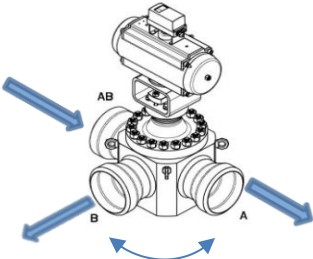
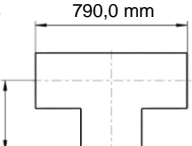


# 3-Way Valve

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	ARCA Regler GmbH	ARTES-Ref.	5503983			
2	Plant:	OCP Safi PS4	Pos.	1			
3	Service:		Qty.:	1			
4	TAG No.	E83-14-T01-TCV	S/N:	3160833.1			
5	<b>Pipeline</b>		Connection A	Connection B	Connection C		
6	Dimensions	Ø D x s [mm x mm]	273 x 18,26	273 x 18,26	273 x 18,26		
7	Material		SA335 P91	SA335 P91	SA335 P91		
8	Weld ends	Ø D x s [mm x mm]	273 x 18,26	273 x 18,26	273 x 18,26		
9	Flange ends		--	--	--		
10	<b>Valve Connection Data</b>		Connection A	Connection B	Connection C		
11	Nominal Pipe Size	NPS	10"	10"	10"		
12	Nominal Pressure	class	1500	1500	1500		
13	Material		SA182 F22 Cl3	SA182 F22 Cl3	SA182 F22 Cl3		
14	<b>Valve Design</b>						
15	Design Pressure	[bar(g)]	85				
16	Design Temperature	[°C]	400				
17	Material		SA182 F22 Cl3				
18	Nominal Pressure (Rating Class)	class	--				
19	<b>Hydraulic Test Pressure</b>	<sup>1)</sup>	<b>121,0 bar</b>				
20	<b>Operational conditions</b>	Loading Case	Loading Case	Loading Case	Loading Case		
21	Medium:	1	2	3	4		
22	Flow [t/h]	42,00	121,00	135,00			
23	Temperature [°C]	330	347	350			
24	Inlet Pressure [bar(g)]	62,80	67,20	67,90			
25	Outlet Pressure [bar(g)]	62,77	66,95	67,58			
26							
27	K <sub>v</sub> -Value [m <sup>3</sup> /h]	1.445,00	1.445,00	1.445,00			
28	Flow Velocity [m/s]	29,22					
29	<b>Valve type</b>	<b>3-Way Valve - Divider - Type W</b>					
30	<b>Material:</b>			<b>Valve Parameters</b>			
31				Ø seat 175 mm			
32	Body: SA182 F22 Cl3			K <sub>VS</sub> -Value: 1.445 m <sup>3</sup> /h			
33	Stem: 1.4122			Δp actuator: 3 bar			
34	Plug: SA182 F22 Cl3			Control characteristic:	Dimensions 790,0 mm		
35	Gaskets: Graphite			linear	395,0 mm		
36							
37							
38							
39							
40	<b>Design &amp; Tests acc. to:</b>	ASME BPVC Section VIII Division 1					
41							
42	Leakage:	ca. 1,5% ... 3% of K <sub>VS</sub> - value					
43	<b>Installation requirements:</b>						
44							
45	<b>Actuator type:</b>	pneumatic	3160844				
46	Model:	ProtACT PR263S HT, single acting, spring closes					
47		fail safe position: air & signal failure - connection B closed					
48		Positioner Siemens Sipart PS2 6DR5110-0NM01-0AA4; 4...20mA; HART					
49		Filter/Regulator: ARCA 961 SS Gauge, SST piping					
50		air supply: min.6,0 bar(g)					
51	<b>Remarks:</b>						
52		- minimum flow: 4,0 t/h at connection A (outlet I) - Position- 24,3%-OPEN					
53							
54							
55		<sup>1)</sup> - hydraulic test pressure acc. to ASME BPVC Section VIII Div.1 - UG99					
56	Revision:	0	1	2	3	4	5
57	Date:	17.06.2020	06.07.2020	03.08.2020			
58	Prepared:	K. A.Ramadan	R. Feldmann	R. Feldmann			
59	Checked:	H. Roßmann	P. Schüler	K. A. Ramadan			