

PRODUCT DATA SHEET

# HC-LB · High Capacity Load Button

Compression · 15K lbf (75 kN) · Stainless Steel · IP68

## OVERVIEW

PRODUCT · FEATURES · APPLICATIONS



### FEATURES

- High capacity in a low-profile footprint
- All stainless steel construction, hermetically sealed to IP68
- Central loading dome for self-aligning, repeatable force transfer
- Four M8 mounting threads for surface mount installation
- Rugged braid shielded TPR cable, 5 m standard
- Nonlinearity and hysteresis superior to most load button load cells

### TYPICAL APPLICATIONS

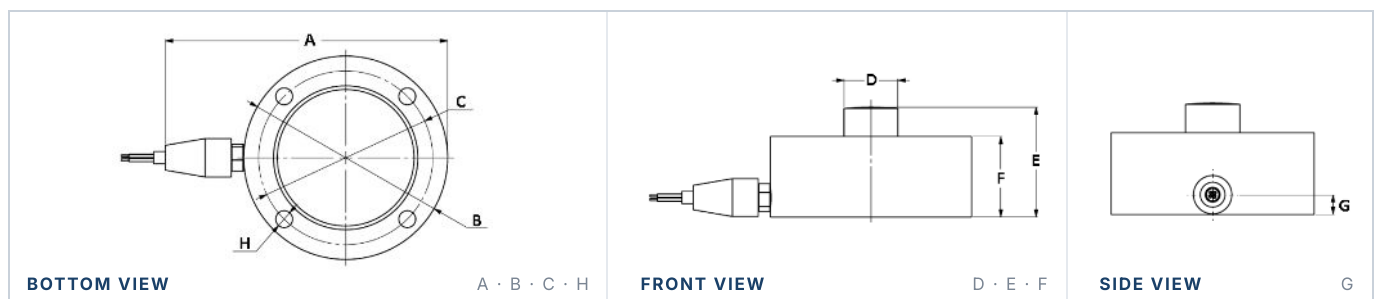
Tank, hopper & reactor weighing · Industrial automation · Spot check of industrial process · Pressing force verification

## CAPACITY

COMPRESSION

<p>MODEL NAME</p> <p><b>HC-LB-15KLB</b></p> <p>High Capacity Load Button</p>	<p>RATED CAPACITY</p> <p><b>15K lbf</b></p> <p>75 kN</p>	<p>NONLINEARITY</p> <p><b>±7.5 lbf</b></p> <p>±37.5 N</p>
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## DIMENSIONS



SYM.	FEATURE	INCHES	MILLIMETERS
A	Outer flange diameter	ø 4.47	ø 113.50
B	Body (sensor) outer diameter	ø 3.23	ø 82.00
C	Loading dome recess diameter	ø 2.76	ø 70.00
D	Loading dome (button) diameter	ø 0.87	ø 22.00
E	Overall height (with dome)	1.77	45.00
F	Body height	1.30	33.00
G	Loading dome height	0.31	8.00
H	Mounting threads (×4, on flange)	M8 ↓ 0.63	M8 ↓ 16

**SPECIFICATIONS**

**PERFORMANCE**

Rated Output (R.O.)	<b>1.7 mV/V</b>
Rated Output Tolerance	<b>±0.01 mV/V</b>
Zero Balance	<b>-0.06 ~ +0.06 mV/V</b>
Nonlinearity	<b>±7.5 lbf [37.5 N]</b>
Hysteresis	<b>±7.5 lbf [37.5 N]</b>
Repeatability	<b>±3 lbf [15 N]</b>
Creep (30 minutes)	<b>±0.05 % of load</b>

**TEMPERATURE**

Compensated Range	<b>-10 to +40 °C</b>
Safe Range	<b>-30 to +70 °C</b>
Temp. Effect on Span	<b>0.002 % of applied / °C</b>
Temp. Effect on Zero	<b>0.03 lbf / °C</b>

**ELECTRICAL**





Input Impedance	<b>770 ± 35 Ω</b>
Output Impedance	<b>700 ± 5 Ω</b>
Insulation Resistance	<b>&gt; 5 GΩ @ 50 V DC</b>
Cable Length	<b>5 m</b>
Cable Specification	<b>4 × 24 AWG</b>
Cable Material	<b>TPR</b>
Cable Structure	<b>Braid Shield</b>

**MECHANICAL**

Sensor Material	<b>Stainless Steel</b>
Element Type	<b>Bonded Foil Strain Gauge</b>
Direction of Loading	<b>Compression</b>
Safe Overload (central)	<b>18K lbf [80 kN]</b>
Ultimate Load	<b>22.5K lbf [100 kN]</b>
Environmental Protection	<b>IP68</b>

**WIRING**

4-CONDUCTOR SHIELDED CABLE

CABLE COLOR CODE	
 Red	<b>+ Excitation (+E)</b>
 Black	<b>- Excitation (-E)</b>
 Green	<b>+ Signal (+S)</b>
 White	<b>- Signal (-S)</b>

**ORDERING & NOTES**

HOW TO SPECIFY

**How to order.** Specify model **HC-LB-15KLBF**. OEM customers are welcome to request customizations.

**Installation.** Mount via the four M8 × 16 deep threads on the underside flange. Apply load centrally to the loading dome to maintain rated accuracy.