

		<h2 style="text-align: center;">Control Valve Specification Sheet</h2>			
Date	17.02.2020	Quotation Ref	-	Prepared By	Dariusz Bucholc
Sheet	-	Revision No	-	Email	dariusz.bucholc@pl.spiraxsarco.com
Quantity	-	AO Number	-	Telephone	-
Customer	-			Order Number	-
Project Type	-			Location	-
Project Name	-	Project Ref	-	Job Name	-
Model Code	DN25 LE33PTSUSS.2 Kv 4 PN 16 + PN9123E + SP5000R0000G7			Tag No	-
CONTROL VALVE SELECTION					
1	Service Application	-	5	Max Safe Working Pressure	-
2	Hazard Area Class	-	6	Pipe Material / Standard	- / DIN 2448 (BS EN 10220)
3	Ambient Air Temperature	-	7	Valve Type	2 Port
4	Site Noise Limit	85 dB(A)	8	Design Standard	EN
DESIGN CONDITIONS			SELECTED PIPE SIZE AND VALVE INSULATION		
9	Maximum Pressure	-	12	Pipe Inlet / Designation	1"DN25 / -
10	Minimum Temperature	-	13	Pipe Outlet / Designation	1 1/4"DN32 / -
11	Maximum Temperature	-	14	Insulation	Thermal / 100mm, 4 in;
PROCESS DATA					
15	Media	Dry Saturated Steam			
16	Process Condition	1	2	3	4
17	Name	-	-	-	-
18	State	Gas	Gas	Gas	Gas
19	Mass Flow	224,0 kg/h	120,0 kg/h	60,0 kg/h	15,0 kg/h
20	Volumetric Flow	53,75 m³/h	28,80 m³/h	14,40 m³/h	3,60 m³/h
21	Inlet Pressure	7,00 bar gauge	7,00 bar gauge	7,00 bar gauge	7,00 bar gauge
22	Outlet Pressure	6,00 bar gauge	6,00 bar gauge	6,00 bar gauge	6,00 bar gauge
23	Differential Pressure	1,00 bar	1,00 bar	1,00 bar	1,00 bar
24	Temperature	170,5 °C	170,5 °C	170,5 °C	170,5 °C
25	Normal Temperature	-	-	-	-
26	Fluid SG	-	-	-	-
27	Vapour Pressure	7,00 bar gauge	7,00 bar gauge	7,00 bar gauge	7,00 bar gauge
28	Viscosity	0,0000147 Pa s	0,0000147 Pa s	0,0000147 Pa s	0,0000147 Pa s
29	Critical Pressure	219,63 bar gauge	219,63 bar gauge	219,63 bar gauge	219,63 bar gauge
30	Critical Temperature (Tc)	373,9 °C	373,9 °C	373,9 °C	373,9 °C
31	Specific Heat Ratio	1,30	1,30	1,30	1,30
32	Compressibility (Z1)	0,93918	0,93918	0,93918	0,93918
33	Required Capacity	3,69 Kv	1,98 Kv	0,99 Kv	0,25 Kv
34	Percent Open	98%	82%	64%	28%
35	Noise Prediction	<65 dB(A)	<65 dB(A)	<65 dB(A)	<65 dB(A)
36	Power Ratio	0,03	0,02	0,01	0
37	Sigma	-	-	-	-
38	SigmaMR	-	-	-	-
39	Cavitation	None	None	None	None
40	Outlet Velocity	34,75 m/s	18,61 m/s	9,31 m/s	2,33 m/s
41	Outlet Mach	0,07	0,04	0,02	0
42	Upstream Pipe Velocity	23,41 m/s	12,54 m/s	6,27 m/s	1,57 m/s
43	Downstream Pipe Velocity	15,69 m/s	8,41 m/s	4,20 m/s	1,05 m/s
VALVE BODY ASSEMBLY					
44	Model Code	DN25 LE33PTSUSS.2 Kv 4 PN 16	52	Plug Material	St.St.431S29
45	Valve Range	Spira-Trol	53	Seat Material	St.St.431S29
46	Flow Direction	Under	54	Seating Type	431 Stainless Steel
47	Characteristic	EQ	55	Packing Material	PTFE
48	End Connections	PN 16	56	Balancing	Unbalanced
49	Body Material	Cast Iron	57	Bonnet Studs/Nuts	DIN ISO 3506 A2-70 / -
50	Bonnet Style	Standard	58	Finish	Standard
51	Trim Type / Reduction	Standard / Reduction 2	59	Shut Off Class	Class IV
ACTUATOR					
60	Actuator Model	PN9123E	74	Finish	Zgodność ze std. / Standard
61	Actuator Type	Pneumatic	75	Hand Wheel	-
62	Control	Single Acting	76	Mounting Flange	-
63	Travel	20,0 mm	77	Valve Adapter	-
64	Fail Position	Extend	78	Positioner Card	-
65	Spring Range	2,0 - 4,0 bar	79	Position Transmitter	-
66	Thrust Available	1,92 kN	80	Local Controller	-
67	% Thrust Used	28,25 %	81	3 Way Isolation	-
68	Required Force To Close	0,54 kN	82	Fault Indicator Relay	-
69	Required Force To Open	0,10 kN	83	Communication Software PSCS	-
70	Required Shut Off Differential	7,00 bar	84	Potentiometer	-
71	Air (Available / Allowable)	5,00 bar gauge / 5,00 bar gauge	85	Auxiliary Switch	-
72	Advised Max Differential	75,52 bar	86	Anti-Condensate Heater	-
73	% Safety Factor	0	87	High Temperature Kit	-
POSITIONER					
88	Positioner Model	SP5000R0000G7	92	Gauge Type / Part Number	0 - 7 bar / -
89	Product Number	3439959	93	Mounting Kit	-
90	Control Signal	4 - 20 mA	94	Mounting Kit Part Number	-
91	Enclosure Rating	IP65	95	Other	-
OTHER ACCESSORIES					
96	Air Instrument Connections	No	101	Lockup Valve / Solenoid Valve	No / No
97	Volume Tank	None	102	IP Converter	No
98	Tank Capacity	-	103	Limit Switch	No
99	Min Volume Required	-	104	Quick Exhaust / Booster	No / No
100	Filter Regulator / Tubing	MPC2AM (Autodrain) / Plastic	105	Other	-
CERTIFICATES AND SPECIAL REQUIREMENTS					
106	Material Certs Body Bonnet	None	112	Nace	No
107	Material Certs Bonnet Bolting	None	113	Control Loop Hysteresis	No
108	Material Certs Trim	None	114	Control Loop Dead Band	No
109	Drawings Outline	No	115	Paint Report	No
110	Drawings GA	No	116	ATEX + CE	No
111	Drawings Hook Up	No	117	Other	-
STANDARD TEST CERTIFICATION					
118	Hydrostatic Test	No	120	Seat Leakage Test	No
119	Functional Test	No	121	Positioner Calibration	No
MESSAGES AND NOTES					
122	The maximum valve lift is greater than 90%.				
123	-				
124	-				
125	-				
126	-				