

PRODUCT DATA SHEET

HC-LB · High Capacity Load Button

Compression · 25K lbf (100 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

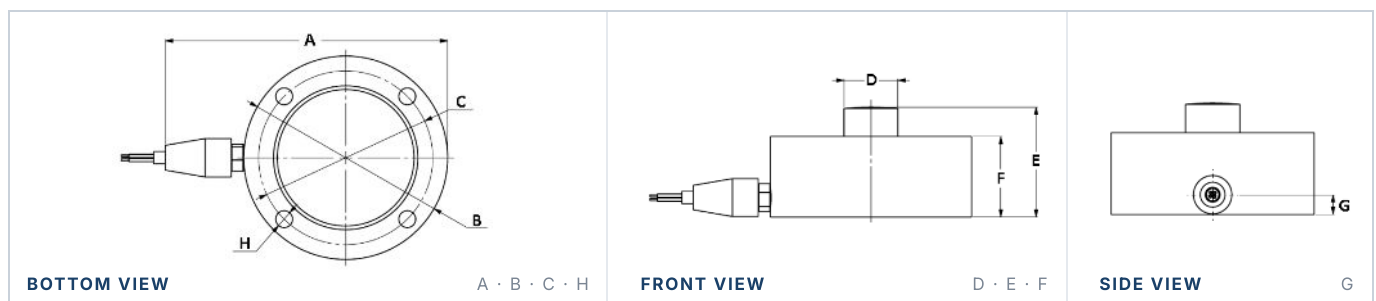
Tank, hopper & reactor weighing · Industrial automation · Spot check of industrial process · Pressing force verification

CAPACITY

COMPRESSION

<p>MODEL NAME</p> <p>HC-LB-25KLB</p> <p>High Capacity Load Button</p>	<p>RATED CAPACITY</p> <p>25K lbf</p> <p>100 kN</p>	<p>NONLINEARITY</p> <p>±12.5 lbf</p> <p>±50 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.)	1.7 mV/V
Rated Output Tolerance	±0.008 mV/V
Zero Balance	-0.06 ~ +0.06 mV/V
Nonlinearity	±12.5 lbf [50 N]
Hysteresis	±12.5 lbf [50 N]
Repeatability	±5 lbf [20 N]
Creep (30 minutes)	±0.05 % of load

TEMPERATURE

Compensated Range	-10 to +40 °C
Safe Range	-30 to +70 °C
Temp. Effect on Span	0.002 % of applied / °C
Temp. Effect on Zero	0.002 % of rated / °C

ELECTRICAL





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

MECHANICAL

Sensor Material	Stainless Steel
Element Type	Bonded Foil Strain Gauge
Direction of Loading	Compression
Safe Overload (central)	30K lbf [120 kN]
Ultimate Load	37.5K lbf [150 kN]
Environmental Protection	IP68

WIRING

4-CONDUCTOR SHIELDED CABLE

CABLE COLOR CODE	
 Red	+ Excitation (+E)
 Black	- Excitation (-E)
 Green	+ Signal (+S)
 White	- Signal (-S)

ORDERING & NOTES

HOW TO SPECIFY

How to order. Specify model **HC-LB-25KLBF**. 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.