

## MTI

## Features 1.Terminal box type 2.For gauge pressure

- Terminal box type of the "HT/HG series" gauge pressure sensor
- Outdoor specification / Waterproof IP67 structure
- Support of a wide range of pressure media such as water and oil
- Output signal of 4 to 20 mADC from a built-in amplifier circuit



## Specifications

| Model  | MTI  |             |             |             |             |             |           |           |
|--|--|-------------|-------------|-------------|-------------|-------------|-----------|-----------|
|  | N-100KP  | -020KP      | -050KP      | -100KP      | -300KP      | -500KP      | -001MP    | -002MP    |
| 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 |
| Pressure type  | Gauge pressure * 2 * 3   |             |             |             |             |             |           |           |
| Overpressure   | 150% of the rated pressure   |             |             |             |             |             |           |           |
| Wetted part material   | Diaphragm: SUS316L Pressure port: SUS316 O-ring: Fluororubber (standard) |             |             |             |             |             |           |           |
| Sealing liquid   | Silicone oil   |             |             |             |             |             |           |           |
| Applicable media   | Gas and fluid (media not damaging the wetted part material)              |             |             |             |             |             |           |           |
| Power supply   | 12 to 28VDC  |             |             |             |             |             |           |           |
| Output   | 4 to 20mADC  |             |             |             |             |             |           |           |
| Load resistance  | 600 Ω or less (at power of 24 VDC)                                       |             |             |             |             |             |           |           |
| Responsiveness   | 5msec or less  |             |             |             |             |             |           |           |
| Accuracy<br>(linearity)  | $\pm$ 0.5% F.S. or less * 4 ( $\pm$ 0.3% F.S. or less)                   |             |             |             |             |             |           |           |
| Temperature characteristics  | $\pm$ 0.05% F.S. $\nearrow$ °C or less (0 to 60°C)                       |             |             |             |             |             |           |           |
| Compensated temperature range  | 0 to 60℃   |             |             |             |             |             |           |           |
| Operating temperature range  | <ul><li>− 10 to 80°C (no freezing allowed)</li></ul>                     |             |             |             |             |             |           |           |
| Operating humidity range   | 35 to 85% RH (no dew condensation allowed)                               |             |             |             |             |             |           |           |
| Pressure connection port   | R3/8 (standard) · G3/8 · R1/4  |             |             |             |             |             |           |           |
| Terminal box   | Material: Aluminum die casting   |             |             |             |             |             |           |           |
| Wire outlet  | G1/2 Applicable outer cable diameter : $\phi$ 6.5 to 8.0                 |             |             |             |             |             |           |           |
| Structure  | IP67   |             |             |             |             |             |           |           |
| Insulation resistance  | 100M $\Omega$ or more $\nearrow$ 500VDC                                  |             |             |             |             |             |           |           |
| Withstand voltage  | 500VAC, 1 minute   |             |             |             |             |             |           |           |
| Vibration resistance   | 98.1 m $/$ s <sup>2</sup> , 2 hours (X, Y, and Z directions)             |             |             |             |             |             |           |           |
| Weight   | Approx 320g  |             |             |             |             |             |           |           |
| Impact of mounting orientation<br>(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).
- st 2.Make sure that the operating vacuum pressure is 10 kPa abs or more. (Operating temperature range: 0 60°C)
- \* 3.Use a wiring cable for atmospheric pressure correction.
- \* 4. We also manufacture high-accuracy pressure sensors (accuracy: ± 0.25% F.S. or less).

