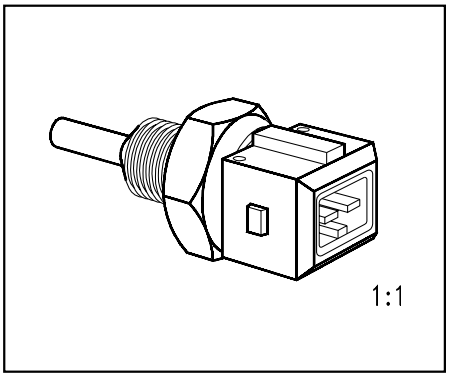
SIEMENS

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 Ω ± 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 [1] $T_A \leq 25$ ˚C, $t \leq 10$ ms	V_{opmax}	25	V
Maximum operating current	I_{opmax}	5	mA
Peak operating current $T_A \leq 25$ ˚C, $t \leq 10$ ms	I_{opp}	7	mA
Operating temperature range	T_{op}	– 50 … + 150	˚C
Storage temperature range	T_{stg}	– 50 … + 150	˚C

[1] 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.

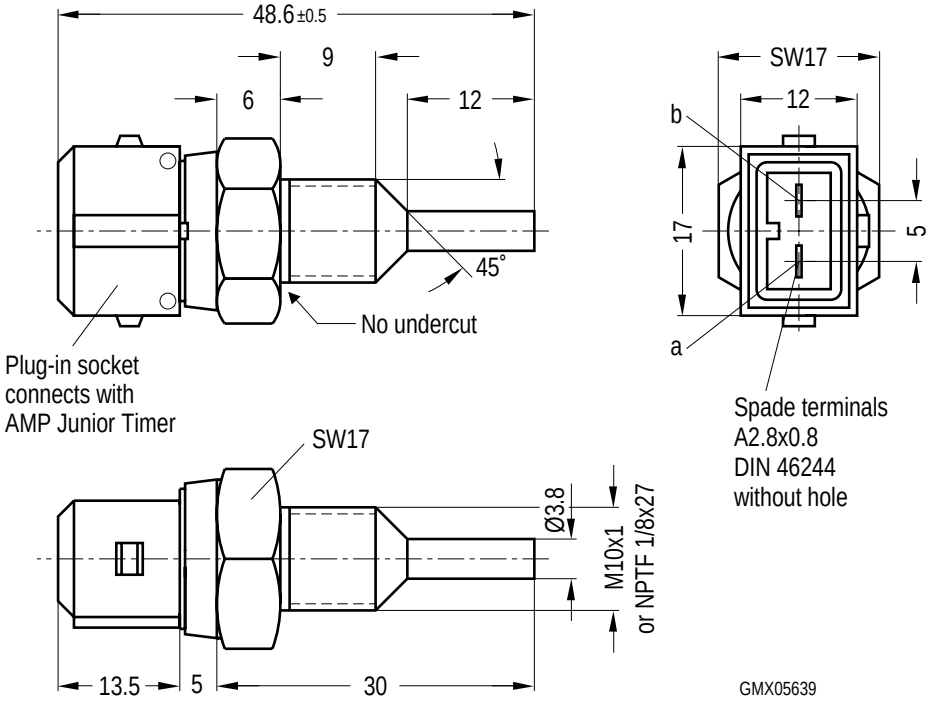
Electrical Characteristics

at T_A = 25 ˚C unless otherwise specified

Parameter	Symbol	Limit Values			Unit
		min.	typ.	max.	
Temperature sensor resistance I_B = 1 mA KTY 19-6M/Z	R_{25}	 1980		 2020	Ω
Thermal time constant (63 % of ΔT_A) in still air in still oil (Freon FC40/PP7)	 τ_{air} τ_{oil}	 – –	 40 4	 – –	s

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”.