

# Control Valve



ARTES Valve & Service GmbH  
Parkallee 7 - 16727 Velten  
GERMANY

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	ARTES-ref.-no.: 5504246					
2	Plant:	Pos.: 4					
3	Location: feed-water control valve	Qty.: 1					
4	TAG No.: 1 LAB20 AA001	S/N: 3168066.1					
5	<b>Pipe - Connection Data</b>	<b>Inlet</b>			<b>Outlet</b>		
6	Dimensions ØD [mm] x s [mm]	139,7	x	10,0	139,7	x	10,0
7	Material	...			...		
8	Welding Connection ØD [mm] x s [mm]	139,7	x	10,0	139,7	x	10,0
9	Flange Connection	--			--		
10	<b>Valve - Design</b>	<b>Inlet</b>			<b>Outlet</b>		
11	Nominal Size DN / NPS	125			125		
12	Nominal Pressure PN / class	--			--		
13	Design Pressure bar(g)	139			139		
14	Design Temperature °C	150			150		
15	Material	1.0460 (P250GH, C22.8)			1.0460 (P250GH, C22.8)		
16	<b>Operation Data</b>	<b>Loading Case</b>	<b>Loading Case</b>	<b>Loading Case</b>	<b>Loading Case</b>	<b>Loading Case</b>	<b>Loading Case</b>
17	Medium : Water/Steam	1	2	3	4	5	6
18	Phase	water	water	water	water	water	
19	Flowrate t/h	5,00	5,00	25,00	50,00	62,50	
20	Temperature, Inlet °C	20,00	110,00	115,00	115,00	115,00	
21	Pressure, Inlet barG	106,60	106,60	102,60	99,60	99,60	
22	Pressure, Outlet barG	0,00	0,00		96,60	96,60	
23	kvs m³/h	0,50	0,51		30,0	37,7	
24	Flow Speed, Outlet m/s	0,12	4,91		1,30	1,62	
25	<b>Type Of Valve</b>	<b>Control Ball Valve Type GW</b>					
26	<b>Valve Parameter</b>				<b>Material</b>		
27	Seat Diameter: 65 mm				Body: 1.0460 (P250GH, C22.8)		
28	Pressure Reduction Steps, controlled: 1				Seating: 1.4122 (X39CrMo17-1), metal sealing		
29	Pressure Reduction Steps, fix: 0				Ball: 1.4122 (X39CrMo17-1), metal sealing		
30	kvs 45 m³/h				Control disc: 1.4122 (X39CrMo17-1), hardened		
31	Control Characteristic: equal percentage				Seals: O-Rings, EPDM perox.		
32	max. Dp für Actuator: 139 bar						
33	Installation Length: 360 mm						
34							
35	<b>Design / Inspection</b>					<b>Final Inspection</b>	
36						<b>Confirmation acc. to DIN EN 3.1</b>	
37	Requirements acc. to: EN 12952					<b>10204</b>	
38	Leakage Class: 0,01% of kvs-Value						
39							
40	<b>Actuator</b> pneumatic						3168048
41	Type: ProtACT PR587S.10.090.16S46.PRH, single-acting, spring closes						
42	Positioner: Siemens Sipart PS2 - 6DR5011-0NG21-0AA1, incl. Iy-Module for position feedback (4 ... 20mA)						
43	Type: 6DR4004-8J; incl. limit transmitter SIA-Module; inductive limit switches; incl.gauge block made of plastic						
44	aluminium block, volume booster SMC EIL100-F02 G1/4"; filter regulator SMC AW30-F02G-B 1/4" incl. pressure gauge						
45	completely piped in stainless steel, air supply: 5,0 bar(g)						
46	<b>Actuatoradaption:</b> EN ISO 5211 - F16 - multi-toothing						
47	<b>Remarks</b>						
48	<b>ATTENTION!</b>						
49	- Loading Case 1 - CAVITATION						
50	- Loading Case 2 - FLASHING						
51							
52	Rangeability 1:50						
53	Revision	0	1	2	3	4	5
54	Date:	11.06.2021	11.10.2021				
55	Prepared:	F. Lange	P. Schüler				
56	Checked:	P. Schüler	R. Feldmann				