



Safety Valves Homologated CE ASME ATEX EAC UKCA SELO

In reference to your request we send you our best offer for the following safety valves sized with data provided by you:

Type:	D10/S
Quantity:	2
Homologated:	ASME VIII DIV.1 - UV
Material:	SS AISI 316L
Conn. In:	1/2" NPT
Conn. Out:	---
Gasket:	VITON (-20 / +200 °C)
Set Pressure (bar gauge):	6,00 bar
Relief Flow:	175,09 SCFM 15,6 °C
Fluid:	AIR

Note: Check if the valve offered complies with your request

WARNING: check carefully all the features of the safety valves described above.

Documentation and additional services included, extra on demand:

Type:	D10/S
CoC-Set Pressure Cert.	ASME VIII DIV.1 - UV (included)
Maintenance manual	Included.
Flow Rate Calculation	On demand
MTC EN10204 3.1 + PMI	On demand
Conf.Ord. EN10204 2.2	On demand
Roughness	On demand.
Hardness	On demand
Electro-Polishing	On demand.
Food Conformity	On demand.
Passports	On demand.
Custom Passports	On demand.
Pressure Gauge	On demand.
Conf.Ord. EN10204 2.1	On demand
Conf.Ord. EN10204 3.1	On demand
Flow Rate Calc. API	On demand
LABS	On demand.
Test H2	On demand.
Special 1	On demand.
Special 2	On demand.

On demand we make special test INAIL- TÜV- RINA - ABS - LLOYD REGISTER

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Calcolo portata di scarico valvola di sicurezza
Safety Valve Fluid Delivery Calculation

Typ. : D10/S

Fluido : ARIA

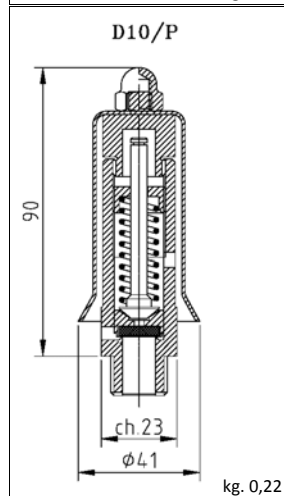
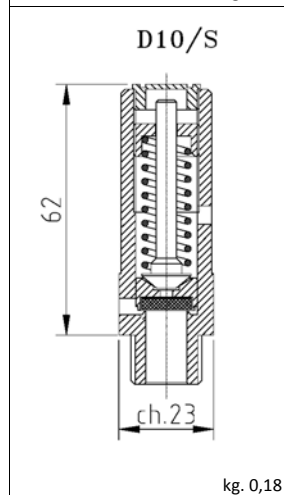
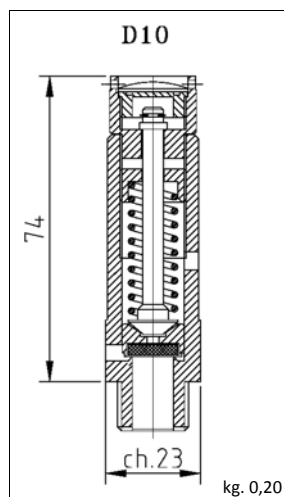
Fluid : AIR

$$W = C K A P \sqrt{\frac{M}{T_a Z}} \quad (\text{lb/h})$$

Pset	Pressione di taratura Setting pressure	6 87,023	bar g psi g
T	Temperatura Temperature	15,6 60,08	°C °F
A	Area orifizio Orifice area	78,5 0,122	mm ² sq in
K	Coefficiente di efflusso (90%Kd) Coefficient of discharge (90%Kd)	0,712	
P	Pressione in bar assoluti (P+Sovrapressione+1) Absolute flowing pressure (P+Over pressure +14,5)	7,6 110,225	bar a psi a
C	Funzione dell'esponente isentropico Function of the isentropic exponent	356	
Ta	Temperatura del fluido in °K (°C + 273) Fluid temperature (°F + 460)	288,6 520,08	°K °F + 460
M	Massa molecolare del fluido Fluid molecular mass	28,97	kg/kmol
Z	Fattore di comprimibilità del fluido Compressibility factor	1	
ç	Massa volumica del fluido alla temperatura di calcolo Fluid volumic mass at the calculation temperature	1,2235	kg/m ³

Inserendo i valori nella formula si ottiene :
Putting these data in the formula the result is :

$$\begin{aligned}
 W &= 802,53 \text{ lb/h} \\
 \text{m}^3/\text{h} / 1,699 &= 175,09 \text{ SCFM} \\
 W / 2,205 &= 363,96 \text{ kg/h} \\
 \text{kg/h} / \varphi &= 297,47 \text{ m}^3/\text{h} \\
 \text{m}^3/\text{h} / 0,06 &= 4957,87 \text{ l/min} \\
 \text{l/min} / 60 &= 82,63 \text{ l/s} \\
 \text{l/min} \times 60 &= 297472,14 \text{ l/h}
 \end{aligned}$$



Tipo : Type :		D10		do: 10 mm	
Omologazione Homologation		PN	Coefficiente efflusso ridotto Low flow coefficient	Campo di taratura Setting range	
CE - UKCA		60	0,77	0,3 - 60,0 bar	
EAC		60	0,77	0,3 - 60,0 bar	
ATEX Ex h II 2 Gb - UKEX (1)		60	0,77	0,3 - 60,0 bar	
ATEX Ex h II 2 Db - UKEX		/	/	/	
ASME XIII		60	0,712	1,0 - 60,0 bar	
Canadian Reg. CRN		60	0,712	1,0 - 60,0 bar	
CONFIGURAZIONE - CONFIGURATION					
Materiale Material		Ottone Brass	Mista Ottone-Acciaio inox Mixed Brass-Stainles steel	Acciaio inox Stainles steel	
Modelli Model	Con ghiera With ring nut	/	/	Con ghiera With ring nut	
	Senza Ghiera Without ring nut	/	/	Senza Ghiera Without ring nut	
	Con protezione With Protection	/	/	Con protezione With Protection	
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
Sedi di Tenuta Seal System	N.B.R. (Std) -10 / + 100 °C	/	/	N.B.R. (Std) -10 / + 100 °C	
	E.P.D.M. -50 / + 150 °C	/	/	E.P.D.M. -50 / + 150 °C	
	VITON -20 / +200 °C	/	/	VITON -20 / +200 °C	
	SILICONE -60 / +200 °C	/	/	SILICONE -60 / +200 °C	
	PTFE -196 / +250 °C	/	/	PTFE -196 / +250 °C	
	KALREZ -20 / +250 °C	/	/	KALREZ -20 / +275 °C	
Connessione Entrata Inlet Connection	G.3/8" - 1/2" ISO228	/	/	G.3/8" - 1/2" ISO228	
	R.3/8" - 1/2" EN10226	/	/	R.3/8" - 1/2" EN10226	
	3/8" - 1/2" NPT	/	/	3/8" - 1/2" NPT	
	/	/	/	3/4" Tri Clamp	
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
Connessione Uscita Outlet Connection	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
A richiesta possono essere eseguiti collaudi dai più prestigiosi enti quali: INAIL (area ISPESL), TÜV, RINA, Bureau Veritas, ABS e Lloyd Register On request tests can be made by the most prestigious societies, such as: INAIL (area ISPESL), TÜV, RINA, Bureau Veritas, ABS and Lloyd Register.					

Note: (1) No Modello Con protezione / No Model With P



CE ASME ATEX GOST approved safety valves

FIELD DEFINITION (NGI'S INTERNAL USE)

• Type

(indicate only one type of your belonging)

Codice	Descrizione
C	Manufacturer
R	Reseller / Assistance
U	End User

• Field

(indicate only one type of your belonging)

Codice	Descrizione
01	Alimentary
02	Bottling
03	Wine field
04	Coffee machines
05	Pharmaceutical / Chemical
06	Dental sterilizer
07	Sterilizers autoclaves
08	Heaters / Steam generators
09	Gas
10	Cryogenic
11	Conditioning / Refrigeration
12	Actuator / Oil & Gas
13	Firefighting
14	Truck Tank
15	Railway
16	Development / Engineering / Consultancy
17	Water treatment
18	Safety valves
19	Air Compressor
OTHERS	(see below)

Describe properly your type of field
