

Control Valve



ARTES Valve & Service GmbH
Parkallee 7 - 16727 Velten
GERMANY

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	Standardkessel Baumgarte GmbH			ARTES-ref.-no.:	5504578	
2	Plant:	Oldhall			Pos.:	2	
3	Location:	Start-Up Control Valve			Qty.:	1	
4	TAG No.:	PCV 4C006			S/N:	3177875.1	
5	Pipe - Connection Data			Inlet		Outlet	
6	Dimensions	Ø D [mm] x s [mm]		168,3	x	8,8	219,1 x 7,1
7	Material			1.5415 (16Mo3)		1.5415 (16Mo3)	
8	Welding Connection	Ø D [mm] x s [mm]		168,3	x	8,8	219,1 x 7,1
9	Flange Connection			--		--	
10	Valve - Design			Inlet		Outlet	
11	Nominal Size	DN / NPS		150		200	
12	Nominal Pressure	PN / class		--		--	
13	Design Pressure	bar(g)		78		25	
14	Design Temperature	°C		440		440	
15	Material			1.5415 (16Mo3, 15Mo3)		1.5415 (16Mo3, 15Mo3)	
16	Operation Data		Loading Case	Loading Case	Loading Case	Loading Case	Loading Case
17	Medium :	Water/Steam		1	2	3	4
18	Phase			steam			
19	Flowrate	t/h		53,00			
20	Temperature, Inlet	°C		425,00			
21	Pressure, Inlet	barA		61,40			
22	Pressure, Outlet	barA		17,00			
23	k _v	m ³ /h		75,3			
24	Flow Speed, Outlet	m/s		78,9			
25	Sound Pressure Level	dB(A) ¹⁾		88			
26	Type Of Valve Control Ball Valve Type W						
27	Valve Parameter			Material			
28	Seat Diameter:	100 mm		Body:	1.5415 (16Mo3, 15Mo3)		
29	Pressure Reduction Steps, controlled:	2		Seating:	1.4122 (X39CrMo17-1), metal sealing		
30	Pressure Reduction Steps, fix:	1		Ball:	1.4122 (X39CrMo17-1), metal sealing		
31	k _{vs}	79 m ³ /h		Control disc:	1.4122 (X39CrMo17-1)		
32	Control Characteristic:	equal perc. mod.		Seals:	Graphite		
33	max. Dp for Actuator:	78 bar					
34	Installation Length:	575 mm					
35							
36	Design / Inspection				Final Inspection		
37	Pressure Equipment (Safety) Regulations 2016 & Preussure Equipment Directive 2014/68/EU				Confirmation acc. to DIN 3.1		
38	Requirements acc. to: EN 12952				EN 10204		
39	Leakage Class: 0,01% of kvs-Value						
40							
41	Actuator	pneumatic					3177805
42	Type:	ProtACT PR1143S, single-acting "rack&pinion"; air to open, spring to close, signal/air failure: close; Manual gear box					
43		MOG.1143...1628, handwheel Ø900; Positioner Siemens Sipart PS2 6DR5110-ONG31-0AA0, 2-wire connection & HART-interface,					
44		ly-module (6DR4004-8J) for position feedback (4...20mA), ly-module (6DR4004-8K) mechanic limit switches					
45		Filter/Regulator G1/4" Norgren B82G-2GK-AD3-RMG; 2x Booster Relay EIL100-F02-L; Positioning Time: ≤ 40 sec/90°					
46		min. air supply pressure: 4,5 bar(g), Breakaway Torque ML = 3000 Nm, Control Torque MR = 1900 Nm					
47	Actuatoradaption:	EN ISO 5211 - F25, square 55 mm					
48	Remarks						
49							
50							
51							
52							
53	¹⁾ Sound Pressure Level - calculated with 150 mm insulation						
54	Revision	0	1	2	3	4	5
55	Date:	01.11.2022	09.11.2022				
56	Prepared:	H. Roßmann	P. Schüler				
57	Checked:	H. Jäkel	R. Feldmann				