

Tension/Compression Load Cell

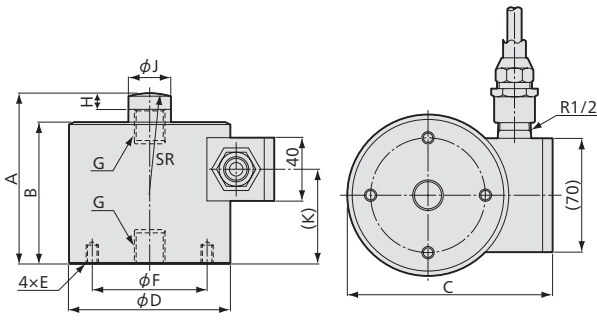


* TEDS-installed models are available. Inquiries are welcome.

Hermetically-seal Structure with Inert Gas Filled in. Usable for both Tensile Loads and Compressive Loads.

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.

■ Dimensions

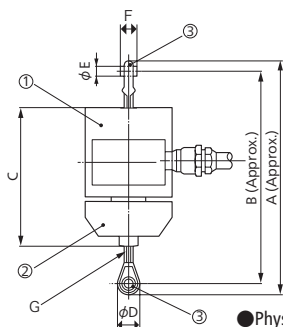


Models	Rated Capacity	Natural Frequencies	A	B	C	ϕD	E	ϕF	G	H	ϕJ	(K)	SR	Weight*	Saddles	Mount Bases
LU-50KE	± 500 N	≈ 1.54 kHz	91.5	77.5	114	80	M5 d=8	50	M8 P=1.25 d=12	10	12	32.5	30	≈ 2.8 kg	CA-1B	CF-50
LU-100KE	± 1 kN	≈ 2.16 kHz														
LU-200KE	± 2 kN	≈ 3.28 kHz														
LU-500KE	± 5 kN	≈ 2.66 kHz	105	90	134	100	M8 d=8	80	M12 P=1.75 d=17	10	19	40	30	≈ 2.8 kg	CA-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	≈ 2.8 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	≈ 2.8 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	≈ 5.0 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	≈ 9.5 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	≈ 22.0 kg		

*Excluding cable

■ Dimensions in Combination with Special Accessories

● In Combination with Rotating Attachment RJ and Ball Joint TU



● Physical quantity indication

● Static measurement

● Dynamic measurement

① Load Cells	② Rotating Attachments	③ Ball Joints	A	B	C	ϕD	ϕE	F	G	Static Breaking Loads
LU-50KE	RJ-02	TU-8	217	195	125	22	8	11	M8, P=1.25	≈ 1.4 kN
LU-100KE										≈ 2.9 kN
LU-200KE										≈ 5.8 kN
LU-500KE	RJ-05	TU-12	262	232	140	30	12	16	M12, P=1.75	≈ 14.7 kN
LU-1TE	RJ-1	TU-14	283	246	160	37	14	17	M14, P=2	≈ 29.4 kN
LU-2TE	RJ-2	TU-18	304	262	160	42	18	23	M18, P=1.5	≈ 58.8 kN
LU-5TE	RJ-5	TU-26	463	393	235	70	25	37	M26, P=2	≈ 136.3 kN
LU-10TE	RJ-10	TU-36	678	573	315	105	40	60	M36, P=2	—
LU-20TE	RJ-20	TU-50	842	706	414	136	50	75	M50, P=3	—

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

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 $\pm 0.2\%$

Environmental Characteristics

Safe Temperature	-30 to 85°C
Compensated Temperature	-10 to 70°C
Temperature Effect on Zero	Within $\pm 0.005\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.005\%$ /°C

Electrical Characteristics

Safe Excitation	20 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	350 $\Omega \pm 0.5\%$
Output Resistance	350 $\Omega \pm 0.5\%$
Cable	4-conductor (0.3 mm ²) chloroprene shielded cable, 7.6 mm diameter by 5 m long, terminated with an NDIS connector plug. PRC03-12A10-7M (Shield wire is connected to the case.)

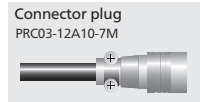
Mechanical Properties

Safe Overloads	150%
Natural Frequencies	See table below.
Weight	See table below.

Optional Accessories

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

Saddle CA-B, Mount Base CF, Rotating Attachment RJ, Ball Joint TU, Hook THC, Shackle TRC



LU-E Recommended products for combination

