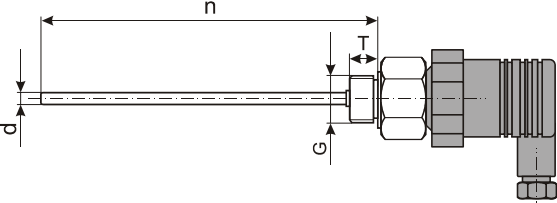
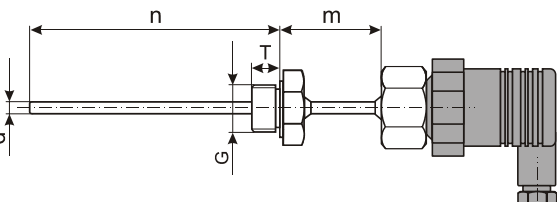
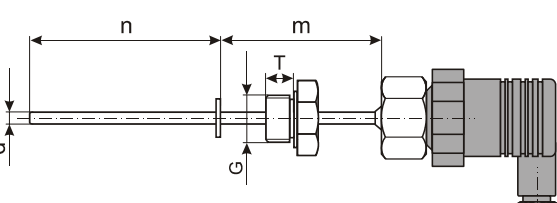
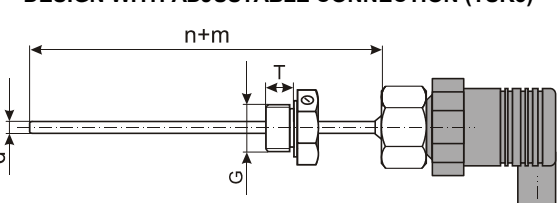
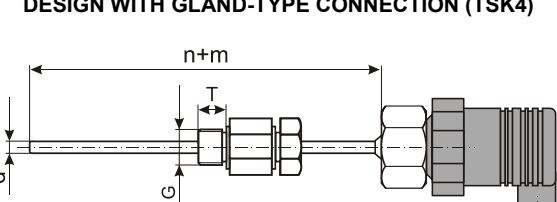


(MI) RTD PROBE WITH DETACHABLE CONNECTOR TSKx Sheath - stainless steel (see Appendix - Sheath materials) Connector - IP65/68 (see Appendix - Sensor connectors)	SENSITIVE ELEMENT	TEMPERATURE RANGE	DIMENSIONS																																																																																									
			n [mm]	d [mm]	wires																																																																																							
<p><b>DESIGN WITHOUT EXTENSION (TSK)</b></p>  <p><b>EXTENDED DESIGN WITH WELDED CONNECTION (TSK1)</b></p>  <p><b>EXTENDED DESIGN WITH MOVABLE CONNECTION (TSK2)</b></p>  <p><b>DESIGN WITH ADJUSTABLE CONNECTION (TSK3)</b></p>  <p><b>DESIGN WITH GLAND-TYPE CONNECTION (TSK4)</b></p> 	<p><b>Regular Design</b></p> <table border="1"> <tr> <td rowspan="4">1 x Pt (RB,RD,RF,RG)</td> <td>T9</td> <td>-50...200 °C</td> <td rowspan="2">50...500</td> <td>4</td> <td>2, 3*</td> </tr> <tr> <td>T1</td> <td>-50...400 °C</td> <td>5</td> <td>2, 3</td> </tr> <tr> <td>T24</td> <td>-50...500 °C</td> <td>50...1500</td> <td>6</td> <td>2, 3, 4*</td> </tr> <tr> <td>T11*</td> <td>-50...600 °C</td> <td>50...3000</td> <td>8, 10, 12, 14</td> <td>2, 3, 4</td> </tr> <tr> <td rowspan="2">2 x Pt (RB,RD,RF,RG)</td> <td>T2*</td> <td>-200...600 °C</td> <td rowspan="2">50...3000</td> <td rowspan="2">6*, 8, 10, 12, 14</td> <td rowspan="2">2x2(3)*</td> </tr> <tr> <td>T4*</td> <td>0...800 °C</td> </tr> <tr> <td rowspan="2">3 x Pt* (RB,RD,RF,RG)</td> <td rowspan="2">T22</td> <td rowspan="2">-200...200 °C</td> <td rowspan="2">50...3000</td> <td rowspan="2">8, 10, 12, 14</td> <td rowspan="2">3x2</td> </tr> </table> <p>1 x Cu (RH, RK)</p> <table border="1"> <tr> <td rowspan="2">T9</td> <td rowspan="2">-50...200 °C</td> <td>50...1500</td> <td>6</td> <td rowspan="2">2, 3, 4*</td> </tr> <tr> <td>50...3000</td> <td>8, 10, 12, 14</td> </tr> </table> <p>2 x Cu (RH, RK)</p> <table border="1"> <tr> <td rowspan="2">T9</td> <td rowspan="2">-50...200 °C</td> <td rowspan="2">50...3000</td> <td>8, 10</td> <td>2x2</td> </tr> <tr> <td>12, 14</td> <td>2x2(3)*</td> </tr> </table> <p>1 x PTC (RP, RQ)</p> <table border="1"> <tr> <td rowspan="2">T12</td> <td rowspan="2">-50...100 °C</td> <td>50...1500</td> <td>6</td> <td>2, 3</td> </tr> <tr> <td>50...3000</td> <td>8, 10, 12, 14</td> </tr> </table> <p>2 x PTC (RP, RQ)</p> <table border="1"> <tr> <td rowspan="2">T12</td> <td rowspan="2">-50...100 °C</td> <td rowspan="2">50...3000</td> <td>8, 10, 12, 14</td> <td>2x2</td> </tr> </table>	1 x Pt (RB,RD,RF,RG)	T9	-50...200 °C	50...500	4	2, 3*	T1	-50...400 °C	5	2, 3	T24	-50...500 °C	50...1500	6	2, 3, 4*	T11*	-50...600 °C	50...3000	8, 10, 12, 14	2, 3, 4	2 x Pt (RB,RD,RF,RG)	T2*	-200...600 °C	50...3000	6*, 8, 10, 12, 14	2x2(3)*	T4*	0...800 °C	3 x Pt* (RB,RD,RF,RG)	T22	-200...200 °C	50...3000	8, 10, 12, 14	3x2	T9	-50...200 °C	50...1500	6	2, 3, 4*	50...3000	8, 10, 12, 14	T9	-50...200 °C	50...3000	8, 10	2x2	12, 14	2x2(3)*	T12	-50...100 °C	50...1500	6	2, 3	50...3000	8, 10, 12, 14	T12	-50...100 °C	50...3000	8, 10, 12, 14	2x2	<p><b>MI Design</b></p> <table border="1"> <tr> <td rowspan="5">1 x Pt (RB,RD,RF,RG)</td> <td>T9</td> <td>-50...200 °C</td> <td rowspan="5">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>T24</td> <td>-50...500 °C</td> <td>6</td> <td>2, 3, 4*</td> </tr> <tr> <td>T11*</td> <td>-50...600 °C</td> <td>8</td> <td>2, 3, 4</td> </tr> <tr> <td>T2*</td> <td>-200...600 °C</td> <td>6, 8</td> <td>2x2, 2x3*</td> </tr> <tr> <td rowspan="2">2 x Pt (RB,RD,RF,RG)</td> <td>T4*</td> <td>0...800 °C</td> <td rowspan="2">50...50000</td> <td rowspan="2">6, 8</td> <td rowspan="2">2x2, 2x3*</td> </tr> <tr> <td>T22</td> <td>-200...200 °C</td> </tr> </table>	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	T2*	-200...600 °C	6, 8	2x2, 2x3*	2 x Pt (RB,RD,RF,RG)	T4*	0...800 °C	50...50000	6, 8	2x2, 2x3*	T22	-200...200 °C
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<p><b>Detachable wiring connector:</b> C1, C7, C8 (see Appendix - Connectors)</p> <p><b>Process connection 'G' (nipple or union nut):</b>                      - M16x1.5(Q0), M18x1.5(Q1), M20x1.5(Q2), M27x2(Q5), M33x2(Q25)                      - 3/8"(Q3/Q9), 1/2"(Q4/Q10), 3/4"(Q6/Q11), 1"(Q12/Q15)                      - welded or adjustable flange                      - other                      - w/o mounting appliances</p> <p><b>Thread length:</b>                      - cylindrical thread: T = 15 mm                      - NPT thread: according to ANSI B1.20.1</p> <p><b>Extension length:</b>                      m = 0...1500 mm</p> <p><b>Extension diameter:</b> (for TSK1 and TSK2 only, [mm])</p> <table border="1"> <thead> <tr> <th>Probe diameter 'd'</th> <th>3, 4 mm</th> <th>4.5...6 mm</th> <th>8 mm</th> <th>10 mm</th> <th>10+ mm</th> </tr> </thead> <tbody> <tr> <td>Ext. length 'm' up to 50 mm</td> <td>8</td> <td>d</td> <td>d</td> <td>d</td> <td>d</td> </tr> <tr> <td>50...150 mm</td> <td>8</td> <td>8</td> <td>d</td> <td>d</td> <td>d</td> </tr> <tr> <td>150...500 mm</td> <td>10</td> <td>10</td> <td>10</td> <td>d</td> <td>d</td> </tr> <tr> <td>500+ mm</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> <td>d</td> </tr> </tbody> </table> <p><b>Tip shape:</b> standard, narrowed, pitted (see Appendix - Tip Shapes)</p> <p><b>Process pressure:</b></p> <table border="1"> <thead> <tr> <th>Probe design</th> <th>TSK, TSK1</th> <th>TSK2</th> <th>TSK4</th> <th>TSK3</th> </tr> </thead> <tbody> <tr> <td>Max. pressure *</td> <td>25 bar</td> <td>16 bar</td> <td>6 bar</td> <td>0 bar</td> </tr> </tbody> </table> <p><b>Sheath material:</b> 1.4301(M1), 1.4401/1.4404(M9), 1.4541(M2), 1.4571(M3), 1.4362(M15)</p> <p><b>Wire material:</b> Cu, Ni, or Ag</p> <p><b>Accuracy class:</b> 'A', 'B', or '2xB' (see Appendix - RTD Tolerance)</p>						Probe diameter 'd'	3, 4 mm	4.5...6 mm	8 mm	10 mm	10+ mm	Ext. length 'm' up to 50 mm	8	d	d	d	d	50...150 mm	8	8	d	d	d	150...500 mm	10	10	10	d	d	500+ mm	14	14	14	14	d	Probe design	TSK, TSK1	TSK2	TSK4	TSK3	Max. pressure *	25 bar	16 bar	6 bar	0 bar																																															
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**Ordering code** TSK(1,2,3,4) - (MI -) G1G2.G3.G4.G6.G7.G9\*9".G10.G11.G12.G13.G14.G15 - #1

Code	Feature or option	Code values	
G1	Number of RTD sensors <sup>(1)</sup>	1, 2, or 3 <sup>(10)</sup>	
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, 12, 14
		MI design	3 <sup>(10)</sup> , 4.5, 6, 8
G6	Probe length 'n' [mm] <sup>(2)</sup>	50...50000 (see table overleaf)	
G7	Probe length 'm' [mm] <sup>(3)</sup>	0...1500	
G9'	Mounting connection	X - no mounting appliances <sup>(4)</sup> , Q0 - M16x1.5, Q1 - M18x1.5, Q2 - M20x1.5, Q3 - G3/8", Q4 - G1/2", Q5 - M27x2, Q6 - G3/4", Q9 - 3/8" NPT, Q10 - 1/2" NPT, Q11 - 3/4" NPT, Q12 - G1", Q15 - 1" NPT, Q25 - M33x2, Uxx - union nut (xx - same as for Qxx), F - flange (specify!), Z - other connection (specify!)	
G9"	Compression fitting ferrule <sup>(5)</sup>	BR - brass, GR - graphite, SS - stainless steel, TF - Teflon®	
G10	Sheath material (wetted parts)	regular design	M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M9 - 1.4401 (1.4404), M15 - 1.4362
		MI design	M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M9 - 1.4401 (1.4404)
G11	Accuracy class	X - none <sup>(6)</sup> , A - 'A', B - 'B', C - '2xB'	
G12	Number of wires	2, 3, 4 <sup>(10)</sup>	
G13	Wire material <sup>(7)</sup>	CU - copper <sup>(8)</sup> , NI - nickel, AG - silver <sup>(9)</sup>	
G14	Tip shape	X - standard closed, N - narrowed <sup>(9)</sup> , P - pitted <sup>(9)</sup>	
G15	Wiring connector	C1 - 4-pin connector M12 (IP68), C7 - DIN 43650 4-pin connector (IP65), C8 - DIN 43651 6-pin connector (IP65)	
#1	Options	X - none, OV - vibration proof (MgO or Silicone filled) <sup>(9)</sup> , OP - electrochemically polished wetted parts <sup>(9)</sup>	

<sup>(1)</sup> The total number of wires must comply with the selected wiring connector!

<sup>(2)</sup> 'n+m' for TSK3 and TSK4!

<sup>(3)</sup> Only for TSK1 and TSK2!

<sup>(4)</sup> Only for TSK!

<sup>(5)</sup> Only for TSK4!

<sup>(6)</sup> For non-Pt sensors

<sup>(7)</sup> Only for Pt sensors!

<sup>(8)</sup> Not applicable to non-MI (regular) RTDs for above 500 °C!

<sup>(9)</sup> Only for non-MI (regular) design!

<sup>(10)</sup> Contact COMECO!