

## CABLE-MOUNTED RESISTANCE THERMOMETERS

Models: (not to scale!)  
PT30 PT37 PT38

PTP35

PT31

PT34

PT33

PT36



**PT30** - Ø6mm, cable lead  
**PT37** - Ø4 or 3mm, wire leads  
**PT38** - with the hole for a bolt insulating jacket

**PT35** - adjustable collet nut  
**PT31** - firmly welded nut Ø4.2

**PT34** - in teflon sleeve (low price)  
**PT33** - flat design (to be mounted in a motor groove)  
**PT36** - embedded,

All thermometer models featuring the lead-in wires firmly fastened to the thermometer body are termed cable thermometers. Metal parts are made of grade 17248 stainless steel. The lead wire length as well as the mechanical design may be customized.

Type:	Description:	Temperature range:	Leads:	Casing material:
<b>PT30</b>	Cable type, surface mounted contact design, Ø6mm (Ø5mm on request), to be fitted on the pipeline with a fastener band. Pt100/B sensor, four-wire connection.	-40...+200°C Special design: up to +350°C	4w cable 200°C 1m 2w cable 350°C 1m	stainless steel of 17248 grade
<b>PT31</b>	Design similar to that of PT30. Fixing bolts M12x1.5 are welded to the shank. M12x1.75, G1/2, M20x1.5 or other type bolts can also be used. Submerged length „Y” according to requirements	-40...+200°C Special design: up to +350°C	4w cable 200°C 1m 2w cable 350°C 1m	stainless steel of 17248 grade
<b>PT33</b>	Flat design for mounting into a stator groove in electric rotating machines. The sensor is cemented into a glass-textile plate. It is protected from outside by means of a special shrinking sleeve.	max. +180°C (class „H”)	2 stranded wires, 200°C 2.5m	glass textile+ teflon
<b>PT34</b>	This is a miniature, very fast-response thermometer, designed to be mounted into the windings of electric machines. The Pt100 sensor is protected by a special teflon shrinking sleeve.	Max. +200°C	2 stranded wires, 200°C 2.5m	teflon sleeve
<b>PT35</b>	Cable-mounted thermometer, Ø8mm, with collet nut M12x1.75 or G1/2, adjustable submerged length. It has been designed to measure, e.g., the bearing temperature in large rotating machines. The adjustable nut is not pressure-tight.	-40...+120°C	4w cable 200°C 2.5m	stainless steel of 17248 grade
<b>PT36</b>	Thermometer of approx. Ø 3.5mm for insertion into electric machine winding. The sensor is embedded in an isolating sleeve - the casing is not exactly cylindrical.	-40...+150°C (class „F”)	2 stranded wires, 200°C 2.5m	isolating sleeve
<b>PT37</b>	Ø4mm stem design, Ø3mm available on request.	Max. +200°C Special design: up to +400°C	2 stranded wires, 200°C 1m 2 silver wires (glass fibre insulation)	stainless steel of 17248 grade
<b>PT38</b>	to measure surface temperature. Design similar to that of PT30, the stem end is flat, with a Ø4.2mm hole for bolt fastening to the surface measured. For preliminary measurements only.	-40...+200°C Special design: up to +350°C	4w cable 200°C 1m 2w cable 350°C 1m	stainless steel of 17248 grade

- Insulation of the 4w 200°C cable (four 0.22 mm<sup>2</sup> wires) (from inside outwards): teflon layer, wire braiding, silicon (by request also teflon)
- Insulation of the 2w 350°C cable (0.35mm<sup>2</sup> wires): glass fibre plus metal wire braiding on each wire
- the 200°C stranded wire: it is a copper stranded wire, 0.35mm<sup>2</sup>, silver plated, with teflon insulation

**Type tests:**

Standard type test: to ČSN IEC 751

EMC: to ČSN EN 61326-1

Safety: assessed acc. to ČSN EN 61010-1

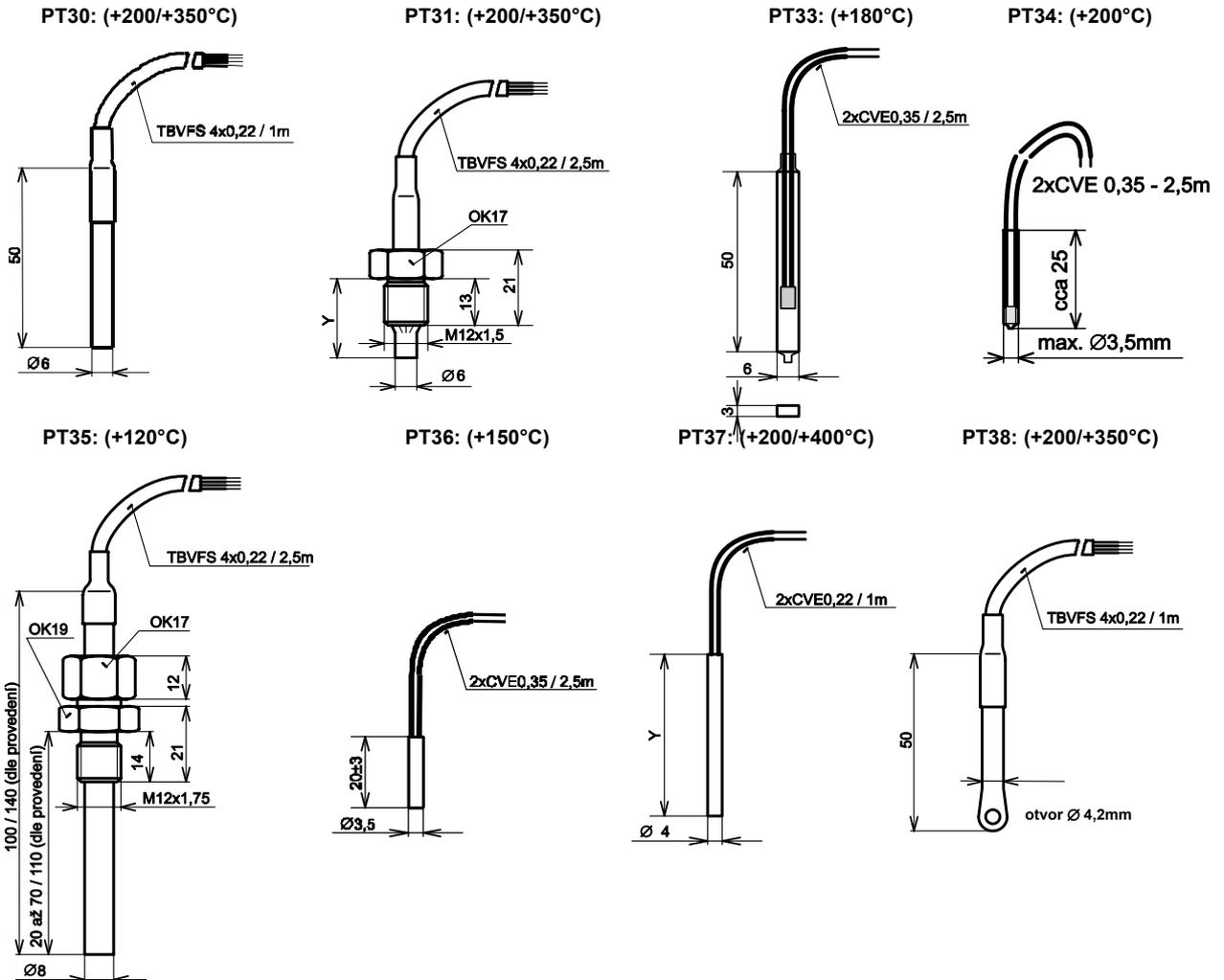
**Connection methods**

Single sensor, four wire model: black + white, red + blue

Two sensor model: black, white - sensor „A“; red, blue – sensor „B“

Single sensor, two wire model: two wires, no discrimination

The wire ends are stripped and tin-plated. Pressing bushings are used for temperatures over 200°C.

**Dimensions:****Your order should include:**

- thermometer type
- accuracy of Pt100 A, B sensor, or other special requirements (double sensor, other sensor type, e.g., Pt100, Ni1000... (Pt100/B is mounted unless otherwise stated)
- stem length, if different from standard design (different dimensions)
- cable length, if different from standard design
- expected maximum temperature to measure, if exceeding that of the standard design (by arrangement)
- quantity (No. of pieces)

**Purchase order examples:**

Most frequently ordered options:

- PT30 Pt100/A 6x50mm 1m 4w cable 200°C 1 pc.
- PT30 Pt100/B 6x50mm 1m 2w cable 350°C 1 pc.
- PT31 Pt100/B Ø6mm Y=80mm 1m 4w cable 200°C 1 pc.
- PT33 Pt100/A 6x50x3mm 2.5m lead-in wires, 200°C 1 pc.
- PT34 Pt100/A 2.5m lead-in wires 200°C 1 pc.
- PT35 Pt100/A Y=110mm 2.5m 4w cable 120°C 1 pc.
- PT36 Pt100/B 2.5m lead-in wires 1 pc.
- PT37 Pt100/B Ø4mm Y=100mm 1m lead-in wires 200°C 1 pc.
- PT37 Pt100/B Ø4mm Y=15mm 20cm lead-in wires 400°C 1 pc.
- PT38 Pt100/B Ø6mm Y=50mm 1m 4w cable 200°C 1 pc.

Any thermometer can be provided with a calibration protocol.