

Three-Way Valve



1	Customer:	ARVOS GmbH	ARTES-N°	5503869			
2	Project:	Ain El Sokhna (NCIC)	Pos.	1			
3	Application:	steam distributor	Units:	1			
4	Tag N°:	3121TV-100	S/N:	3157085.1			
5	Pipe		connection 1	connection 2	connection 3		
6	Pipe dimension	Ø D x s mm	168,3 x 10,97	114,3 x 8,56	168,3 x 10,97		
7	Pipe material		¹⁾	¹⁾	¹⁾		
8	Welding ends	Ø D x s mm	168,3 x 10,97	114,3 x 8,56	168,3 x 10,97		
9	Flange ends		--	--	--		
10	Valve Design		connection 1	connection 2	connection 3		
11	Nominal pipe size	NPS	6"	4"	6"		
12	Nominal pressure	Class	--	--	--		
13	Design pressure	bar(g)	60	60	60		
14	Temperature	°C	475	475	475		
15	material of welding ends*		SA182 F22 Cl3	SA182 F22 Cl3	SA182 F22 Cl3		
16	Test pressure - Body Strength		101,00 bar				
17	Operating data	Loading case	Loading case	Loading case	Loading case	Loading case	
18	Medium:	SH steam	1	2	3	4	
19	Flow	kg/h	11300	26100	30300		
20	Temperature	°C	400	422	465		
21	Inlet pressure	bar(a)	42,0	50,0	60,0		
22	Outlet pressure	bar(a)	41,0	49,0	59,0		
23							
24	K _V -value	m ³ /h	98,90	247,43	283,00		
25							
26	Valve type	3-way- valve (distributor), type W					
27	Materials				Valve parameters		
28					Ø seat:	80	mm
29	Body:	SA182 F22 Cl3			Ø stem:	-	mm
30	Stem:	1.4122			K _{VS} -value	300	m ³ /h
31	Seat:	SA182 F22 Cl3			max. Δp actuator:	2	bar
32					Characteristic:	Install. Length: 445,0 mm	
33	Gaskets	Graphite			linear		
34							
35							
36							
37	Inspection:	ASME BPVC Sec. VIII Div. 1					
38		Requirements acc. :	ASME BPVC Sec.VIII Div.1				
39		Leakage rate:	max. 1,5% of C _{VS}				
40	Installation advices	Installation position: horizontally					
41							
42	Actuator	pneumatic				3156961	
43	Type:	ProtACT PR263S single acting rack & pinion type,					
44		air to open, spring to close. signal/air failure: close (outlet 3 is closed)					
45		E/P Positioner Samson Type 3730-3 with LCD and AUTOTUNE (ATEX/IECEX/FM/CSA)					
46		input 4...20mA; feedback 4...20mA; HART communication					
47		Filtre-Regulator Norgren B84G-4AK-AD1-RMG; coating acc. to C5M					
48		min. air supply pressure; 4,0bar(g)					
49	Remarks						
50							
51		- coating - ARTES-Special Coating ("Specification - Special Coating -high-temperature ≤ 540°C-" - attached)					
52							
53		¹⁾ Please check the material of the weld ends (weldability, material of the pipeline)!					
54	Revision	0	1	2	3	4	
55	Date:	23.01.2020	06.02.2020				
56	Prepared:	K. A.Ramadan	P. Schüler				
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