

## Small-sized Compression Load Cell



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

### Compact & lightweight Nonlinearity: Within $\pm 0.05\%$ RO

- Hermetically sealed structure with inert gas filled in
- BISELCOM gages are used.

Compact & lightweight design facilitates installation into existing facilities. While nonlinearity of within  $\pm 0.05\%$  RO is ensured, the hermetically-sealed structure with inert gas filled in enables highly stable and reliable measurement.

\*BISELCOM gages are self-temperature-compensation strain gages with the sensitivity temperature compensation function added.

### Specifications

#### Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.05\%$ RO
Hysteresis	Within $\pm 0.05\%$ RO
Repeatability	0.03% RO or less
Rated Output	2.5 mV/V $\pm 0.2\%$

#### Environmental Characteristics

Safe Temperature	-20 to 80°C
Compensated Temperature	-10 to 70°C
Temperature Effect on Zero	Within $\pm 0.003\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.003\%$ /°C

#### Electrical Characteristics

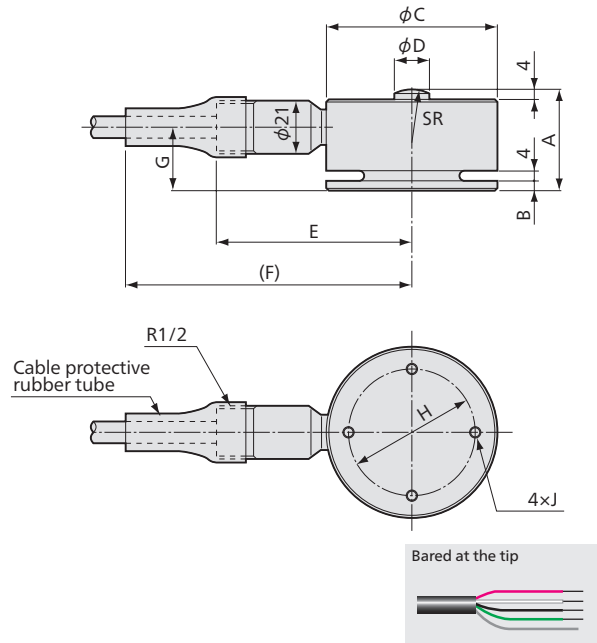
Safe Excitation	20 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	350 $\Omega$ $\pm 0.5\%$
Output Resistance	350 $\Omega$ $\pm 0.5\%$
Cable	4-conductor (0.5 mm <sup>2</sup> ) chloroprene shielded cable, 8.5 mm diameter by 5 m long, bared at the tip (Shield wire is not connected to the case.)

#### Mechanical Properties

Safe Overloads	150%
Natural Frequencies	See table below.
Weight	See table below.
Degree of Protection	IP67 (IEC 60529)
Compliance	Directive 2011/65/EU (RoHS)

- Optional Accessories
- Saddle CA-B (Page 2-72)
  - Mount base CF (Page 2-72)
  - Steady brace CR (Page 2-22)

### Dimensions



Models	Rated Capacity	Natural Frequencies (Approx.)	A	B	$\phi C$	$\phi D$	E	(F)	G	H	J	SR	Weight (Approx.)*
LC-5TV	50 kN	17 kHz	40	4	68	14	78	114	25	50	M5	40	1 kg
LC-10TV	100 kN	16 kHz	45	5	78	20	83	119	29	60	M6	70	1.3 kg
LC-20TV	200 kN	15 kHz	55	6	98	26	93	129	36	80	M8	120	3.1 kg

\*Excluding cable

- Physical quantity indication
- Static measurement
- Dynamic measurement

LC-V Recommended products for combination

Instrumentation Amplifier WGA-910A  
→ 3-91

Instrumentation Amplifier WGA-680A  
→ 3-94

Data Logger UCAM-60 series  
→ 3-27

Strain Amplifier DPM-900 series  
→ 3-5

Universal Recorder EDX-200A  
→ 3-55

Universal Recorder EDX-100A  
→ 3-63