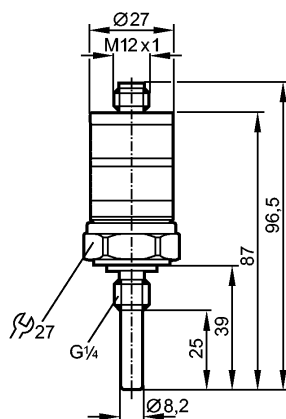


TK6130

TK-025CLFR14-QKPKG / US

Temperature sensors



Made in Germany

Product characteristics

Electronic temperature sensor

Process connection: G 1/4 A

Installation length EL: 39 mm

2 switching outputs

complementary

Hysteresis

adjustable

Measuring range: -25...140 °C / -13...284 °F

Measuring element: 1 x Pt 1000, to DIN EN 60751, class B

Application

| | |
|---------------------------------|--------------------------|
| Application | liquids and gases |
| Medium temperature [°C] | -25...125 (145 max. 1 h) |
| Minimum installation depth [mm] | 15 |

Electrical data

| | |
|-----------------------------|-------------|
| Electrical design | DC PNP |
| Operating voltage [V] | 9.6...32 1) |
| Current consumption [mA] | < 30 |
| Protection class | III |
| Reverse polarity protection | yes |

Outputs

| | |
|--------------------------|--------------------------------------|
| Output function | normally open / closed complementary |
| Current rating [mA] | 500 |
| Voltage drop [V] | < 2 |
| Short-circuit protection | Yes (non-latching) |
| Overload protection | yes |

Measuring / setting range

| | |
|-------------------------|-----------------------|
| Measuring range °C/°F | -25...140 / -13...284 |
| Setting range | |
| Set point, SP [°C/°F] | -16...140 / 3...284 |
| Reset point, rP [°C/°F] | -20...136 / -4...277 |

Accuracy / deviations

| | |
|-----------------------------|-----|
| Temperature drift (/ 10 K) | 0.1 |
|-----------------------------|-----|

TK6130

TK-025CLFR14-QKPKG / US

Temperature sensors

| | | |
|------------------|-----|-------|
| Setting accuracy | [K] | ± 3 |
| Repeatability | [K] | ± 0.1 |

Reaction times

| | | |
|---------------------|---------------|----------|
| Power-on delay time | [s] | 0.5 |
| Dynamic response | T05 / T09 [s] | 1 / 3 *) |

Software / programming

| | |
|--------------------------------|-------|
| Adjustment of the switch point | Shims |
|--------------------------------|-------|

Environment

| | | |
|---------------------|-------|-----------|
| Pressure rating | [bar] | 300 |
| Ambient temperature | [°C] | -25...70 |
| Storage temperature | [°C] | -40...100 |
| Protection | | IP 67 |

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 61000-4-6 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] 684 |

Mechanical data

| | |
|--------------------------|--|
| Process connection | G ¼ A |
| Materials (wetted parts) | stainless steel 316L / 1.4404; FPM (Viton) |
| Probe length L | [mm] 25 |
| Installation length EL | [mm] 39 |
| Housing materials | stainless steel 316L / 1.4404; PC (Makrolon); PBT (Pocan); FPM (Viton) |
| Weight | [kg] 0.104 |

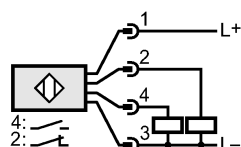
Displays / operating elements

| | |
|---------|--|
| Display | Power LED green Switching status LED yellow |
|---------|--|

Electrical connection

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

Wiring



Remarks

| | |
|---------|---|
| Remarks | 1) cULus - Class 2 source required *) according to DIN EN 60751 The values for accuracy apply to flowing water. |
|---------|---|

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