

# LT-FH/FL

- LT-FH: -10 to 150°C
- LT-FL: -196 to 30°C ●500 N to 50 kN

## High/Low Temp. Tension Load Cell



\*TEDS-installed models are available. Inquiries are welcome.

### High Reliability Airtight Structure Selectable from a Wide Range of Rated Capacity.

- The mechanical stopper that activates at 500% overload

LT-FH series enables continuous operation under temperature as high as 150°C with no external cooling. LT-FL series enable operation at ultra-low temperature of -196°C.

### Specifications

#### Performance

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

#### Environmental Characteristics

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

#### Electrical Characteristics

<b>Safe Excitation</b>	20 V AC or DC
<b>Recommended Excitation</b>	1 to 10 V AC or DC
<b>Input Resistance</b>	350 Ω±0.5%
<b>Output Resistance</b>	350 Ω±0.5%
<b>Cable</b>	4-conductor (0.03 mm <sup>2</sup> ) 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

<b>Safe Overloads</b>	200%
<b>Ultimate Overload</b>	500%
<b>Natural Frequencies</b>	See table below.
<b>Weight</b>	See table below.

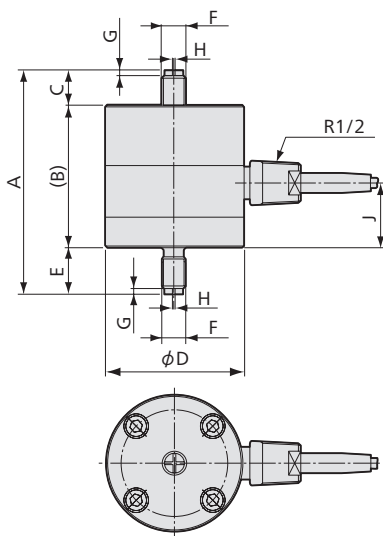
**Optional Accessories** (For details, see pages 2-72 to 2-76)

- Rotating Attachment RJ
- Ball Joint TU
- Hook THD
- Shackle TRD

Models (FH)	Models (FL)	Rated Capacity	Natural Frequencies	Weight*
LT-50KFH	LT-50KFL	500 N	≈ 1.5 kHz	≈ 1.7 kg
LT-100KFH	LT-100KFL	1 kN	≈ 2.6 kHz	
LT-200KFH	LT-200KFL	2 kN	≈ 4.1 kHz	≈ 2.0 kg
LT-500KFH	LT-500KFL	5 kN	≈ 5.0 kHz	
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

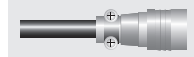
\*Excluding cable

### Dimensions



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

Connector plug  
PRC03-12A10-7M



- Physical quantity indication
- Static measurement
- Dynamic measurement

LT-FH/FL Recommended products for combination

- Instrumentation Amplifier WGA-900A → 3-95
- Data Logger UCAM-60B → 3-25
- Strain Amplifier DPM-900 Series → 3-5
- Universal Recorder EDX-200A → 3-55
- Universal Recorder EDX-100A → 3-63
- Sensor Interface PCD-400A → 3-77

