

LT-FH/FL

High/Low Temp. Tension Load Cell



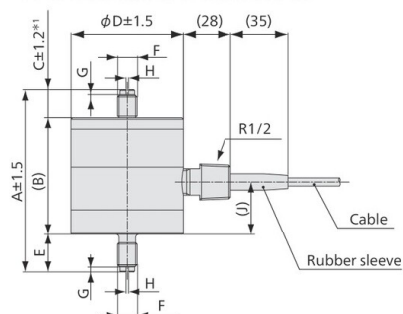
High/low-temperature load cells with wide capacity range

- Rated capacity: 5 kN to 50 kN (FH)
500 N to 50 kN (FL)
- With mechanical stopper (ultimate overloads: 500%)
- Compensated temp. : -10 to 150°C (FH)
-196 to 30°C (FL)

LT-FH load cells enable continuous operation under temperatures as high as 150°C with no external cooling. LT-FL load cells enable operation at ultra-low temperatures from -196°C.

■ Dimensions

*1 LT-500KFH/FL to LT-5TFH/FL: C±1.5



LT-50 to 200KFL

LT-500KFH/FL to 2TFH/FL

LT-5TFH/FL



*Flat to flat positions are not specified.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within ±0.5% RO
Hysteresis	Within ±0.5% RO
Repeatability	0.05% RO or less
Rated Output	1.5 mV/V ±0.2%

Environmental Characteristics

Safe Temperature	FH: -10 to 150°C (Excluding connector) FL: -200 to 80°C (Excluding connector)
Compensated Temperature	FH: -10 to 150°C (Excluding connector) FL: -196 to 30°C (Excluding connector)
Temperature Effect on Zero	Within ±0.005% RO/°C
Temperature Effect on Output	Within ±0.01%/°C

Electrical Characteristics

Safe Excitation	20 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	350 Ω ±0.5%
Output Resistance	350 Ω ±0.5%
Cable	4-conductor (0.3 mm ²) fluoroplastic shielded cable, 5 mm diameter by 5 m long, terminated with a connector plug PRC03-12A10-7M (Shield wire is not connected to the case.)

Mechanical Properties

Safe Overloads	200%
Ultimate Overloads	500%
Natural Frequencies	See table below.
Weight	See table below.

■ Optional Accessories	Rotating attachment RJ Ball joint TU Hook THD Shackle TRD
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■ Models

Model		Rated Capacity	Natural Frequencies (Approx.)	Weight (Approx.)*1
For high temp.	For low temp.			
—	LT-50KFL	500 N	1.5 kHz	1.7 kg
—	LT-100KFL	1 kN	2.6 kHz	
—	LT-200KFL	2 kN	4.1 kHz	
LT-500KFH	LT-500KFL	5 kN	5.0 kHz	2.0 kg
LT-1TFH	LT-1TFL	10 kN	5.2 kHz	2.1 kg
LT-2TFH	LT-2TFL	20 kN	5.8 kHz	2.4 kg
LT-5TFH	LT-5TFL	50 kN	4.5 kHz	7.0 kg

*TEDS-installed models are available. Please contact us.

*1 Excluding cable

Model		A	(B)	C	φD	E	F	G	H	(J)
—	LT-50KFL	111	71	17	68	23	M12×1.75	3	1.6	32
—	LT-100KFL					27	M14×2			
—	LT-200KFL					33	M18×1.5	5	3	36
LT-500KFH	LT-500KFL	129	82	20		44	M24×2			
LT-1TFH	LT-1TFL	143	84	26						
LT-2TFH	LT-2TFL	168	89	35						
LT-5TFH	LT-5TFL	236	126	55	96	55	M39×3	6	6	48

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Sensor



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor