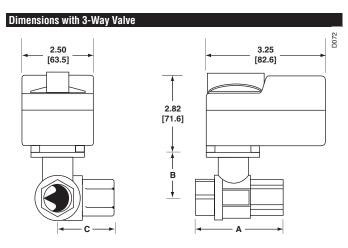
Models TR24-SR-T US

TR24-SR US TR24-SR/300 US TR24-SR/500 US TR24-SR-T US with 3 ft plenum rated cable TR24-SR-T US with 10 ft plenum rated cable TR24-SR-T US with 16 ft plenum rated cable

Technical Data	
Control	proportional
Nominal voltage	24 VAC 50/60 Hz, 24 VDC
Nominal voltage range	19.228.8 VAC, 21.628.8 VDC
Power consumption	0.5 W
Transformer sizing	1VA (class 2 power source)
Electrical connection	screw terminals accessible after removal of small cover (3 ft, 10 ft, 16 ft cables optional)
Input impedance	100 kΩ
Angle of rotation	90°
Direction of rotation	reversible with switch under cover
Position indication	integrated into handle
Manual override	push down handle
Running time	90 seconds
Humidity	5 to 95% non-condensing
Ambient temperature	-22°F to 122°F (-30°C to 50°C)
Storage temperature	-40°F to 176°F (-40°C to 80°C)
Housing	NEMA 1/IP40
Housing rating	UL94-5V(B)
Agency listing†	cULus according to UL 60730-1A/-2-14, CAN/ CSA E60730-1:02, CE according to 2004/108/ EC and 2006/95/EC for line voltage and/or –S versions
Noise level	max. 35 db (A)
Quality standard	ISO 9001

† Rated impulse voltage 500V, Control pollution degree 2, Type of action 1

NOTE: Response sensitivity is 75mV



Valve Nominal Size		Dimen	[mm])	
Inches	DN [mm]	Α	В	C
1/2"	15	2.41" [61.1]	1.39" [35.2]	1.20" [30.6]
1/2"	15	2.38" [60.4]	1.78" [45.2]	1.29" [32.8]
3/4"	20	2.73" [69.3]	1.87" [47.4]	1.47" [37.3]
	1/2" 1/2"	Inches DN [mm] 15 15 15	Inches DN [mm] A ½" 15 2.41" [61.1] ½" 15 2.38" [60.4]	Inches DN [mm] A B ½" 15 2.41" [61.1] 1.39" [35.2] ½" 15 2.38" [60.4] 1.78" [45.2]



TR24-SR Actuators, Proportional

Wiring Diagrams



X INSTALLATION NOTES



Actuators with color coded wires are optional. Wire numbers are provided for reference.

CAUTION Equipment damage!

Actuators may be connected in parallel.

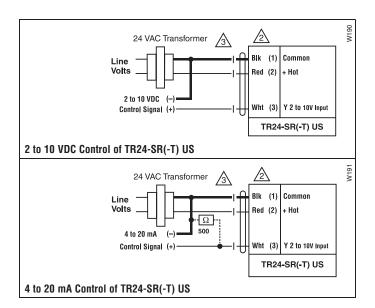
Power consumption and input impedance must be observed.



Actuators may also be powered by 24 VDC.

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.



Direct/Reverse acting switch is under wiring cover.

R = CW with decrease in signal

L = CCW with decrease in signal

No feedback