

LUK-A

Tension/Compression Load Cells



●Thin ●5 kN to 2 MN

Specifications

Performance

Rated Capacity :	See table below.
Nonlinearity :	Within±0.1% RO (LUK-A-5KN to 200KN) Within±0.2% RO (LUK-A-500KN to 2MN)
Hysteresis :	Within±0.1% RO (LUK-A-5KN to 200KN) Within±0.2% RO (LUK-A-500KN to 2MN)
Repeatability :	0.05% RO or less (LUK-A-5KN to 200KN) 0.1% RO or less (LUK-A-500KN to 2MN)
Rated Output :	±2mV/V (±4000μm/m) ±0.1% (±10% with 5KN to 20KN)

Environmental Characteristics

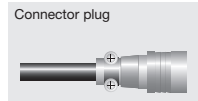
Safe Temperature Range :	-35 to 80°C
Compensated Temperature Range :	-10 to 70°C
Temperature Effect on Zero Balance :	Within±0.005% RO/°C
Temperature Effect on Output :	Within±0.005%/°C

Electrical Characteristics

Safe Excitation Voltage :	15V AC or DC
Recommended Excitation Voltage :	1 to 10V AC or DC
Input Resistance :	350Ω±1%
Output Resistance :	350Ω±1%
Cable :	4-conductor (0.3mm ²) chloroprene shielded cable, 7.6 mm diameter by 5 m long, terminated with connector plug (Shield wire is not connected to mainframe.)

Mechanical Properties

Safe Overload Rating :	150%
Natural Frequency :	See table below.
Weight :	See table below (not including cable)
Safe Lateral Force Component :	See table below.
Safe Moment :	See table below.

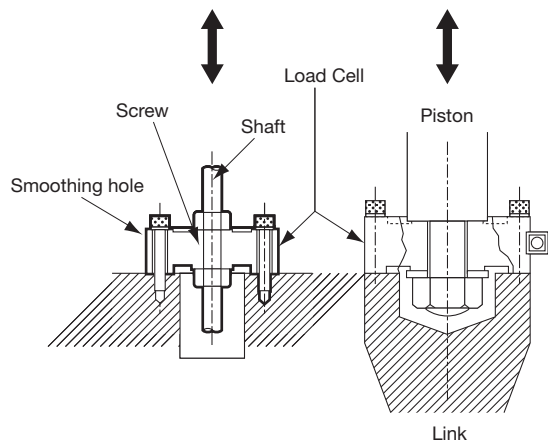


Compact, Light Weight, Tension/Compression Load Cells

The thin structure is suitable for installation where the height is limited. The service life can be extended by using with one-half the rated capacity if repetitive loads are applied continuously.

※When used for tension, special accessories such as ball-joint and rotating attachment.

Installation Example

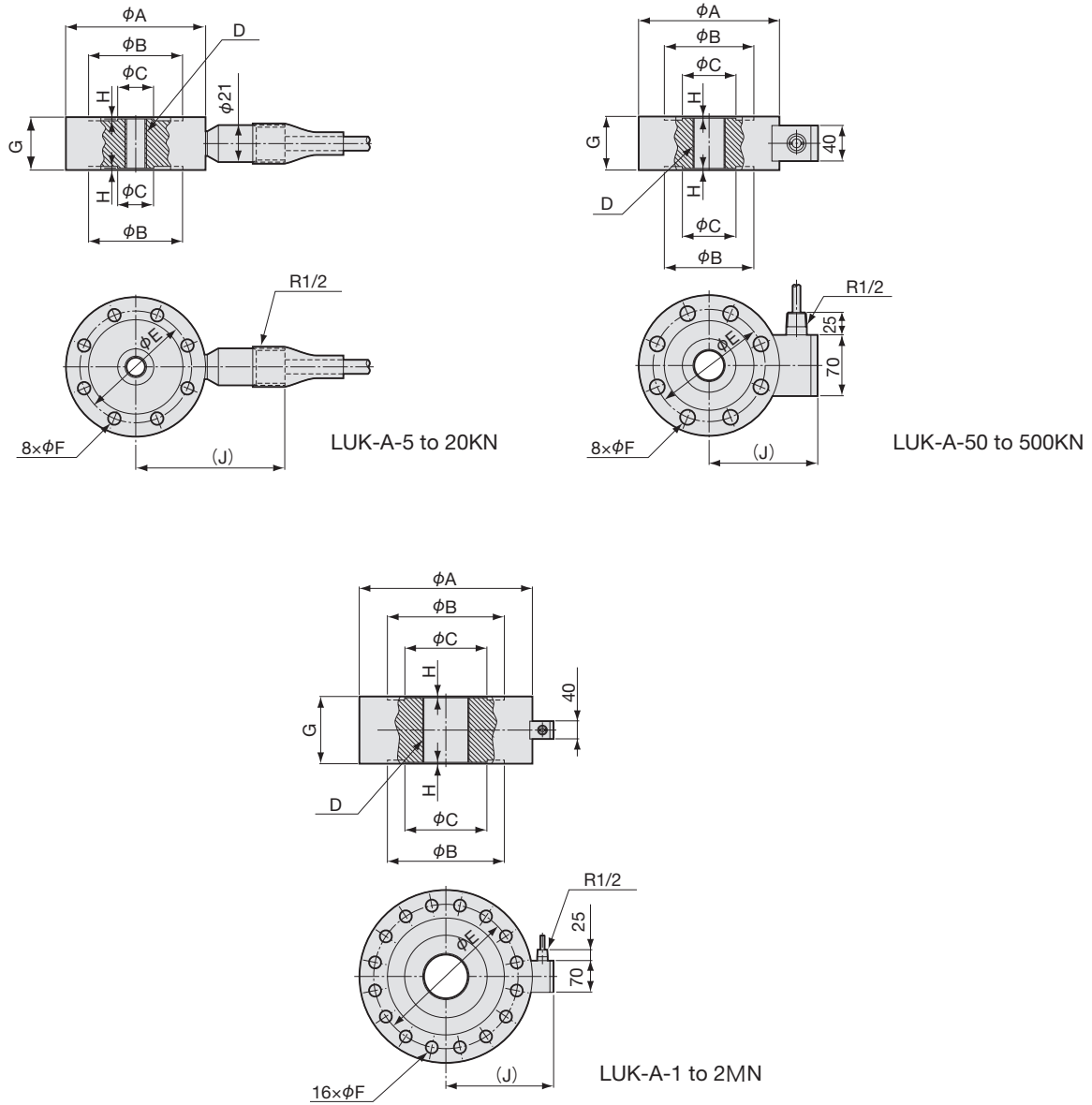


To Ensure Safe Usage

Be sure to prevent the shaft from turning when using for hanging load measurement.



■ Dimensions



Model	Rated Capacity	Natural Frequency (Approx.)	Safe Moment	Safe Lateral Force Component	ϕA	ϕB	ϕC	D	ϕE	ϕF	G	H	(J)	Weight (Approx.)
LUK-A-5KN	$\pm 5\text{kN}$	7.4kHz	15N·m	250N	77	52	20	M12 P=1.75	62	7	30	1	82	900g
LUK-A-10KN	$\pm 10\text{kN}$	10.8kHz	30N·m	500N										
LUK-A-20KN	$\pm 20\text{kN}$	8.5kHz	60N·m	1kN	107	70	34	M18 P=1.5	85	9	40	1	97	2kg
LUK-A-50KN	$\pm 50\text{kN}$	11kHz	150N·m	2.5kN	127	77	40	M24 P=1.5	95	13	50	2	102	4kg
LUK-A-100KN	$\pm 100\text{kN}$	9kHz	500N·m	5kN	157	100	60	M36 P=2	125	17	60	2	119	7kg
LUK-A-200KN	$\pm 200\text{kN}$	7.5kHz	1kN·m	10kN	227	136	90	M50 P=2	180	22	70	2	157	18kg
LUK-A-500KN	$\pm 500\text{kN}$	5.2kHz	2.5kN·m	25kN	307	200	138	M76 P=3	256	26	105	3	198	50kg
LUK-A-1MN	$\pm 1\text{MN}$	5kHz	5kN·m	50kN	375	254	180	M100 P=3	314	26	150	3	233	90kg
LUK-A-2MN	$\pm 2\text{MN}$	3.9kHz	10kN·m	100kN	560	410	260	M150 P=4	485	36	200	3	326	245kg