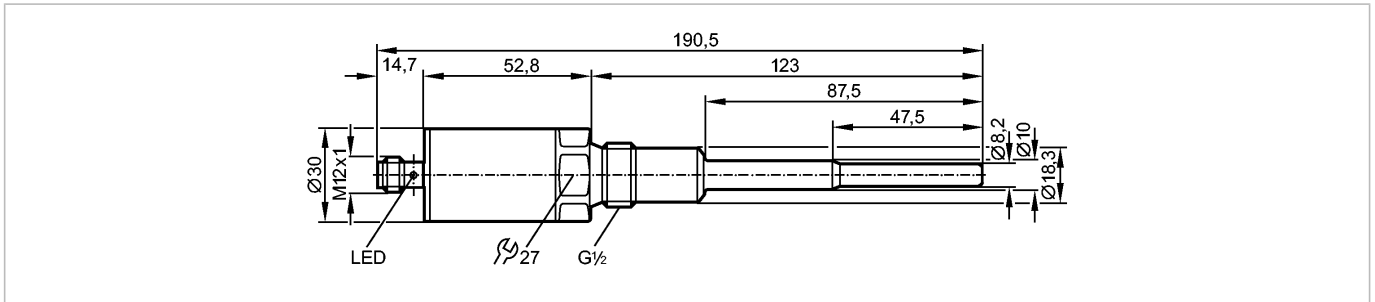


TAA431

TAA123CCDR12-ASIVG/US

Temperature sensors



Product characteristics

| |
|--|
| Temperature transmitter |
| Quick disconnect |
| Process connection: G 1/2 A |
| Installation length EL: 87.5 mm |
| AS-i profile S-7.3 |
| Max. medium temperature |
| 150°C / 302°F (max. 40 perc) |
| Measuring range: -10...150 °C / 14...302 °F |
| Measuring element: 1 x Pt 1000, to DIN EN 60751, class A |

Application

| | |
|---------------------------------|---|
| Application | liquids and gases |
| Pressure rating [bar] | 300; only applies to the sensor; for installation in adapters the indications in the adapter data sheet shall apply |
| Minimum installation depth [mm] | 15 |

Electrical data

| | |
|-----------------------------|---------------------|
| Electrical design | AS-i |
| Operating voltage [V] | 18...31.6 DC (AS-i) |
| Current consumption [mA] | < 25 |
| Protection class | III |
| Reverse polarity protection | yes |

Outputs

| | |
|---------------------|---|
| Output function | Analog value (16 bit value incl. sign) |
| Overload protection | yes |

Measuring / setting range

| | | |
|-------------------|--------------|-------------|
| Measuring range | -10...150 °C | 14...302 °F |
| Resolution | | |
| Analog output [K] | 0.05 | |

Accuracy / deviations

| | |
|--|---|
| Analog output [K] | ± 0.1 (60°C / 140°F) / ± 0.3 (0...140°C / 32...284°F) |
| Temperature coefficients (in % of the span per 10 K) | < ± 0.1 ***** |

Reaction times

| | |
|--------------------------------|----------|
| Dynamic response T05 / T09 [s] | 1 / 3 *) |
|--------------------------------|----------|

Environment

| | |
|--------------------------|----------|
| Ambient temperature [°C] | -25...70 |
|--------------------------|----------|



TAA431

TAA123CCDR12-ASIVG/US

Temperature sensors

| | | |
|---------------------|------|----------------|
| Storage temperature | [°C] | -40...100 |
| Protection | | IP 68 / IP 69K |

Tests / approvals

| | | |
|----------------------|---------|--|
| EMC | | EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 10 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-5 Surge: 0.5/1 kV EN 61000-4-6 HF conducted: 10 V |
| Shock resistance | | DIN IEC 68-2-27: 50 g (11 ms) |
| Vibration resistance | | DIN EN 60068-2-6 20 g (10...2000 Hz) |
| MTTF | [Years] | 348 |

AS-i classification

| | | |
|-------------------------|--|---------|
| AS-i version | | 2.11 |
| AS-i profile | | S-7.3.C |
| I/O configuration [hex] | | 7 |
| ID code [Hex] | | 3.C |

Mechanical data

| | | |
|--------------------------|------|---|
| Process connection | | G ½ A |
| Materials (wetted parts) | | stainless steel 316L / 1.4404 |
| Probe length L | [mm] | 87.5 |
| Installation length EL | [mm] | 87.5 |
| Housing materials | | stainless steel 316L / 1.4404; stainless steel (304S15); stainless steel (303S22); PA |
| Tightening torque | [Nm] | 30...50 |
| Weight | [kg] | 0.262 |

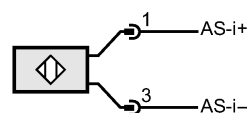
Displays / operating elements

| | | |
|---------|--|---|
| Display | | Function display LED green (operate); red (error) |
|---------|--|---|

Electrical connection

| | | |
|------------|--|-------------------------------------|
| Connection | | M12 connector; gold-plated contacts |
|------------|--|-------------------------------------|

Wiring



Remarks

| | | |
|---------|--|---|
| Remarks | | *) according to DIN EN 60751 *****) In case of deviation from the reference condition 25 ± 5 °C The values for accuracy apply to flowing water. Referring to UL: For use on a low voltage circuit with overcurrent protection in accordance with UL873 Tab. 28.1 or I _{max} = 100/U _b (U _b = voltage of the circuit). |
|---------|--|---|

| | | |
|---------------|---------|---|
| Pack quantity | [piece] | 1 |
|---------------|---------|---|