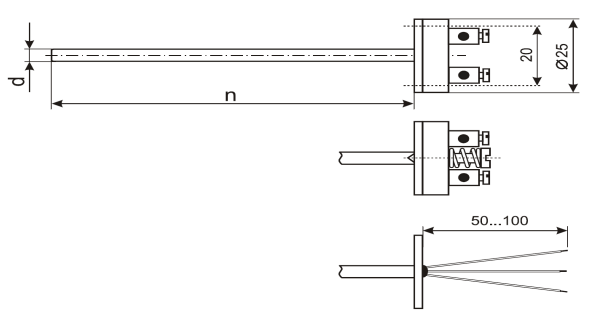
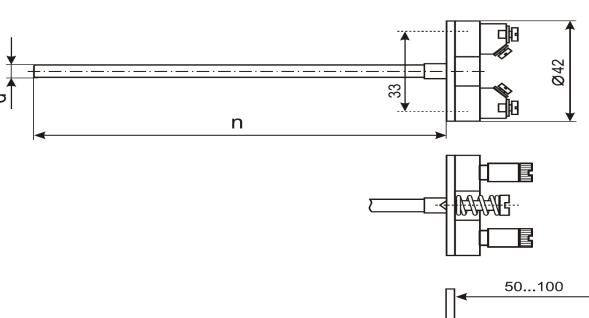


# Termorezistenta - tip TSSM & TSSB

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

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

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

<sup>(1)</sup> This length does not coincide with the probe immersion length!

<sup>(2)</sup> For non-Pt sensors

<sup>(3)</sup> Only for Pt sensors!

<sup>(4)</sup> Only for non-MI (regular) sheath types!

<sup>(5)</sup> Requires 'OS' option!

<sup>(6)</sup> Contact