

TP

PRECIOUS METAL THERMOCOUPLES

Precious metal thermocouples are intended for use in MTC1, MTC1C, MTC1L, MTC1KD, MTC2, MTC2C, MTC2L, MTC4S, MTC5A, MTC5MA, MTC5LA, MTC6A, MTC6LA, MTC6MA, MTC6S and MTC7BM assembly as a measuring element.

The output signal of thermocouple is a thermoelectric voltage, the value of which is according to the ČSN EN 60584-1 ed. 2.

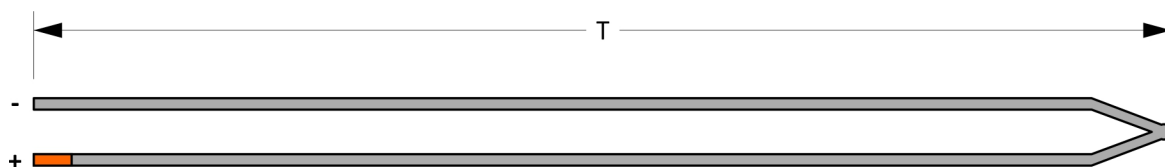


Figure TP.1: Thermocouple

Optional Parameters Including the Creation of an Order Code (Table TP.1)

Pos.	Code	TP - ① - ②
①	Thermocouple type	
	S035	Thermocouple type „S“, wire diameter 0,35 mm, accuracy class 1 acc. ČSN EN 60584-1 ed. 2
	S05	Thermocouple type „S“, wire diameter 0,5 mm, accuracy class 1 acc. ČSN EN 60584-1 ed. 2
	R05	Thermocouple type „R“, wire diameter 0,5 mm, accuracy class 1 acc. ČSN EN 60584-1 ed. 2
	B05	Thermocouple type „B“, wire diameter 0,5 mm, accuracy class 2 acc. ČSN EN 60584-1 ed. 2
②	Thermocouple length T [mm]	
	xxx	Selectable range from 50 (in 1 mm increments)

Order code example: TP-S05-870

... Thermocouple type „S“, wire diameter 0,5 mm, accuracy class 1

... Thermocouple length T = 870 mm

Approximate weight of the product: TP-S05-870 ... < 10 g

Maximum operating temperature of thermocouples (Table TP.2)

Thermocouple type	Recommended	With limited lifetime
„S“, wire dia. 0,5 mm	< 1400 °C	< 1600 °C
„S“, wire dia. 0,35 mm	< 1300 °C	< 1400 °C
„B“, wire dia. 0,5 mm	< 1500 °C	< 1700 °C
„R“, wire dia. 0,5 mm	< 1400 °C	< 1600 °C

Notes: Operating temperatures are related to temperature measurement in a chemically inert environment. The values are determined empirically.

Minimum thermocouple lengths in assemblies (Table TP.3)

Thermocouple assembly	Thermocouple length T [mm]
MTC1	N + 70
MTC1C	N + 70
MTC1KD	N + 70
MTC1L	N + 70
MTC2	N + 70
MTC2C	N + 70
MTC2L	N + 70
MTC4S	N + 80
MTC5A	N + 80
MTC5LA	N + 80
MTC5MA	N + 40
MTC6A	N + 80
MTC6LA	N + 80
MTC6MA	N + 40
MTC6S	N + 80
MTC7BM	N + 70

Notes: „N“ is the nominal length of the thermocouple assembly.