

LOW PROFILE LOAD CELLS

WATERPROOF FOR WET OR WASHDOWN APPLICATIONS

***Tension/Compression
Calibrated in Tension
5 to 500,000 lb Capacities
2.3 kgf to 225T* Capacities***

LSHD Series Compression



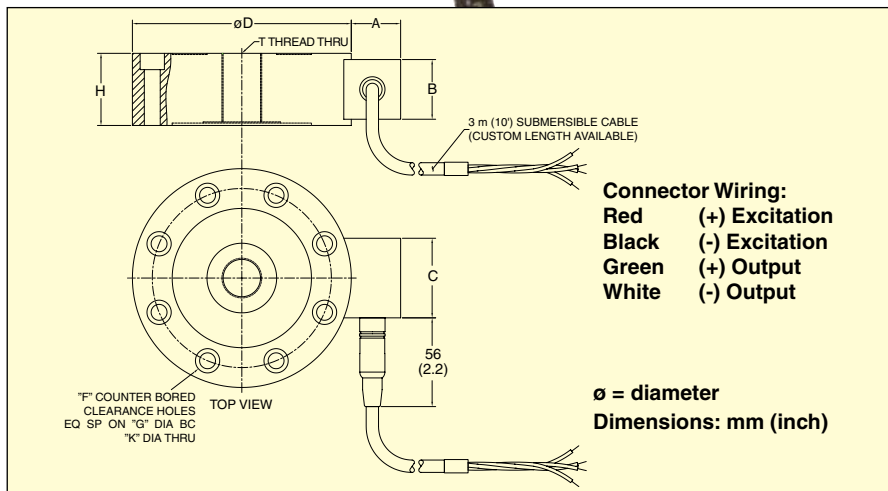
- **High Accuracy**
- **5-Point NIST Traceable Calibration Included**
- **Hermetically Sealed for Wet and Submerged Applications**
- **All Stainless Steel Construction for Harsh Industrial Environments**
- **1% Interchangeability for Scale Applications**
- **High Capability to Resist Side Loads**
- **Low Profile for Easy Installations**
- **3 m (10') Waterproof Cable Standard**

The LSHD Series load cells are hermetically sealed and have a high pressure, high temperature molded cable seal to assure long life in wet or submerged applications such as truck or rail scales. They are supplied with a standard length of 3 m (10') of cable, however longer lengths are available. Many standard lengths are stocked plus custom lengths are also available.



LSHD

Waterproof high pressure molded cable connection.



SPECIFICATIONS

Excitation: 10 Volts, 15 Vdc maximum

Output Ranges ≤ 25 lb: 2 mV/V $\pm 1\%$

Ranges > 25 lb: 3 mV/V $\pm$ 1%

Calibration: 5 points in tension

0%, 50%, 100%, 50%, 0% capacity

Linearity ≤ 25 lb: $\pm 0.2\%$ FSO

Ranges > 25 lb: $\pm 0.1\%$ FSO

Hysteresis ≤ 25 lb: $\pm 0.1\%$ FSO

Ranges > 25 lb: $\pm 0.08\%$ FSO

Repeatability ≤ 25 lb: $\pm 0.1\%$ FSO

Ranges > 25 lb: $\pm 0.03\%$ FSO

Zero Balance: $\pm 1\%$ FSO

FS Deflection: 0.025 to 0.075 mm
(0.001 to 0.003")

Operating Temperature: -18 to 82°C
(0 to 180°F)

Compensated Temperature:
15 to 71°C (60 to 160°F)

Thermal Effects:

Span: $\pm 0.0036\%$ rdg/ $^{\circ}\text{C}$

Zero: $\pm 0.0036\%$ FSO/ $^{\circ}\text{C}$

Safe Overload: 150% Capacity

Ultimate Overload: 300% Capacity

CAPACITY (LBS)	Dimensions: mm (inch)								
	D	H	K	G	F	T-THREADS	B	C	A
5 to 25	64 (2.50)	20 (0.80)	4.6 (0.18)	51 (2.00)	6	¼ – 28UNF–2B	19 (0.75)	32 (1.25)	23 (0.92)
50 to 1000	76 (3.00)	25 (1.00)	7 (0.28)	57 (2.25)	6	⅜ – 24UNF–2B	19 (0.75)	32 (1.25)	23 (0.92)
2000 to 5000	89 (3.50)	25 (1.00)	9 (0.34)	67 (2.63)	6	½ – 20UNF–2B	19 (0.75)	32 (1.25)	23 (0.92)
7500 to 15,000	140 (5.50)	46 (1.80)	10 (0.40)	114 (4.50)	8	1 – 14UNS–2B	38 (1.50)	51 (2.00)	32 (1.24)
20,000 to 50,000	152 (6.00)	46 (1.80)	13 (0.53)	124 (4.88)	8	1½ – 12UNF–2B	38 (1.50)	51 (2.00)	32 (1.24)
75,000 to 100,000	229 (9.00)	64 (2.50)	17 (0.66)	197 (7.75)	12	2 – 12UN–2B	38 (1.50)	51 (2.00)	32 (1.24)
150,000 to 200,000	279 (11.00)	76 (3.00)	20 (0.78)	241 (9.50)	12	2½ – 12UN–2B	38 (1.50)	51 (2.00)	32 (1.24)
300,000 to 500,000	356 (14.00)	108 (4.25)	25 (1.00)	298 (11.75)	12	3½ – 8UN–2B	38 (1.50)	51 (2.00)	32 (1.24)

*** Metric Models Available:** Contact Sales for specific model number, price and delivery information.

WATERPROOF LOAD CELLS

Bridge Resistance: 350 Ω nominal

Protection Level: IP68

Electrical Connection: 3 m (10')
submersible cable

Other lengths available see table

Construction: 17-4 pH stainless steel

Submersible Depth:

5 to 10K Range: 3 m (10')

20 to 50K Range: 6 m (20')

75 to 500K Range: 15 m (50')

SUBMERSIBLE CABLE

LENGTH	LENGTH cont'd
0.6 m (2')	15.2 m (50')
1.5 m (5')	18.3 m (60')
3.0 m (10')	19.8 m (65')
4.5 m (15')	22.8 m (75')
6.0 m (20')	30.4 m (100')
7.6 m (25')	45.7 m (150')
9.1 m (30')	60.9 m (200')
12.2 m (40')	91.4 m (300')

Custom cable length available.

POPULAR OPTIONS

DESCRIPTION	SUFFIX
± 5 Vdc Output (calibrated 0 to 5 Vdc in tension)	“-5T” (Ranges 75k)
Overload Stops	Consult factory
Dual Bridge	Available

To Order					
CAPACITY		MODEL NO.	COMPATIBLE METERS	LOAD BUTTON	ROD END
lb	kg				
5	2.3	LSHD-5	DP41-S, DP25B-S, DPi8-S	LBC-14	REC-014M
10	4.5	LSHD-10	DP41-S, DP25B-S, DPi8-S	LBC-14	REC-014M
25	11	LSHD-25	DP41-S, DP25B-S, DPi8-S	LBC-14	REC-014M
50	23	LSHD-50	DP41-S, DP25B-S, DPi8-S	LBC-38	REC-038M
100	45	LSHD-100	DP41-S, DP25B-S, DPi8-S	LBC-38	REC-038M
250	114	LSHD-250	DP41-S, DP25B-S, DPi8-S	LBC-38	REC-038M
500	227	LSHD-500	DP41-S, DP25B-S, DPi8-S	LBC-38	REC-038M
1000	455	LSHD-1K	DP41-S, DP25B-S, DPi8-S	LBC-38	REC-038M
2000	909	LSHD-2K	DP41-S, DP25B-S, DPi8-S	LBC-012	REC-012M
3000	1.3T	LSHD-3K	DP41-S, DP25B-S, DPi8-S	LBC-012	REC-012M
4000	1.8T	LSHD-4K	DP41-S, DP25B-S, DPi8-S	LBC-012	REC-012M
5000	2.2T	LSHD-5K	DP41-S, DP25B-S, DPi8-S	LCB-012	REC-100M
7500	3.4T	LSHD-7.5K	DP41-S, DP25B-S, DPi8-S	LBC-100	REC-100M
10,000	4.5T	LSHD-10K	DP41-S, DP25B-S, DPi8-S	LBC-100	REC-100M
15,000	6.8T	LSHD-15K	DP41-S, DP25B-S, DPi8-S	LBC-100	REC-100M
20,000	9.1T	LSHD-20K	DP41-S, DP63900-S	LBC-112	REC-112M
30,000	13T	LSHD-30K	DP41-S, DP63900-S	LBC-112	REC-112M
50,000	22T	LSHD-50K	DP41-S, DP63900-S	LBC-112	REC-112M
75,000	34T	LSHD-75K	DP41-S, DP63900-S	—	—
100,000	45T	LSHD-100K	DP41-S, DP63900-S	—	—
150,000	68T	LSHD-150K	DP41-S, DP63900-S	—	—
200,000	90T	LSHD-200K	DP41-S, DP63900-S	—	—
300,000	135T	LSHD-300K	DP41-S, DP63900-S	—	—
400,000	180T	LSHD-400K	DP41-S, DP63900-S	—	—
500,000	225T	LSHD-500K	DP41-S, DP63900-S	—	—

Comes complete with 5-point NIST traceable calibration certificate, 59K shunt data, and 3 m (10') cable.

Note: Ranges over 300,000 lb are calibrated at 300,000 lb.

Ordering Examples: LSHD-500 is a 500 lb range waterproof load cell.

LSHD-20K, 20,000 lb range waterproof load cell.