



Pressure Safety Valve Sizing

Calculation Results

Recommended Type: CONVENTIONAL Flow Regime: CRITICAL

Total Backpressure: 0.50 barg Relieving Pressure: 7.48 barg

Calculated Area: 1831.4 mm² Selected Area: 1840.6 mm²

Orifice Inlet Size: 76.2 mm Orifice Outlet Size: 101.6 mm

Actual relief Rate: 10050.2 kg/hr

Orifice Designation: L

No. of Required: 1

PSV Suction Line Specification >>

Vapor Viscosity: 0.01 Cp

General Data Process Data Sizing Data **Calculation Results** Notes

Close

Fitting Quantity

Please insert the no of selected fitting.
Fitting Item: Elbow - 90 deg Std

0

OK
Cancel

Suction Pipe Specification

File

Data Available

Nominal Diameter + Pipe Schedule
 Internal Diameter
 Pipe OD + Pipe Thickness

Pipe Schedule: std

Pipe Specifications

Pipe Length: 15.00 m
Roughness: 0.0018 in
Nominal Diameter: 0.5 in
Internal Diameter: 0.622 in
Pipe Thickness: 0.000 in
Outer Diameter: 0.000 in

Fittings Specifications

- Tee thru run
- Tee thru branch
- Elbow - 90 deg LR
- Elbow - 90 deg Std**
- Elbow - 45 deg LR
- Elbow - 45 deg Std
- Close pattern return ben
- Gate valve
- Ball valve
- Globe valve
- Angle valve
- Butterfly valve (2 - 8)
- Butterfly valve (10 - 14)
- Butterfly valve (16 - 24)
- Check valve - swing

Fitting No.: 0

<< Back to Main Form Delete All Fittings

Calculator

Edit View Help

0.

Hex Dec Oct Bin Degrees Radians Grads

Inv Hyp Backspace CE C

Sta F-E () MC 7 8 9 / Mod And

Ave dms Exp ln MR 4 5 6 * Or XOR

Sum sin x^y log MS 1 2 3 . Lsh Not

s cos x³ nl M+ 0 +/- + = Int

Dat tan x² 1/x pi A B C D E F

Orifice Designation	API Area (mm ²)	Inlet Flange Class Rating
D	71	150,300,600,900,1500,2500
E	126.5	150,300,600,900,1500,2500
F	198.1	150,300,600,900,1500,2500
G	324.5	150,300,600,900,1500,2500
H	506.5	150,300,600,900,1500
J	830.3	150,300,600,900,1500
K	1185.4	150,300,600,900,1500
L	1840.6	150,300,600,900,1500
M	2322.6	150,300,600,900
N	2800.0	150,300,600,900
P	4116.1	150,300,600,900
Q	7129.0	150,300,600
R	10322.6	150,300,600
T	16774.2	150,300