

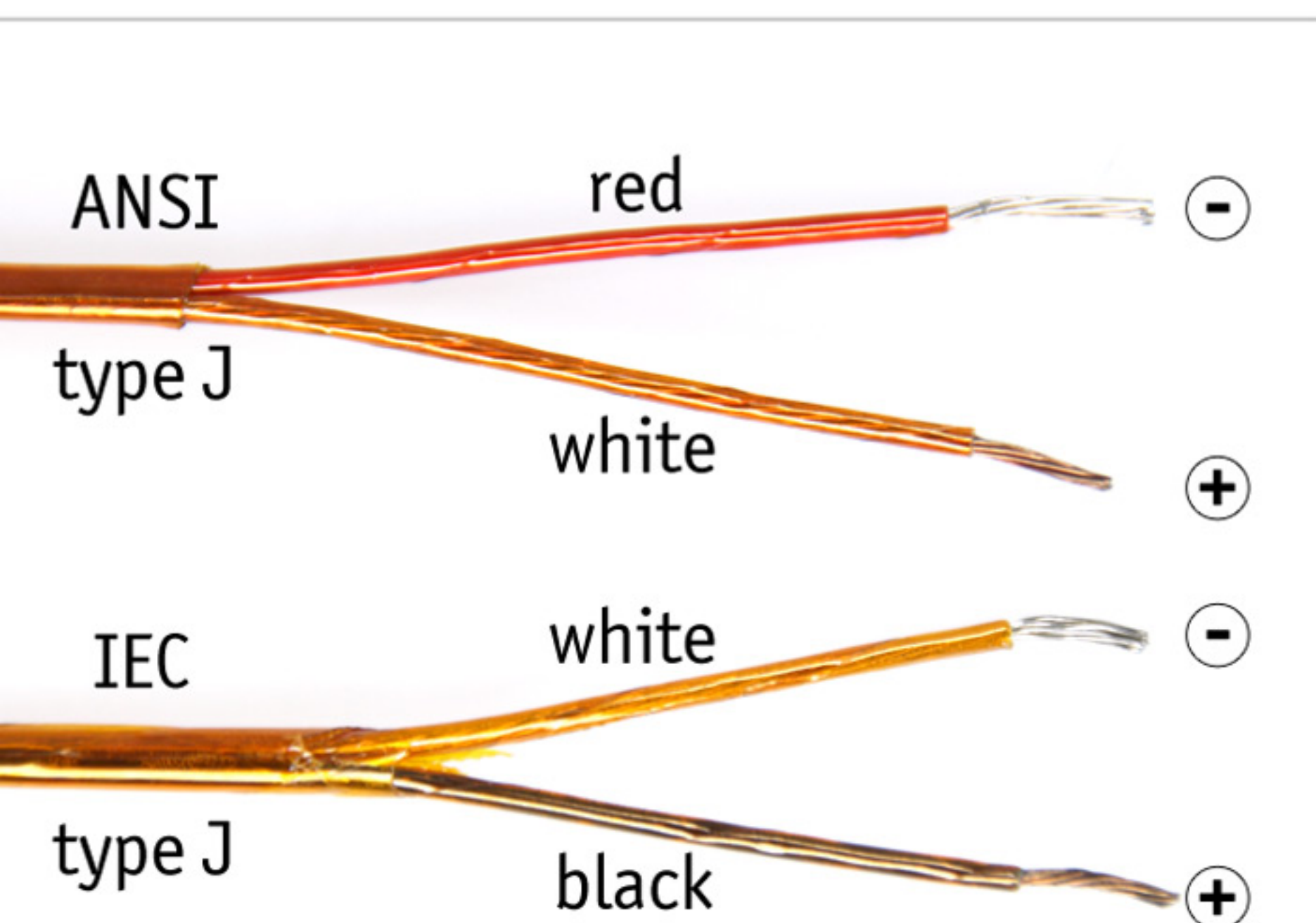
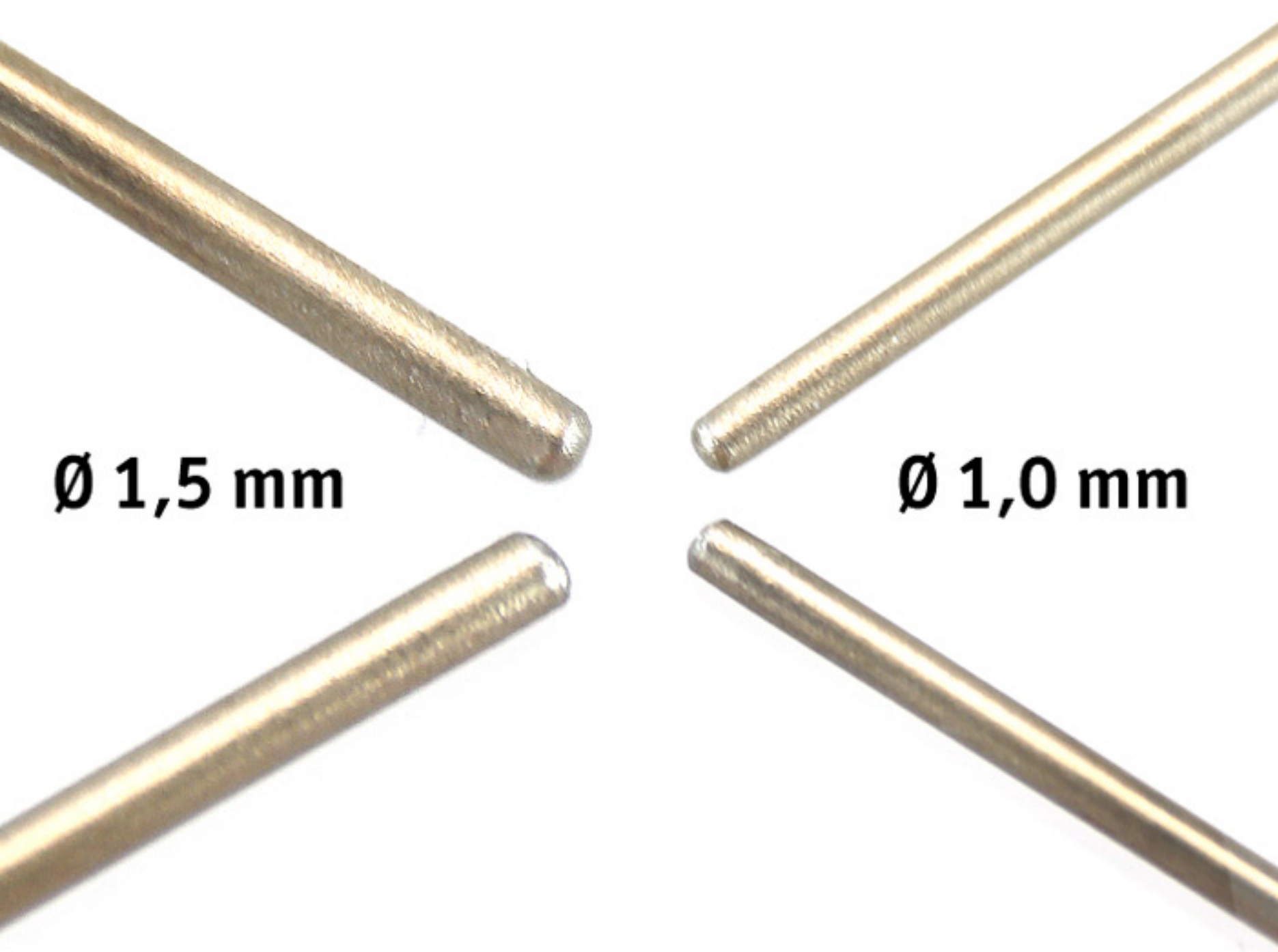
Thermocouples

Sheath thermocouples for the plastics industry with cast connection head

Sheath thermocouples with Kapton connector cable and a cast connection head capable of withstanding high temperatures: an 'Xtreme' version designed for the most demanding conditions in temperature measurement for nozzles and hot runner systems.

These thermocouples are available in the usual dimensions for plastics processing applications, Ø 1.0 mm and Ø 1.5 mm, and deliver optimum results in terms of precision, durability and thermal and mechanical resilience.

Our many years of experience in the field of nozzle heating and temperature measurement have enabled us to find effective solutions for specific problems and to implement those solutions in designing innovative products. Thanks to their cast connection head (5 x 16 mm) and the Kapton cable used, these sheath thermocouples, developed for the specific requirements of the hot runner industry, can be used in conditions in which the connector area is subjected to ambient temperatures of up to 300 °C (or optionally 500 °C). In addition to being well insulated, as would be expected, the thermocouple is also waterproof.



Thermoc

insulation

www.freek-heaters.com

experience 300°C

MEASUREMENT

PRECISION

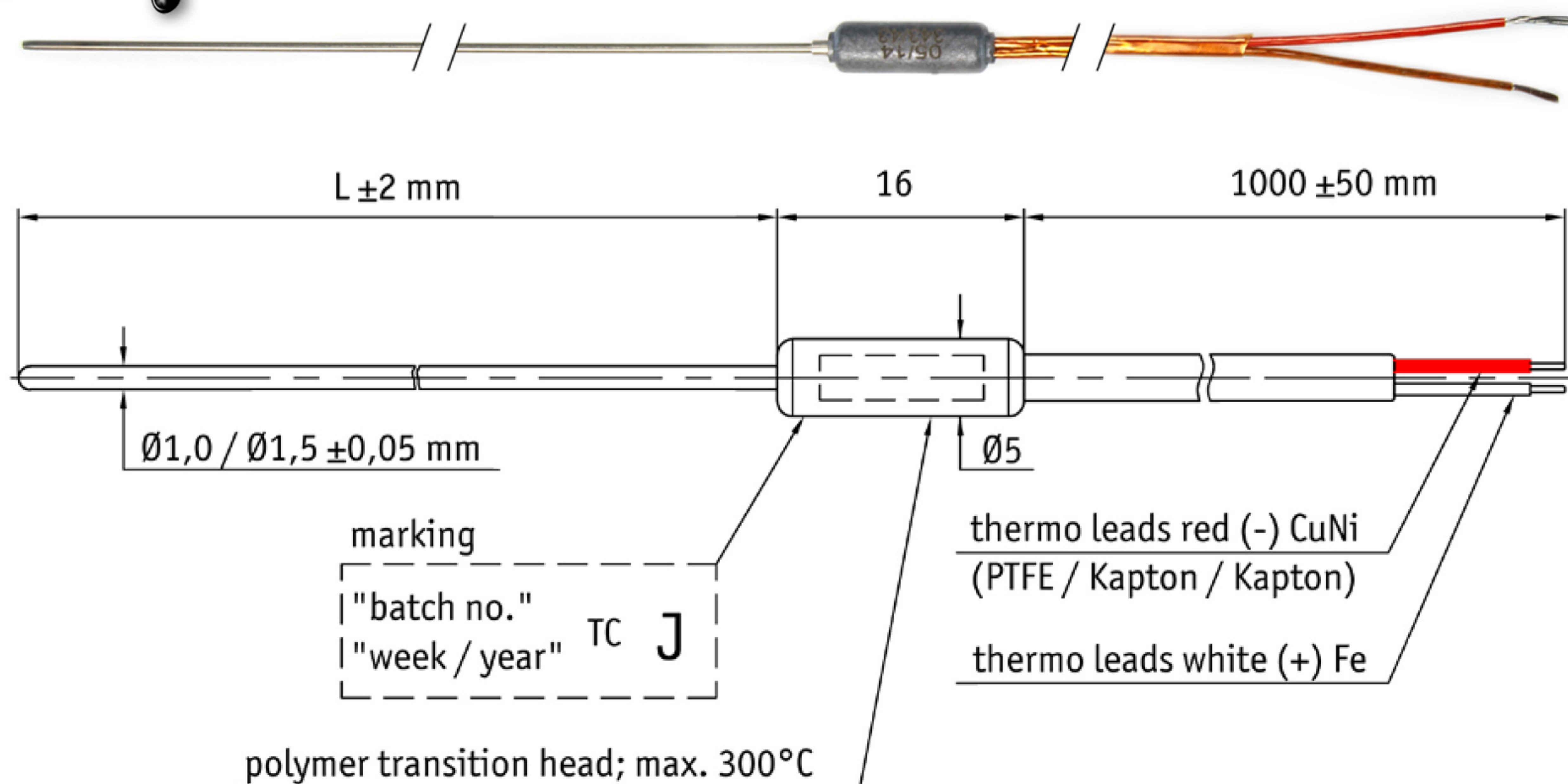
Kapton

(500°C)

stable at high temperatures



friedr. freek
GmbH



Thermocouple type and colour coding

ANSI MC 96.1		
Typ J ANSI (Fe-CuNi) *	+	<div><div></div><div></div></div> -
Typ K ANSI (NiCr-Ni)	+	<div><div></div><div></div></div> -

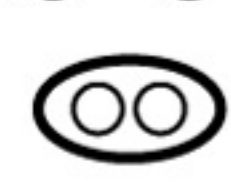
IEC 584 / DIN EN 60584		
Typ J IEC (Fe-CuNi)	+	<div><div></div><div></div></div> -
Typ K IEC (NiCr-Ni)	+	<div><div></div><div></div></div> -

* see drawing and photo above

Range of application and precision as per IEC 584 / DIN EN 60584

Type	Accuracy class		Range of application
J (Fe-CuNi)	2 (Standard)	1 (Special)	-40°C – 600°C
K (NiCr-Ni)	2 (Standard)	1 (Special)	-40°C – 1100°C

Connection type

- Sheath thermocouple with cast connection head, 300°C (500°C optional)
- Double Kapton-insulated PTFE cable 2x 0,22 mm²,  1,2 x 2,1 mm
- Standard cable length 1000 mm

Sensor type

- Potential-free
- Type J: AISI304 (1.4301) Ø1,0 / Ø1,5 mm
- Type K: INC600 (2.4851) Ø1,0 / Ø1,5 mm
- Sensor length variable

