

# Three-Way Valve



ARTES Valve & Service GmbH  
Parkallee 7 - 16727 Velten  
Germany

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	Neptune Energy Deutschland GmbH	ARTES-Ref.:	5504463.1				
2	Plant:	Adorf Z17 - 18	Pos.:	1				
3	Service:	Gaskühler W2110	Qty.:	1				
4	TAG No.:	TCV 211001	S/N:	3174484.2				
5	<b>Pipeline</b>		<b>Connection 1</b>	<b>Connection 2</b>	<b>Connection 3</b>			
6	Dimensions	Ø D [mm] x s [mm]	114,3 x 5	114,3 x 5	114,3 x 5			
7	Material							
8	Weld ends	Ø D [mm] x s [mm]						
9	Flange ends		ASME B16.5/RTJ			1)		
10	<b>Valve Design</b>		<b>Connection 1</b>	<b>Connection 2</b>	<b>Connection 3</b>			
11	Nom. pipe size	DN / NPS	4"	4"	4"			
12	Nom. pressure	PN / class	600	600	600	1)		
13	Design Pressure	[bar(g)]	100	100	100	1)		
14	Design Temp.	[°C]	-10 ... +120	-10 ... +120	-10 ... +120	1)		
15	Material		1.4462	1.4462	1.4462	1)		
16	<b>Hydraulic Test Pressure</b>							
17	<b>Operational conditions</b>	Load Case	Load Case	Load Case	Load Case	Load Case		
18	Medium:	Erdgas	1	2	3	4		
19	Flow	[Nm³/h]	25.000					
20	Temperature	[°C]	60					
21	p inlet	[bar(g)]	70,00					
22	p outlet	[bar(g)]	69,70					
23	Kvs value	[m³/h]	157,00					
24	Leakage flow	[Nm³/h]	457,00					
25								
26	<b>Valve type</b>	<b>DWA-G Teiler</b>						
27	<b>Material:</b>				<b>Valve Parameters</b>			
28					Ø seat		65	mm
29	Body:				Kvs Value:		199	m³/h
30	Stem:				delta p actuator		3	bar
31	Plug:				Control characteristic:		linear	
32					Dimensions:			
33	Gaskets:							
34								
35								
36								
37	<b>Design &amp; Tests acc. to:</b>	Pressure Equipment Directive 2014/68/EU						
38		Requirements acc. to: EN 13445						
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 type:</b>	pneumatisch				3174286		
44	Model:	ProtACT Typ PR216S.12.PRS.27, einfachwirkend, Federkraft schließt Anschluss 3						
45		Stellungsregler ABB TZID 4-20mA inkl. analoger Rückmeldung, Schlitzinitiatoren SJ2-SN (NC)						
46		3/2 Wegemagnetventil Herion 2401191.4260 Ex 24V						
47		Filter und Reduziereinheit Norgren Herion B84G-4GK-AD1-RMG 1/2" inkl. Manometer						
48	Actuator adaption:	EN ISO 5211 - F14						
49	<b>Remarks:</b>							
50								
51		1) Design in Anlehnung an ASME B16.5 - Abweichung der Designdaten von den Angaben der ASME B16.5!						
52		Prüfung der Festigkeit für angegebene Designdaten.						
53								
54	Revision:	0	1	2	3	4		
55	Date:	13.01.2025						
56	Prepared:	C. Pocher						
57	Checked:	R. Feldmann						