



Control Valve Data Sheet (Sheet 1/2)

Project / EPC:
End User:
End User Location:

Quote No: 24/03190
Customer: CEA

Rev.: 1

Filled By :
Date: 30/07/2024

Minimum design temperature is (-45°C), vendor to update.

Item	Item	Quantity	2	PED(2014/68/CE) Category NACE Piping diam. – Schedule Min Ambient Temperature Design Press. / Temp.	B + C2
	TAG	LCV-0001A_B			Not required
	Service				1 1/4" - Schedule 40
	Valve Type	Globe single seat			FV - 22 bar.g / -40/120 C

Fluid/State	Propylene	Liquid
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Service Conditions	Sizing Conditions	Units	Case 1	Case 2	Case 3	#N/D	#N/D	#N/D
	18.78 barg	Density	kg/m3	437,000	437,000	437,000		
	Viscosity	cP	0,069	0,069	0,069			
	Flow rate	kg/h	2847,000	3273,000	1139,000		22 barg	
To be updated	Outlet pressure	bar.g	22,000	18,780	18,780			
	DP	bar.g	3,860	3,860	3,860		To be updated	
	Temperature	C	18,140	14,920	14,920			
			56,000	56,000	56,000			

Service Results	Flashing is occurring;	Flashing is occurring;	Flashing is occurring;	42,94% of Flashing at control valve outlet	
	Selected Cv	1,955	2,997	1,043	
	Travel	3,5	3,5	3,5	
	Noise estimated at 1m	Db	84,119	68,319	59,769
	Velocity on inlet line	m/s	3,247	3,733	1,299
	Velocity on outlet line	m/s	0,220	0,253	0,088

Valve Model	KA10	Valve Function	Control
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Body / Bonnet	Inlet/Outlet Size	ANSI 300 RF	Positioner	Manufacturer	OMC
	Inlet/Outlet conn.	ASME SA-352 LCC		Model	YT3700L-20
	Body Material	SS316L ARMED GRAPHITE		Execution	IP66
	Body Gasket	ASME SA-320 L7		Enclosure	Alluminium
	Studs	ASME SA-194 4		Signal Input	4-20mA
	Nuts	EXTENDED		Feedback	4-20mA
	Bonnet type	ASTM A350 LF2		Electrical connections	1/2 G
	Bonnet Material	Not Required		Diagnostic	-
Balancing System		Protocol	HART		

Trim	Cv	3,5	Accessories	Manufacturer	SITECNA
	Seat Type	Threaded		Model	FR04
	Seat material	17-4PH H900		Material	AISI 316
	Seat size	10,0 mm		Gauge	AISI 316
	Flow action	To Open		Pressure Range	0,4-10 bar
	Stem Material	NO		Manufacturer	-
	Flow Divider	-		Model	-
	Flow Divider Material	LIN		Execution	-
	Plug Characteristic	17-4PH H900		Material	-
	Plug (Mat.)	METALLIC/17-4PH H900		Electrical & Pneumatic conn.	-
Seal Type / Material	IV	Power Supply	-		
Leakage Class	EN60534-4 / ANSI FCI	Power Consumption	-		
Leakage Standard		Manufacturer	-		

Packing	Type	V-RING	Switches	Model	-
	Material	PTFE/GRAPHITE		Execution	-
	Actuator type	AX24		Case material	-
	Air failure	Close		Enclosure	-
				Contacts	-

Extra	Spring case/Yoke	Carbon Steel	Volume Booster	Manufacturer	-
	Diaphragm material	NBR		Model	-
	Handwheel	NO		Material	-
	Spring Action	Normally close		System	-

Notes	- Safety factor: 1,6	Tubing & Fittings	System	-
			Material	OMC STD ST. STEEL FITTINGS
				Vmech 3.9.5

-Actuator sizing,catalog to be mentioned

Ex approval to be specified

M20*1.5

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Customer: CEA		<div style="border: 1px solid red; padding: 2px; color: red; font-weight: bold;"> Minimum design temperature is (-45°C), vendor to update. </div>		PED (2014/68/CE) Category		B + C2	
Item	Quantity			2		NACE	
	TAG	LCV-0001A_B		Piping diam. - Schedule		1 1/4" - Schedule 40	
	Service	Globe single seat		Min Ambient Temperature			
	Valve Type	Propylene		Design Press. / Temp.		FV - 22 bar.g / -40, 120 C	
	Fluid/State	Liquid					
	Sizing Conditions	Units	Case 1	Case 2	Case 3	#N/D	#N/D
Service Results	Calculated	Cv	1,955	2,997	1,043		
	Selected	Cv	3,5	3,5	3,5		
	Travel	%	56,000	86,000	30,000		

Flow Curve

