

OMC		OMC Calculation		Filled By	Date	
1	Quotation No.	24/00100			23/07/2024	
2	Customer	C		Project	Vmech 3.9.5	
3	RFQ No.			End User		
4	Item	Quantity	2	Location		
5		Tag No.		PED (2014/68/CE) Category	B + C2	
6		Service		NACE	Not required	
7		Valve Type	Globe single seat	Piping diam. - Schedule	1 1/4" - Schedule 80	
8	Medium / State	Propylene	Min Ambient / Medium Temp.	Design Press. / Temp.	FV - 22 bar.g / 120 C	
9	Units		Case 1	Case 2		
10	Density	kg/m3	459,732	459,732	Mass density to be corrected to 437.	
11	Viscosity	cP	0,063	0,063		
12	Flow rate	kg/h	2847,000	3273,000	Inlet pressure to be corrected to 22	
13	Inlet pressure	bar.g	18,780	19,000	Inlet pressure to be corrected to 18.78	
14	Outlet pressure	bar.g	3,880	3,700	Outlet pressure to be corrected to 3.86	
15	DP	bar.g	14,900	15,300		
16	Temperature	C	48,000	48,000	Temperature to be corrected to 56	
17	Remarks		Flashing is occurring;	Flashing is occurring;		
18	Results and Factors	Calculated Cv	2,540	2,845		
19		Selected Cv	8	8		
20		Travel %	68,0	71,0		
21		SPL @ 1m Db	65,778	73,758		
22		Velocity on inlet line m/s	3,709	4,264		
23		Velocity on outlet line m/s	0,232	0,267		
24	Valve Model	SS316L 10	KA13-30-1"-AX24-A4RA		Valve Function	Control
25	Body / Bonnet	Inlet/Outlet Size	1"		<p>SA-320 L7</p> <p>SA-194 4</p> <p>Only upgraded material in compare with data sheet is accepted</p> <p>Characteristic should be changed to LINEAR. Also vendor to update graph.</p> <p>Type of actuator to be specified</p>	
26		Inlet/Outlet conn.	ANSI 300 RF			
27		Body Material	ASME SA-352 LCC			
28		Body Gasket	ARMED GRAPHITE			
29		Studs	ASME SA-193 B7			
30		Nuts	ASME SA-194 2H			
31	Bonnet type	STANDARD				
32	Bonnet Material	ASTM A350 LF2				
33	Balancing System	Not Required				
34	Trim	Cv	8			
35		Seat Type	Threaded			
36		Seat material	17-4PH H900			
37		Seat size	20,0 mm			
38		Flow action	To Open			
39		Stem Material	17-4PH H900			
40	Flow Divider	NO				
41	Flow Divider Material	-				
42	Plug Characteristic	EQP				
43	Plug (Mat.)	17-4PH H900				
44	Seal Type / Material	METALLIC/17-4PH H900				
45	Packing	Leakage Standard	EN60534-4 / ANSI FCI			
46		Type	SP200			
47	Actuator	Material	PTFE/GRAPHITE			
48		Actuator type	AX24			
49	Air failure	Close				
50	Stroke (mm)	20				
51	Notes	-Actuator sizing, catalog and also safety factor of selected size to be mentioned				
52		-Air set to be specified				
53		-positioner spec to be mentioned				
54						
55	Remarks					
56						
57						
58						
59						

- Minimum and maximum design temperature to be specified by vendor (+120/-45°C)
 - Flashing has been occurred at control valve outlet, vapor fraction at outlet is 42.94% and to be specified in vendor datasheet.
 - Vapor pressure is 18.68 barg.

Flashing has been occurred at control valve outlet, vapor fraction at outlet is 42.94% (based on MYCON PFD).

min case with 1139 kg/h to be calculated

Mass density to be corrected to 437.

Inlet pressure to be corrected to 22

To be updated

Inlet pressure to be corrected to 18.78

Outlet pressure to be corrected to 3.86

Temperature to be corrected to 56

Only upgraded material in compare with data sheet is accepted

Characteristic should be changed to LINEAR. Also vendor to update graph.

V-ring

Type of actuator to be specified

-Actuator sizing, catalog and also safety factor of selected size to be mentioned
 -Air set to be specified
 -positioner spec to be mentioned