

(MI) RTD REPLACEABLE INSERT - PREPARED FOR IN-HEAD TRANSMITTER ** Sheath - stainless steel (see Appendix - Sheath materials) Terminal base - Al ₂ O ₃ . Terminals - Ni-plated brass	TSSx	SENSITIVE ELEMENT	TEMPERATURE RANGE	DIMENSIONS		
	TSOSx			n [mm]	d [mm]	wires
<p>DESIGN WITH TERMINAL BLOCK TYPE "M" (TS(O)SM)</p>						
Regular Design						
1 x Pt (RB,RD,RF,RG)	T9	-50...200 °C	50...200	4	2	
	T1	-50...400 °C	50...500	5	2, 3*	
	T24	-50...500 °C	50...1500	6	2, 3, 4*	
	T11*	-50...600 °C	50...3000	8	2, 3, 4	
2 x Pt (RB,RD,RF,RG)	T2*	-200...600 °C	50...3000	6, 8, 10	2x2, 2x3*	
	T4*	0...800 °C				
3 x Pt* (RB,RD,RF,RG)	T22	-200...200 °C	50...3000	8, 10	3x2	
1 x Cu (RH, RK)	T9	-50...200 °C	50...1500	6	2, 3, 4*	
			50...3000	8	2, 3, 4	
2 x Cu (RH, RK)	T9	-50...200 °C	50...3000	6	2x2*	
				8	2x2(3)*	
1 x PTC (RP, RQ)	T12	-50...100 °C	50...1500	6	2, 3	
			50...3000	8, 10	2x2	
2 x PTC (RP, RQ)			50...3000	8, 10	2x2	
MI Design						
1 x Pt (RB,RD,RF,RG)	T9	-50...200 °C	50...50000	3*	2, 3*	
	T1	-50...400 °C		4.5	2, 3*	
	T24	-50...500 °C		6	2, 3, 4*	
	T11*	-50...600 °C		8	2, 3, 4	
2 x Pt (RB,RD,RF,RG)	T2*	-200...600 °C	50...50000	6, 8	2x2, 2x3*	
	T4*	0...800 °C				
2 x PTC (RP, RQ)	T22	-200...200 °C	50...50000	6, 8	2x2, 2x3*	
<p>Suitable protection heads: (see Appendix - Protection Heads) - TS(O)SM: heads with 20 mm mounting distance - TS(O)SB: heads with 33 mm mounting distance</p> <p>Fixing to protection head: direct (default) or springing ('OS' option)</p> <p>Tip shape: standard, narrowed, pitted (see Appendix - Tip Shapes)</p> <p>Sheath material: 1.4301(M1), 1.4404(M9), 1.4541(M2), 1.4571(M3), 1.4362 (M15)</p> <p>Wire material: Cu, Ni, or Ag</p> <p>Accuracy class: 'A', 'B', or '2xB' (see Appendix - RTD Tolerance)</p>						
<p>* Please contact COMECO! ** No transmitter mounted!</p>						
<p>DESIGN WITH TERMINAL BLOCK TYPE "B" (TS(O)SB)</p>						

Ordering code TS*(B, M) - (MI -) G1G2.G3.G4.G6.G10.G11.G12.G13.G14 - #1

Code	Feature or option	Code values
*	Base model variant	S - standard (w/ terminal block), OS - prepared for in-head transmitter (w/o terminal block)
G1	Number of RTD sensors	1, 2, or 3 ⁽⁷⁾
G2	Sensor	RB - Pt50, RD - Pt100, RF - Pt500, RG - Pt1000, RH - Cu50, RK - Cu100, RP - PTC 1k, RQ - PTC 2k
G3	Temperature range	T1 - -50...400 °C, T2 - -200...600 °C, T4 - 0...800 °C, T9 - -50...200 °C, T11 - -50...600 °C, T22 - -200...200 °C, T24 - -50...500 °C
G4	Diameter 'd' [mm]	regular design 4, 5, 6, 8, 10
		MI design 3 ⁽⁷⁾ , 4.5, 6, 8
G6	Insert length 'n' [mm] ⁽¹⁾	50...50000 (see table overleaf)
G10	Sheath material (wetted parts)	regular design M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M9 - 1.4404, M15 - 1.4362
		MI design M2 - 1.4541, M3 - 1.4571, M9 - 1.4404
G11	Accuracy class	X - none ⁽²⁾ , A - 'A', B - 'B', C - '2xB'
G12	Number of wires	2, 3, 4 ⁽⁷⁾
G13	Wire material ⁽³⁾	CU - copper ⁽⁴⁾ , NI - nickel, AG - silver ⁽⁵⁾
G14	Tip shape	X - standard closed, N - narrowed ⁽⁵⁾ , P - pitted ⁽⁵⁾
#1	Options	X - none, OV - vibration proof (MgO or Silicone filled) ^(5,6) , OS - spring-fixed terminal block, OP - electrochemically polished sheath surface ⁽⁵⁾

⁽¹⁾ This length does not coincide with the probe immersion length!

⁽²⁾ For non-Pt sensors

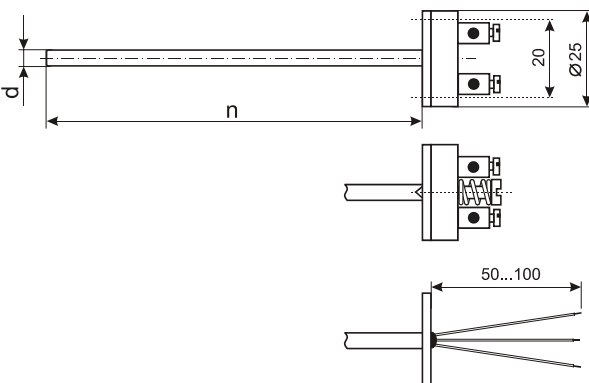
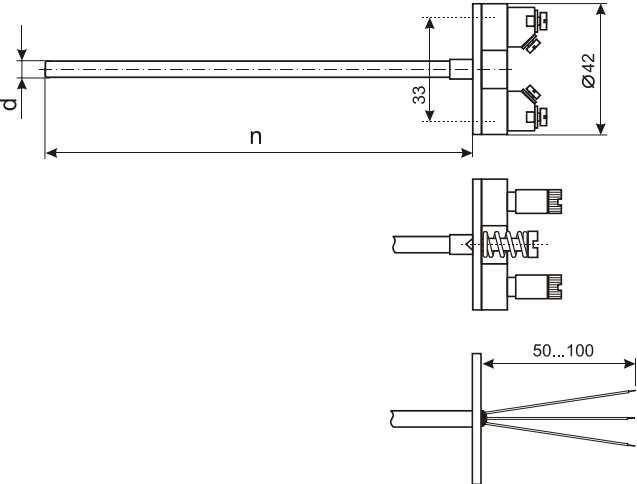
⁽³⁾ Only for Pt sensors!

⁽⁴⁾ Not applicable to non-MI (regular) RTDs for above 500 °C!

⁽⁵⁾ Only for non-MI (regular) design!

⁽⁶⁾ Requires 'OS' option!

⁽⁷⁾ Contact COMECO!

(MI) T/C REPLACEABLE INSERT - PREPARED FOR IN-HEAD TRANSMITTER ** Sheath - stainless steel (see Appendix - Sheath materials) Terminal base - Al ₂ O ₃ . Terminals - Ni-plated brass	TSSx	SENSITIVE ELEMENT	TEMPERATURE RANGE	DIMENSIONS		
	TSOSx			n [mm]	d [mm]	wires
<p>DESIGN WITH TERMINAL BLOCK TYPE "M" (TS(O)SM)</p>  <p>DESIGN WITH TERMINAL BLOCK TYPE "B" (TS(O)SB)</p> 	Regular Design					
	1(2) x J 1(2) x L	T4	0...800 °C	50...1500 50...3000	6 8, 10	2 (2x2)
	1(2) x K	T3 T16 T6*	0...850 °C 0...1100 °C 0...1150 °C	50...1500 50...3000	6 8, 10	2 (2x2)
	1(2) x E	T3 T13	0...850 °C 0...1000 °C	50...1500 50...3000	6 8, 10	2 (2x2)
	1(2) x S 1(2) x R	T16 T6*	0...1100 °C 0...1150 °C	50...1500 50...3000	6 8, 10	2 (2x2)
	MI Design					
	1 x J 2 x J	T4	0...800 °C	50...50000	3, 4.5, 6, 8	2 2x2
	1 x T 2 x T	T8	0...400 °C	50...50000	3, 4.5, 6, 8	2 2x2
	1 x K 1 x N, 1 x E	T3 T16	0...850 °C 0...1100 °C	50...50000	3, 4.5, 6, 8	2
	2 x K 2 x N, 2 x E	T6* T6*	0...1150 °C 0...1250 °C	50...50000	3, 4.5, 6, 8	2x2
	2 x S 2 x R	T16 T6*	0...1100 °C 0...1150 °C	50...10000	3, 4.5, 6	2x2
	<p>Suitable protection heads: (see Appendix - Protection Heads) - TS(O)SM: heads with 20 mm mounting distance - TS(O)SB: heads with 33 mm mounting distance</p> <p>Fixing to protection head: direct (default) or springing ('OS' option)</p> <p>Tip shape (hot junction design): standard (isolated), grounded, open-tube, exposed (see Appendix - Tip Shapes)</p> <p>Sheath material: 1.4404(M9), 1.4541(M2), 1.4571(M3), 1.4762(M4), 1.4841(M5), 1.4845(M6), 1.4876(M7), 2.4816(M8), 1.4362 (M15)</p> <p>MI sheath material: 1.4404(M9), 1.4541(M2), 1.4571(M3), 1.4762(M4), 1.4841(M5), 1.4876(M7), 2.4816(M8), Microbell® (M10)</p> <p>Accuracy class: '1' or '2' (see Appendix - T/C Tolerance)</p>					
	<p>* Please contact COMECO!</p> <p>** No transmitter mounted!</p>					

Ordering code TS*(B, M) - (MI -) G1G2.G3.G4.G6.G10.G11.G14 - #1

Code	Feature or option	Code values
*	Base model variant	S - standard (w/ terminal block), OS - prepared for in-head transmitter (w/o terminal block)
G1	Number of thermocouples	1 or 2
G2	Thermocouple	regular design E - type "E", J - type "J", K - type "K", L - type "L", R - type "R", S - type "S"
	MI design	E - type "E", J - type "J", K - type "K", N - type "N", R - type "R", S - type "S", T - type "T"
G3	Temperature range	T3 - 0...850 °C, T4 - 0...800 °C, T6 - 0...1200 °C ⁽⁴⁾ , T13 - 0...1000 °C, T16 - 0...1100 °C
G4	Diameter 'd' [mm]	regular design 6, 8, 10
	MI design	3, 4.5, 6, 8
G6	Insert length 'n' [mm] ⁽¹⁾	50...50000 (see table overleaf)
G10	Sheath material (wetted parts)	regular design M2 - 1.4541, M3 - 1.4571, M4 - 1.4762, M5 - 1.4841, M6 - 1.4845, M7 - 1.4876, M8 - 2.4816, M9 - 1.4404, M15 - 1.4362
	MI design	M2 - 1.4541, M3 - 1.4571, M4 - 1.4762 (1.4749), M5 - 1.4841, M7 - 1.4876 (Incolloy 800), M8 - 2.4816 (Inconel 600), M9 - 1.4404, M10 - Microbell®
G11	Accuracy class	1 - '1' ⁽⁴⁾ , 2 - '2'
G14	Tip shape (hot junction)	X - standard (isolated from sheath), G - grounded, E - exposed hot junction, O - open-tube design
#1	Options	X - none, OV - vibration proof (secured screws) ^(2,3) , OS - spring-fixed terminal block, OP - electrochemically polished sheath surface ⁽²⁾

⁽¹⁾ This length does not coincide with the probe immersion length!

⁽²⁾ Only for non-MI (regular) design!

⁽³⁾ Requires 'OS' option!

⁽⁴⁾ Contact COMECO!