

Piston Gauge Calculator

Piston Gauge Platform: Pressurements M2800-3-F as PG

Piston-Cylinder: Pressurements M2800, 10-800 psi EA

Mass Set: Pressurements M2800 to 800 psi as PG

Trim Mass Set: None

Mass Bell: None

Medium: Sebacate DHI

Measurement Mode: Gauge

Ambient Temperature (C): 20

Ambient Humidity(%RH): 40

Ambient Pressure (kPa): 101.325

Ambient Pressure Height (cm): 0.00

Head Height (cm): 0.0

P-C Temperature (C): 20.00

Piston Position (mm): 0.0

Local Gravity (m/s²): 9.78302

Mass Loading Resolution: 0.0001

Pressure (psi): **110.0943**

True Mass (kg): **6.2599587E0**

Nominal Mass (kg): **6.2599586E0**

Mass List:

- 0.5P 2.8431900E-2 kg
- 1P1 5.6863900E-2 kg
- 1P2 5.6863900E-2 kg
- 1P3 5.6863900E-2 kg
- 1P4 5.6863900E-2 kg
- 5P 2.8431950E-1 kg
- 10P1 5.6863890E-1 kg
- 10P2 5.6863890E-1 kg
- 10P3 5.6863890E-1 kg
- 10P4 5.6863890E-1 kg
- 50P 2.8431947E0 kg
- 1 5.6863893E0 kg
- 2 5.6863893E0 kg
- 3 5.6863893E0 kg

Masses To Load:

Piston 0.0000001 kg
 CarrierM 5.7356925E-1 kg
 1 5.6863893E0 kg

Close

Setup Piston-Cylinder

Piston-Cylinder Editor [X]

Piston-Cylinder Label: 12 / 12

Header | Calibration | Tolerance | Characteristics

| | |
|----------------------|--|
| Manufacturer | <input type="text" value="Pressurements"/> |
| Model | <input type="text" value="M2800-3-F"/> |
| Serial Number | <input type="text" value="61166"/> |
| Identification | <input type="text" value="X1096"/> |
| Customer ID | <input type="text"/> |
| Piston-Cylinder Type | <input type="text" value="Piston Gauge"/> |

Piston-Cylinder Editor [X]

Piston-Cylinder Label: 12 / 12

Header | **Calibration** | Tolerance | Characteristics

| | |
|--------------------------|--|
| Calibration Date | <input type="text" value="7 /28/2005"/> |
| Calibration Due Date | <input type="text" value="7 /28/2015"/> |
| Calibration Performed By | <input type="text" value="Ruska-Pressurements"/> |
| Certification ID | <input type="text" value="070561166"/> |
| M&TE Device | <input type="checkbox"/> |
| Record Last Edited | <input type="text" value="10/31/2010 5:44:35 PM"/> |
| Record Last Edited By | <input type="text" value="Admin"/> |

Piston-Cylinder Editor X

Piston-Cylinder Label 11 / 11

Header | Calibration | **Tolerance** | Characteristics

Effective Area Tolerance Type

%Reading

Constant Offset psi

Piston-Cylinder Editor X

Piston-Cylinder Label 12 / 12

Header | Calibration | Tolerance | **Characteristics**

| | |
|--|--|
| <p>Effective Area <input type="text" value="80.6677089"/> <input type="text" value="mm2"/></p> <p>Temperature Reference (C)* <input type="text" value="20"/></p> <p>Mass (kg)* <input type="text" value="0.0000001"/></p> <p>Mass Resolution (kg)* <input type="text" value="0.000000"/></p> <p>Average Density (kg/m³)* <input type="text" value="8000"/></p> <p>Min Rotation Rate (RPM) <input type="text"/></p> <p>Max Rotation Rate (RPM) <input type="text"/></p> | <p>Piston Thermal Expansion (/°C) <input type="text" value="0"/> E-6</p> <p>Cylinder Thermal Expansion (/°C) <input type="text" value="0"/> E-6</p> <p>Pressure Expansion (/MPa) <input type="text" value="3.55"/> E-6</p> <p>Pressure Expansion 2nd (/MPa²) <input type="text"/> E-6</p> <p>Reference Level Offset (mm) <input type="text"/></p> <p>Surface Tension (N/m) <input type="text" value="0.0283"/></p> |
|--|--|

Setup Mass Set

Mass Set Editor [X]

Mass Set Label 5 / 5

Header | Calibration | Mass Set

Manufacturer


Model

Serial Number

Identification

Customer ID

Mass Set Type



Mass Set Editor

Mass Set Label: 5 / 5

Header | Calibration | **Mass Set**

Individual Masses

- CarrierM 5.7356925E-1
- 0.1P 5.6863893E-3 kg
- 0.2P1 1.1372800E-2 kg
- 0.2P2 1.1372800E-2 kg
- 0.5P 2.8431900E-2 kg
- 1P1 5.6863900E-2 kg
- 1P2 5.6863900E-2 kg
- 1P3 5.6863900E-2 kg
- 1P4 5.6863900E-2 kg
- 5P 2.8431950E-1 kg
- 10P1 5.6863890E-1 kg

Individual Mass Settings

Mass Name*

Nominal Mass

True Mass (kg)*

Tolerance (+/-mg)*

Makeup Mass

Mass Density (kg/m³)*

Mass Set Resolution (kg)

Mass Set Total

Mass Set Editor

Mass Set Label: 5 / 5

Header | Calibration | **Mass Set**

Individual Masses

- 10P2 5.6863890E-1 kg
- 10P3 5.6863890E-1 kg
- 10P4 5.6863890E-1 kg
- 50P 2.8431947E0 kg
- 1 5.6863893E0 kg
- 2 5.6863893E0 kg
- 3 5.6863893E0 kg
- 4 5.6863893E0 kg
- 5 5.6863893E0 kg
- 6 5.6863893E0 kg
- 7 5.6863893E0 kg

Individual Mass Settings

Mass Name*

Nominal Mass

True Mass (kg)*

Tolerance (+/-mg)*

Makeup Mass

Mass Density (kg/m³)*

Mass Set Resolution (kg)

Mass Set Total

Setup DWT

Piston Gauge Platform Editor [X]

Record Label: 2 / 5

Editing Record

Header | Calibration | P-C/MS | Sources | Comment

Platform Device Type:

Record Type:

Manufacturer:

Model:


Serial Number:

Identification:

Customer ID:

This device can be used as a DUT.

Platform Type:



Piston Gauge Platform Editor [X]

Record Label: 2 / 5

Header | Calibration | P-C/MS | Sources | Comment

Piston-Cylinder:

Mass Set:

Trim Mass Set:

Mass Bell:

Default Medium:

Limited to Default Medium

Default Measurement Mode:

Limited to Default Measurement Mode

