

3-way Mixing/Diverting, Characterized Control Valve, Chrome Plated Brass Ball and Nickel Plated Brass Stem



5-year warranty



Type overview

Type	DN
B318B	20

Technical data

Functional data	Valve size [mm]	0.75" [20]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	0...250°F [-18...120°C]
	Body Pressure Rating	600 psi
	Close-off pressure Δ ps	200 psi
	Flow	A-port: as stated in chart B-port: 70% of A – AB Cv
	Flow characteristic	A-port equal percentage, B-port modified for constant common port flow
	Leakage rate	0% for A – AB, <2.0% for B – AB
	Pipe connection	Internal thread NPT (female)
	Servicing	maintenance-free
	Flow Pattern	3-way Mixing/Diverting
	Controllable flow range	75°
	Cv	7.4
	Materials	Valve body
Stem		nickel-plated brass
Stem seal		EPDM (lubricated)
Seat		PTFE
Characterized disc		TEFZEL®
O-ring		EPDM (lubricated)
Ball		chrome plated brass
Suitable actuators	Non Fail-Safe	TR LRB(X)
	Spring	TFRB(X) LF

Safety notes



- **WARNING:** This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

Product features

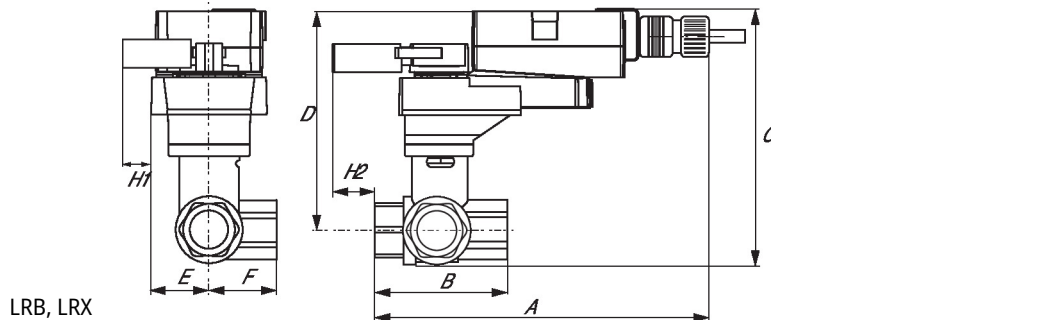
Application This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable or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

Flow/Mounting details

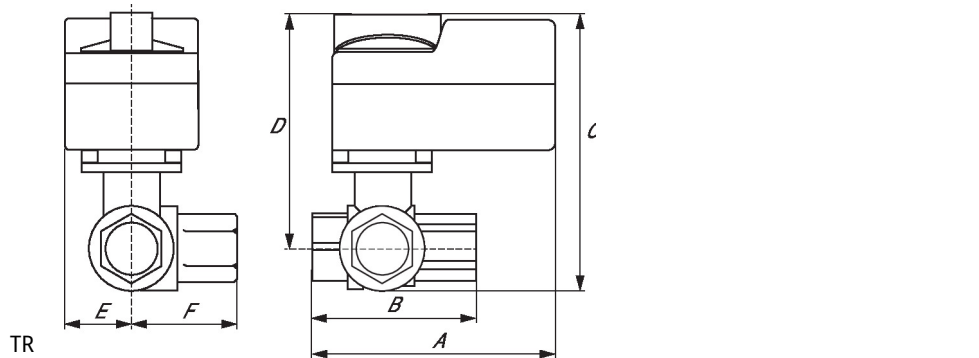


Dimensions

Type	DN	Weight
B318B	20	0.87 lb [0.40 kg]

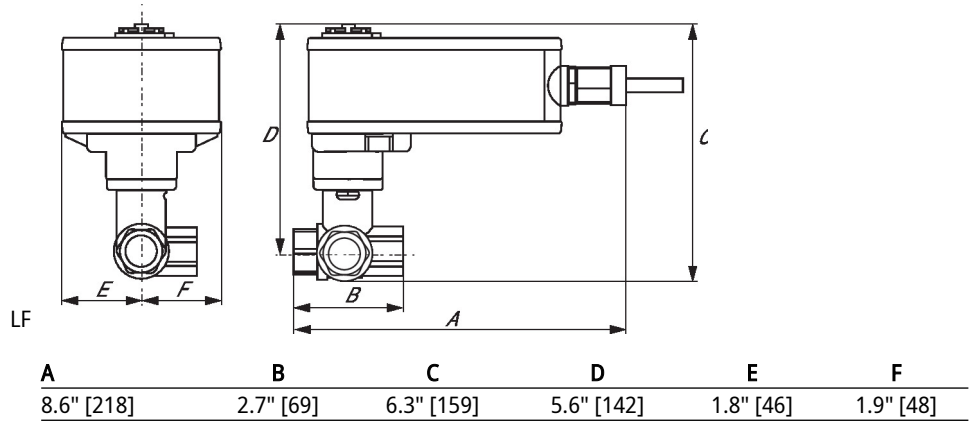
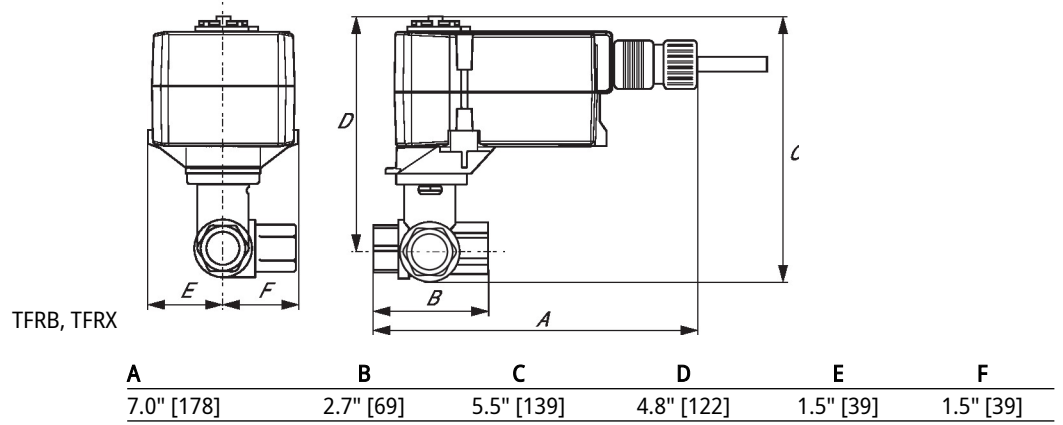


A	B	C	D	E	F	H1	H2
8.5" [216]	2.7" [69]	5.8" [147]	5.1" [129]	1.3" [33]	1.5" [39]	1.2" [30]	1" [25]



A	B	C	D	E	F
4.0" [102]	2.7" [69]	5.39" [137]	4.7" [120]	1.3" [33]	1.5" [39]

Dimensions



On/Off, Non fail-safe, 24 V



5-year warranty


Technical data

Electrical data	Nominal voltage	AC 24 V	
	Nominal voltage frequency	50/60 Hz	
	Nominal voltage range	AC 19.2...28.8 V	
	Power consumption in operation	1 W	
	Transformer sizing	1 VA	
	Electrical Connection	Plenum cable 18 GA, 10 ft [3 m]	
	Overload Protection	electronic throughout full rotation	
	Functional data	Manual override	push down handle
Angle of rotation		90°	
Running Time (Motor)		90 s / 90°	
Noise level, motor		35 dB(A)	
Position indication		integrated into handle	
Safety data		Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP40	
	Degree of protection NEMA/UL	NEMA 1	
	Enclosure	UL Enclosure Type 1	
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU	
	Quality Standard	ISO 9001	
	UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC	
	Ambient humidity	Max. 95% RH, non-condensing	
	Ambient temperature	-22...122°F [-30...50°C]	
	Storage temperature	-40...176°F [-40...80°C]	
	Servicing	maintenance-free	
	Weight	Weight	0.69 lb [0.31 kg]

Electrical installation
INSTALLATION NOTES

- Provide overload protection and disconnect as required.
- Actuators cannot be wired in parallel.
- Actuators with plenum cable do not have numbers; use color codes instead.

Electrical installation

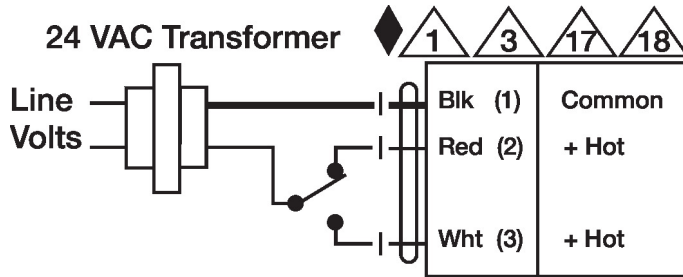
◆ Meets cULus requirements without the need of an electrical ground connection.

⚠ **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

On/Off



Floating Point

