

# 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.:	5504547	
2	Plant:	A.12019 - Warsaw WTE		Pos.:	6	
3	Location:	3-Way Control Valve - Drum Water Primary Air Preheater		Qty.:	2	
4	KKS No.:	21/31 HLC30 AA001		S/N:	3176837.1 & 3176837.2	
5	<b>Pipe - Connection Data</b>		<b>Connection A</b>	<b>Connection B</b>	<b>Connection C</b>	
6	Dimensions	Ø D [mm] x s [mm]	139,7 x 6,3	139,7 x 6,3	139,7 x 6,3	
7	Material		1.0345	1.0345	1.0345	
8	Welding Connection	Ø D [mm] x s [mm]	139,7 x 6,3	139,7 x 6,3	139,7 x 6,3	
9	Flange Connection		--	--	--	
10	<b>Valve - Design Data</b>		<b>Connection A</b>	<b>Connection B</b>	<b>Connection C</b>	
11	Nominal Size	DN / NPS	125	125	125	
12	Nominal Pressure	PN / class	100	100	100	
13	Design Pressure	bar(g)	64	64	64	
14	Design Temperature	°C	277	277	277	
15	Material		1.0460	1.0460	1.0460	
16	<b>Test Pressure - Body Strength</b>		<b>150,0 bar</b>			
17	<b>Operation Data</b>		<b>Load Case</b>	<b>Load Case</b>	<b>Load Case</b>	<b>Load Case</b>
18	Medium:	Water	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
19	Flow Rate	kg/s	17,60	4,70		
20	Temperature	°C	261,0	261,0		
21	Pressure, Inlet	bar(a)	47,80	47,80		
22	Pressure, Outlet	bar(a)	47,60	47,60		
23	Kv Value	m³/h	160,03	42,73		
24	Flow Speed, Outlet	m/s	1,82	--		
25						
26	<b>Type Of Valve</b> 3-Way Valve - Type W (Divider)					
27	<b>Material</b>			<b>Valve Parameter</b>		
28						
29	Body:	1.0460				
30	Stem:	1.4122				
31	Plug:	1.0460				
32						
33	Seals:	Graphite				
34			Seat Diameter:	65	mm	
35			Kvs Value:	max. 195	m³/h	
36			max. dp actuator:	2	bar	
37	<b>Design / Inspection</b>		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	<b>Mounting Instruction</b>					
42						
43	<b>Actuator type:</b>	pneumatic			3176831	
44	Type:	ProtACT PR134D, double-acting "rack&pinion"; signal/air failure: "Fail-in-Place"; Manual gear box MOG.088...134,				
45		housing: Aluminium, handwheel Ø350, coating: C5M; Positioner Samson 3730-3, HART, 2 inductive limit switches SJ2-SN				
46		housing: Aluminium; air set YT-200BP210 PT1/4", inlet pressure: 1...17 bar, pressure control range: 0...8,4 bar;				
47		manual condensate drain, incl. manometer, display 0...10 bar; piping SST 10 mm				
48		min. air supply pressure: 5,5 bar(g)				
49	<b>Actuator adaption:</b>	EN ISO 5211 - F10 - square 27 mm				
50	<b>Remarks</b>					
51						
52						
53						
54	Body Strength Test - Test Pressure: p' = 150 bar - Test Medium: Water					
55	Revision	0	1	2	3	4
56	Date:	29.08.2022	12.10.2022			
57	Prepared:	H. Roßmann	P. Schüler			
58	Checked:	H. Jäkel	R. Feldmann			