# High Temperature Load Cell

## FEATURES

- Operational to 400°F
- Compact—rugged
- Low deflection
- Environmentally sealed
- 20,000 to 200,000 pound capacities


## APPLICATIONS

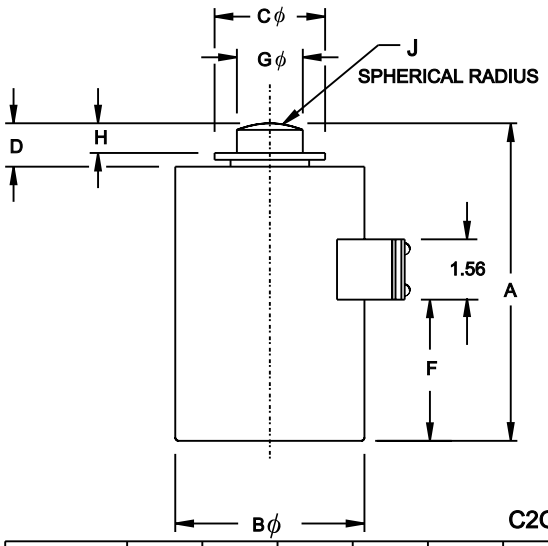
- High temperature environments

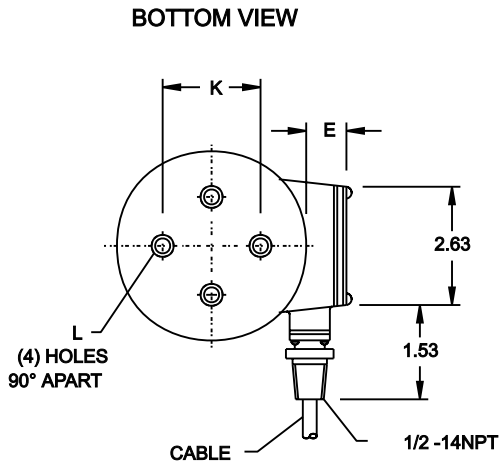
## DESCRIPTION

C2G1-H load cells operate at temperatures up to 400°F without needing external cooling. Ability to withstand extreme heat makes C2G1-H cells the perfect choice for weighing molten metals. Other applications include tank and scale installations in locations that are subject to intense heat.

Double diaphragm fabrication and gage linearizing combine to offer precision performance and long term reliability. Low deflection and superior sealing guarantee trouble-free operation. Relatively low mass and small deflection under load, produce excellent frequency response. Overall, C2G1-H cells perform superbly in severe environments where other transducers cannot.

## OUTLINE DIMENSIONS




C2G1-H

| CAPACITY (lbs) | A | Bϕ | Cϕ | D | E | F | Gϕ | H | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20,000 | 7 1/2 | 4 1/2 | 2 1/4 | 3/4 | 7/8 | 3 7/16 | 1 1/4 | 1/2 | 6 | 2 3/8 | 3/8-24UNF-2B X 3/8 DP |
| 50,000 | 7 1/2 | 4 1/2 | 2 1/4 | 3/4 | 7/8 | 3 7/16 | 1 1/4 | 1/2 | 6 | 2 3/8 | 3/8-24UNF-2B X 3/8 DP |
| 100,000 | 9 1/8 | 6 | 3 1/8 | 1 1/16 | 1 1/32 | 4 3/4 | 1 3/4 | 5/8 | 12 | 4 | 1/2-20UNF-2B X 3/4 DP |
| 200,000 | 11 5/8 | 8 | 4 1/2 | 1 1/16 | 1 1/8 | 6 1/4 | 2 1/2 | 5/8 | 12 | 5 1/2 | 5/8-18UNF-2B X 1 DP |

BLH NOBEL
A VPG Brand

High Temperature Load Cell

| SPECIFICATIONS | |
|---|---|
| **PARAMETER** | **VALUE** |
| **PERFORMANCE** | |
| **Rated ouput** | 2 mV/V ±0.25% |
| **Non-linearity—% RO** | 0.20 |
| **Hysteresis—% RO** | 0.10 |
| **Repeatability—% RO** | 0.10 |
| **Creep—% RO (20 minutes)** | 0.10 |
| **ELECTRICAL** | |
| **Recommended excitation** | 10 VAC-DC |
| **Zero balance—% RO** | 2.5 |
| **Input resistance** | 375 Ω ±8 Ω @ 400°F |
| **Output resistance** | 350 Ω ±10.0 Ω |
| **Number of bridges** | single |
| **Min. Insulation resistance** | |
| **Bridge to ground** | 1000 MΩ (@ 50 VDC) |
| **Shield to ground** | 1000 MΩ (@ 50 VDC) |
| **Electrical connection** | 20 ft cable |

| PARAMETER | VALUE |
|---|---|
| **TEMPERATURE** | |
| **Safe range** | ±15 to ±400°F |
| **Compensated range** | ±15 to ±400°F |
| **Effect on zero balance** | 0.0025% RO/°F |
| **Effect on rated output** | 0.005% Load/°F |
| **ADVERSE LOAD RATINGS** | |
| **Safe overload** | 150% RO |
| **Ultimate overload** | 300% RO |

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly.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