

HLV-S6VL

Features 1.Compact 2.Low power

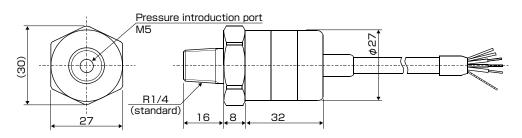
- Pressure sensor designed to operate on 3 to 5 VDC
- Low current consumption ideal for battery-powered sensors
- Pressure sensor with a welded structure that does not use an O-ring in the wetted part
- The wetted part is made of SUS316 or SUS316L that has high corrosion resistance.
- Support of a wide range of pressure media such as gas and medicinal solution
- Output signal of 0.1 to 1.1 VDC from a built-in amplifier circuit

Specifications

| Model | HLV(-S6VL) | | | | | | | | | | |
|---|---|----------------|----------------|----------------|-------------|-------------|-----------|-------------|-----------|-----------|--|
| | 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 press | | | | | | | ge pressure | | | |
| Overpressure | 200% 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 | 3 to 5VDC | | | | | | | | | | |
| Output | 0.1 to 1.1VDC | | | | | | | | | | |
| Current consumption | 2mA or less | | | | | | | | | | |
| Load resistance | 1k Ω or more | | | | | | | | | | |
| Responsiveness | 5msec or less | | | | | | | | | | |
| Accuracy (linearity) | \pm 0.5% F.S. or less * 3 (\pm 0.3% F.S. or less) | | | | | | | | | | |
| Temperature characteristics | \pm 0.05% F.S. $/^{\circ}$ C or less (0 to 60 $^{\circ}$ C) | | | | | | | | | | |
| Compensated temperature range | 0 to 60℃ | | | | | | | | | | |
| Operating temperature range (Measurement medium temperature) | - 20 to 80°C (no freezing allowed) ($-$ 20 to 100°C no freezing allowed) | | | | | | | | | | |
| Operating humidity range | $35\sim 85\%$ 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 \nearrow 500VDC | | | | | | | | | | |
| Withstand voltage | 500VAC, 1 minute | | | | | | | | | | |
| Vibration resistance | 98.1 m $/$ 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℃)
- $\fint 3$. We also manufacture high-accuracy pressure sensors (accuracy: \pm 0.25% F.S. or less).

Dimensions (Units: mm)



N: Negative pressure

Cables / wires

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





V : Voltage Special

KP: kPa **Space**: Positive pressure MP: MPa

Space: 0.5m **02**:2m **05**:5m

Space: R1/4(standard) **R3**: R3/8 Voltage output R4: R1/2 0.1-1.1V/3-5V

C: Compound pressure **10**: 10m

G2: G1/4 G3: G3/8