

LCH-F

High-Accuracy Compression Load Cells

● Accuracy: 1/5000 ● 100 & 200 kN



Can measure compression loads with 1/5000 accuracy. Usable in highly humid environment.

Features

- Accuracy: 1/5000
- Remote sensing possible (see P. 8-18)
- Watertight structure

Specifications

Performance

Rated Capacity: See table below.
 Nonlinearity: Within $\pm 0.02\%$ RO
 Hysteresis: Within $\pm 0.02\%$ RO
 Repeatability: 0.02% RO or less
 Rated Output: 2 mV/V (4000 $\mu\text{m/m}$) $\pm 0.1\%$

Environmental Characteristics

Safe Temperature Range: -35 to 80°C
 Compensated Temperature Range: -10 to 60°C
 Temperature Effect on Zero Balance: Within $\pm 0.0015\%$ RO/ $^\circ\text{C}$
 Temperature Effect on Output: Within $\pm 0.001\%$ / $^\circ\text{C}$

Electrical Characteristics

Safe Excitation Voltage: 20 VAC or DC
 Recommended Excitation Voltage: 1 to 10 VAC or DC
 Input Resistance: $350 \Omega \pm 0.5\%$
 Output Resistance: $350 \Omega \pm 0.5\%$
 Cable: 6-conductor (0.5 mm^2) chloroprene shielded cable, 9.5 mm diameter by 5 m long, with press-fit terminal for 4 mm (Shield wire is not connected to mainframe.)

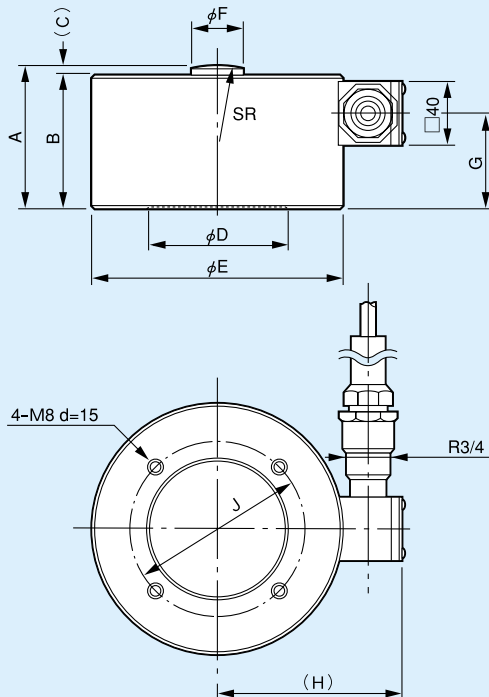
Mechanical Properties

Safe Overload Rating: 200%
 Natural Frequency: See table below.
 Weight: See table below.
 Protection Rating: IP67 (watertight type conforming to JIS C 0920)

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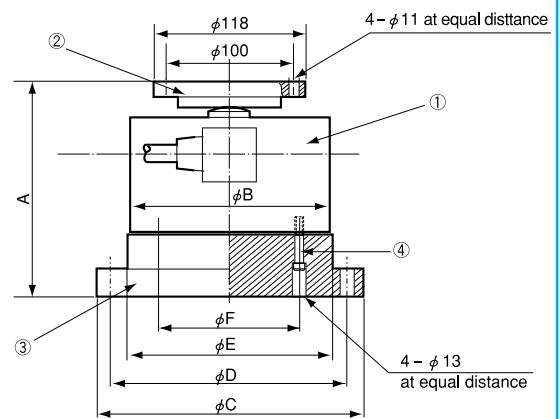
TRANSDUCERS

Dimensions



Dimensions in Combination with Accessories

In Combination with Saddle CA and Mount Base CF



① Load Cell	② Saddle	③ Mount Base	④ Bolt*	A	ϕB	ϕC	ϕD	ϕE	ϕF
LCH-10TF	CA-50B	CF-110	4-M8 L=35	168	156	208	184	160	110
LCH-20TF	CA-50B	CF-130	4-M8 L=30	188	176	234	210	186	130

*Hexagon socket head bolt attached to the mount base.

Model	Rated Capacity	Natural Frequency (Approx.)	A	B	(C)	ϕD	ϕE	ϕF	G	(H)	J	SR	Weight (Approx.)	Movable Saddle
LCH-10TF	100 kN	7.5 kHz	90	82	8	90	156	32	60	113.5	110	50	12 kg	ER-10B
LCH-20TF	200 kN	7 kHz	110	100	10	110	176	45	75	123.5	130	70	17 kg	ER-20B