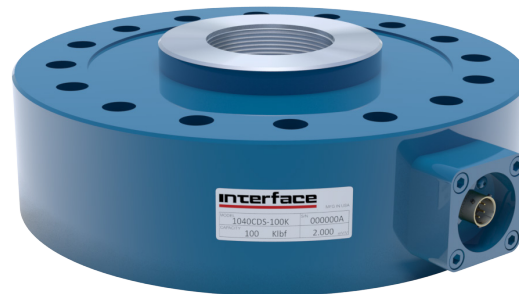


1000 FATIGUE RATED HIGH CAPACITY LOAD CELL (U.S. & METRIC)

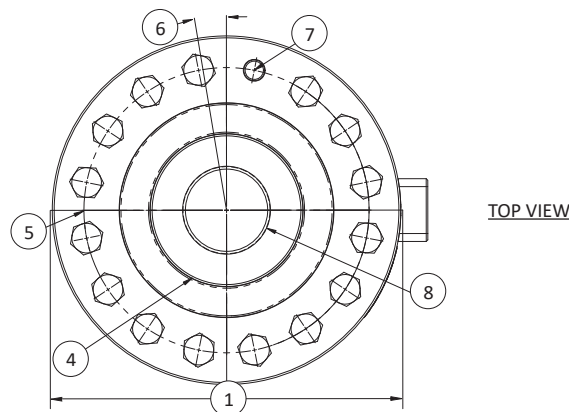
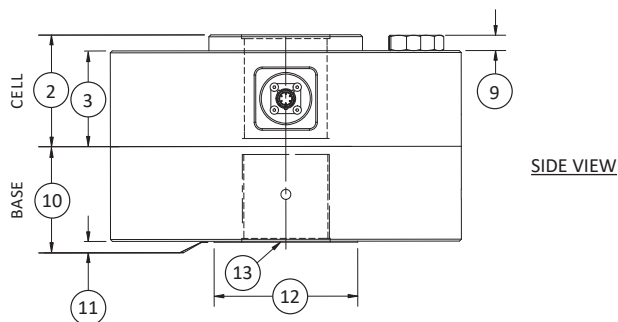
FEATURES & BENEFITS

- Capacities from 100K to 1000K lbf (450 to 4500 kN)
- Proprietary Interface temperature compensated strain gages
- 100 million fully reversed cycles
- Performance to 0.06%
- Eccentric load compensated
- Low deflection
- 0.0008%/°F (0.0015%/°C) temp. effect on output
- Barometric compensation
- Shunt calibration
- Tension and compression

STANDARD CONFIGURATION



Model 1040CDS-100K (Shown)



DIMENSIONS

| See Drawing | MODEL | | | | | | | | | | | |
|-------------|------------------------|----------------------|------------------------|----------------------|-----------------------|----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1040 | | 1044 | | 1052 | | 1060 | | 1080 | | 1090 | |
| | CAPACITY | | | | | | | | | | | |
| | US (lbf) | Metric (kN) | US (lbf) | Metric (kN) | US (lbf) | Metric (kN) | US (lbf) | Metric (kN) | US (lbf) | Metric (kN) | US (lbf) | Metric (kN) |
| | 100K | 450 | 135K | 600 | 200K | 900 | 300K | 1500 | 500K | 2250 | 1000K | 4500 |
| | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm |
| (1) | Ø11.00 | Ø279.0 | Ø11.00 | Ø279.0 | Ø12.00 | Ø304.8 | Ø15.50 | Ø393.7 | Ø20.50 | Ø520.7 | Ø26.00 | Ø660.4 |
| (2) | 3.50 | 88.9 | 4.00 | 101.6 | 4.50 | 114.3 | 5.50 | 139.7 | 6.25 | 158.8 | 7.75 | 196.9 |
| (3) | 3.00 | 76.2 | 3.25 | 82.6 | 4.25 | 108.0 | 5.00 | 127.0 | 6.00 | 152.4 | 7.50 | 190.5 |
| (4) | Ø4.81 | Ø122.2 | Ø4.81 | Ø122.2 | Ø5.68 | Ø144.3 | Ø7.73 | Ø196.3 | Ø10.55 | Ø267.9 | Ø13.79 | Ø350.3 |
| (5) | Ø9.00 | Ø228.6 | Ø8.75 | Ø222.2 | Ø9.88 | Ø250.8 | Ø12.68 | Ø322.1 | Ø16.50 | Ø419.1 | Ø20.50 | Ø520.7 |
| (6) | 11.25° | 11.25° | 11.25° | 11.25° | 9.00° | 9.00° | 7.50° | 7.50° | 6.43° | 6.43° | 5.63° | 5.63° |
| (7) | Ø0.65 | Ø16.5 | Ø0.79 | Ø20.1 | Ø0.79 | Ø21.0 | Ø0.94 | Ø23.9 | Ø1.06 | Ø27.0 | Ø1.31 | Ø33.3 |
| | 16 Places | | 16 Places | | 20 Places | | 24 Places | | 28 Places | | 32 Places | |
| (8) | 2 ¾-8 UNF-3B ↓ 3.25 | M72 X 2-4H ↓ 82.6 | 2 ¾-8 UNF-3B ↓ 3.75 | M72 X 2-4H ↓ 96.3 | 3 ½-8 UN-3B ↓ 3.75 | M90 X 3-4H ↓ 95.3 | 4 ¼-8 UN-3B ↓ 4.25 | M120 X 4-4H ↓ 108.0 | 6.00-8 UN-3B ↓ 5.63 | M150 X 4-4H ↓ 130.0 | 8.00-8 UN-3B ↓ 7.00 | M200 X 4-4H ↓ 178.0 |
| (9) | 0.50 | 12.7 | 0.50 | 12.7 | 0.59 | 15.0 | 0.69 | 17.5 | 1.00 | 25.4 | 1.25 | 31.3 |
| (10) | 3.00 | 76.2 | 4.00 | 101.6 | 4.50 | 114.3 | 5.00 | 127.0 | 7.00 | 177.8 | 9.00 | 228.6 |
| (11) | 0.03 | 0.8 | 0.03 | 0.8 | 0.03 | 0.8 | 0.03 | 0.8 | 0.03 | 0.8 | 0.10 | 2.5 |
| (12) | Ø4.50 | Ø114.3 | Ø4.50 | Ø114.3 | Ø6.00 | Ø152.4 | Ø7.75 | Ø196.9 | Ø10.55 | Ø267.9 | Ø14.00 | Ø355.6 |
| (13) | 2 ¾-8 UNF-3B ↓ 2.75 | M72 X 2-4H ↓ 69.8 | 2 ¾-8 UNF-3B ↓ 3.75 | M72 X 2-4H ↓ 95.3 | 3 ½-8 UN-3B ↓ 3.75 | M90 X 3-4H ↓ 95.3 | 4 ¼-8 UN-3B ↓ 4.25 | M120 X 4-4H ↓ 108.0 | 6.00-8 UN-3B ↓ 6.38 | M150 X 4-4H ↓ 162.0 | 8.00-8 UN-3B ↓ 7.25 | M200 X 4-4H ↓ 184.0 |

1000HC v2.1 01-27-2021

1000 FATIGUE RATED HIGH CAPACITY LOAD CELL (U.S. & METRIC)

SPECIFICATIONS

| PARAMETERS | | MODEL | | | | | |
|-------------------------------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|
| | | 1040 | 1044 | 1052 | 1060 | 1080 | 1090 |
| | | CAPACITY | | | | | |
| Measuring Range | U.S. (lbf) | 100K | 135K | 200K | 300K | 500K | 1000K |
| | Metric (kN) | 450 | 600 | 900 | 1500 | 2250 | 4500 |
| ACCURACY – (MAX ERROR) | | | | | | | |
| Static Error Band – %FS | | ±0.06 | ±0.07 | ±0.09 | ±0.10 | ±0.15 | ±0.20 |
| Nonlinearity – %FS | | ±0.06 | ±0.08 | ±0.09 | ±0.10 | ±0.15 | ±0.20 |
| Hysteresis – %FS | | ±0.06 | ±0.08 | ±0.09 | ±0.10 | ±0.15 | ±0.20 |
| Nonrepeatability – %RO | | ±0.02 | ±0.02 | ±0.02 | ±0.02 | ±0.02 | ±0.02 |
| Creep, in 20 min – % | | ±0.025 | ±0.025 | ±0.025 | ±0.025 | ±0.025 | ±0.025 |
| Side Load Sensitivity – % | | ±0.1 | ±0.25 | ±0.25 | ±0.25 | ±0.25 | ±0.25 |
| Eccentric Load Sensitivity – % / in | | ±0.1 | ±0.25 | ±0.25 | ±0.25 | ±0.25 | ±0.25 |
| TEMPERATURE | | | | | | | |
| Compensated Range | °F | +15 to +115 | +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 | -10 to +45 |
| Operating Range | °F | -65 to +200 | -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 | -55 to +90 |
| Effect on Zero – %RO / deg | °F | ±0.0008 | ±0.0008 | ±0.0008 | ±0.0008 | ±0.0008 | ±0.0008 |
| | °C | ±0.0015 | ±0.0015 | ±0.0015 | ±0.0015 | ±0.0015 | ±0.0015 |
| Effect on Output – % / deg | °F | ±0.0008 | ±0.0008 | ±0.0008 | ±0.0008 | ±0.0008 | ±0.0008 |
| | °C | ±0.0015 | ±0.0015 | ±0.0015 | ±0.0015 | ±0.0015 | ±0.0015 |
| ELECTRICAL | | | | | | | |
| Rated Output – mV/V (Nominal) | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Excitation Voltage – VDC MAX | | 20 | 20 | 20 | 20 | 20 | 20 |
| Bridge Resistance – Ohm (Nominal) | | 350 | 350 | 350 | 350 | 350 | 350 |
| Zero Balance – %RO | | ±1.0 | ±1.0 | ±1.0 | ±1.0 | ±1.0 | ±1.0 |
| Insulation Resistance – Megohm | | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 |
| MECHANICAL | | | | | | | |
| Safe Overload – %CAP | | ±300 | ±300 | ±300 | ±300 | ±300 | ±300 |
| Deflection @ RO | in | 0.003 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| | mm | 0.08 | 0.08 | 0.10 | 0.10 | 0.13 | 0.13 |
| Optional Base – P/N (Metric) | | B105 (M) | B116 (M) | B121 (M) | B122 (M) | B123 (M) | B125 (M) |
| Natural Frequency – kHz | | 4.9 | 5.0 | 5.5 | 5.5 | 5.5 | 5.5 |
| Weight | lbs | 68 | 70 | 100 | 200 | 450 | 860 |
| | kg | 30.9 | 31.8 | 45 | 90 | 205 | 390 |
| Calibration | | Tension & Compression | | | | | |
| Material | | Alloy Steel | | | | | |

OPTIONS

- Base (Recommended)
- Connector protection
- Standardized output
- Transducer Electronic Data Sheet (TEDS)
- Custom calibration
- Multiple bridge
- Special threads
- Dual diaphragm
- Special temperature range

CONNECTOR OPTIONS

- Integral cable – 10 ft (3 m)
- PT02E-10-6P bayonet connector
- PC04E-10-6P screw-type connector

ACCESSORIES

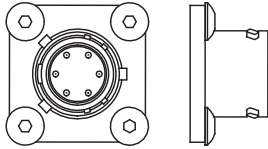
- Mating connector
- Mating cable
- Instrumentation
- Loading hardware

1000 FATIGUE RATED HIGH CAPACITY LOAD CELL (U.S. & METRIC)

BAYONET CONNECTOR



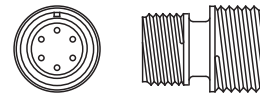
Model 1040CDS-100K-B (Shown)



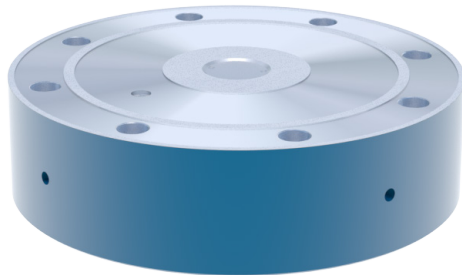
SCREW TYPE CONNECTOR



Model 1040ALD-100K-B (Shown)



BASE



Model B1XX (Shown)