

LCR-B-S7

● 5 to 100 kN

Tension Meter Load Cell



Excellent Environmental Resistance Tension Meter Load Cells

- High safe overload rating of 300% max.
- Mechanical stopper activating against overloads of 150% to 200%
- Hermetically sealed structure with inert gas filled in
- Highly reliable structure (IP64)
- Corrosion resistant
- Cable direction selectable from either left or right

Designed for tension meters, LCR-B-S7 series load cells are suitable for load measurement under environments where heat resistance, oil resistance, corrosion resistance and high overload rating are required.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.1\%$ RO for 5 to 50 kN Within $\pm 0.2\%$ RO for 100 kN
Hysteresis	Within $\pm 0.1\%$ RO for 5 to 50 kN Within $\pm 0.2\%$ RO for 100 kN
Repeatability	0.1% RO or less
Rated Output	1 mV/V $\pm 1\%$

Environmental Characteristics

Safe Temperature	-20 to 120°C
Compensated Temperature	-10 to 100°C
Temperature Effect on Zero	Within $\pm 0.005\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.005\%$ /°C

Electrical Characteristics

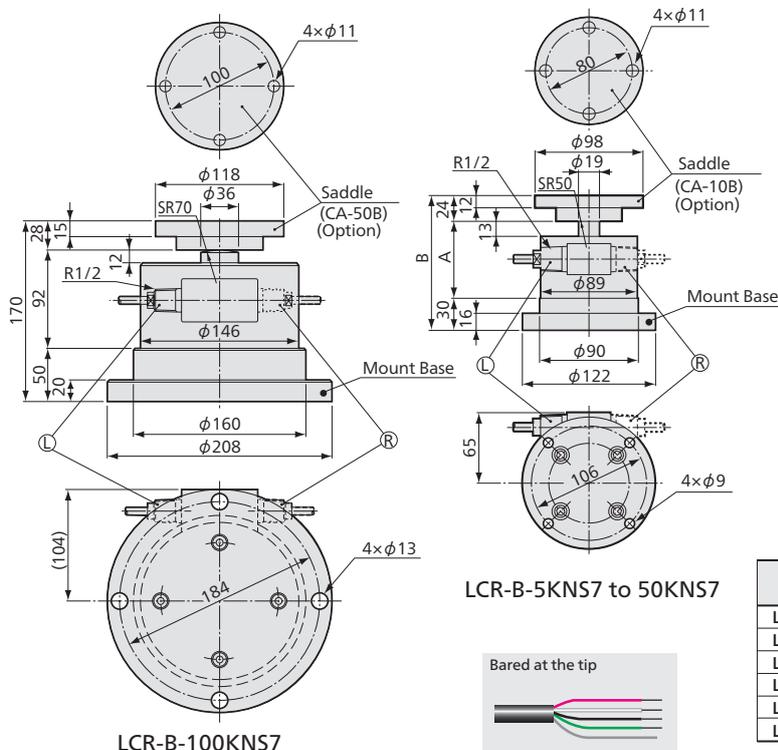
Safe Excitation	15 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	350 $\Omega \pm 1\%$
Output Resistance	350 $\Omega \pm 1\%$
Cable	4-conductor (0.75 mm ²) fluonlex shielded cable, 8 mm diameter by 10 m long, bared at the tip (Shield wire is not connected to the case.)

Mechanical Properties

Ultimate Overload Rating	1000% (400% for 100KNS7)
Safe Overloads	300% (200% for 100KNS7)
Materials	Stainless steel (Excluding the mount base of 100 & 100KNS7)
Degree of Protection	IP64 (IEC 60529)
Weight	See table below (Excluding cable).

Optional Accessories Saddle CA-B

Dimensions



To Ensure Safe Usage

Never disassemble the mount base, which has the stopper mechanism activating against overloads of 150% to 200%. Once removed, overload protection is not guaranteed.

Models	Rated Capacity	A	B	Weight
LCR-B-5KNS7(L, R)	5 kN			
LCR-B-10KNS7(L, R)	10 kN	57	111	≈ 4 kg
LCR-B-20KNS7(L, R)	20 kN			
LCR-B-30KNS7(L)	30 kN			
LCR-B-50KNS7(L, R)	50 kN	70	124	≈ 4.5 kg
LCR-B-100KNS7(L, R)	100 kN	See drawing lower left.		≈ 19 kg

● Physical quantity indication

LCR-B-S7
Recommended
products for
combination

Instrumentation Amplifier
WGA-900A
→ 3-95

Instrumentation Amplifier
WGA-680A
→ 3-97

Instrumentation Amplifier
WGA-100B
→ 3-108

4-Channel Signal Conditioner
WGC-140A
→ 3-110

Measuring Instrument Controller
WDC-810C1
→ 3-114