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B3 Series, Three Way, Characterized Control Valve Stainless Steel Ball and Stem









Technical Data				
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	1/2", 3/4", 1", 11/4", 11/2", 2"			
Type of end fitting	NPT female ends			
Materials:				
Body	forged brass, nickel plated			
Ball	stainless steel			
Stem	stainless steel			
Seats	PTFE			
Characterizing disc	Tefzel®			
Packing	2 EPDM O-rings, lubricated			
Body pressure rating				
600 psi	1/2" - 1"			
400 psi	11/4" - 2"			
Media temp. range	0°F to 250°F [-18°C to 120°C]			
Close off pressure				
200 psi	1/2" - 2"			
Maximum differential	50 psi for typical applications			
pressure (∆P)				
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			
-	B-port: 70% of A to AB Cv			

Tefzel[©] is a registered trademark of DuPont

Dimensions OZESZ-LOSG-AMBIANNIS

Valve Nominal Size			ninal Size	Dimensions (Inches [mm])					
	Valve Body	e Body Inches D		Α	В	C			
	B307-B311	1/2"	15	2.41" [61.1]	1.39" [35.2]	1.20" [30.6]			
	B312-B316	1/2"	15	2.38" [60.4]	1.78" [45.2]	1.29" [32.8]			
	B317-B321	3/4"	20	2.73" [69.3]	1.87" [47.4]	1.47" [37.3]			
	B322-B325	1"	25	3.09" [78.4]	1.87" [47.4]	1.59" [40.3]			
	B329-B331	1 1/4"	32	3.96" [100.6]	2.27" [57.7]	2.14" [54.3]			
	B338-B341	1½"	40	4.39" [111.6]	2.51" [63.7]	2.40" [61.1]			
	B347-B352	2"	50	4.90" [124.5]	2.73" [69.5]	2.74" [69.7]			

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 Nor	Туре	Suitable Actuators						
Cv	Inches	DN [mm]	3-Way NPT	No	n-Spr	ing	,	Spring	
0.3	1/2	15	B307						
0.46	1/2	15	B308		LR Series	NRN4 Series	TFSeries	LF Series	
8.0	1/2	15	B309						
1.2	1/2	15	B310						
1.9	1/2	15	B311						
3	1/2	15	B312						
4.7	1/2	15	B313						
10	1/2	15	B315						
16	1/2	15	B316						
4.7	3/4	20	B317						
7.4	3/4	20	B318						
14	3/4	20	B320						
24	3/4	20	B321						
7.4	1	25	B322						
10	1	25	B323						
30	1	25	B325*						
10	1 1/4	32	B329		AR Series	ARN4 Series			
19	11/4	32	B330						
25	11/4	32	B331						
19	1½	40	B338						
29	1½	40	B339						
37	1½	40	B340						AF Series
46	1½	40	B341						Se
29	2	50	B347						AF
37	2	50	B348						
46	2	50	B349						
57	2	50	B350						
68	2	50	B351						
83	2	50	B352						

Models without characterizing disc

Three-way Mixing be piped to the bypass leg. Characterizing Disc (where applicable) B Port Disc (All 3-way models)