

Three-Way Valve



ARTES Valve & Service GmbH
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Germany

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	MRC Global (Belgium) NV	ARTES-Ref.:	5504918					
2	Plant:	callensvyncke - IER - Imerys Energy Recovery Will.	Pos.:	4					
3	Service:	Temperature control BFW in ECO INT	Qty.:	1					
4	TAG No.:	50 LAB55 AA065	S/N:	3186582.1					
5	Pipeline		Connection 1	Connection 2	Connection 3				
6	Dimensions	Ø D [mm] x s [mm]	168,3 x 12,5	168,3 x 12,5	168,3 x 12,5				
7	Material		1.0345	1.0345	1.0345				
8	Weld ends	Ø D [mm] x s [mm]	--	--	--				
9	Flange ends		EN 1092-1/B	EN 1092-1/B	EN 1092-1/B				
10	Valve Design		Connection 1	Connection 2	Connection 3				
11	Nom. pipe size	DN / NPS	150	150	150				
12	Nom. pressure	PN / class	160	160	160				
13	Design Pressure	[bar(g)]	116,5	116,5	116,5				
14	Design Temp.	[°C]	255	255	255				
15	Material		1.5415	1.5415	1.5415				
16	Hydraulic Test Pressure								
17	Operational conditions		Load Case	Load Case	Load Case	Load Case			
18	Medium:	water	1	2	3	4			
19	Flow	[t/h]	54,4	90,0	109,0	116			
20	Temperature	[°C]	152,0	152,0	152,0	220			
21	p inlet	[bar(g)]	55,00	56,70	58,60	67,0			
22	p outlet	[bar(g)]	54,50	56,20	58,30	66,5			
23	Kvs value	[m³/h]	80,44	132,83	207,68	178,88			
24	flow speed	[m/s]	1,02	1,69	2,04	2,36			
25	Sound Pressure Level	[dB(A)]	51	55	55	58			
26	Valve type DWA-W								
27	Material:					Valve Parameters			
28	Body:	1.5415 (16Mo3)				Ø seat		80	mm
29	Stem:	1.4122				Kvs Value:		max. 300	m³/h
30	Plug:	1.4122				delta p actuator		3	bar
31	Gaskets:	Grafit				Control characteristic:		linear	
32						Dimensions:		540,0 mm	
33								270,0 mm	
34									
35									
36									
37	Design & Tests acc. to:		Pressure Equipment Directive 2014/68/EU						
38			Requirements acc. to: EN 12952						
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				3186571			
44	Model:	ProtACT PR263S.PRH - single acting rack&pinion type, air open/spring close, signal/air failure: close							
45		E/P positioner Sipart PS2 6DR5110-0NG01-0AA0 with 2-wire connection and HART-interface,							
46		incl. ly-module for position-feedback (4...20mA); air set PCR-P-64-G14-12-E-R1-M-T18, Norgren,							
47		1/4", piping SST incl. Festo PAGN-63-16-G14-R1-1.6-0.5-V2; min. air supply pressure; 6,0bar(g)							
48	Actuator adaption:	acc. ISO 5211							
49	Remarks:								
50	When loss of instrument air C=0, Flow from A to B								
51	Listed sound pressure level with 200mm sound-/thermalinsulation. Pls check!!!								
52	Port A (1) always open, Port B(2) and Port C (3) controled.								
53	When loss of instrument air C=0, flow from A to B								
54	Revision:	0	1	2	3	4			
55	Date:	04.03.2024	19.04.2024	24.04.2024					
56	Prepared:	C. Pocher	C. Pocher	R. Feldmann					
57	Checked:	D. Hermann	R. Feldmann	C. Pocher					