



# Order information

## ESCC Qualified Hi-Rel temperature sensor with qualified extended wires

Nomenclature according to ESA Detail Specification 4006/015

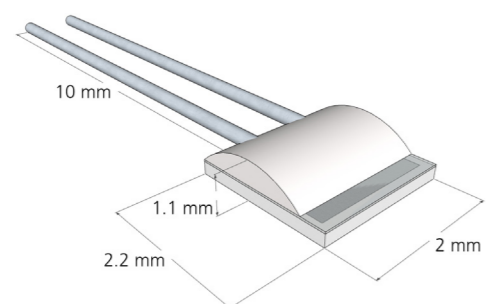
Nomenclature according to IST AG Reference



## Hi-Rel temperature thin-film sensors

### Your benefits compared to a wire-wound sensor:

- Resistant against thermal cycles
- Vibration-resistant
- Small dimensions (W x L x H: 2.0 x 2.2 x 1.1 mm ± 0.2 mm)
- Light weight
- No movable parts
- 10 mm platinum wires
- EM versions available



The platinum wires are designed so they can later be processed, e.g. brazing, resistance-welding, laser-welding, crimping and TIN-soldering (elaborately).

### ESCC QPL Qualified Part list (sensor only)

Variant Number	Based on Type (Former order code)	Main Reference (Order code)	Nominal Rz (Ω) at 0°C	Operating Temperature Range Top (°C)	Maximum Operating Current (mA)	Maximum Rated Current (mA)
01	P0K1.232.7W (010.02991)	101410	100	- 50 to +150	1	4
02	P0K1.232.7W (010.02992)	101411	100	-200 to +200	1	4
03	P0K2.232.7W (010.02993)	150026	200	- 50 to +150	0.7	2.8
04	P0K2.232.7W (010.02994)	101412	200	-200 to +200	0.7	2.8
05	P0K5.232.7W (010.02995)	101413	500	- 50 to +150	0.45	1.3
06	P0K5.232.7W (010.02996)	101414	500	-200 to +200	0.45	1.3
07	P1K0.232.7W (010.02997)	101415	1000	- 50 to +150	0.3	1.3
08	P1K0.232.7W (010.02998)	101416	1000	-200 to +200	0.3	1.3
09	P2K0.232.7W (010.02999)	101417	2000	- 50 to +150	0.2	0.9
10	P2K0.232.7W (010.03000)	101418	2000	-200 to +200	0.2	0.9

4006015 XX XX XXXX  
 E.g. 4006015 07 01 0300 (same sensor without wires = 40060150700)

### Characteristic Code

0100 to 9999 Extension cable/wires nominal total length [mm]

left blank Sensor with platinum leads only

### Characteristic Code: Termination Type

00	Sensor with platinum leads only	
01	Twisted 2-core extension cable (no shield)	ESCC Component 390101910B
02	Twisted 4-core extension cable (no shield)	ESCC Component 390101926B
03	Twisted 2-core extension cable with shield and jacket	ESCC Component 390101957B
04	Twisted 4-core extension cable with shield and jacket	ESCC Component 390101973B
05	2-wire extension (single extension wires)	ESCC Component 390101902B

### ESCC Component Type Variant Number, Sensor Element

01	P0K1	Temperature range from -50 °C to +150 °C
02	P0K1	Temperature range from -200 °C to +200 °C
03	P0K2	Temperature range from -50 °C to +150 °C
04	P0K2	Temperature range from -200 °C to +200 °C
05	P0K5	Temperature range from -50 °C to +150 °C
06	P0K5	Temperature range from -200 °C to +200 °C
07	P1K0	Temperature range from -50 °C to +150 °C
08	P1K0	Temperature range from -200 °C to +200 °C
09	P2K0	Temperature range from -50 °C to +150 °C
10	P2K0	Temperature range from -200 °C to +200 °C

Detail Specification Reference: 4006/015

QP XXX. 232. X LXX. B. XXX  
 E.g. QP 1K0. 232. 1 L10. B. 300

### Total length

from 100 mm up to 10'000 mm

### Tolerance class

B IEC 60751 F.03

### Wire / cable type

10	ESCC 3901 019 10B
26	ESCC 3901 019 26B
57	ESCC 3901 019 57B
73	ESCC 3901 019 73B
02	ESCC 3901 019 02B

### Temperature range of sensor element

1	-50 °C to +150 °C
2	-200 °C to +200 °C

### Chip-Size

232 2.3 x 2.0 mm (LxW) (only qualified chip size)

### Resistance in Ohm at 0 °C

OK1	100 Ohm
OK2	200 Ohm
OK5	500 Ohm
1K0	1000 Ohm
2K0	2000 Ohm

### Material identification

Q	Qualified Flight Model (QP for qualified extended version)
P	Engineering Model (P for engineering extended version)