



## Standard Features

- ASTM E74 performance: Lower Limit Factor (LLF) better than 0.02 %, Class A loading range better than 8 % of capacity when used only in a single direction in compression.<sup>1</sup>
- ISO 376 Class 0.5 performance range
- Suitable to be used as secondary calibration standards, as well as field force measurement
- Reliable multi-column design provides repeatable force measurement in rotation
- Compression-only load cells. Compression/tension models available per request
- Capacities from 200K–2,000K lbf, or equivalent kgf/Newton
- Available accessories such as: compression blocks, load pads, custom-cut protective cases, various indicators

*1. When the directions are combined, there may be a reduction in the loading range. The reduction varies by capacity, and the verified range of forces could increase to 20 % of capacity.*

## Technical Specifications

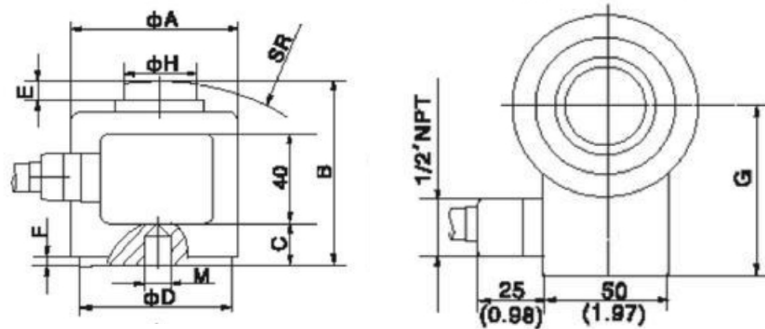
| Specifications                   | Capacity (lbf ) |                 |                 |                 |                 |                 |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                  | 200K            | 300K            | 500K            | 600K            | 750K            | 1M              |
| <b>Accuracy</b>                  |                 |                 |                 |                 |                 |                 |
| Non-Linearity, % FS              | ± 0.01          | ± 0.01          | ± 0.017         | ± 0.03          | ± 0.03          | ± 0.03          |
| Hysteresis, % FS                 | ± 0.02          | ± 0.02          | ± 0.02          | ± 0.03          | ± 0.03          | ± 0.03          |
| Non-Repeatability, % FS          | ± 0.01          | ± 0.01          | ± 0.01          | ± 0.01          | ± 0.01          | ± 0.01          |
| Zero Balance, % FS               | ± 1.0           | ± 1.0           | ± 1.0           | ± 1.0           | ± 1.0           | ± 1.0           |
| <b>Temperature</b>               |                 |                 |                 |                 |                 |                 |
| Compensated Range, °F            | 14 to 104       | 14 to 104       | 14 to 104       | 60 to 160       | 60 to 160       | 60 to 160       |
| Operating Range, °F              | -31 to 149      | -31 to 149      | -31 to 149      | -30 to 185      | -30 to 185      | -30 to 185      |
| Sensitivity Effect, % Rdg per °F | 0.001           | 0.001           | 0.001           | 0.002           | 0.002           | 0.002           |
| Zero Effect, % R.O. per °F       | 0.001           | 0.001           | 0.001           | 0.002           | 0.002           | 0.002           |
| <b>Electrical</b>                |                 |                 |                 |                 |                 |                 |
| Recommended Excitation, VDC      | 5-12            | 5-12            | 5-12            | 10              | 10              | 10              |
| Input Resistance, Ω              | 450 ± 5         | 450 ± 5         | 450 ± 5         | 350             | 350             | 350             |
| Output Resistance, Ω             | 480 ± 5         | 480 ± 5         | 480 ± 5         | 350             | 350             | 350             |
| Sensitivity (FS), mV/V, Nominal  | 2               | 3               | 2               | 2               | 2               | 2               |
| Insulation Bridge/Case, MegΩ     | >5000 at 50 VDC | >5000 at 50 VDC | >5000 at 50 VDC | >5000 at 50 VDC | >5000 at 50 VDC | >5000 at 50 VDC |
| <b>Mechanical</b>                |                 |                 |                 |                 |                 |                 |
| Safe Overload, % FS              | 150             | 150             | 150             | 150             | 150             | 150             |
| Material                         | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel |

| Capacity (lbf) | 200,000    | 300,000    | 500,000    | 600,000    | 750,000    | 1,000,000   |
|----------------|------------|------------|------------|------------|------------|-------------|
| Capacity (kN)  | 900        | 1 000      | 2 500      | 3 000      | 3 500      | 5 000       |
| Part No.       | PC-200K-MC | PC-300K-MC | PC-500K-MC | PC-600K-MC | PC-750K-MC | PC-1000K-MC |

Load cells for other capacities are available. Contact Morehouse for more information.

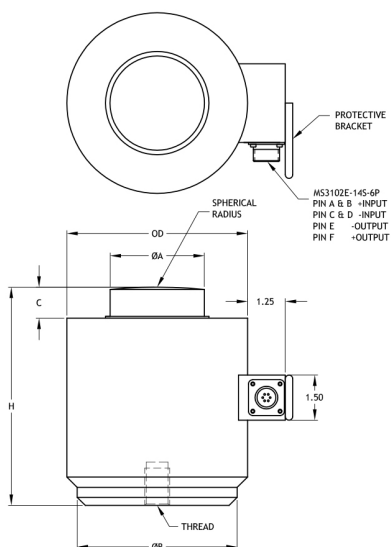
## Dimensions

### 200K, 300K, 500K Load Cells



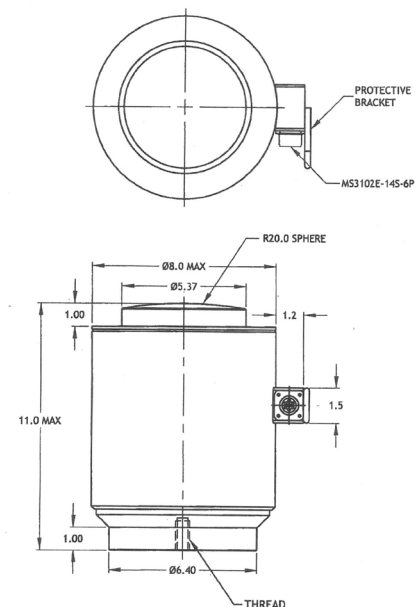
| Capacity | A               | B               | C               | D               | E               | F             | G             | H              | M            |
|----------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------|----------------|--------------|
| 200K     | 151.4<br>(5.96) | 184.2<br>(7.25) | 87.35<br>(3.44) | 123.8<br>(4.87) | 23.15<br>(0.91) | 3.7<br>(0.15) | 108<br>(4.26) | 79.4<br>(3.13) | 3/4-16UNF-2B |
| 300K     | 151.4<br>(5.96) | 184.2<br>(7.25) | 87.35<br>(3.44) | 123.8<br>(4.87) | 23.15<br>(0.91) | 3.7<br>(0.15) | 108<br>(4.26) | 79.4<br>(3.13) | 3/4-16UNF-2B |
| 500K     | 162.6<br>(6.40) | 228.6<br>(9.0)  | 101.5<br>(4.0)  | 136.3<br>(5.37) | 10.85<br>(0.43) | 3.7<br>(0.15) | 123<br>(4.84) | 93.7<br>(3.69) | 3/4-16UNF-2B |

### 600K Load Cell



| Capacity | OD   | ØA   | ØB   | H    | Thread        | C    |
|----------|------|------|------|------|---------------|------|
| 600K     | 6.50 | 3.69 | 5.81 | 9.00 | 3/4-16 UNF-3B | 1.04 |

### 750K, 1M Load Cells



## Wiring

### 200K, 300K, 500K Load Cells

| Wire Color | Description  |
|------------|--------------|
| Green      | Excitation + |
| Black      | Excitation - |
| White      | Output +     |
| Red        | Output -     |
| Bare       | Shield       |

### 600K, 750K, 1M Load Cells

| Pin   | Description |
|-------|-------------|
| A & B | + Input     |
| C & D | - Input     |
| E     | - Output    |
| F     | + Output    |