

PRODUCT DATA SHEET

HC-LB · High Capacity Load Button

Compression · 35K lbf (150 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

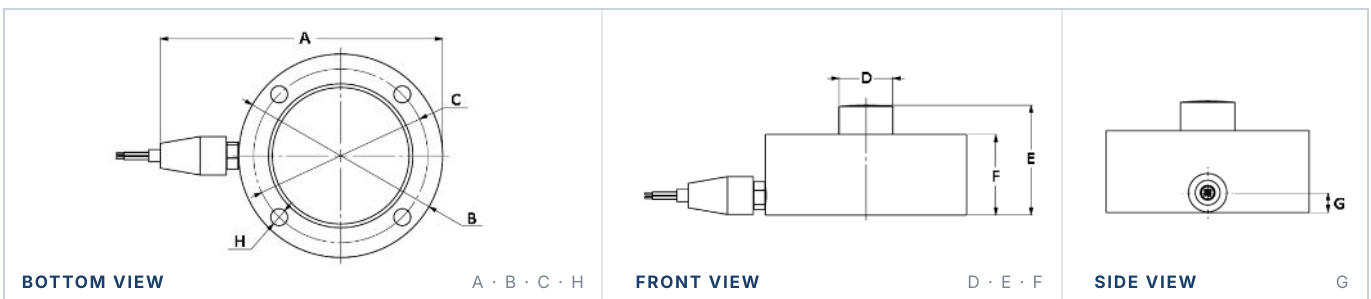
Tank, hopper & reactor weighing · Industrial automation · Spot check of industrial process · Pressing force verification

CAPACITY

COMPRESSION

<p>MODEL NAME</p> <p>HC-LB-35KLB</p> <p>High Capacity Load Button</p>	<p>RATED CAPACITY</p> <p>35K lbf</p> <p>150 kN</p>	<p>NONLINEARITY</p> <p>±17.5 lbf</p> <p>±77.5 N</p>
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DIMENSIONS



SYM.	FEATURE	INCHES	MILLIMETERS
A	Outer flange diameter	∅ 5.18	∅ 131.50
B	Body (sensor) outer diameter	∅ 3.94	∅ 100.00
C	Loading dome recess diameter	∅ 3.46	∅ 88.00
D	Loading dome (button) diameter	∅ 1.10	∅ 28.00
E	Overall height (with dome)	1.85	47.00
F	Body height	1.38	35.00
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	±17.5 lbf [77.5 N]
Hysteresis	±17.5 lbf [77.5 N]
Repeatability	±7 lbf [30 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 R.O. / °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)	42K lbf [180 kN]
Ultimate Load	52.5K lbf [225 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-35KLBF**. 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.