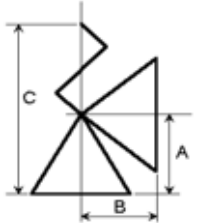
 EMERSON AUTOMATION SOLUTIONS via del aione 275 55100 Lucca Italy 0039 0583 533451 luca.bigongiari@emerson.com					Pressure Relief Valve Sizing & Selection Report 7-set-2021					
Quote Number:					No	Prpd.	Chk.	Appr.	Date	Revision
Client: SIFEM					End-User Ref. No.:					
Location:					Project Ref. No.:					
Project: RICHIESTA OFFERTA 142345TP										
1	Valve ID				41	SIZING DATA				
2	Tag No.	PRV0001			42	Design Code	ASME Section VIII		Sizing Std.	API 520
3	Service				43	Sizing Basis	Blocked Discharge			
4	PID No.				44	Fluid State at Inlet	Gas / Vapor			
5	Line No.				45	Relieving Case	Pressure Relief			
6		Quantity			46	Fluid Properties				
7	GENERAL				47	Fluid Name		Nitrogen		
8	Valve Type	Conventional, DSO, O-ring Seat			48	Molecular Weight, M		28,010		
9	Safety / Relief	Safety	Balanced	No	49	Compressibility, Z		1,000		
10	Nozzle	Semi	Bonnet	Closed	50	Ratio of Sp. Heats, k (Cp / Cv)		1,400		
11	CONNECTIONS				51	Gas Constant, C		356,1		
12	Inlet	3/4"	Thrd.	FNPT	52					
13	Outlet	1"	Thrd.	FNPT	53					
14	MATERIALS OF CONSTRUCTION				54					
15	Body	SS SA351-CF8M			55					
16	Inlet Bushing	SS A351-CF8M			56					
17	Bonnet	N/A			57					
18	Cap	SS A479-316			58					
19	Nozzle	SS A479-316			59	Sizing Coefficients		Unit	-	
20	Seat	Viton®			60	K, Gas	Kd, Gas	0,816	0,907	
21	Seals	Viton®			61	Kb	Kc	1,0	1,0	
22	Spindle	SS A479-316			62					
23	Guide	SS A479-316			63					
24	Spring	SS A313-316			64	Required Capacity		Unit	Nm³/hr	
25	Cap Type	Screwed			65	Total		166		
26	NACE MR0175/ISO 15156:2015	No			66					
27	Accessories				67	Pressures		Unit	barg	
28					68	MAWP	Operating		6,8	
29					69	Set	CDTP	11,5	11,5	
30					70	Over Pressure		1,15	10%	
31	SIZING / SELECTION SUMMARY				71	Built-Up		0		
32	Valve Model No.	83SF68-8			72	Back Pressure	Constant Superimposed	0		
33	Brand	Anderson Greenwood			73		Variable Superimposed	0		
34	Area	Calculated	Selected	0,036	74		Total	0		
35	(in²)	Data Set	Orifice	ASME	75	Inlet Loss		0	0%	
36	Flow	Unit	Required	Nm³/hr	76	Atmospheric (Barometric)		14,696	psia	
37		Rated	Actual	891,651	77	Temperatures		Unit	°C	
38					78	Normal System				
39	Reaction Force, Open Discharge			15,58 daN	79	Operating	Relieving	55	55	
40	Noise Level (db), Open Discharge			102,4 at 100-ft	80	Design Min	Design Max			
Tag Notes					Valve Dimensions	in	A			
							3,7			
							B			
							1,81			
							C			
				10,99	lb	Weight				
				8,3						