



HLV • HLI



Features 1.Compact 2.Welded structure

- 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

Specifications

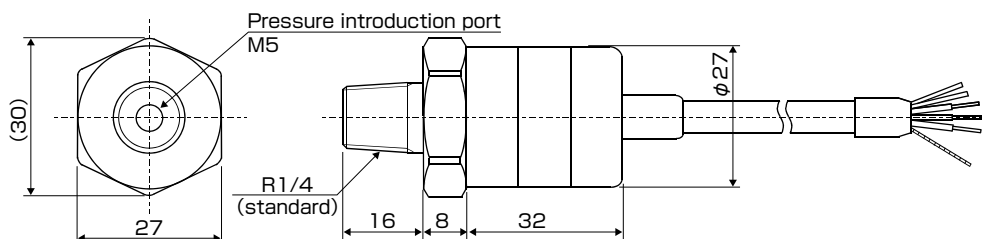
Model	HLV • HLI									
	N-100KP	-020KP	-050KP	-100KP	-300KP	-500KP	-001MP	-002MP	-003MP	-005MP
Rated pressure ※ 1	0 to -100kPa	0 to 20kPa	0 to 50kPa	0 to 100kPa	0 to 300kPa	0 to 500kPa	0 to 1MPa	0 to 2MPa	0 to 3MPa	0 to 5MPa
Pressure type	Gauge pressure ※ 2									Shield gauge pressure
Overpressure	HLV : 200% of the rated pressure / HLI : 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	HLV : 1 to 5VDC / HLI : 4 to 20mADC									
Current consumption	HLV : 6mA or less									
Load resistance	HLV : 1k Ω or more / HLI : 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)									
Structure	IP65									
Insulation resistance	100M Ω or more / 500VDC									
Withstand voltage	500VAC, 1 minute									
Vibration resistance	98.1m / s ² , 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

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

Model

H 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	Space	R1/4 (standard)
I	Current	N	Negative pressure	MP	02	R3
C	Compound pressure				05	R4
					10	G2
						G3