

temperature probes

RTD CABLE PROBE FOR FREE MOUNTING Ax (BTSAx) Sheath - stainless steel (see table notes) Cable - see table notes	SENSITIVE ELEMENT	CABLE TYPE	TEMPERATURE RANGE	DIMENSIONS																
				d [mm]	wires															
<p>STRAIGHT-TUBE DESIGN (A)</p> <p>$n = 20 \dots 200 \text{ mm}$ $k = 1 \dots 10 \text{ m}$</p> <p>DESIGN WITH ANGLED TERMINATION (AL)</p> <p>$n = 20 \dots 200 \text{ mm}$ $k = 1 \dots 10 \text{ m}$</p> <p>BENDED-TUBE DESIGN (AB)</p> <p>$n = 20 \dots 200 \text{ mm}$ $k = 1 \dots 10 \text{ m}$ $m = 30 \dots 200 \text{ mm}$</p>	1 x Pt (RB,RD,RF,RG)	SLSL, TSL, TT, YY, UU, YU GLGL	T9 -50...200 °C T1* -50...400 °C T7 0...200 °C T8 0...400 °C	3* 4, 4.5 5 6 8	2, 3* 2, 3* 2, 3* 2, 3, 4* 2, 3, 4															
	2 x Pt (RB,RD,RF,RG)	TT	T22 -200...200 °C	6, 8	2x2, 2x3*															
	1 x Cu (RH, RK)	SLSL, TSL, YY, UU, YU	T9 -50...200 °C	5* 6 8	2, 3* 2, 3, 4* 2, 3, 4															
	2 x Cu (RH, RK)	GLGL, TT	T7 0...200 °C	6, 8	2x2, 2x3*															
	1 x PTC (RP, RQ)	SLSL, TSL, YY, UU, YU	T12 -50...100 °C	6	2, 3															
	2 x PTC (RP, RQ)	GLGL, TT	T19 0...100 °C	8	2x2															
	<p>Sheath material: 1.4301 (M1), 1.4541 (M2), 1.4571 (M3), 1.4404 (M9)</p> <p>Cable type: - GLGLP(V) (glass fiber w/ steel braid, max. 400 °C ambient temperature) - SLSL or TSL (silicone, max. 250 °C ambient temperature) - TT (Teflon®, max. 250 °C ambient temperature) - YY (PVC, max. 100 °C ambient temperature) - UU or YU (PUR, max. 80 °C ambient temperature)</p> <p>Applicable cables:</p> <table border="1"> <thead> <tr> <th>Probe design / Temp. range</th> <th>A, AB</th> <th>AL</th> </tr> </thead> <tbody> <tr> <td>T12, T19</td> <td>all</td> <td rowspan="2">all</td> </tr> <tr> <td>T7, T9</td> <td>no PUR, no PVC</td> </tr> <tr> <td>T22</td> <td>TT</td> <td>TT, SLSL, TSL</td> </tr> <tr> <td>T1, T8</td> <td>GLGLP</td> <td>no PUR, no PVC</td> </tr> </tbody> </table> <p>Tip shape: standard, narrowed, pitted (see Appendix - Tip shapes)</p> <p>Accuracy class: 'A', 'B', or '2xB' (see Appendix - RTD Tolerance)</p> <p>Cable connector: 4-pin (C3) (see Appendix - Connectors)</p>						Probe design / Temp. range	A, AB	AL	T12, T19	all	all	T7, T9	no PUR, no PVC	T22	TT	TT, SLSL, TSL	T1, T8	GLGLP	no PUR, no PVC
	Probe design / Temp. range	A, AB	AL																	
	T12, T19	all	all																	
	T7, T9	no PUR, no PVC																		
	T22	TT	TT, SLSL, TSL																	
	T1, T8	GLGLP	no PUR, no PVC																	
* Please contact BASI!																				

temperature probes

Ordering code BTSA(L,B) - G1G2.G3.G4.G6.G7.G8.G10.G11.G12.G14.G15 - #1

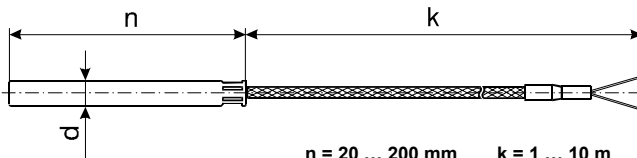
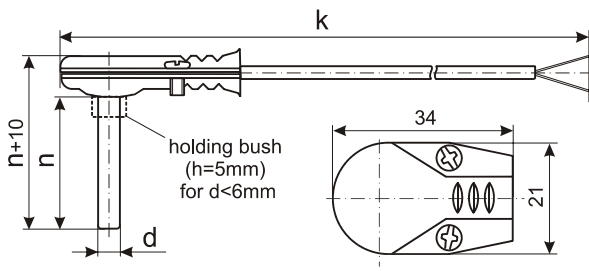
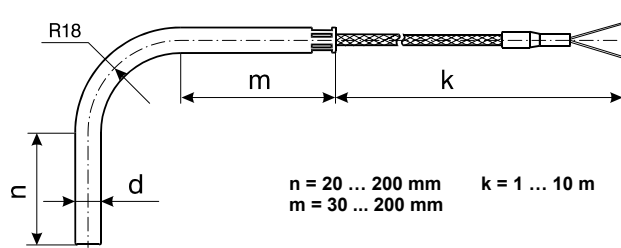
Code	Feature or option	Code values	
G1	Number of RTD sensors	1 or 2	
G2	Sensor	RB - Pt50, RD - Pt100, RF - Pt500, RG - Pt1000, RH - Cu50, RK - Cu100, RP - PTC 1k, RQ - PTC 2k	
G3	Temperature range	T1 - -50...400 °C, T7 - 0...200 °C, T8 - 0...400 °C, T9 - -50...200 °C, T12 - 50...100 °C, T19 - 0...100 °C, T22 - -200...200 °C	
G4	Diameter 'd' [mm]	RTD	4, 5, 6, 8
		MI RTD ⁽¹⁾	3 ⁽⁴⁾ , 4.5, 6, 8
G6	Probe length 'n' [mm]	20...200	
G7	Probe length 'm' [mm] ⁽²⁾	30...200	
G8	Cable length 'k' [m] and type	1GL...10GL - glass fiber, 1SL...10SL - silicone, 1TF...10TF - Teflon®, 1PU...10PU - polyurethane ⁽⁴⁾ , 1PV...10PV - PVC	
G10	Sheath material (wetted parts)	M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M9 - 1.4404	
G11	Accuracy class	X - none (for non Pt sensors), A - 'A', B - 'B', C - '2xB'	
G12	Number of wires	2, 3, 4 ⁽⁴⁾	
G14	Tip shape	X - standard closed, N - narrowed ⁽³⁾ , P - pitted ⁽³⁾	
G15	Connector	X - none, C3 - 4-pin male plug-in connector ø8 (for H5700 thermometer only)	
#1	Options	X - none, OV - vibration proof (MgO or Silicone filled) ⁽³⁾ , OS - cable protection SS spring (≈ 50 mm), OB - braid termination lead (only w/o connector), OP - electrochemically polished sheath surface ⁽³⁾	

⁽¹⁾ Only for BTSAL!

⁽²⁾ Only for BTSAB!

⁽³⁾ Only for non-MI (normal) sheath types!

⁽⁴⁾ Contact BASI!

T/C CABLE PROBE FOR FREE MOUNTING Ax(BTSAx) Sheath - stainless steel (see table notes) Cable - see table notes	SENSITIVE ELEMENT	CABLE TYPE	TEMPERATURE RANGE	DIMENSIONS	
				d [mm]	wires
<p>STRAIGHT-TUBE DESIGN (A)</p>  <p>$n = 20 \dots 200 \text{ mm}$ $k = 1 \dots 10 \text{ m}$</p>	<p>1 x K, 1 x N, 1 x E</p>	<p>SLSL, TSL, YY, UU, YU</p> <p>GLGL, TT, SFSF</p>	<p>T9 -50...200 °C T1* -50...400 °C</p> <p>T7 0...200 °C T8 0...400 °C T4* 0...800 °C</p>	3, 4, 4.5, 5, 6, 8	2
	<p>1 x J, 1 x T</p>	<p>SLSL, TSL, YY, UU, YU</p> <p>GLGL, TT, SFSF</p>	<p>T9 -50...200 °C T1* -50...400 °C</p> <p>T7 0...200 °C T8 0...400 °C</p>	3, 4, 4.5, 5, 6, 8	2
<p>DESIGN WITH ANGLED TERMINATION (AL)</p>  <p>$n = 20 \dots 200 \text{ mm}$ $k = 1 \dots 10 \text{ m}$</p>					
<p>BENDED-TUBE DESIGN (AB)</p>  <p>$n = 20 \dots 200 \text{ mm}$ $k = 1 \dots 10 \text{ m}$ $m = 30 \dots 200 \text{ mm}$</p>					

Sheath material:
1.4301 (M1), 1.4541 (M2), 1.4571 (M3), 1.4404 (M9), 1.4841 (M5), 2.4816 (M8)

Cable type:

- GLGLP(V) (glass fiber w/ steel braid, max. 400 °C ambient temperature)
- SLSL or TSL (silicone, max. 250 °C ambient temperature)
- TT (Teflon®, max. 250 °C ambient temperature)
- YY (PVC, max. 100 °C ambient temperature)
- UU or YU (PUR, max. 80 °C ambient temperature)
- SFSF (mineral fiber, max. 1000 °C ambient temperature)

Applicable cables:

Probe design	A, AB	AL
Temp. range	A, AB	AL
T7, T9	no PUR, no PVC	all
T1, T8	GLGLP, SFSF	no PUR, no PVC
T4	SFSF	GLGLP, SLSL*, TSL*

Tip shape (hot junction design):
standard (isolated), grounded, open-tube, exposed
(see Appendix - Tip shapes)

Accuracy class:
'1' or '2' (see Appendix - T/C Tolerance)

Cable connector:
4-pin (C3), 'T/C standard' (C5) or 'T/C miniature' (C6)
(see Appendix - Connectors)

* Please contact BASII

temperature probes

Ordering code BTSA(L,B) - G2.G3.G4.G6.G7.G8.G10.G11.G14.G15 - #1

Code	Feature or option	Code values	
G2	Thermocouple	J - T/C type "J", K - T/C type "K", T - T/C type "T", N - MI T/C type "N" ⁽¹⁾ , E - MI T/C type "E" ⁽¹⁾ , T - MI T/C type "T" ⁽¹⁾	
G3	Temperature range	T1 - -50...400 °C, T4 - 0...800 °C ⁽⁴⁾ , T7 - 0...200 °C, T8 - 0...400 °C, T9 - -50...200 °C	
G4	Diameter 'd' [mm]	normal T/C	4 ⁽⁴⁾ , 5 , 6 , 8
		MI T/C ⁽¹⁾	3 , 4.5 , 6 , 8
G6	Probe length 'n' [mm]	20...200	
G7	Probe length 'm' [mm] ⁽²⁾	30...200	
G8	Cable length 'k' [m] and type	1GL...10GL - glass fiber, 1MF...10MF - mineral fiber, 1SL...10SL - silicone, 1TF...10TF - Teflon®, 1PU...10PU - polyurethane ⁽⁴⁾ , 1PV...10PV - PVC	
G10	Sheath material (wetted parts)	normal T/C	M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M9 - 1.4404
		MI T/C ⁽¹⁾	M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M5 - 1.4841, M8 - 2.4816 (Inconel 600), M9 - 1.4404
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	
G15	Connector	X - none, C3 - 4-pin male plug-in connector ø8 (for H5700 thermometer only), C5 - T/C connector, C6 - miniature T/C connector	
#1	Options	X - none, OV - vibration proof (MgO or Silicone filled) ⁽³⁾ , OS - cable protection SS spring (≈ 50 mm), OB - braid termination lead (only w/o connector), OP - electrochemically polished sheath surface ⁽³⁾	

⁽¹⁾ Only for BTSAL!

⁽²⁾ Only for BTSAB!

⁽³⁾ Only for non-MI (normal) sheath types!

⁽⁴⁾ Contact BASI!