

3-Way Valve



ARTES Valve & Service GmbH
Parkallee 7 - 16727 Velten
GERMANY

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	Standardkessel Baumgarte GmbH	ARTES-ref.-no.:				5504578	
2	Plant:	Oldhall	Pos.:				4	
3	Location:	3-Way Control Valve - Drum Preheating	Qty.:				1	
4	KKS No.:	TCV 4F010	S/N:				3177876.1	
5	Pipe - Connection Data		Connection 1	Connection 2	Connection 3			
6	Dimensions	Ø D [mm] x s [mm]	114,3 x 8,0	114,3 x 8,0	114,3 x 8,0			
7	Material		1.5415	1.5415	1.5415			
8	Welding Connection	Ø D [mm] x s [mm]	--	--	--			
9	Flange Connection		EN 1092-1/B	EN 1092-1/B	EN 1092-1/B			
10	Valve - Design		Connection 1	Connection 2	Connection 3			
11	Nominal Size	DN / NPS	100	100	100			
12	Nominal Pressure	PN / class	160	160	160			
13	Design Pressure	bar(g)	89	89	89			
14	Design Temperature	°C	303	303	303			
15	Material		1.5415	1.5415	1.5415			
16	Test Pressure - Body Strength		240,0 bar					
17	Operation Data		Loading Case	Loading Case	Loading Case	Loading Case		
18	Medium:	Water	1	2	3	4		
19	Flow Rate	t/h	61,00	40,66	43,32	80,08		
20	Temperature	°C	130	130	130	130,0		
21	Pressure, Inlet	bar(a)	85,35	85,35	76,58	76,58		
22	Pressure, Outlet	bar(a)	84,65	84,22	76,08	46,08		
23	Kv Value	m³/h	89,02	59,34	63,24	116,89		
24	Flow Speed, Outlet	m/s	--	--	--	3,13		
25								
26	Type Of Valve 3-Way Valve - Type W (Distributor)							
27	Material					Valve Parameter		
28						Seat Diameter:	65	mm
29	Body:	1.5415				Kvs Value:	max. 200	m³/h
30	Stem:	1.4122				max. dp actuator:	3	bar
31	Plug:	1.5415				Control characteristic:	--	
32						Dimensions:		
33	Seals:	Graphite						
34								
35								
36								
37	Design / Inspection		Pressure Equipment (Safety) Regulations 2016 & Pressure Equipment Directive 2014/68/EU					
38			Requirements acc. to: EN 12952					
39			Leakage class: 1,5% of Kvs-value					
40			Final Inspection Confirmation acc. to DIN EN 10204 - 3.1					
41	Mounting Instruction							
42								
43	Actuator type:	pneumatic				3177806		
44	Type:	ProtACT PR216S, single-acting "rack&pinion"; air to open, spring to close, signal/air failure: close; Manual gear box						
45		MOG.216...263, handwheel Ø400; Positioner Siemens Sipart PS2 6DR5110-0NG31-0AA0, 2-wire connection & HART-interface,						
46		ly-module (6DR4004-8J) for position feedback (4...20mA), ly-module (6DR4004-8K) mechanic limit switches						
47		Filter/Regulator G1/4" Norgren B82G-2GK-AD3-RMG; Positioning Time: ≤ 30 sec/90°						
48		min. air supply pressure: 4,5 bar(g), Breakaway Torque ML = 500 Nm, Control Torque MR = 300 Nm						
49	Actuator adaption:	EN ISO 5211 - F14 - square 27 mm						
50	Remarks							
51	Safety position - signal/air failure - Connection 3 closed							
52								
53								
54								
55	Revision	0	1	2	3	4		
56	Date:	01.11.2022	14.11.2022					
57	Prepared:	H. Roßmann	P. Schüler					
58	Checked:	H. Jäkel	R. Feldmann					