

3-Way Valve



ARTES Valve & Service GmbH
Parkallee 7 - 16727 Velten
GERMANY

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	Doosan Lentjes GmbH			ARTES-ref.-no.:	5504341	
2	Plant:	A.12016 - Olsztyn WTE			Pos.:	9	
3	Location:	3-Way Control Valve Drum Water Primary Air Preheater			Qty.:	1	
4	KKS No.:	11 HLC10 AA001			S/N:	3170955.1	
5	Pipe - Connection Data			Connection A	Connection B	Connection C	
6	Dimensions	Ø D [mm] x s [mm]		139,7 x 10	139,7 x 10	114,3 x 7,1	
7	Material			1.0345	1.0345	1.0345	
8	Welding Connection	Ø D [mm] x s [mm]		139,7 x 10	139,7 x 10	114,3 x 7,1	
9	Flange Connection			--	--	--	
10	Valve - Design Data			Connection A	Connection B	Connection C	
11	Nominal Size	DN / NPS		125	125	100	
12	Nominal Pressure	PN / class		160	160	160	
13	Design Pressure	bar(g)		85	85	85	
14	Design Temperature	°C		298	298	298	
15	Material			1.0460	1.0460	1.0460	
16	Test Pressure - Body Strength			178,0 bar			
17	Operation Data		Load Case	Load Case	Load Case	Load Case	Load Case
18	Medium:	Water	1	2	3	4	5
19	Flow Rate	kg/s	16,82	16,62			
20	Temperature	°C	290,4	286,2			
21	Pressure, Inlet	bar(a)	79,80	75,40			
22	Pressure, Outlet	bar(a)	79,60	75,20			
23	Kv Value	m³/h	160,74	156,93			
24	Flow Speed, Outlet	m/s	2,05	2,95			
25							
26	Type Of Valve 3-Way Valve - Type W (Divider)						
27	Material			Valve Parameter			
28							
29	Body:	1.0460		Seat Diameter: 80 mm			
30	Stem:	1.4122		Kvs Value: max. 300 m³/h			
31	Plug:	1.0460		max. dp actuator: 2 bar			
32							
33	Seals:	Graphite		Control characteristic: linear		Dimensions: 400,0 mm	
34							
35							
36							
37	Design / Inspection			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				3170827	
44	Type:	ProtACT PR216D; double-acting "rack&pinion"; signal/air failure: "Fail-in-Place"					
45		Positioner Sipart PS2 6DR5120-0NG31-0AF0, 2-wire connection & HART-interface,					
46		ly-module (6DR4004-8J) for position-feedback (4...20mA)					
47		air set P172CEACP G3/8", adapter G3/8"-G1/4", piping SST, 2 limit switches with junction box					
48		min. air supply pressure: 4,5 bar(g)					
49	Actuator adaption:	EN ISO 5211 - F14 - square 36 mm					
50	Remarks						
51							
52							
53							
54	Body Strength Test - Test Pressure: p' = 178 bar - Test Medium: Water						
55	Revision	0	1	2	3	4	5
56	Date:	03.11.2021	29.12.2021	27.01.2022	22.04.2022		
57	Prepared:	H. Roßmann	P. Schüler	D. Hermann	P. Schüler		
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