

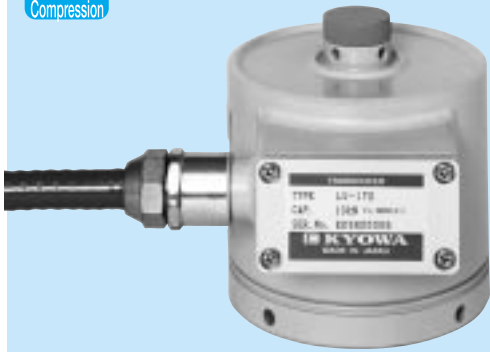
LU-E

Tension/Compression Load Cells

● For Both Tension & Compression Loads ● 500 N to 200 kN



Built to order



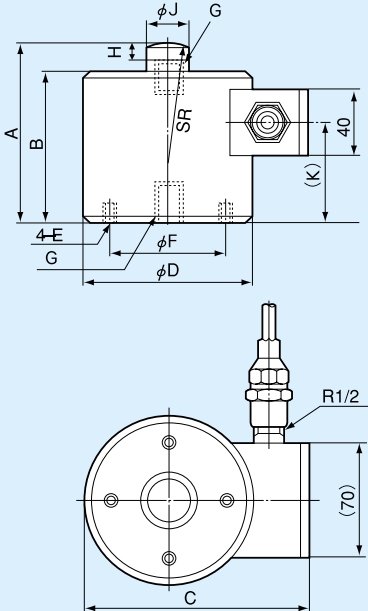
- TEDS-installed versions can be manufactured. Inquiries are welcome.

The detection portion is hermetically sealed with inert gas filled in to prevent aging deterioration and to ensure reliability and stability for a long period of time.

Features

- Hermetically-sealed structure with inert gas filled in
- Usable for both tension and compression loads

Dimensions



Note: For compression load measurement, fully screw in the load base.

Specifications

Performance

- Rated Capacity: See table below.
- Nonlinearity: Within $\pm 0.2\%$ RO
- Hysteresis: Within $\pm 0.1\%$ RO
- Repeatability: 0.1% RO or less
- Rated Output: 2 mV/V (4000 $\mu\text{m/m}$) $\pm 0.2\%$

Environmental Characteristics

- Safe Temperature Range: -30 to 85°C
- Compensated Temperature Range: -10 to 70°C
- Temperature Effect on Zero Balance: Within $\pm 0.005\%$ RO/ $^\circ\text{C}$
- Temperature Effect on Output: Within $\pm 0.005\%$ / $^\circ\text{C}$

Electrical Characteristics

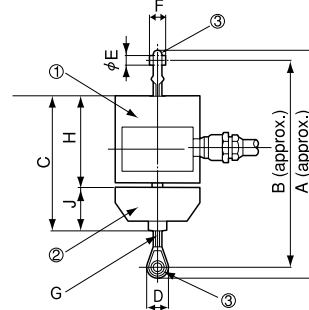
- Safe Excitation Voltage: 20 VAC or DC
- Recommended Excitation Voltage: 1 to 10 VAC or DC
- Input Resistance: $350 \Omega \pm 0.5\%$
- Output Resistance: $350 \Omega \pm 0.5\%$
- Cable: 4-conductor (0.3 mm²) chloroprene shielded cable, 7.6-mm diameter by 5 m long, terminated with NDIS connector plug (Shield wire is connected to mainframe.)

Mechanical Properties

- Safe Overload Rating: 150%
- Natural Frequency: See table below.
- Weight: See table below.

Dimensions in Combination with Special Accessories

In Combination with Rotating Attachment RJ and Ball Joint TU



① Load Cell	② Rotating Attachment	③ Ball Joint	A	B	C	D	ϕE	F	G	H	J	Static Breaking Load (Approx.)
LU-50KE												1.4 kN
LU-100KE	RJ-02	TU-8	217	195	125	22	8	11	M8 P=1.25	81.5	45	2.9 kN
LU-200KE												5.8 kN
LU-500KE	RJ-05	TU-12	262	232	140	30	12	16	M12 P=1.75	95	45	14.7 kN
LU-1TE	RJ-1	TU-14	283	246	160	37	14	17	M14 P=2	98	62	29.4 kN
LU-2TE	RJ-2	TU-18	304	262	160	42	18	23	M18 P=1.5	98	62	58.8 kN
LU-5TE	RJ-5	TU-26	463	393	235	70	25	37	M26 P=2	150	85	136.3 kN
LU-10TE	RJ-10	TU-36										
LU-20TE	RJ-20	TU-50										

Contact us for dimensions in these cases.

- Notes: 1. Rotation attachment RJ is not applicable for compression load measurement.
 2. Special accessories for tension loads should be mounted at our factory.
 3. Dimensions A and B are approximate, since the ball joint is screw-in type.

Model	Rated Capacity	Natural Frequency (Approx.)	A	B	C	ϕD	E	ϕF	G	H	ϕJ	(K)	SR	Weight (Approx.)	Saddle	Movable Saddle	Mount Base
LU-50KE	± 500 N	1.54 kHz	91.5	77.5	114	80	M5 d=8	50	M8 P=1.25 d=12	10	12	32.5	30	3.9 kg	CA-1B	ER-1B	CF-50
LU-100KE	± 1 kN	2.16 kHz															
LU-200KE	± 2 kN	3.28 kHz															
LU-500KE	± 5 kN	2.66 kHz	105	90	134	100	M8 d=8	80	M12 P=1.75 d=17	10	19	40	30	3.9 kg	CA-1B	ER-1B	CF-80
LU-1TE	± 10 kN	4.2 kHz	108	90	130	100	M8 d=12	80	M14 P=2 d=22	10	26	60	50	3.4 kg			
LU-2TE	± 20 kN	4.97 kHz	108	90	130	100	M8 d=12	80	M18 P=1.5 d=22	10	26	60	70	3.4 kg			
LU-5TE	± 50 kN	3.5 kHz	167	140	144	112	M8 d=15	95	M26 P=2 d=35	17	36	100	70	5.2 kg			
LU-10TE	± 100 kN	3.14 kHz	220	190	172.5	138	M8 d=15	120	M36 P=2 d=45	20	50	145	70	11.0 kg			
LU-20TE	± 200 kN	2.5 kHz	277	235	221	186	M8 d=15	160	M50 P=3 d=65	27	64	190	100	22.5 kg			