

1800 PLATINUM STANDARD™ CALIBRATION LOAD CELL (US & METRIC)

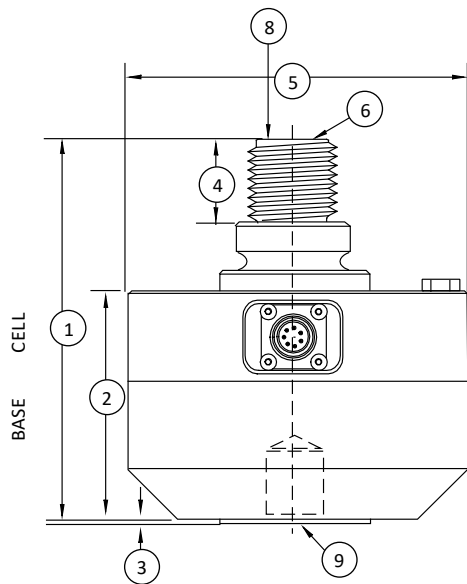
FEATURES & BENEFITS

- Capacities from 1.1K to 55K lbf (5 to 250 kN)
- Handcrafted excellence for the most demanding calibration requirements
- Tension and compression in one unit
- 0.005% nonrepeatability
- Capable of 2% lower load limit per ASTM E74
- High precision base installed
- ASTM E74 calibration standard
- Eccentric load compensated
- 0.0008%/°F temp. effect on output
- Connector protector standard

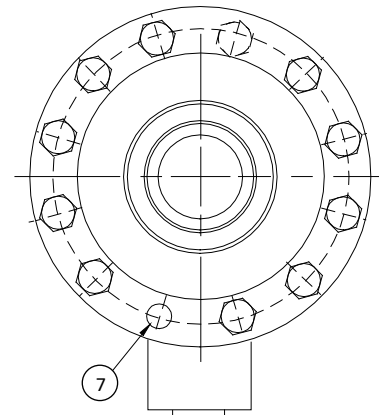
STANDARD CONFIGURATION



Model 1820CJY-50K (shown)



SIDE VIEW



TOP VIEW

DIMENSIONS

| See Drawing | MODEL | | | | | |
|-------------|------------------------|-------------------|-----------------------|-------------------|-----------------------|-------------------|
| | 1810 | | 1820 | | 1830 | |
| | CAPACITY | | | | | |
| | U.S. (lbf) | Metric (kN) | U.S. (lbf) | Metric (kN) | U.S. (lbf) | Metric (kN) |
| | 1.1K, 2.2K, 3.3K, 5.5K | 5, 10, 15, 25 | 11K, 22K | 50, 100 | 55K | 250 |
| in | mm | in | mm | in | mm | |
| (1) | 4.65 | 118.1 | 6.85 | 174.0 | 8.26 | 209.7 |
| (2) | 3.28 | 83.3 | 4.13 | 104.9 | 5.00 | 127.0 |
| (3) | 0.03 | 0.8 | 0.03 | 0.8 | 0.03 | 0.8 |
| (4) | 0.75 | 19.1 | 1.50 | 38.1 | 1.88 | 47.8 |
| (5) | 4.13 | 104.9 | 6.06 | 154.0 | 8.00 | 203.2 |
| (6) | 6.00 | 152.4 | 6.00 | 152.4 | 8.00 | 203.2 |
| (7) | 8 Places | | 12 Places | | 16 Places | |
| (8) | ¼-18 UNF-3A | M16x2 - 4H | 1¼-12 UNF - 3A | M33x2 - 4H | 1¼-12 UNF - 3A | M42x2 - 4H |
| (9) | ¼-18 UNF - 3B ↓ 0.75 | M16x2 - 4H ↓ 19.1 | 1¼-12 UNF - 3B ↓ 1.25 | M33x2 - 4H ↓ 31.8 | 1¼-12 UNF - 3B ↓ 2.00 | M42x2 - 4H ↓ 50.8 |

1800PS v2.1 05-01-2018

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SPECIFICATIONS

| PARAMETERS | | MODEL | | | | |
|----------------------------------------------|-------------|-----------------------|-------------|-------------|-------------|-------------|
| | | 1810 | 1810 | 1810 | 1820 | 1830 |
| | | CAPACITY | | | | |
| Measuring Range | U.S. (lbf) | 1.1K | 2.2K, 3.3K | 5.5K | 11K, 22K | 55K |
| | Metric (kN) | 5 | 10, 15 | 25 | 50, 100 | 250 |
| ACCURACY – (MAX ERROR) | | | | | | |
| Static Error Band – %FS | | ±0.020 | ±0.020 | ±0.020 | ±0.020 | ±0.025 |
| Nonlinearity – %FS | | ±0.020 | ±0.020 | ±0.020 | ±0.020 | ±0.020 |
| Hysteresis – %FS | | ±0.020 | ±0.025 | ±0.025 | ±0.025 | ±0.030 |
| Nonrepeatability – % RO | | ±0.005 | ±0.005 | ±0.005 | ±0.005 | ±0.005 |
| Creep, in 20 min – % | | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 |
| Side Load Sensitivity – % | | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 |
| Eccentric Load Sensitivity – % / in | | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 |
| Lower Load Limit – % Cap. (ASTM E74 Class A) | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| TEMPERATURE | | | | | | |
| Compensated Range | °F | +15 to +115 | +15 to +115 | +15 to +115 | +15 to +115 | +15 to +115 |
| | °C | -10 to +45 | -10 to +45 | -10 to +45 | -10 to +45 | -10 to +45 |
| Operating Range | °F | -65 to +200 | -65 to +200 | -65 to +200 | -65 to +200 | -65 to +200 |
| | °C | -55 to +90 | -55 to +90 | -55 to +90 | -55 to +90 | -55 to +90 |
| Effect on Zero – %RO / °F MAX | | ±0.0004 | ±0.0004 | ±0.0004 | ±0.0004 | ±0.0004 |
| Effect on Output – %RO / °F MAX | | ±0.0008 | ±0.0008 | ±0.0008 | ±0.0008 | ±0.0008 |
| ELECTRICAL | | | | | | |
| Rated Output – mV/V (Nominal) | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Excitation Voltage – VDC MAX | | 20 | 20 | 20 | 20 | 20 |
| Bridge Resistance – Ohm (Nominal) | | 700 | 700 | 700 | 700 | 700 |
| Zero Balance – %RO | | ±1.0 | ±1.0 | ±1.0 | ±1.0 | ±1.0 |
| Insulation Resistance – Megohm | | 5000 | 5000 | 5000 | 5000 | 5000 |
| MECHANICAL | | | | | | |
| Safe Overload – %CAP | | ±150 | ±300 | ±300 | ±300 | ±300 |
| Deflection @ RO | in | 0.002 | 0.002 | 0.002 | 0.002 | 0.004 |
| | mm | 0.05 | 0.05 | 0.05 | 0.05 | 0.10 |
| Weight | lbs | 3.8 | 9 | 9 | 25 | 62 |
| | kg | 1.7 | 4.1 | 4.1 | 11.3 | 28.1 |
| Calibration | | Tension & Compression | | | | |
| Material | | Alloy steel | | | | |

OPTIONS

- Standardized output
- Transducer Electronic Data Sheet (TEDS)
- Custom calibration
- Multiple bridge
- Special threads
- Dual diaphragm
- Special temperature range
- Cable length
- Add connector to cable

CONNECTOR OPTIONS

- PT02E-12-8P bayonet connector

ACCESSORIES

- Mating connector
- Mating cable
- Instrumentation