

Temperature Sensors Type ITS PPSU

Inline Temperature Sensor

ITS the new inline temperature sensor from AVS-Römer





Inline temperature sensor for measuring temperature of fluids and gaseous medium.

The ceramic temperature sensor combined with the proven ELSA push-in connector made from PPSU is mainly used in the food industries.

Other features:

- fast response time
- minimal dead space
- materials and constructional design especially optimised for food applications

Variations / options:

- other hose connections
- other materials for seal

CHARACTERISTICS

GENERAL

| | |
|------------------------------|---|
| Constructional design | Ceramic temperature measuring cell |
| Product name | Temperature sensor |
| Product type | ITS-958P3-... |
| Nominal diameter | 2.5 DN or DN 4 |
| Connection | ELSA push-in connectors for pipe/tube OD 4 or OD 6 |
| Ambient temperature | 0 °C to +60 °C |
| Medium temperature | 0 °C to +130 °C |
| Medium viscosity | up to approx. 35 mm ² /s |
| Thermal time constant | <2 s (water) |
| Body material | PPSU (KTW-approved, NSF-certified) |
| Sensor housing material | Al ₂ O ₃ |
| O-ring material | FKM (FDA-compliant) or EPDM (FDA compliant, KTW authorized, NSF certified) |
| Approval | NSF/ANSI 169 |
| PNEUMATIC - HYDRAULIC | |
| Nominal pressure | PN 20 |
| Pressure range | Technical vacuum up to maximum allowable operating pressure OP in accordance with the specification table |
| Flow rate | Kv-value in accordance with the specification table |
| Medium | Gases or fluidss which do not corrode the materials specified |
| ELECTRIC | |
| Electrical Connection | 2-pin PVC ribbon cable AWG 24, 0.75 m, UL AWM style 2651, 300 V, 105 °C, strand ends pre-tinned |

Caution! PPSU should not be used in contact with aromatic hydrocarbons, oxidising acids, acetone, chlorinated hydrocarbons, ethers or ketones! Also, PPSU should not be placed directly in contact with anaerobic adhesives!

Home

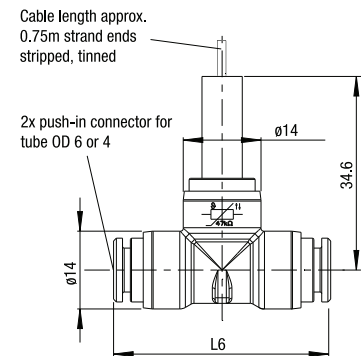
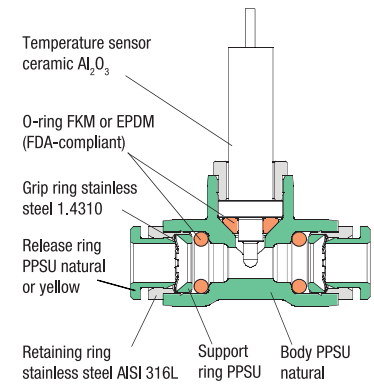


Temperature Sensor, Type ITS

 Product group **720** PN **20** Max. Allow. OP at ambient temp.
 T_{min} 0 °C, T_{max} +60 °C

Plastic PPSU

| for tube OD | DN | Allow. OP [bar] at medium temp. | | | Kv-value water [l/min] | L6 | Sensor-type | Nominal resistance NTC at 25 °C Pt100 at 0 °C | R Tolerance | B value R25/85 | B Tolerance | Sealant material | Type | Order number |
|-------------|-----|---------------------------------|--------|--------|------------------------|----|-------------|---|-------------|----------------|-------------|----------------------|---------------------|--------------|
| | | 20 °C | 100 °C | 135 °C | | | | | | | | | | |
| 4 | 2.5 | 20 | 16 | 10 | 2.4 | 38 | NTC | 10 kOhm | ±1 % | 3977 K | ±1 % | FKM (FDA-compliant) | ITS-958P3-4FF-NTC10 | 390517 |
| 4 | 2.5 | 20 | 16 | 10 | 2.4 | 38 | NTC | 10 kOhm | ±1 % | 3977 K | ±1 % | EPDM (FDA-compliant) | ITS-958P3-4PF-NTC10 | 390521 |
| 6 | 4.0 | 20 | 16 | 10 | 8.1 | 39 | NTC | 10 kOhm | ±1 % | 3977 K | ±1 % | FKM (FDA-compliant) | ITS-958P3-6FF-NTC10 | 390518 |
| 6 | 4.0 | 20 | 16 | 10 | 8.1 | 39 | NTC | 10 kOhm | ±1 % | 3977 K | ±1 % | EPDM (FDA-compliant) | ITS 958P3-6PF-NTC10 | 390522 |
| 4 | 2.5 | 20 | 16 | 10 | 2.4 | 38 | NTC | 47 kOhm | ±1 % | 3690 K | ±1 % | FKM (FDA-compliant) | ITS-958P3-4FF-NTC47 | 390508 |
| 4 | 2.5 | 20 | 16 | 10 | 2.4 | 38 | NTC | 47 kOhm | ±1 % | 3690 K | ±1 % | EPDM (FDA-compliant) | ITS-958P3-4PF-NTC47 | 390509 |
| 6 | 4.0 | 20 | 16 | 10 | 8.1 | 39 | NTC | 47 kOhm | ±1 % | 3690 K | ±1 % | FKM (FDA-compliant) | ITS-958P3-6FF-NTC47 | 390510 |
| 6 | 4.0 | 20 | 16 | 10 | 8.1 | 39 | NTC | 47 kOhm | ±1 % | 3690 K | ±1 % | EPDM (FDA-compliant) | ITS 958P3-6PF-NTC47 | 390511 |
| 4 | 2.5 | 20 | 16 | 10 | 2.4 | 38 | Pt100 | 100 Ohm | Kl. B | - | - | FKM (FDA-compliant) | ITS-958P3-4FF-PT100 | 390519 |
| 4 | 2.5 | 20 | 16 | 10 | 2.4 | 38 | Pt100 | 100 Ohm | Kl. B | - | - | EPDM (FDA-compliant) | ITS-958P3-4PF-PT100 | 390523 |
| 6 | 4.0 | 20 | 16 | 10 | 8.1 | 39 | Pt100 | 100 Ohm | Kl. B | - | - | FKM (FDA-compliant) | ITS-958P3-6FF-PT100 | 390520 |
| 6 | 4.0 | 20 | 16 | 10 | 8.1 | 39 | Pt100 | 100 Ohm | Kl. B | - | - | EPDM (FDA-compliant) | ITS-958P3-6PF-PT100 | 390524 |

Illustration

Characteristic Curve -10 °C to +135 °C 0-250 kΩ
