

PRESSURE SENSORS

High Volume OEM Item (Type NSK)

Type NSK & XSK

GENERAL DESCRIPTION

- High reliability and accuracy
- Double diaphragm structure
- Diffusion silicone chip pressure sensor

SPECIFICATIONS

- Fluid temperature range: -30 to 120°C (Type NSK)
-20 to 70°C (Type XSK)
- Ambient temperature range: -30 to 100°C (Type NSK)
-30 to 80°C (Type NSK-BH)
-20 to 70°C (Type XSK)



CE mark applicable (available upon request)

UL recognized (available upon request)

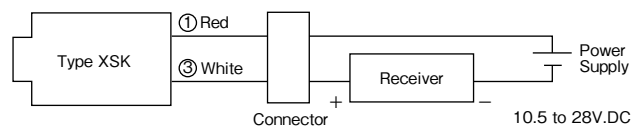
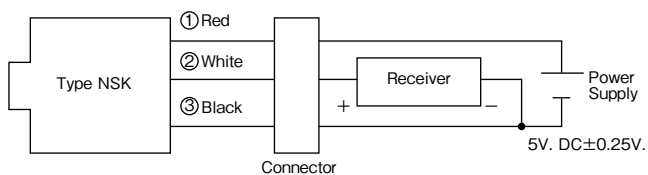
TYPE NUMBER SELECTION

Unit: MPa (bar)

| Catalog No. | | Pressure Range | Supply Voltage | Output | * Accuracy | Current Consumption | Load Resistance | Airtight Pressure | Wt. (kg) |
|-------------|----------|-------------------------|-----------------|-----------------|------------|---------------------|----------------------------------------------|-------------------|----------|
| BC | 010I-103 | 0 to 1 {0 to 10} | 5V. DC ± 0.25V | 0.5 to 4.5V. DC | ±2.5% F.S. | Max. 10mA | Min. 10 kΩ | 3.85 {38.5} | 0.04 |
| | 017I-103 | 0 to 1.7 {0 to 17} | | 0.5 to 3.5V. DC | | | | | |
| | 020I-103 | 0 to 2 {0 to 20} | | 0.5 to 4.5V. DC | | | | | |
| | 030I-103 | 0 to 3 {0 to 30} | | 0.5 to 4.5V. DC | ±2.0% F.S. | | | | |
| | 035I-103 | 0 to 3.5 {0 to 35} | | 0.5 to 4.5V. DC | | | | | |
| | 042I-103 | 0 to 4.15 {0 to 41.5} | | 0.5 to 3.5V. DC | ±2.5% F.S. | | | | |
| | 050I-103 | 0 to 5 {0 to 50} | | 0.5 to 4.5V. DC | | | | | |
| NSK- BE | 010I-103 | 0 to 1 {0 to 10} | 5V. DC ± 0.25V | 0.5 to 4.5V. DC | ±2.5% F.S. | Max. 10mA | Min. 10 kΩ | 3.85 {38.5} | 0.04 |
| | 017I-103 | 0 to 1.7 {0 to 17} | | 0.5 to 3.5V. DC | | | | | |
| | 020I-103 | 0 to 2 {0 to 20} | | 0.5 to 4.5V. DC | | | | | |
| | 030I-103 | 0 to 3 {0 to 30} | | 0.5 to 4.5V. DC | ±2.0% F.S. | | | | |
| | 035I-103 | 0 to 3.5 {0 to 35} | | 0.5 to 4.5V. DC | | | | | |
| | 042I-103 | 0 to 4.15 {0 to 41.5} | | 0.5 to 3.5V. DC | ±2.5% F.S. | | | | |
| | 050I-103 | 0 to 5 {0 to 50} | | 0.5 to 4.5V. DC | | | | | |
| NSK- BH | 010D-103 | 0 to 1 {0 to 10} | 5V. DC ± 0.25V | 0.5 to 4.5V. DC | ±2.5% F.S. | Max. 10mA | Min. 10 kΩ | 3.85 {38.5} | 0.06 |
| | 017D-103 | 0 to 1.7 {0 to 17} | | 0.5 to 3.5V. DC | | | | | |
| | 020D-103 | 0 to 2 {0 to 20} | | 0.5 to 4.5V. DC | | | | | |
| | 030D-103 | 0 to 3 {0 to 30} | | 0.5 to 4.5V. DC | ±2.0% F.S. | | | | |
| | 035D-103 | 0 to 3.5 {0 to 35} | | 0.5 to 4.5V. DC | | | | | |
| | 042D-103 | 0 to 4.15 {0 to 41.5} | | 0.5 to 3.5V. DC | ±2.5% F.S. | | | | |
| | 050D-103 | 0 to 5 {0 to 50} | | 0.5 to 4.5V. DC | | | | | |
| XSK- AC | 10I-194 | -0.05 to 1 {-0.5 to 10} | 10.5 to 28V. DC | 4 to 20mA | ±3% F.S. | — | Max. 100Ω at 12V. DC Max. 500Ω at 24V. DC | 3.85 {38.5} | 0.09 |
| | 20I-194 | 0 to 2 {0 to 20} | | | | | | | |
| | 30I-194 | 0 to 3 {0 to 30} | | | | | | | |
| | 35I-194 | 0 to 3.5 {0 to 35} | | | | | | | |
| | 50I-194 | 0 to 5 {0 to 50} | | | | | | | |

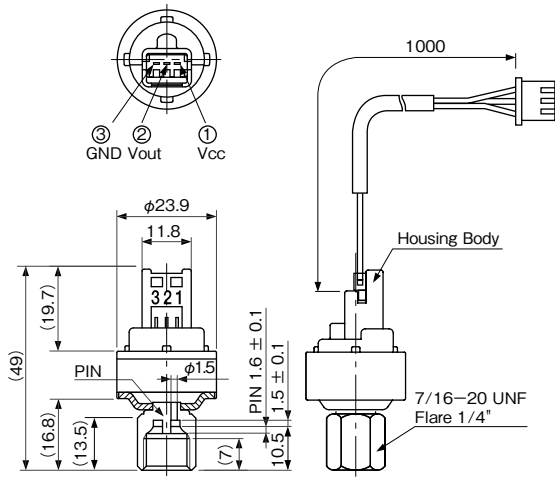
* Included non linearity hysteresis, and temperature drift
• Enclosure IP66

WIRING

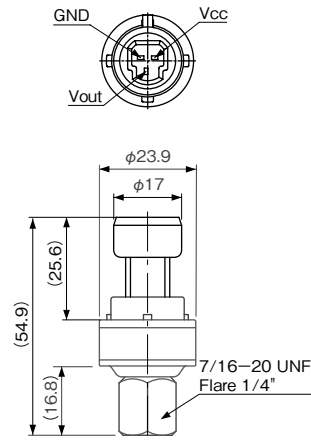


DIMENSIONS

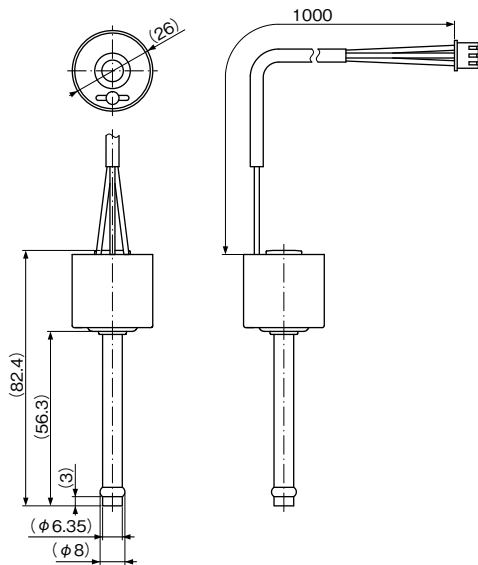
Type NSK-BC (Molex connector)



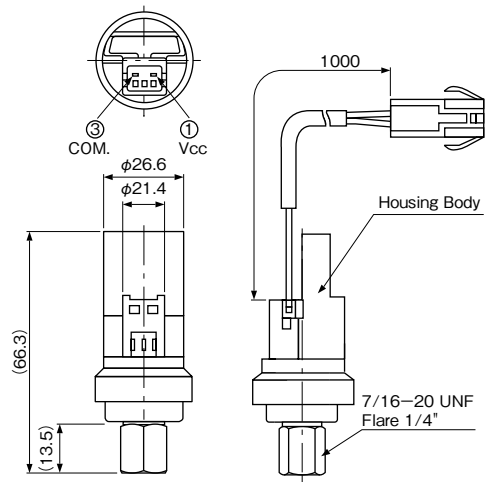
Type NSK-BE (Packard connector)



Type NSK-BH (Lead wire direct Connector)



Type XSK (Molex connector)



Unit: mm

ACCESSORY

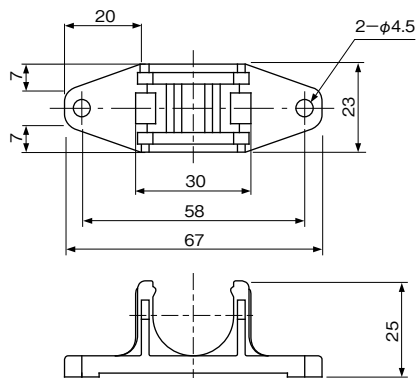
- Lead wire with connector is supplied as standard accessory except for NSK-BE type.

OPTIONAL PARTS

Bracket

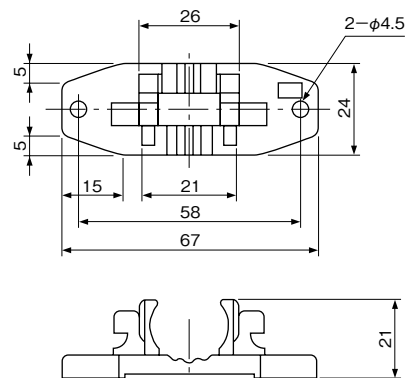
- NSK

Type No. NSK-PP02 (for NSK-BC, BE)



- XSK

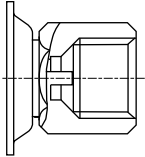
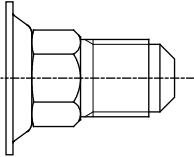
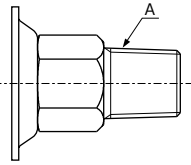
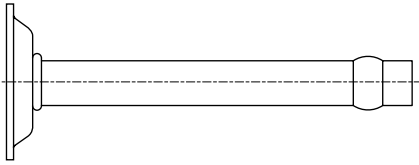
Type No. YSK-PP02



Unit: mm

PRESSURE CONNECTIONS

- Connection Material
Stainless steel pressure connection is available upon request. (R only)
- Connection Style
Standard connection style is 7/16–20UNF Female Flare with schrader depressor.
The following connection styles are available upon request.

| 7/16–20UNF Female Flare 1/4" with schrader depressor | 7/16–20UNF Male Flare 1/4" | | | | | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|------|-----|--|-----|------|-----|------|-----|------------------------------------------------------------------------------------|
|  |  | | | | | | | | | | |
| R (NPT) | 1/4" Copper Solder (Type NSK–BH) | | | | | | | | | | |
|  <table border="1" data-bbox="491 719 743 871"> <thead> <tr> <th>A</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>1/8"</td> <td>NSK</td> </tr> <tr> <td></td> <td>XSK</td> </tr> <tr> <td>1/4"</td> <td>XSK</td> </tr> <tr> <td>3/8"</td> <td>XSK</td> </tr> </tbody> </table> | A | Type | 1/8" | NSK | | XSK | 1/4" | XSK | 3/8" | XSK |  |
| A | Type | | | | | | | | | | |
| 1/8" | NSK | | | | | | | | | | |
| | XSK | | | | | | | | | | |
| 1/4" | XSK | | | | | | | | | | |
| 3/8" | XSK | | | | | | | | | | |