

# LMR-S-SA2

●  $\phi 21$  mm, thickness: 10 mm ● 2 to 20 kN

## Small-sized Compression Load Cell



### Compact & lightweight Moderate price Suitable for load distribution measurement

Compact & lightweight LMR-S-SA2 series load cells are used by just putting or bonding on the measurement point or setting in a hollow. Major applications include measurement of load distribution by using multiple units, load measurement in pipe making mills or where a measuring site or the weight of the load cell itself is limited.

### Specifications

#### Performance

<b>Rated Capacity</b>	See table below.
<b>Nonlinearity</b>	Within $\pm 1\%$ RO (20KNSA2: Within $\pm 2\%$ RO)
<b>Hysteresis</b>	Within $\pm 1\%$ RO (20KNSA2: Within $\pm 2\%$ RO)
<b>Rated Output</b>	1 mV/V ( $2000 \times 10^{-6}$ strain) or more

#### Environmental Characteristics

<b>Safe Temperature</b>	-10 to 60 °C
<b>Compensated Temperature</b>	0 to 50 °C
<b>Temperature Effect on Zero</b>	Within $\pm 0.05\%$ RO/°C
<b>Temperature Effect on Output</b>	Within $\pm 0.05\%$ /°C

#### Electrical Characteristics

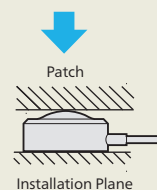
<b>Safe Excitation</b>	7 V AC or DC
<b>Recommended Excitation</b>	1 to 2 V AC or DC
<b>Input Resistance</b>	350 $\Omega \pm 2\%$
<b>Output Resistance</b>	350 $\Omega \pm 2\%$
<b>Cable</b>	4-conductor (0.035 mm <sup>2</sup> ) vinyl shielded cable, 1.7 mm diameter by 2 m long, bared at the tip (Shield wire is not connected to the case.)

#### Mechanical Properties

<b>Safe Overloads</b>	120%
<b>Natural Frequencies</b>	Approx. 50 kHz
<b>Weight</b>	Approx. 25 g (Excluding cable)
<b>Materials</b>	Stainless steel

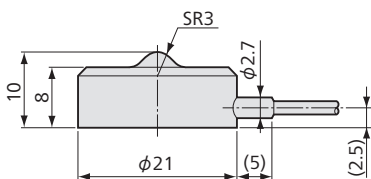
Models	Rated Capacity
LMR-S-2KNSA2	2 kN
LMR-S-5KNSA2	5 kN
LMR-S-10KNSA2	10 kN
LMR-S-20KNSA2	20 kN

### To Ensure Safe Usage

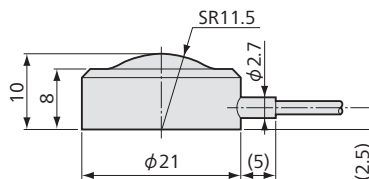


Compact large capacity load cells result in high surface pressure on the mounting surfaces under rated load. For the patch & installation plane material, use HRC40 to 44. Smoothness of mounting surfaces both patch and installation plane as smooth as Rz2.5 or so is recommended.

### Dimensions

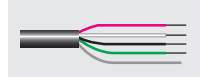


LMR-S-2KNSA2



LMR-S-5KNSA2 to 20KNSA2

Bared at the tip



● Physical quantity indication

● Static measurement ● Dynamic measurement

