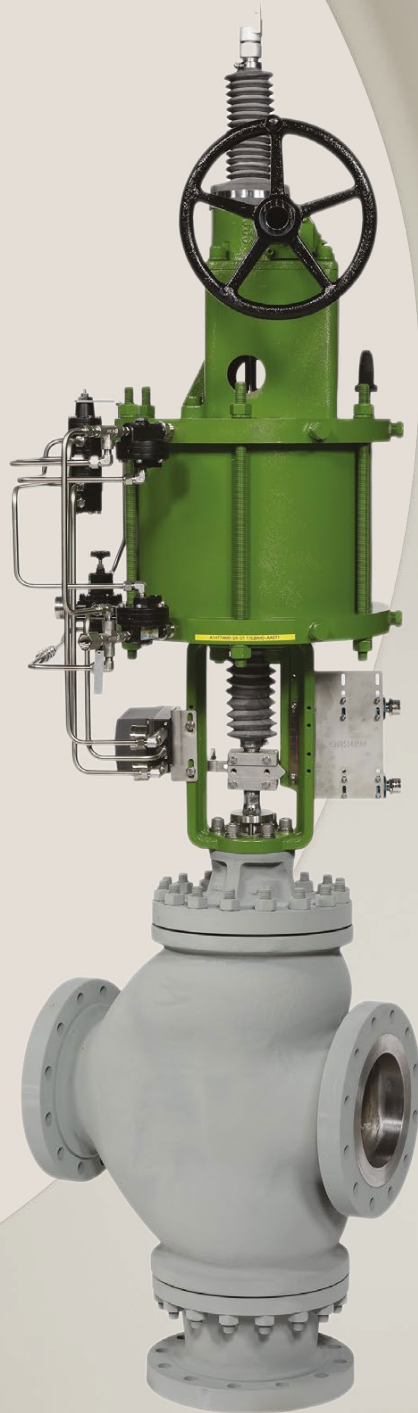


Process Automation

IMI CCI

830T

Three-way valve





830T

Three-way valve for diverting or mixing in general applications

The 830T is designed for diverting or mixing in general service applications. In diverting applications, it takes a common fluid stream and splits it into two outlet ports. For mixing applications, it combines two fluid streams and discharges the mixed fluid to a common outlet port.

By performing the function of two opposite-acting standard two-way valves, the three-way valve is a more cost-effective control option for diverting or mixing applications. The 830T valve is available in sizes 1 inch to 10 inch and ASME 150 to 300.

Key benefits

High capacity

Large streamlined passages allow higher flow for optimised mixing and diverting.

Flexibility

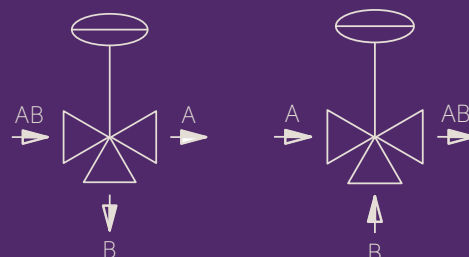
The 830T comes with a wide range of options to fit your application needs.

Stable operation

Multiple guiding along the cage and stem ensures smooth plug travel for a stable operation.

Durability

The sturdy design with tight tolerances and multiple guides ensure a trouble-free service life.

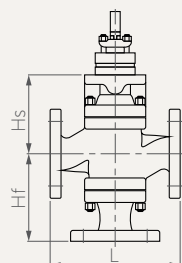


Diverting type flow diagram:
Inlet AB, outlet A & B

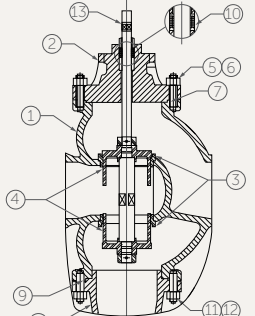
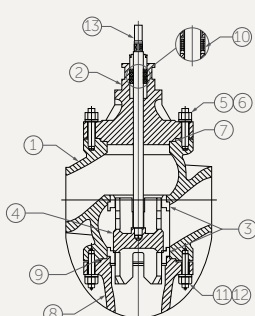
Mixing type flow diagram:
Inlet A & B, outlet AB

Technical features

Pressure rating		ASME B16.34 Class 150, Class 300																					
Design temperature		Max 260°C																					
End connection		Flanged ends (RF and FF)																					
Seat type		Screwed double seat																					
Shut-off class		ANSI/FCI 70.2, Leakage Class III, IV																					
Trim characteristic		Linear																					
Actuator		MSD-III diaphragm actuator, SP piston actuator																					
Materials	Body, bonnet, bottom flange	A216 WCB (A216 WCC, A351 CF8, A351 CF8M optional)																					
	Trim	410 SS (316 SS optional)																					
Configuration	Bonnet type	Clamp					Bolted																
	Body size	1"	1 ½"	2"	2 ½"	3"	4"	5"	6"	8"	10"												
	Stroke (mm)	20	20	20	40	40	50	50	50	70	70 (100)												
	Cv	16	33	50	75	105	190	260	390	500	750 (1020)												
Dimensions	Pressure rating	150#										300#											
	Body size	1"	1 ½"	2"	2 ½"	3"	4"	5"	6"	8"	10"	1"	1 ½"	2"	2 ½"	3"	4"	5"	6"	8"	10"		
	Mixing type	L	184	254	254	276	298	352	403	451	615	N/A	L	197	254	267	292	318	368	425	473	615	N/A
		Hf	124	180	180	200	220	245	323	299	444	N/A	Hf	124	180	180	200	220	253	334	299	444	N/A
		Hs	111	149	149	174	187	216	303	275	395	N/A	Hs	111	149	149	174	187	216	303	275	395	N/A
	Diverting type	L	184	254	254	276	298	352	403	454	608	698	L	197	254	267	292	318	368	425	474	630	734
		Hf	124	180	180	200	220	245	323	370	505	478	Hf	124	180	180	200	220	253	334	370	525	496
		Hs	111	149	149	174	187	216	303	365	456	463	Hs	111	149	149	174	187	216	303	365	456	463



Materials	Part name		Standard material	
	1	Body	A216 WCB	
	2	Bonnet	A216 WCB	
	3	Seat	410 SS	
	4	Plug	410 SS	
	5	Bonnet stud	A193-B7	
	6	Hex nut	A194-2H	
	7	Bonnet gasket	Graphite (Filler) with 304SS	
	8	Bottom flange	A216 WCB	
	9	Bottom gasket	Graphite (Filler) with 304SS	
	10	Packing	Teflon	
	11	Bottom flange stud	A193-B7	
	12	Hex nut	A194-2H	
	13	Stem	410 SS	



Mixing type sectional viewDiverting type sectional view

Allowable shut-off pressure / parts

Mixing type (pressure unit: kgf/cm ²)													
Actuator			Body size / Trim size (inch)										
Type	Action	Size	1" / 1"	1.5" / 1.5"	2" / 2"	2.5" / 2.5"	3" / 3"	4" / 4"	5" / 5"	6" / 6"	8" / 8"	10" / 10"	
MSD-III diaphragm	Reverse acting	250	38										
		290	51	30									
		370		51	40	13	8						
		480						16.5					
		550							11	7			
	Direct acting	250	27										
		290											
		370	51	30	18	9.5	5.5						
		480						10	6				
		550											
SP Piston	Both	113 sqin							35	21	13	9	

Diverting type (pressure unit: kgf/cm ²)													
Actuator			Body size / Trim size (inch)										
Type	Action	Size	1" / 1"	1.5" / 1.5"	2" / 2"	2.5" / 2.5"	3" / 3"	4" / 4"	5" / 5"	6" / 5"	8" / 7"	10" / 9"	
MSD-III diaphragm	Reverse acting	250	50										
		290		23	14								
		370			20	19	12	10					
		480						18					
		550							11	11			
	Direct acting	250	50	19									
		290											
		370		25	15	16.5	11	9					
		480							14	6	6		
		550											
SP Piston	Both	113 sqin								35	35	17	10

Process Automation

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