

Advantages

- Easy to Use
- Rugged Field Use Design
- Temperature Compensated
- 1-3 Year Recommended Calibration Intervals
- Record and Store Tests
- Free Calibration & Configuration Software
- Innovative Patented Technology
- ISO17025 Accredited Calibration Certificates
- Intrinsically Safe

Handheld Pressure Calibrators

| | Pressure Accuracy | Vacuum Accuracy | Operating Temp. Range | IP Rating | Pressure Sensors | Pressure Connection | Datalogging | Differential Pressure | Absolute Pressure | Read Temperature | Read Electrical | 24VDC Power Supply | Switch Test | External Pressure Module | Intrinsically Safe | |
|---------------------|-------------------------|-----------------|-----------------------|-----------|------------------|---------------------|-------------|-----------------------|-------------------|------------------|-----------------|--------------------|-------------|--------------------------|--------------------|-------------|
| Vacuum to 15000 psi | ± 0.035% Rdg | ± 0.05% FS | -20 to 50° C | IP65 | 1 or 2 | CPF Female | | | | | | | | | | HP40 Series |
| Vacuum to 15000 psi | ± 0.1% Rdg | ± 0.25% FS | -10 to 50° C | IP67 | 1 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | XP2i |
| Vacuum to 15000 psi | ± 0.025% Rdg | ± 0.06% FS | -20 to 50° C | IP67 | 1 or 2 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | nVision |
| Vacuum to 10000 psi | ± 0.035% Rdg | ± 0.05% FS | -20 to 50° C | IP65 | 1 or 2 | CPF Female | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | HP40 Series |
| Vacuum to 10000 psi | ± 0.2% Rdg | ± 0.25% FS | -10 to 50° C | IP65 | 1 | CPF Female | | | | | | | | | | m1 |
| Vacuum to 5000 psi | ± 0.05% Rdg + 0.005% FS | ± 0.25% Rdg | 0 to 50° C | — | 1 or 2 | 1/8" NPT Female | | | | ✓ | | | | | | 30 Series |
| Vacuum to 3000 psi | ± 0.25% Rdg | ± 0.5% FS | -10 to 50° C | IP65 | 1 | CPF Female | | | | | | | | | | m1M |
| Vacuum to 100 psi | ± 0.1% Rdg | ± 0.1% Rdg | -10 to 50° C | IP67 | 1 | 1/8" NPT Female | ✓ | ✓ | | | | | | | ✓ | XP2i-DP |
| Pressure Range | Specifications | | | | | | Functions | | | | | | | | | Model |

■ From 18 to 28° C.
 ■ Typical.
 ■ Plus either 0.004 or 0.01 psi.
 ■ 1/4" NPT M, 1/4" BSP M, or M20 M adapter included.
 ■ 1/4" NPT M and 1/4" BSP M adapters included.

Deadweight Testers

| | Standard Pressure Accuracy | Optional Pressure Accuracy (Rdg) | Maximum Pressure | Minimum Pressure | Minimum Increment | Pressure Connection* | Dual Piston Available | Dual Column Available | Tripped Compatibility | 5m Incremental Weight Sets | Hydraulic | Pneumatic | Self Contained | Self-Regulating Ball Type | Included Carrying Case | |
|---------------------------------|-------------------------------------------------------------------|----------------------------------|------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------|-----------|----------------|---------------------------|------------------------|---------------|
| 10 psi to 15000 psi | ± 0.015% Rdg | ± 0.025%, ± 0.1% | 15000 psi | 10 psi | 5 psi | 1/4" and 1/2" NPT F | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ | Type T Series |
| 10 psi to 3000 psi | ± 0.1% Rdg | ± 0.05% | 3000 psi | 10 psi | 0.1 psi | 1/4" NPT F | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | HL Series |
| 10 psi to 1500 psi | ± 0.025% Rdg | — | 1500 psi | 10 psi | 1 psi | 7/16-20 37° AN4 M | | | | | ✓ | | ✓ | | ✓ | HK Series |
| 4 inH ₂ O to 301 psi | ± 0.05% Rdg | ± 0.025%, ± 0.015% | 301 psi | 4 inH ₂ O | 1 inH ₂ O | 1/8" NPT F | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | RK Series |
| 4 inH ₂ O to 30 psi | ± 0.05% Rdg | ± 0.025%, ± 0.015% | 30 psi | 4 inH ₂ O | 1 inH ₂ O | 1/4" NPT F | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | PKII Series |
| Pressure Range | Specifications (See the Data Sheets for complete specifications.) | | | | | | Functions | | | | | | | | | Model* |

■ With installed adapter to 1/4 tube fitting.
 ■ Not included with dual column or 0.015% accuracy. These units are supplied with bench top column mounting plate and tubing.

* CPF connections are available for all deadweight tester models.

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Of Reading Accuracy

Our gauge accuracy is defined as "percent of reading". For example, a gauge with 0.1 percent of reading accuracy that displays 100 psi would be accurate to ± 0.1 psi at that pressure. At 50 psi, the same gauge would have an accuracy of ± 0.05 psi (twice as accurate). This versatility is why one of our gauges can replace 3 to 5 standard "of scale" rated gauges.

Temperature Compensation

Our active temperature compensation corrects sensors for changes in temperature within our specified ranges (up to -20 to 50°C). Without temperature compensation, the additional errors can quickly overwhelm the basic specification at common working temperatures.

Floating Ball Testers

While in operation, our pneumatic tester's ball and weights float freely, which is virtually frictionless, supported only by a thin film of air. This eliminates the necessity to rotate the weights during testing and allows the user to concentrate on the instrument calibration.

Self-Regulating Design

The instrument's built-in flow regulator automatically adjusts the input air flow to maintain the ball and weights in a float position. The regulator also compensates for variations in pressure from the air supply. Simply add or remove weights to generate your target pressure.

Leak-free Seal up to 10 000 psi

Our patented CPF fitting design maintains a leak-free seal up to 10 000 psi, with only finger-tightening. Improve safety with a self-venting weep hole, which alerts you, by leaking gas or test fluid, before you fully disconnect from a pressurized system. Each of our products either includes CPF fittings as standard, or can be adapted to our CPF line.

Advantages

- Easy to Use
- Rugged Field Use Design
- Temperature Compensated
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Handheld Pressure Calibrators

| | Pressure Accuracy | Vacuum Accuracy | Operating Temp. Range | IP Rating | Pressure Sensors | Pressure Connection | Datalogging | Differential Pressure | Absolute Pressure | Read Temperature | Read Electrical | 24VDC Power Supply | Switch Test | External Pressure Module | Intrinsically Safe | |
|--------------------|-------------------------|-----------------|-----------------------|-----------|------------------|---------------------|-------------|-----------------------|-------------------|------------------|-----------------|--------------------|-------------|--------------------------|--------------------|-------------|
| Vacuum to 1000 bar | ± 0.035% Rdg | ± 0.05% FS | -20 to 50° C | IP65 | 1 or 2 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | HP40 Series |
| Vacuum to 1000 bar | ± 0.1% Rdg | ± 0.25% FS | -10 to 50° C | IP67 | 1 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | XP2i |
| Vacuum to 1000 bar | ± 0.025% Rdg | ± 0.06% FS | -20 to 50° C | IP67 | 1 or 2 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | nVision |
| Vacuum to 700 bar | ± 0.035% Rdg | ± 0.05% FS | -20 to 50° C | IP65 | 1 or 2 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | HP50 Series |
| Vacuum to 700 bar | ± 0.2% Rdg | ± 0.25% FS | -10 to 50° C | IP65 | 1 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | m1 |
| Vacuum to 300 bar | ± 0.05% Rdg + 0.005% FS | ± 0.25% Rdg | 0 to 50° C | — | 1 or 2 | 1/8" NPT Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 30 Series |
| Vacuum to 200 bar | ± 0.25% Rdg | ± 0.5% FS | -10 to 50° C | IP65 | 1 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | m1M |
| Vacuum to 7 bar | ± 0.1% Rdg | ± 0.1% Rdg | -10 to 50° C | IP67 | 1 | 1/8" NPT Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | XP2i-DP |
| Pressure Range | Specifications | | | | | | Functions | | | | | | | | | Model |

■ From 18 to 28° C.
 ■ Typical.
 ■ Plus either 0.0003 or 0.001 bar.
 ■ 1/4" NPT M, 1/4" BSP M, or M20 M adapter included.
 ■ 1/4" NPT M and 1/4" BSP M adapters included.

Deadweight Testers

| | Standard Pressure Accuracy | Optional Pressure Accuracy (Rdg) | Maximum Pressure | Minimum Pressure | Minimum Increment | Pressure Connection* | Dual Piston Available | Dual Column Available | Tripped Compatibility | 5m Incremental Weight Sets | Hydraulic | Pneumatic | Self Contained | Self-Regulating Ball Type | Included Carrying Case | |
|--------------------|-------------------------------------------------------------------|----------------------------------|------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------|-----------|----------------|---------------------------|------------------------|---------------|
| 1 bar to 1000 bar | ± 0.015% Rdg | ± 0.025%, ± 0.1% | 15000 psi | 10 psi | 5 psi | 1/4" and 1/2" NPT F | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Type T Series |
| 1 bar to 225 bar | ± 0.1% Rdg | ± 0.05% | 3000 psi | 10 psi | 0.1 psi | 1/4" NPT F | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | HL Series |
| 0.5 bar to 100 bar | ± 0.025% Rdg | — | 1500 psi | 10 psi | 1 psi | 7/16-20 37" AN4 M | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | HK Series |
| 10 mbar to 20 bar | ± 0.05% Rdg | ± 0.025%, ± 0.015% | 301 psi | 4 inH ₂ O | 1 inH ₂ O | 1/8" NPT F | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | RK Series |
| 10 mbar to 2 bar | ± 0.05% Rdg | ± 0.025%, ± 0.015% | 30 psi | 4 inH ₂ O | 1 inH ₂ O | 1/4" NPT F | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | PKII Series |
| Pressure Range | Specifications (See the Data Sheets for complete specifications.) | | | | | | Functions | | | | | | | | | Model* |

■ With installed adapter to 1/4 tube fitting.
 ■ Not included with dual column or 0.015% accuracy. These units are supplied with bench top column mounting plate and tubing.

* CPF connections are available for all deadweight tester models.

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Of Reading Accuracy

Our gauge accuracy is defined as "percent of reading". For example, a gauge with 0.1 percent of reading accuracy that displays 100 bar would be accurate to ± 0.1 bar at that pressure. At 50 bar, the same gauge would have an accuracy of ± 0.05 bar (twice as accurate). This versatility is why one of our gauges can replace 3 to 5 standard "of scale" rated gauges.

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Self-Regulating Design

The instrument's built-in flow regulator automatically adjusts the input air flow to maintain the ball and weights in a float position. The regulator also compensates for variations in pressure from the air supply. Simply add or remove weights to generate your target pressure.

Leak-free Seal up to 700 bar

Our patented CPF fitting design maintains a leak-free seal up to 700 bar, with only finger-tightening. Improve safety with a self-venting weep hole, which alerts you, by leaking gas or test fluid, before you fully disconnect from a pressurized system. Each of our products either includes CPF fittings as standard, or can be adapted to our CPF line.

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|-------------------|-------------------------|-----------------|-----------------------|-----------|------------------|---------------------|-------------|-----------------------|-------------------|------------------|-----------------|--------------------|-------------|--------------------------|--------------------|-------------|
| Vacuum to 100 MPa | ± 0.035% Rdg | ± 0.05% FS | -20 to 50° C | IP65 | 1 or 2 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | HP40 Series |
| Vacuum to 100 MPa | ± 0.1% Rdg | ± 0.25% FS | -10 to 50° C | IP67 | 1 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | XP2i |
| Vacuum to 100 MPa | ± 0.025% Rdg | ± 0.06% FS | -20 to 50° C | IP67 | 1 or 2 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | nVision |
| Vacuum to 70 MPa | ± 0.035% Rdg | ± 0.05% FS | -20 to 50° C | IP65 | 1 or 2 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | HP40 Series |
| Vacuum to 70 MPa | ± 0.2% Rdg | ± 0.25% FS | -10 to 50° C | IP65 | 1 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | m1 |
| Vacuum to 30 MPa | ± 0.05% Rdg + 0.005% FS | ± 0.25% Rdg | 0 to 50° C | — | 1 or 2 | 1/8" NPT Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 30 Series |
| Vacuum to 20 MPa | ± 0.25% Rdg | ± 0.5% FS | -10 to 50° C | IP65 | 1 | CPF Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | m1M |
| Vacuum to 700 kPa | ± 0.1% Rdg | ± 0.1% Rdg | -10 to 50° C | IP67 | 1 | 1/8" NPT Female | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | XP2i-DP |
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|----------------------|-------------------------------------------------------------------|----------------------------------|------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------|-----------|----------------|---------------------------|------------------------|---------------|
| 100 kPa to 100 MPa | ± 0.015% Rdg | ± 0.025%, ± 0.1% | 15000 psi | 10 psi | 5 psi | 1/4" and 1/2" NPT F | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Type T Series |
| 100 kPa to 22.5 MPa | ± 0.1% Rdg | ± 0.05% | 3000 psi | 10 psi | 0.1 psi | 1/4" NPT F | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | HL Series |
| 50 kPa to 10 000 kPa | ± 0.025% Rdg | — | 1500 psi | 10 psi | 1 psi | 7/16-20 37" AN4 M | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | HK Series |
| 1 kPa to 2011 kPa | ± 0.05% Rdg | ± 0.025%, ± 0.015% | 301 psi | 4 inH ₂ O | 1 inH ₂ O | 1/8" NPT F | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | RK Series |
| 1 kPa to 200 kPa | ± 0.05% Rdg | ± 0.025%, ± 0.015% | 30 psi | 4 inH ₂ O | 1 inH ₂ O | 1/4" NPT F | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | PKII Series |
| Pressure Range | Specifications (See the Data Sheets for complete specifications.) | | | | | | Functions | | | | | | | | | Model* |

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