

# Three-Way Valve



ARTES Valve & Service GmbH  
Parkallee 7 - 16727 Velten  
GERMANY

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	MRC Global (Belgium) NV	ARTES-ref.-no.:	5504779			
2	Plant:	Recybois II	Pos.:	3			
3	Location:	diverting valve	Qty.:	1			
4	TAG No.:	1 HAC10 AA102	S/N:	3183523.1			
5	<b>Pipeline</b>		<b>Connection 1</b>	<b>Connection 2</b>	<b>Connection 3</b>		
6	Dimensions	Ø D [mm] x s [mm]	88,9 x 4,0	88,9 x 4,0	60,3 x 3,2		
7	Material		---	---	---		
8	Weld ends	Ø D [mm] x s [mm]	---	---	---		
9	Flange ends		EN1092/B	EN1092/B	EN1092/B		
10	<b>Valve Design</b>		<b>Connection 1</b>	<b>Connection 2</b>	<b>Connection 3</b>		
11	Nom. pipe size	DN / NPS	80	80	50		
12	Nom. pressure	PN / class	100	100	100		
13	Design Pressure	[bar(g)]	80	80	80		
14	Design Temp.	[°C]	110	110	110		
15	Material		1.0460	1.0460	1.0460		
16	<b>Hydraulic Test Pressure</b>						
17	<b>Operational conditions</b>		loading case 1	loading case 2	Load Case	Load Case	
18	Medium:	water	A → B	A → B	3	4	
19	Flow	[kg/h]	47.754	32.000			
20	Temperature	[°C]	105	105			
21	p inlet	[bar(g)]	53,90	53,90			
22	p outlet	[bar(g)]	53,80	53,57			
23	Kvs value	[m³/h]	154,35	28,36			
24							
25							
26	<b>Valve type</b> DWA-GW ( diverting valve )						
27	<b>Material:</b>			<b>Valve Parameters</b>			
28							
29	Body:	1.0460		Ø seat		65 mm	
30	Stem:	1.4122		Kvs Value:		max. 199,1 m³/h	
31	Plug:	1.4122		delta p actuator		1 bar	
32				Control characteristic:		linear	
33	Gaskets:	O-Ringe, EPDM perox.		Dimensions:		370,0 mm	
34				175,0 mm			
35							
36							
37	<b>Design &amp; Tests acc. to:</b>		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	<b>Installation requirements:</b>						
42							
43	<b>Actuator</b>	pneumatic				3183533	
44	ProtACT PR216S.PRH, single-acting "rack&pinion", air to open, spring to close, signal/air failure: close						
45	Positioner: Siemens Sipart PS2 6DR5310-0NG01-0AA0, Iy-module 6DR4004-8J for position feedback (4...20 mA)						
46	Filter/Regulator: YT-200BP210 - 1/4" , stainless steel piped						
47	min. air supply: 5,5 bar(g)						
48	<b>Actuatoradaption:</b> acc. ISO 5211						
49	<b>Remarks:</b>						
50	- Connection 1 (Port A) always open, Connection 2 & 3 (Port B & C) controlled						
51	- Signal/Air Failure: Connection 3 (Port C) closed						
52							
53							
54	Revision:	0	1	2	3	4	
55	Date:	11.09.2023					
56	Prepared:	C. Pocher					
57	Checked:	D. Hermann					