



## RLV • RLI



### Features 1.Compact 2.With adjustment function

- Pressure sensor with a welded structure that does not use an O-ring in the wetted part
- The wetted part is made of SUS316 or SUS316L that has high corrosion resistance.
- Support of a wide range of pressure media such as gas and medicinal solution
- Output signal of 1 to 5 VDC or 4 to 20 mADC from a built-in amplifier circuit
- With trimmer for zero and span adjustment

### Specifications

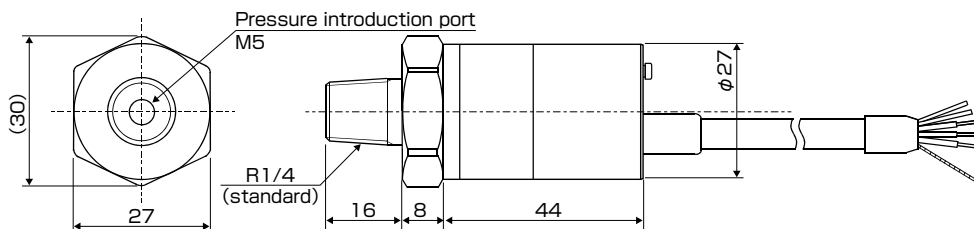
Model	RLV • RLI									
	N-100KP	-020KP	-050KP	-100KP	-300KP	-500KP	-001MP	-002MP	-003MP	-005MP
Rated pressure ※ 1	0 to -100kPa	0 to 20kPa	0 to 50kPa	0 to 100kPa	0 to 300kPa	0 to 500kPa	0 to 1MPa	0 to 2MPa	0 to 3MPa	0 to 5MPa
Pressure type	Gauge pressure ※ 2								Shield gauge pressure	
Overpressure	RLV : 200% of the rated pressure / RLI : 150% of the rated pressure									
Wetted part material	Diaphragm : SUS316L Pressure port : SUS316									
Sealing liquid	Silicone oil									
Applicable media	Gas and fluid (media not damaging the wetted part material)									
Power supply	12 to 28VDC									
Output	RLV : 1 to 5VDC / RLI : 4 to 20mADC									
Current consumption	RLV : 6mA or less									
Load resistance	RLV : 1k Ω以上 / RLI : 600 Ω or less (at power of 24 VDC)									
Responsiveness	5msec or less									
Accuracy (linearity)	± 0.5% F.S. or less ※ 3 (± 0.3% F.S. or less)									
Temperature characteristics	± 0.05% F.S. / °C or less (0 to 60°C)									
Compensated temperature range	0 to 60°C									
Operating temperature range (Measurement medium temperature)	- 20 to 80°C (no freezing allowed) - 20 to 100°C (no freezing allowed)									
Operating humidity range	35 to 85% RH (no dew condensation allowed)									
Pressure connection port	R1/4 (standard) · R3/8 · R1/2 · G1/4 · G3/8									
Cable	φ 6 vinyl : 500mm / 2000mm (standard) Shield cable + atmospheric relief pipe (Excluding -003MP and -005MP)									
Regulator	With trimmer for zero and span adjustment									
Insulation resistance	100M Ω or more / 500VDC									
Withstand voltage	500VAC, 1 minute									
Vibration resistance	98.1m / s <sup>2</sup> , 2 hours (X, Y, and Z directions)									
Weight	Approx 200g									
Impact of mounting orientation (port orientation changed from downward to sideways)	+ 0.1% F.S.	+ 0.5% F.S.	+ 0.3% F.S.	+ 0.1% F.S.						

※ 1.We also manufacture compound pressure sensors (gauge pressure of 500 kPa or less).

※ 2.Make sure that the operating vacuum pressure is 10 kPa abs or more. (Operating temperature range: 0 - 60°C)

※ 3.We also manufacture high-accuracy pressure sensors (accuracy: ± 0.25% F.S. or less).

### Dimensions (Units : mm)



### Cables / wires

	RLV	RLI
Red	Power supply +	Power supply +
White	Output	Power supply -
Black	Common	—
Atmospheric relief pipe	Gauge pressure available	

### Model

**R L V C** - **5 0 0** **K P** - **0 2** - **R 3**

Type Output mode Special Pressure range Unit of pressure Cable length Pressure connection port  
**V** : Voltage **Space** : Positive pressure **KP** : kPa **Space** : 0.5m **Space** : R1/4 (standard)  
**I** : Current **N** : Negative pressure **MP** : MPa **02** : 2m **R3** : R3/8  
**C** : Compound pressure **05** : 5m **R4** : R1/2  
**10** : 10m **G2** : G1/4  
**G3** : G3/8