

# Three-Way Valve



ARTES Valve & Service GmbH  
Parkallee 7 - 16727 Velten  
GERMANY

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	Technoflow S.r.l.	ARTES-Ref.	5503433		
2	Plant:		Pos.	2		
3	Service:	for boiler B-5201B	Qty.:	1		
4	P & ID No.	103	S/N:	3144438.1		
5	<b>Pipeline</b>		Connection 1	Connection 2	Connection 3	
6	Dimensions	Ø D x s mm	168,3 x 21,95	168,3 x 21,95	168,3 x 21,95	
7	Material					
8	Weld ends	Ø D x s mm	B16.25	B16.25	B16.25	
9	Flange ends		--	--	--	
10	<b>Valve Design</b>		Connection 1	Connection 2	Connection 3	
11	Nom. pipe size	DN	6"	6"	6"	
12	Nom. pressure	PN	1500	1500	1500	
13	Design Pressure	bar(g)	208,6	208,6	208,6	
14	Design Temp.	°C	250	250	250	
15	Material		SA105	SA105	SA105	
16	<b>Hydraulic Test Pressure</b>		<b>383,0 bar</b>			
17	<b>Operational conditions</b>		Load Case	Load Case	Load Case	Load Case
18	Medium:	<b>water</b>	1	2	3	4
19	Flow	t/h				
20	Temperature	°C				
21	p inlet	bar(g)				
22	p outlet	bar(g)				
23	Kvs value	m³/h				
24	Leakage flow	t/h				
25						
26	<b>Valve type</b>		<b>Type W</b>			
27	<b>Material:</b>					
28						
29	Body:	SA105				
30	Stem:	1.4122				
31	Plug:	1.4122				
32						
33	Gaskets:	Graphite				
34						
35						
36						
27			<b>Valve Parameters</b>			
			Ø seat	100	mm	
			Kvs Value:	470	m³/h	
			max. Δp for actuator:	2	bar	
			Control characteristic:	linear		
			Dimensions	544,0 mm		
				272,0 mm		
37	<b>Design &amp; Tests acc. to:</b>		ASME B16.34 (ASME BPVC Sec.VIII Div.1)			
38						
39			Leakage: straight way 1 --> 3: 20% of Kvs, bypass 1 -->2: 1,5% of Kvs <sup>1)</sup>			
40	<b>Installation requirements:</b>					
41						
42	<b>Actuator type:</b>	manual				<b>3144130</b>
43	Model:	gearbox auma GS80.3 with handwheel				
44		high temperature version, with mechanical limit stops				
45						
46						
47						
48	<b>Remarks:</b>					
49	<sup>1)</sup> valve-internal, not adjustable, mechanical limit stop ensures a minimum water flow of 20% from port 1 to port 3					
50						
51						
52						
53	Revision:	0	1	2	3	4
54	Date:	15.07.2018	28.08.2018	07.09.2018		
55	Prepared:	P. Schüler	P. Schüler	P. Schüler		
56	Checked:	H. Jäkel	H. Jäkel	H. Jäkel		