

Three-Way Valve



ARTES Valve & Service GmbH
Parkallee 7 - 16727 Velten
Germany

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	SMS Group GmbH	ARTES-Ref.:	5504802					
2	Plant:		Pos.:	1					
3	Service:		Qty.:	1					
4	TAG No.:		S/N:	3184161.1					
5	Pipeline		Connection 1	Connection 2	Connection 3				
6	Dimensions	Ø D [mm] x s [mm]	168,3 x 4,5	168,3 x 4,5	168,3 x 4,5				
7	Material								
8	Weld ends	Ø D [mm] x s [mm]	--	--	--				
9	Flange ends		ASME B16.5/RF	ASME B16.5/RF	ASME B16.5/RF				
10	Valve Design		Connection 1	Connection 2	Connection 3				
11	Nom. pipe size	DN / NPS	6"	6"	6"				
12	Nom. pressure	PN / class	150	150	150				
13	Design Pressure	[bar(g)]	10	10	10				
14	Design Temp.	[°C]	80	80	80				
15	Material		SA105	SA105	SA105				
16	Hydraulic Test Pressure								
17	Operational conditions		Load Case	Load Case	Load Case	Load Case			
18	Medium:	Wasser	1	2	3	4			
19	Flow	[m³/h]	160	160					
20	Temperature	[°C]	80	80					
21	p inlet	[bar(a)]	9,0	9,00					
22	p outlet	[bar(a)]	8,0	8,75					
23	Kvs value	[m³/h]	164,0	400,00					
24	Strömungsgeschw	[m/s]	2,23	--					
25									
26	Valve type DWA-GW (Distributor)								
27	Material:					Valve Parameters			
28						Ø seat		100	mm
29	Body:	SA105				Kvs Value:		max 400	m³/h
30	Stem:	1.4122				delta p actuator		3	bar
31	Plug:	1.4122				Control characteristic:		Dimensions: 420,0 mm	
32						linear		210,0 mm	
33	Gaskets:	O-Ringe, EPDM perox.							
34									
35									
36									
37	Design & Tests acc. to:		ASME BPVC Sec.VIII, Div.1						
38			Requirements acc. to: ASME BPVC Sec.VIII, Div.1						
39			Leakage: 1,5% of Kvs-value						
40			Factory Acceptance Test Certificate acc. to EN 10204-3.1						
41	Installation requirements:								
42									
43	Actuator type:	pneumatic				3184163			
44	Model:	ProtACT PR263S.PRH, single-acting "rack&pinion", air to open, spring to close, signal/air failure: close							
45		Positioner: Siemens Sipart PS2 6DR5310-ONG00-0AA0, ly-module 6DR4004-8J for position feedback							
46		ly-module 6DR4004-8J for position feedback (4...20mA)							
47		Filter/Regulator: YT-200BP210 - 1/4" ; min. air supply: 6bar(g)							
48	Actuator adaption:	acc. ISO 5211							
49	Remarks:								
50	- Connection 1 always open, Connection 2 & 3 controlled								
51	- Signal/Air Failure: Connection 3 closed								
52									
53									
54	Revision:	0	1	2	3	4			
55	Date:	18.10.2023							
56	Prepared:	T. Khallouf							
57	Checked:	R. Feldmann							