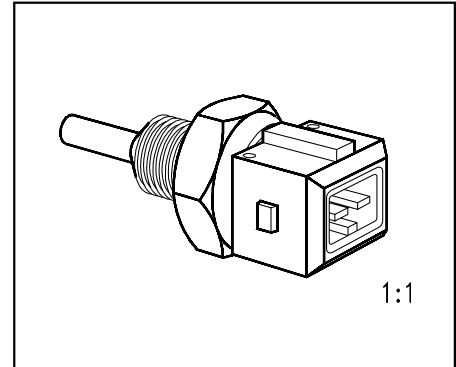


## Silicon Spreading Resistance Temperature Sensor in Robust Threaded Metal Housing

KTY 19-6 M/Z

### Features

- Temperature dependent Resistor with Positive Temperature Coefficient
- Selected at 25 °C,  $R_{25} = 2000 \Omega \pm 1\%$
- Corrosion resistant stainless steel housing with connector socket
- Fast response
- High long-term stability
- excellent linearity
- Robust threaded housing
- Mating splash-proof connector set available



Test voltage: 1000 V ~  
 Isolation voltage: 100 V ~  
 Test duration: 1 s  
 Insertion torque: max. 30 Nm

Type	Marking	Thread	Ordering Code	Pin Configuration		Package
				1	2	
KTY 19-6M	KTY 19M	ISO M10x1	Q62705-K271	electrical contact	electrical contact	BSS303 DIN 1.4305
KTY 19-6Z	KTY 19Z	NPTF 1/8" × 27	Q62705-K272	electrical contact	electrical contact	stainless steel
Connector Set (Splash-proof)	—	—	Q62901-B80	—	—	housing: potential free

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Maximum operating voltage <sup>1)</sup> $T_A \leq 25 \text{ °C}, t \leq 10 \text{ ms}$	$V_{\text{opmax}}$	25	V
Maximum operating current	$I_{\text{opmax}}$	5	mA
Peak operating current $T_A \leq 25 \text{ °C}, t \leq 10 \text{ ms}$	$I_{\text{opp}}$	7	mA
Operating temperature range	$T_{\text{op}}$	– 50 ... + 150	°C
Storage temperature range	$T_{\text{stg}}$	– 50 ... + 150	°C

<sup>1)</sup> ESD Class 1. When the temperature sensor is operated with long supply leads, it should be protected through the parallel connection of a > 10 nF capacitor to prevent damage to the sensor through induced voltage peaks.

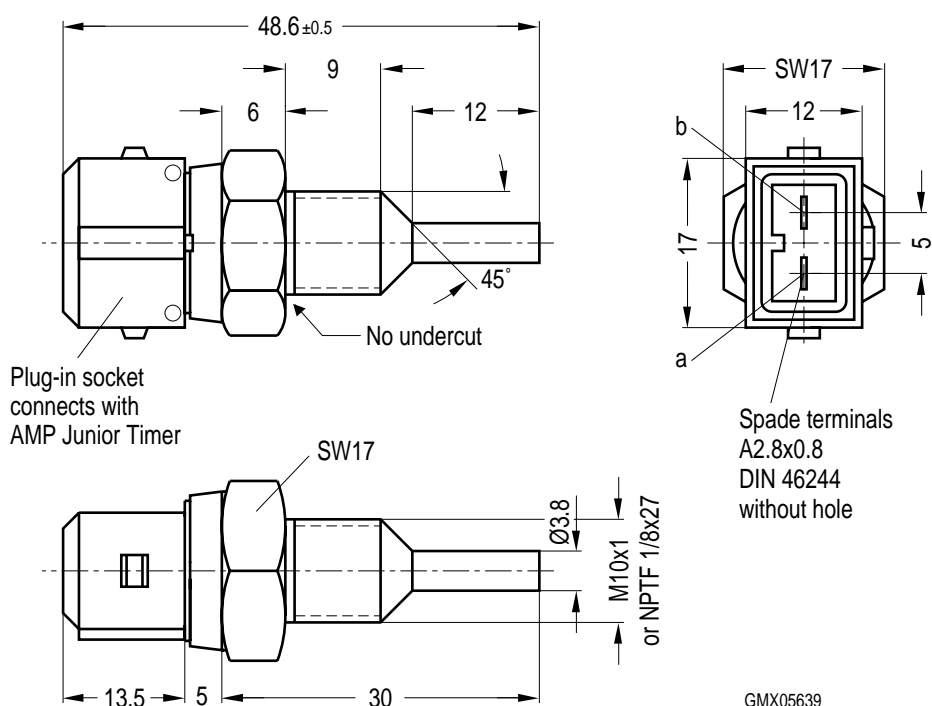
## Electrical Characteristics

at  $T_A = 25\text{ °C}$  unless otherwise specified

Parameter	Symbol	Limit Values			Unit
		min.	typ.	max.	
Temperature sensor resistance $I_B = 1\text{ mA}$ KTY 19-6M/Z	$R_{25}$	1980		2020	$\Omega$
Thermal time constant (63 % of $\Delta T_A$ ) in still air	$\tau_{\text{air}}$	—	40	—	s
in still oil (Freon FC40/PP7)	$\tau_{\text{oil}}$	—	4	—	

## Package Outline

### Stainless Steel Housing, BSS303 (equiv. DIN 1.4305)



Weight approx. 20 g

Dimensions in mm

## Exterior Packaging

I.e. tubes, trays, boxes are shown in our Data Book "Package Information".