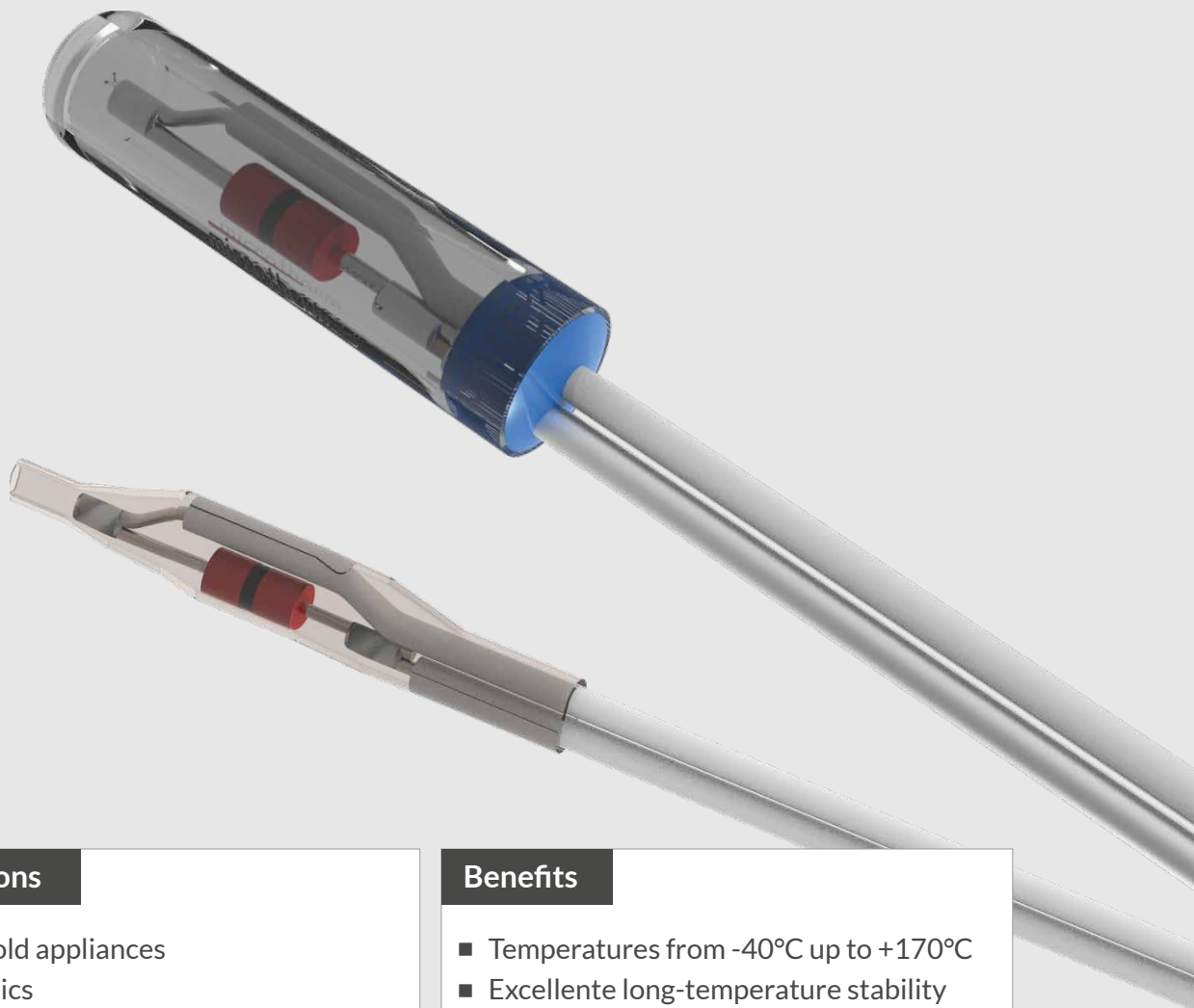


temperature sensor

Type

STS1



Applications

- Household appliances
- Electronics
- Engineering
- Automotive

Benefits

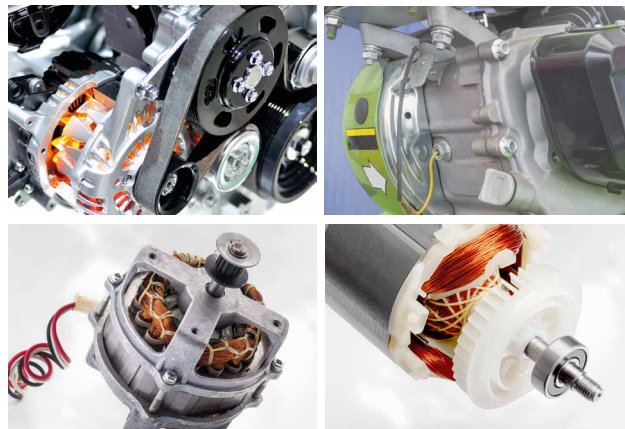
- Temperatures from -40°C up to $+170^{\circ}\text{C}$
- Excellent long-temperature stability
- High precision and reliability
- No reversal polarity (+/-) possible

Description

Sensors of the STS type series are characterized by a temperature curve which is very similar to KTY sensors showing a positive temperature coefficient. The STS1 is a suitable alternative to former product KTY84-130. Available standard executions are shrink-sleeve or PPS housing package, beside these there are manifold customized solutions on hand.

technical data

| ratings | type |
|---|------------------------|
| | STS1 |
| typical resistance at 100°C (±3%) | 1000 Ω |
| operating temperature range | -40°C ... +170 (190)°C |
| minimum insulation resistance (100V _{DC}) | 100 MΩ |
| operating current | 1 mA |
| maximum rated power | 10 mW |

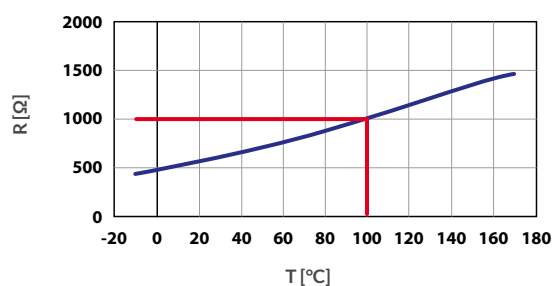


standard types

| type execution | illustration | drawing dimensions (mm) | technical description |
|----------------|--------------|-------------------------|--|
| STS1 G918 | | | housing PPS leads ETFE, AWG24, white |
| STS1 U129 | | | shrink sleeve Kynar® leads ETFE, AWG24, white |

temperature vs. resistance

| T °C | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| min. | 414 | 452 | 493 | 537 | 582 | 629 | 678 | 733 | 788 | 846 | 907 | 970 | 1030 | 1094 | 1162 | 1227 | 1290 | 1346 | 1396 |
| typ. | 435 | 475 | 517 | 562 | 608 | 656 | 706 | 761 | 817 | 875 | 937 | 1000 | 1064 | 1132 | 1204 | 1274 | 1341 | 1402 | 1457 |
| max. | 456 | 498 | 541 | 587 | 634 | 683 | 734 | 789 | 846 | 904 | 967 | 1030 | 1098 | 1170 | 1246 | 1321 | 1392 | 1458 | 1518 |



ordering example

| | | | | | |
|------|------|---|------|-----|---------------------------|
| STS1 | 1000 | 3 | L360 | 500 | G918 |
| | | | | | Housing number |
| | | | | | Length of leads (± 10 mm) |
| | | | | | Leads white, AWG24, ETFE |
| | | | | | Tolerance (%) |
| | | | | | R[Ω] at 100 °C |
| | | | | | Type of sensor |

Remark: Values of electric resistance correspond almost exactly to KTY84. Above 170°C the linearity can differ.

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