

# Temperature Sensors for Surface Measurement TOPE-243, TTJE-243, TTKE-243

### Specification

-50÷400°C	Pt100
-40÷400°C	K, J

-40÷400°C **K**, **J** class 2

## Pipe band clamp

- material: stainless steel 1.4301
- pipe band clamp diameter 16÷180 mm
- width b: 9 for D<110
- 12 for D>110

#### Sheath

 material: stainless steel 1.4541: welded tangentially to band clamp (S) welded perpendicularly to band clamp (P)

#### Lead wire

- stranded Cu wire or thermocouple stranded wire: 2x0,22 mm<sup>2</sup>

class B

- fiberglass insulation, metallic overbraid
- length L<sub>n</sub> [m]: 1,5 (standard)
- Cu wire resistance ~0,14  $\Omega/m = ~0,36^{\circ}C$

#### Options

- Pt500, Pt1000, Ni100, Ni1000
- other lead wire insulation types acc. to requirements:
  operating temperature of silicone insulation up to 180°C
  operating temperature of teflon insulation up to 200°C
- 3, 4-wire connection for Pt100
- Pt100: class A -30÷300°C, class AA 0÷150°C; TC: class 1





## **Ordering code**

Temperature sensor	[	Т	E-243		 		
RTD Pt: <b>OP</b>							
Thermocouple Fe-CuNi: TJ							
Thermocouple NiCr-NiAl: TK							
Band clamp tangent to sheath: S				-			
Band clamp perpendicular to sheath: P							
Pipeline diameter D [mm]: 40							
RTD type: Pt100							
RTD / thermocouple class: A, B*/ 1, 2					 	-	
RTD connection for Pt100: 2, 3, 4-wire						J	
Lead wire length L <sub>o</sub> [m]: <b>1,5</b>					 		
Lead wire insulation other than fiberglass: Silice	one (Si), teflon (F)						

\*Other parameters acc. to requirements

Ordering example:

**TTJE-243S–25÷40–2–1,5 m–Si** single sensor with thermocouple Fe-CuNi /J/, class 2, with sheath welded tangentially to band clamp, band clamp diameter 25÷40 mm, silicone insulated lead wire length  $L_p$ =1,5 m

**TOPE-243P–80÷100–Pt100–B–2–1,5 m–Ws** single sensor with Pt100, class B, 2-wire connection, sheath welded perpendicularly to band clamp, fiberglass silicone insulated lead wire length  $L_n$ =1,5 m