

STIKO

TEMPERATURE
PRESSURE
CALIBRATION



Documentation 2025

GAS-ACTUATED THERMOMETERS



GENERAL INFORMATION

- This documentation is for **gas-actuated thermometers** manufactured by STIKO, "Made in Holland".

Booklet I	Rigid-stem, every-angle and diesel thermometers
Booklet II	Remote-reading (capillary) thermometers
Booklet III	Add-ons: contacts, 4-20 mA, fabricated pockets

- STIKO can arrange for transportation to your address via UPS, in which case we will additionally invoice you the incurred UPS costs.

CERTIFICATION

- Certificates of Conformity to the company's published specifications are available on request for all STIKO manufactured products according to EN 10204 (2.2).
- Certificates of Calibration for all STIKO manufactured products are also available. These certificates indicate deviations from standards traceable to national (Dutch RVA or German DKD) and international standards.

The results are recorded in a certificate which include calibration date, instrument serial number, type number and the used RVA or DKD standard.
- Material Certificates for all STIKO manufactured products are also available in the form of copies from material suppliers (EN 10204 3.1) that specify the used materials.

WARRANTY AND REPAIR SERVICE

- A warranty period of 24 months is applicable for all instruments.
- An efficient repair and spare part service is available at competitive rates for STIKO products as well as products of other manufacturers.

Instruments for repair should be sent carriage paid and labelled with the sender's name and address, together with a brief description of the work required.

Please note that instruments need to be cleaned before they are returned.

If the instrument is leaking, please seal it in a plastic bag.

If you need a repair quotation, please indicate this on your document.

Repair quotations cannot be made before inspection of the products.

Lead-times upon request.



STIKO has more than 60 years of experience in manufacturing state-of-the-art mechanical instruments in the area of **TEMPERATURE, PRESSURE and PRESSURE CALIBRATION**.

STIKO is ISO-9001-2015 approved and we develop and manufacture all our instruments according to PED (2014/68/EU).

STIKO - Industrieweg 5, 9301 LM Roden, The Netherlands.

STIKO

TEMPERATURE
PRESSURE
CALIBRATION



BOOKLET I
RIGID STEM THERMOMETERS

INDEX RIGID-STEM THERMOMETERS

5 Steps for calculating rigid-stem thermometers

For contacts, transmitters and pockets, please revert to Booklet III: Add-ons

STEP 1 - TYPE OF CASE

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**Not applicable for TXR - DIESEL*

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Please check our actual lead-times at www.stiko.com/currentleadtimes

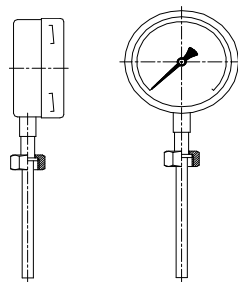
RIGID STEM DIAL THERMOMETERS

Type TXR, with stainless steel case according to EN 13190

STANDARD MODEL:

CASE	: bayonet lock, AISI304/1.4301, IP-65
STEM - BULB	: AISI321/1.4541, see pages I-8 and I-9
WINDOW	: mineral glass 4 mm
DIAL	: aluminium, black figures on white
POINTER	: aluminium, black
CONNECTION	: see pages I-10 to I-12
RANGES	: from -200°C up to +800°C, see page I-7

EXAMPLE:



TXR100XA

OVERLOAD	: up to 30% F.S. (but max. 800°C)
ACCURACY	: ±1% F.S. / class 1
MOVEMENT	: brass
OPTIONS	: see page I-13
CONTACTS	: see Booklet III
PT-100	: see Booklet III
TRANSMITTER	: see Booklet III

TYPE	MODEL	CASE DIAMETER (Ø in mm)				
		63	80	100	160	250
A 1130		TXR063XA	TXR080XA	TXR100XA	TXR160XA	TXR250XA
E 1131		TXR063XE	TXR080XE	TXR100XE	TXR160XE	TXR250XE
T 1133-x (x=A,B,C or D)		TXR063XT-x	TXR080XT-x	TXR100XT-x	TXR160XT-x	TXR250XT-x
F 1138		TXR063XF	TXR080XF	TXR100XF	TXR160XF	TXR250XF
G 1135		TXR063XG	TXR080XG	TXR100XG	TXR160XG	TXR250XG
OPTION		EXTRA COSTS				
Lx (for case filling in combination with an electrical device, see Booklet III)	GLYCERIN FILLED CASE	TXR063Lx	TXR080Lx	TXR100Lx	TXR160Lx	TXR250Lx
	SILICON OIL FILLED CASE for lower environmental temperatures	TXR063Lx	TXR080Lx	TXR100Lx	TXR160Lx	TXR250Lx
	RESISTANCE OIL FILLED CASE movement becomes stainless steel (included in price)	TXR063Lx	TXR080Lx	TXR100Lx	TXR160Lx	TXR250Lx
Connection at 3/9/12 hrs						

EVERY ANGLE DIAL THERMOMETERS

Type TXR, with KNEE JOINT and stainless steel case acc. to EN 13190

STANDARD MODEL:

CASE : bayonet lock, AISI304/1.4301, IP-65

KNEE JOINT : AISI316/1.4436, 360° see below

360° : bending and turning

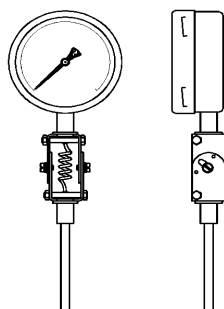
STEM - BULB : AISI321/1.4541, see pages I-8 and I-9

WINDOW : mineral glass 4 mm

DIAL : aluminium, black figures on white

POINTER : aluminium, black

EXAMPLE:



TXR100XA + K360°

CONNECTION : see pages I-10 to I-12

RANGES : -200 upto +800°C

see page I-7

OVERLOAD : up to 30% F.S.

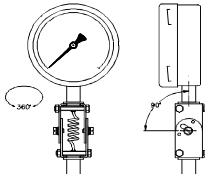
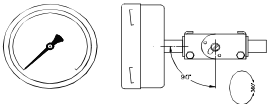
(but max. 800°C)

ACCURACY : ±1% F.S. / class 1

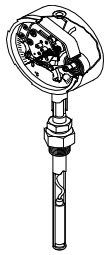
MOVEMENT : brass

OPTIONS : see page I-13

CONTACTS : see Booklet III

TYPE	MODEL	CASE DIAMETER (Ø in mm)				
		63	80	100	160	250
A 360°		TXR063XA+K360°	TXR080XA+K360°	TXR100XA+K360°	TXR160XA+K360°	TXR250XA+K360°
E 360°		TXR063XE+K360°	TXR080XE+K360°	TXR100XE+K360°	TXR160XE+K360°	TXR250XE+K360°
OPTION		EXTRA COSTS				
Lx (for case filling in combination with an electrical device, see Booklet III)	GLYCERIN FILLED CASE	TXR063Lx+K360°	TXR080Lx+K360°	TXR100Lx+K360°	TXR160Lx+K360°	TXR250Lx+K360°
	SILICON OIL FILLED CASE for lower environmental temperatures	TXR063Lx+K360°	TXR080Lx+K360°	TXR100Lx+K360°	TXR160Lx+K360°	TXR250Lx+K360°
	RESISTANCE OIL FILLED CASE movement becomes stainless steel (included in price)	TXR063Lx	TXR080Lx	TXR100Lx	TXR160Lx	TXR250Lx

DIESEL EXHAUST DIAL THERMOMETERS

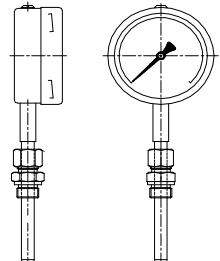


3-D view SECUTHERM® DIESEL

GENERAL INFORMATION

DIAL THERMOMETERS SPECIAL DESIGNED FOR:

- Diesel engines for monitoring:
exhaust gas, cooling water, oil, air-inlet temperatures
- Compressors,
- Turbochargers,
- other machines subjected to severe vibrations
- max. temperature 800°C



SECUTHERM® DIESEL THERMOMETER

Type TXR-DIESEL, with stainless steel case according to EN 13190

STANDARD MODEL:

CASE : bayonet lock, AISI304/1.4301, IP-67
silicone oil filled

STEM AND BULB : Ø12 mm, AISI321/1.4541, see pages I-8 and I-9

WINDOW : mineral glass 4 mm

DIAL : aluminium, black figures on white

POINTER : aluminium, black

CONNECTION : AISI304/1.4301, see pages I-10 to I-12

RANGES : See below

ADJUSTMENT : +/- 6% F.S. with adjustment screw

OVERLOAD : up to 30% F.S. (but max. 800°C)

ACCURACY : ±1% F.S. / class 1

MOVEMENT : brass

OPTIONS : see page I-13

TYPE	MODEL	CASE DIAMETER (Ø in mm)	
		80	100
A 1130		TXR080LA-DIESEL	TXR100LA-DIESEL
E 1131		TXR080LE-DIESEL	TXR100LE-DIESEL

TEMPERATURE RANGES for TXR-DIESEL:

	SCALE DIVISION	CASE DIMENSIONS (in mm)	
	cl. 1	80	100
0...+600	10		•
0...+650	10		•
0...+700	10		•
0...+750	10		•
0...+800	10		•
+50...+600	10		•
+50...+650	10		•
+50...+700	10		•
+100...+600	10		•
+100...+650	10		•
+100...+700	10		•

TEMPERATURE RANGES for all types except TXR-DIESEL:

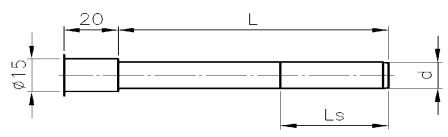
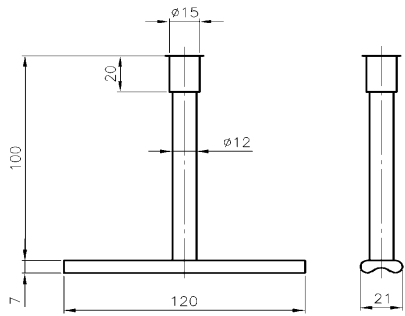
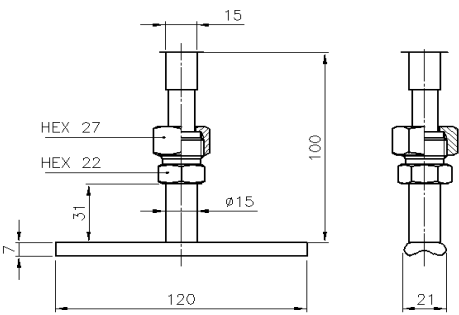
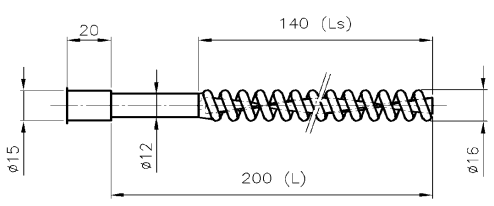
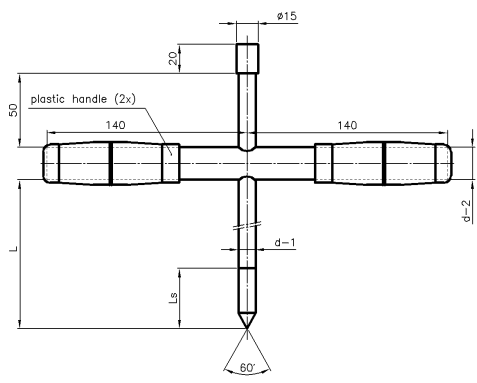
STANDARD TEMPERATURE RANGES		EXTRA COSTS	
(in °C)	SCALE DIVISION		MINIMUM SPAN IS 60°C
	cl. 1	option cl. 0.6	ALL CASE DIMENSIONS
-200 ...+50	5	2	
-200 ...+100	5	2	
-200 ...+150	5	2	
-120 ...+40	2	1	
-110 ...+50	5	1	
-100 ...+100	5	1	
-100 ...+50	5	1	
-80 ...+40	2	1	
-60 ...+40	2	0.5	
-60 ...+60	2	1	
-50 ...+50	2	0.5	
-50 ...+100	5	1	
-40 ...+20	1	0.5	
-40 ...+40	1	0.5	
-40 ...+60	2	0.5	
-40 ...+80	2	1	
-40 ...+110	5	1	
-40 ...+120	2	0.5	
-40 ...+160	5	1	
-30 ...+30	1	0.5	
-30 ...+50	1	0.5	
-30 ...+70	2	0.5	
-30 ...+170	5	1	
-20 ...+40	1	0.5	
-20 ...+60	1	0.5	
-20 ...+80	2	0.5	
-20 ...+100	2	1	
-20 ...+120	2	1	
-20 ...+180	5	1	
-15 ...+45	1	0.5	
-10 ...+50	1	0.5	
-10 ...+110	2	1	
-10 ...+150	5	1	
0 ...+60	1	0.5	
0 ...+80	1	0.5	
0 ...+100	2	0.5	
0 ...+120	2	1	
0 ...+160	5	1	
0 ...+200	5	1	
0 ...+250	5	2	
0 ...+300	5	2	
0 ...+400	10	2	
0 ...+500	10	5	
0 ...+600	10	5	
0 ...+700	10	5	
0 ...+800	10	5	

OPTIONS ON TEMPERATURE RANGES

	CASE DIMENSIONS (in mm)				
	ø63	ø80	ø100	ø160	ø250
NON-STANDARD RANGES IN °C					
Non-standard ranges					
DUAL SCALE IN °C/°F					
Standard ranges	•				
Non-standard ranges	on demand				
RANGE IN °F or °K					
Standard ranges	on demand				
ACCURACY					
±1% F.S. / class 1	•	•	•	•	•
±0.6 / 0.5% F.S. (class 0.6 or 0.5) (Without external adjustment)	x	x			
Mirrorscale (for anti-parallax)	x	x			

x NOT AVAILABLE

• STANDARD / NO EXTRA PRICE

STEM TYPE LENGTH					
TYPE	STANDARD MODEL	bulb diameter Ø d	EXTRA COSTS per 100 mm STAINLESS STEEL AISI321/1.4541		
A <i>plain stem</i>	 FOR SHORTEST POSSIBLE SENSITIVE PART "Ls": SEE PAGE I-8	9, 10, 12			
		6, 6.35, 8, 11, 12.5, 13, 14			
		7, 15, 16, 17, 18, 20			
		FOR BULB OPTIONS: SEE PAGE I-13			
SPECIAL BULB					
TYPE	MODEL	DIMENSIONS			EXTRA COSTS STAINLESS STEEL AISI316/1.4404
		L	d-1	d-2	
S <i>surface bulb: fixed type</i>		-	-	-	
SA <i>surface bulb: adjustable type</i>	 THREAD BETWEEN HEX-1 AND HEX-2: 1/2"BSP	-	-	-	
HA <i>helical air bulb</i>		-	-	-	
HP <i>with handle and point</i>		1000	10 12	22	
		1000	14 16	22	
		1000	18	22	
			10/12		
	Extra length per 500mm		14/18		

SHORTEST POSSIBLE LENGTH FOR SENSITIVE PART OF STEM

TABLE 1 THERMOMETERS WITHOUT CONTACT														
DIAMETER AND LENGTH OF SENSITIVE PART mm (Ls)														
Ø	6	6,35	7	8	9	10	11	12	12,5/13	14	15	16	18	20
Ls	70	60	50	35	30	25	20	18	17	15	14	13	13	12
	120	96	80	60	45	35	30	25	25	20	20	17	16	15
														80
														60

Temperature span

TABLE 2 THERMOMETERS WITH CONTACT														
DIAMETER AND LENGTH OF SENSITIVE PART mm (Ls)														
Ø	6	6,35	7	8	9	10	11	12	12,5/13	14	15	16	18	20
Ls	70	60	50	35	30	25	20	18	17	15	14	13	13	12
	120	96	80	60	45	35	30	25	25	20	20	17	16	15
	190	155	125	90	60	55	45	35	35	30	25	25	20	20
														120
														80
														60

Temperature span

HOW TO USE: Instrument without contact
 Bulb diameter: 10mm
 Range: -20/+40C (= 60C span)
 QUESTION: What is the shortest possible sensitive length of the stem?

No contact → TABLE 1

On the right side of the table (temperature span): go down until you reach the 60°C span.

Go left to the diameter and length side and stop at the column corresponding to 10mm bulb diameter.

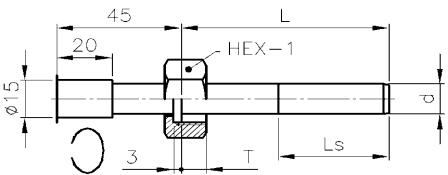
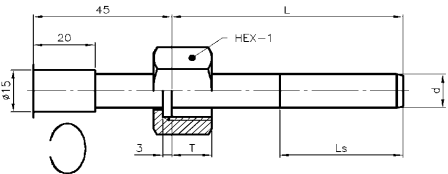
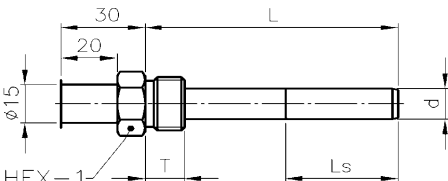
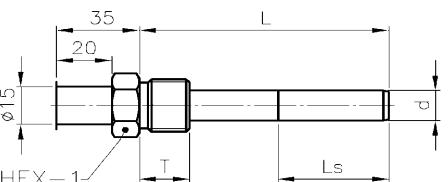
The minimum sensitive length is 35 mm.

If this is too long, then choose a larger diameter, or a higher temperature range.

TABLE 1 THERMOMETERS WITHOUT CONTACT														
DIAMETER AND LENGTH OF SENSITIVE PART mm (Ls)														
Ø	6	6,35	7	8	9	10	11	12	12,5/13	14	15	16	18	20
Ls						10								
						35								
														60

Temperature span

CONNECTIONS FOR RIGID STEM MODELS TYPE TXR

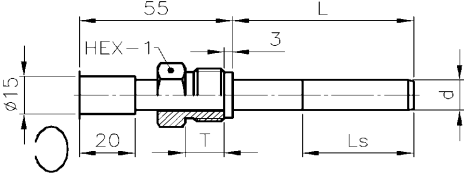
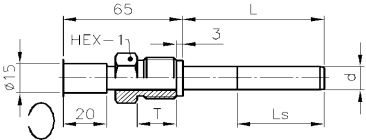
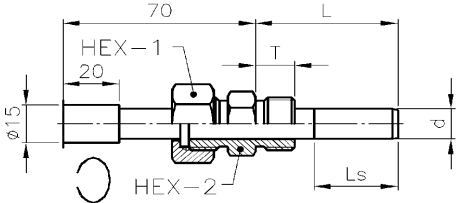
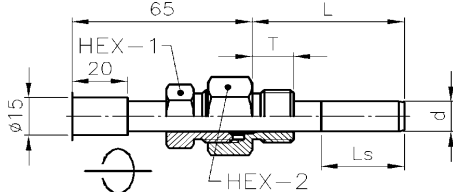
TYPE	MODEL	DIMENSIONS					EXTRA COSTS
		connection	HEX-1	HEX-2	T	d max	STAINLESS STEEL AISI303/1.4305
B <i>coupling nut (standard model)</i>		1/4"BSP	22	-	7	Ø 8	
		3/8"BSP	27	-	9	Ø 11	
		1/2"BSP	27	-	9	Ø 15	
		3/4"BSP	32	-	9	Ø 20	
		1"BSP	41	-	13	Ø 20	
		M18x1.5	27	-	8	Ø 12	
		M20x1.5	27	-	9	Ø 14	
		M24x1.5	32	-	9	Ø 18	
BL <i>coupling nut (long model)</i>		1/2"BSP	27	-	14	Ø 15	
		3/4"BSP	32	-	16	Ø 20	
		1"BSP	41	-	18	Ø 20	
C <i>fixed nipple (standard model)</i>		1/4"BSP	17	-	12	Ø 8	
		3/8"BSP	22	-	12	Ø 11	
		1/2"BSP	22	-	14	Ø 15	
		3/4"BSP	30	-	16	Ø 20	
		1"BSP	36	-	18	Ø 20	
		1/4"NPT	17	-	14	Ø 8	
		1/2"NPT	22	-	20	Ø 15	
		3/4"NPT	30	-	20	Ø 20	
		1"NPT	36	-	25	Ø 20	
		M18x1.5	22	-	12	Ø 12	
		M20x1.5	22	-	14	Ø 14	
		M24x1.5	27	-	14	Ø 18	
CL <i>fixed nipple (long model)</i>		1/2"BSP	22	-	20	Ø 15	
		3/4"BSP	30	-	20	Ø 20	
		1"BSP	36	-	25	Ø 20	

All other connections, if technically possible, EUR 75,00 for quantities of < 10 pieces per connection, larger quantities on request

All threaded connections are pressure tight up to 25 bar

OPTION		EXTRA COSTS
CONNECTION IN AISI316/1.4401	for connections B/BL, C/CL, A04/AL04	
	for connections B01, CS3	

CONNECTIONS FOR RIGID STEM MODELS TYPE TXR

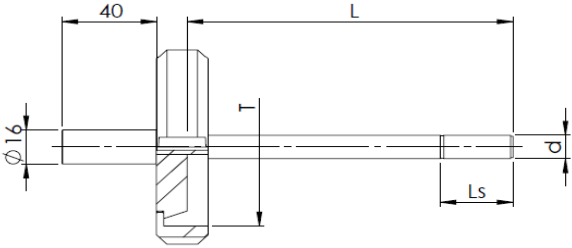
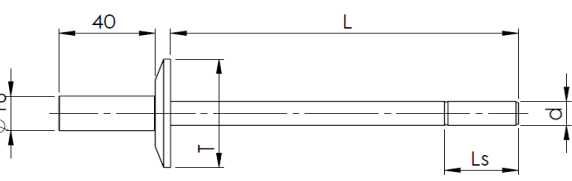
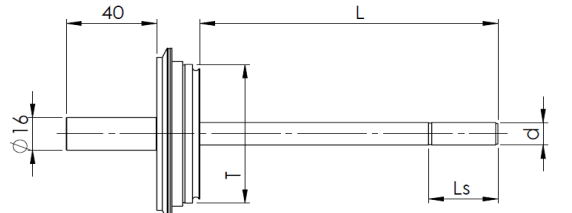
TYPE	MODEL	DIMENSIONS					EXTRA COSTS
		connection	HEX-1	HEX-2	T	d max	STAINLESS STEEL AISI303/1.4305
A 04 turning nipple (standard model)		1/4"BSP	17	-	12	Ø 8	
		3/8"BSP	22	-	12	Ø 11	
		1/2"BSP	22	-	14	Ø 15	
		3/4"BSP	30	-	16	Ø 20	
		1"BSP	36	-	18	Ø 20	
		M18x1.5	22	-	12	Ø 12	
		M20x1.5	22	-	14	Ø 14	
		M24x1.5	27	-	14	Ø 18	
AL04 turning nipple (long model)		1/2"BSP	27	-	18	Ø 15	
		3/4"BSP	30	-	20	Ø 20	
		1"BSP	36	-	25	Ø 20	
B 01 coupling nut + double nipple	 THREAD BETWEEN HEX-1 and HEX-2: 1/2"BSP	1/4"BSP	27	22	12	Ø 8	
		3/8"BSP	27	22	12	Ø 11	
		1/2"BSP	27	22	14	Ø 15	
		3/4"BSP	27	27	16	Ø 20	
		1"BSP	27	36	18	Ø 20	
		1/4"NPT	27	22	14	Ø 8	
		1/2"NPT	27	22	20	Ø 15	
		3/4"NPT	27	32	20	Ø 20	
		1"NPT	27	36	25	Ø 20	
		M18x1.5	27	22	12	Ø 12	
		M20x1.5	27	22	14	Ø 14	
		M24x1.5	27	27	14	Ø 18	
CS 3 adjustable connection, sliding on stem	 THREAD BETWEEN HEX-1 and HEX-2: 1/2"BSP	1/4"BSP	22	27	12	Ø 8	
		3/8"BSP	22	27	12	Ø 11	
		1/2"BSP	22	27	14	Ø 15	
		3/4"BSP	22	32	16	Ø 20	
		1"BSP	22	36	18	Ø 20	
		1/4"NPT	22	27	14	Ø 8	
		1/2"NPT	22	27	20	Ø 15	
		3/4"NPT	22	32	20	Ø 20	
		1"NPT	22	36	25	Ø 20	
		M18x1.5	22	27	12	Ø 12	
		M20x1.5	22	27	14	Ø 14	
		M24x1.5	22	27	14	Ø 18	
		1/2"BSPT	22	27	20	Ø 15	
	FOR CONNECTION TYPE CS3	1/2"BSP female					
		3/4"BSP female					
		1"BSP female					

All other connections, if technically possible, EUR 75,00 for quantities of < 10 pieces per connection, larger quantities on request

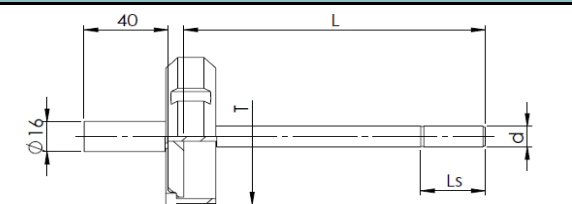
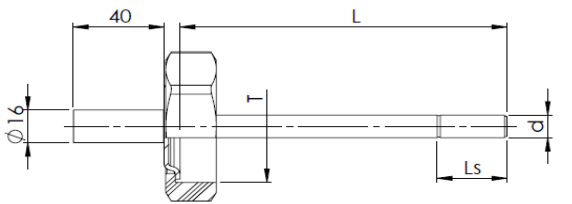
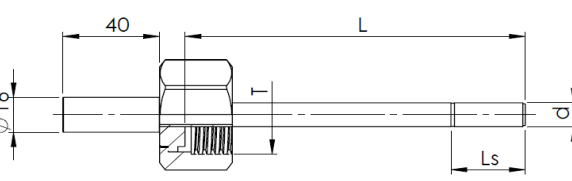
All threaded connections are pressure tight up to 25 bar

OPTION	EXTRA COSTS
CONNECTION IN AISI316/1.4401	for connections B/BL, C/CL, A04/AL04
	for connections B01, CS3

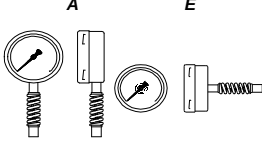
SANITARY CONNECTIONS FOR RIGID STEM MODELS TYPE TXR

TYPE	MODEL WITH POLISHED BULB	DIMENSIONS		EXTRA COSTS
		connection	T	STAINLESS STEEL AISI316/1.4401
CM <i>Acc. to DIN 11851</i>		1" - DN25	rd 52x1/6	
		1 1/2" - DN40	rd 65x1/6	
		2" - DN50	rd 78x1/6	
		3" - DN80	rd 104x1/6	
TC <i>TRI CLAMP acc. to BS4825, ISO2852 and DN32676</i>		1"	Ø 50.5	
		1 1/2"	Ø 50.5	
		2"	Ø 64	
TV <i>Varivent® In-Line</i>		DN50	Ø 50	
		Suitable for in-line housing DN25		
		DN68	Ø 68	
		Suitable for in-line housing DN40 and up		

Also available in SMS, RJT, IDF etc.

SMS <i>SMS 1145</i>		On demand
APV <i>APV- RJT</i>		On demand
IDF <i>IDF (ISO2853)</i>		On demand

OPTIONS FOR RIGID STEM THERMOMETERS

OPTION		CASE DIAMETER (Ø in mm)				
		63	80	100	160	250
CASE MATERIAL AISI316L/1.4404 <i>(i.o. AISI304/1.4301)</i>	CASE + BAYONETRING		N.A.		*	N.A.
	FRONT -OR BACKFLANGE	N.A.	N.A.			N.A.
ANTI-VIBRATIONSPRING <i>(steel)</i> For model TXR, type A and E <i>(add -AVS to the article code)</i>						
PLEXIGLASS or POLYCARBONATE						
SAFETY GLASS						
 EX certified instrument Manufactured with safety glass + blow out + special text on dial and sticker + STIKO logo. For certificates and Ex zone, see below.	Instrument without contact					
	Instrument with contact	N.A.	N.A.			N.A.
DRAG POINTER <i>RESETABLE WITH KEY</i>	Single Drag Pointer					
	Double Drag Pointer	N.A.	N.A.			
DRAG POINTER IN COMBINATION WITH CONTACT <i>RESETABLE WITH KEY</i>		N.A.	N.A.			N.A.
OVERLOAD RESISTANCE EXECUTION	OVERLOAD POSSIBLE UPTO 100% DEPENDING ON RANGE	O.D.	O.D.	O.D.	O.D.	O.D.
STAINLESS STEEL MOVEMENT	AISI304/1.4301					
MICROMETER POINTER	ADJUSTABLE POINTER					

* 160mm SS316L cases not available in combination with electrical contacts

OPTIONS FOR BULB AND STEM		
OPTION		EXTRA COSTS PER 100 MM
BULB AND STEM AISI316/1.4401 (Tmax = 400°C)	for diameter 6, 8, 9, 10, 12, 13, 14, 15, 16, 18	
BULB AND STEM POLISHED (MECHANICAL)	for all diameters	
BULB AND STEM PTFE® LINING (max.250° C)	ON DEMAND	
BULB AND STEM HALAR® COATED (max.120° C)		

MARKING FOR TEMPERATURE GAUGES	
OPTION	EXTRA COSTS
TAG number on dial	
TAG number on AISI304/1.4301 TAG plate 55x25 mm	
Lettering on dial	
Red mark on dial	

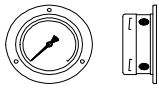
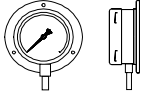
CERTIFICATES FOR TEMPERATURE GAUGES			
TYPE OF CERTIFICATE			NET PRICES
Certificate of Conformity acc. to EN 10204 2.2.			
Calibration certificate (Traceable to international standards)			
Material certificate wetted parts (EN10204 3.1 copy from material supplier)			
 EX certificate See options above for instrument modification requirements	For mechanical gauges - without contact	 II 2G Ex h IIC T6...T1 Gb X II 2D Ex h IIIC T85°C...450°C Db X	PER ORDER
	For gauges with inductive contact	 II 2G Ex ia IIC T4...T6 Gb or II 2D Ex ia IIIC T135°C...T85°C Db KEMA 10ATEX0158	PER INSTRUMENT

ROOM THERMOMETERS

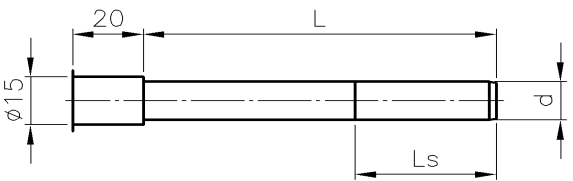
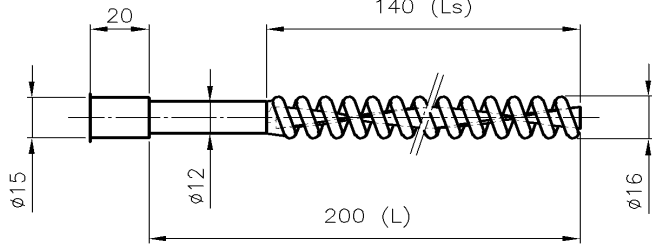
Type RTX, with stainless steel case according to EN 13190

STANDARD MODEL

CASE	: bayonet lock, AISI304/1.4301, type R with vent holes (for indoor use), type B: IP65	RANGES	: for measuring ambient temperatures: minimum -50 upto +80°C, see page I-6
STEM AND BULB	: AISI321/1.4541, for type R: bulb inside case and for type B: plain stem type A or helical air-bulb type HA (see below)	OVERLOAD	: up to 30% F.S. (but max. 80°C)
WINDOW	: mineral glass 4 mm	ACCURACY	: ±1% F.S. / class 1
DIAL	: aluminium, black figures on white	MOVEMENT	: brass
POINTER	: aluminium, black	OPTIONS	: see page I-13. For electrical device: Booklet III

TYPE	MODEL	CASE DIAMETER (ø in mm)				
		063	080	100	160	250
R 1142		N.A.	N.A.	RTX100XR	RTX160XR	RTX250XR
B 1142-SPECIAL		RTX063XB	RTX080XB	RTX100XB	RTX160XB	RTX250XB
OPTION		EXTRA COSTS				
LB not for type R	LIQUID FILLED CASE: GLYCERINE (in combination with electrical device: Resistance oil, see Booklet III)	RTX063LB	RTX080LB	RTX100LB	RTX160LB	RTX250LB

BULB TYPES FOR TYPE B

TYPE	MODEL	BULB AISI321/1.4541	EXTRA COSTS
A PLAIN STEM	 FOR STANDARD SENSITIVE PART "Ls": SEE PAGE 31	L=60 d=12 Ls=35	STANDARD
HA HELICAL AIR BULB		L=200	

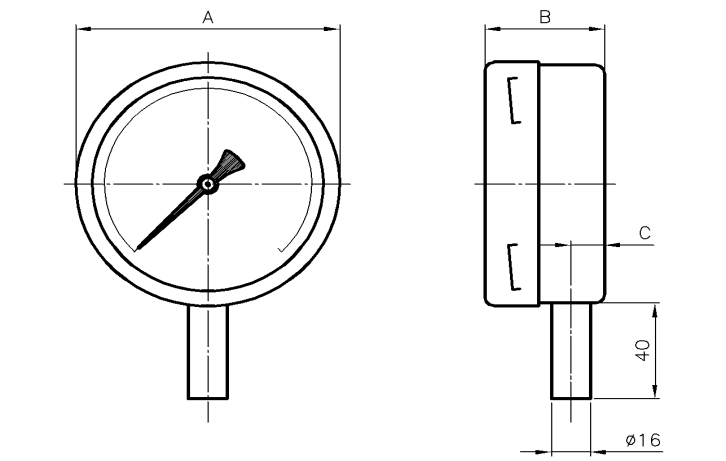
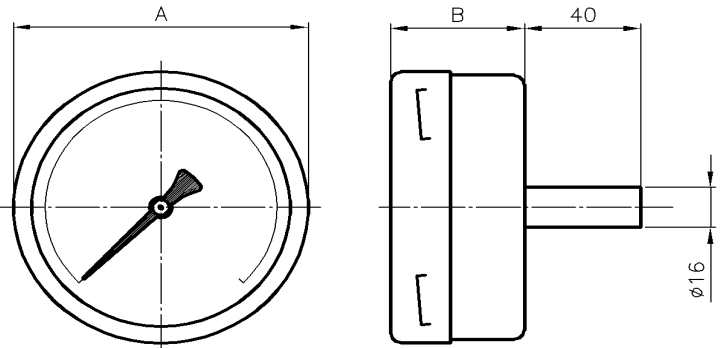
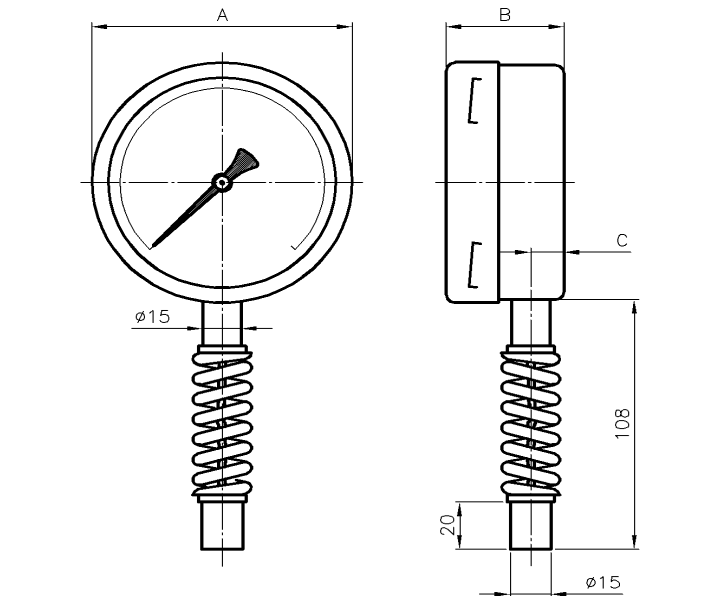
RIGID STEM DIAL THERMOMETERS TYPE TXR

TYPE	DRAWING	DIMENSIONS mm																																															
A TXRxxxXA		<table><tr><th rowspan="2">DIM.</th><th colspan="5">CASE DIAMETER</th></tr><tr><th>63</th><th>80</th><th>100</th><th>160</th><th>250</th></tr><tr><td>A</td><td>65</td><td>83</td><td>101</td><td>161</td><td>252</td></tr><tr><td>B</td><td>38</td><td>37</td><td>45</td><td>45</td><td>55</td></tr><tr><td>C</td><td>13</td><td>13</td><td>13</td><td>13</td><td>13</td></tr></table>	DIM.	CASE DIAMETER					63	80	100	160	250	A	65	83	101	161	252	B	38	37	45	45	55	C	13	13	13	13	13																		
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T TXRxxxXT-x		<table><tr><th rowspan="2">DIM.</th><th colspan="5">CASE DIAMETER</th></tr><tr><th>63</th><th>80</th><th>100</th><th>160</th><th>250</th></tr><tr><td>A</td><td>65</td><td>83</td><td>101</td><td>161</td><td>252</td></tr><tr><td>B</td><td>38</td><td>37</td><td>45</td><td>45</td><td>55</td></tr><tr><td>C</td><td>13</td><td>13</td><td>13</td><td>13</td><td>13</td></tr></table>	DIM.	CASE DIAMETER					63	80	100	160	250	A	65	83	101	161	252	B	38	37	45	45	55	C	13	13	13	13	13																		
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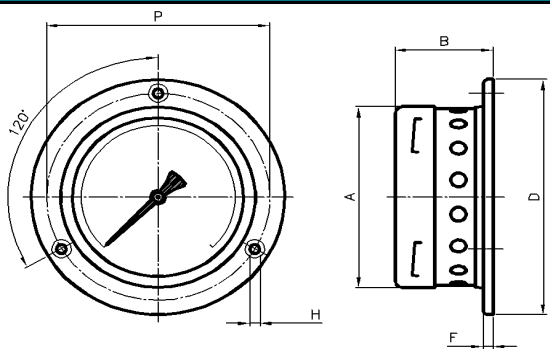
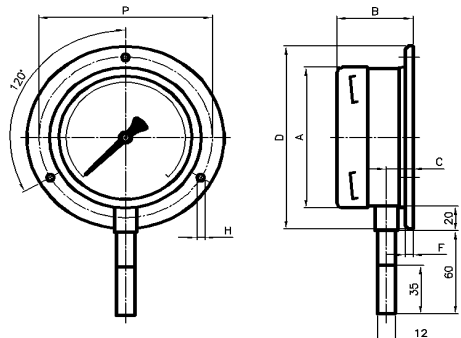
EVERY ANGLE DIAL THERMOMETERS TYPE TXR

TYPE	DRAWING	DIMENSIONS mm																													
A knee joint 360°		<table><tr><th rowspan="2">DIM.</th><th colspan="5">CASE DIAMETER</th></tr><tr><th>63</th><th>80</th><th>100</th><th>160</th><th>250</th></tr><tr><td>A</td><td>65</td><td>83</td><td>101</td><td>161</td><td>252</td></tr><tr><td>B</td><td>38</td><td>37</td><td>45</td><td>45</td><td>55</td></tr><tr><td>C</td><td>13</td><td>13</td><td>13</td><td>13</td><td>13</td></tr></table>	DIM.	CASE DIAMETER					63	80	100	160	250	A	65	83	101	161	252	B	38	37	45	45	55	C	13	13	13	13	13
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DIESEL EXHAUST DIAL THERMOMETERS

TYPE	DRAWING	DIMENSIONS mm																													
A TXRxxxLA-DIESEL		<table><tr><th rowspan="2">DIM.</th><th colspan="5">CASE DIAMETER</th></tr><tr><th>63</th><th>80</th><th>100</th><th>160</th><th>250</th></tr><tr><th>A</th><td>65</td><td>83</td><td>101</td><td>161</td><td>252</td></tr><tr><th>B</th><td>38</td><td>37</td><td>45</td><td>45</td><td>55</td></tr><tr><th>C</th><td>13</td><td>13</td><td>13</td><td>13</td><td>13</td></tr></table>	DIM.	CASE DIAMETER					63	80	100	160	250	A	65	83	101	161	252	B	38	37	45	45	55	C	13	13	13	13	13
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E TXRxxxLE-DIESEL		<table><tr><th rowspan="2">DIM.</th><th colspan="5">CASE DIAMETER</th></tr><tr><th>63</th><th>80</th><th>100</th><th>160</th><th>250</th></tr><tr><th>A</th><td>65</td><td>83</td><td>101</td><td>161</td><td>252</td></tr><tr><th>B</th><td>38</td><td>37</td><td>45</td><td>45</td><td>55</td></tr></table>	DIM.	CASE DIAMETER					63	80	100	160	250	A	65	83	101	161	252	B	38	37	45	45	55						
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+AVS TXRxxxLA-DIESEL+AVS		<table><tr><th rowspan="2">DIM.</th><th colspan="5">CASE DIAMETER</th></tr><tr><th>63</th><th>80</th><th>100</th><th>160</th><th>250</th></tr><tr><th>A</th><td>65</td><td>83</td><td>101</td><td>161</td><td>252</td></tr><tr><th>B</th><td>38</td><td>37</td><td>45</td><td>45</td><td>55</td></tr><tr><th>C</th><td>13</td><td>13</td><td>13</td><td>13</td><td>13</td></tr></table>	DIM.	CASE DIAMETER					63	80	100	160	250	A	65	83	101	161	252	B	38	37	45	45	55	C	13	13	13	13	13
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ROOM THERMOMETERS TYPE RTX

TYPE	DRAWING	DIMENSIONS mm																																																					
R RTXxxxXR		<table><tr><th rowspan="2">DIM.</th><th colspan="5">CASE DIAMETER</th></tr><tr><th>63</th><th>80</th><th>100</th><th>160</th><th>250</th></tr><tr><td>A</td><td>N.A.</td><td>N.A.</td><td>101</td><td>161</td><td>252</td></tr><tr><td>B</td><td>N.A.</td><td>N.A.</td><td>51</td><td>51</td><td>57</td></tr><tr><td>D</td><td>N.A.</td><td>N.A.</td><td>132</td><td>196</td><td>285</td></tr><tr><td>F</td><td>N.A.</td><td>N.A.</td><td>5</td><td>5</td><td>2</td></tr><tr><td>H</td><td>N.A.</td><td>N.A.</td><td>5.5</td><td>6</td><td>6</td></tr><tr><td>P</td><td>N.A.</td><td>N.A.</td><td>116</td><td>178</td><td>270</td></tr></table>	DIM.	CASE DIAMETER					63	80	100	160	250	A	N.A.	N.A.	101	161	252	B	N.A.	N.A.	51	51	57	D	N.A.	N.A.	132	196	285	F	N.A.	N.A.	5	5	2	H	N.A.	N.A.	5.5	6	6	P	N.A.	N.A.	116	178	270						
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STIKO

TEMPERATURE
PRESSURE
CALIBRATION



BOOKLET II
REMOTE-READING THERMOMETERS

INDEX REMOTE-READING THERMOMETERS

5 Steps for calculating remote-reading thermometers

For contacts, transmitters and pockets, please revert to Booklet III: Add-ons

STEP 1 - TYPE OF CASING

- Capillary type round case (TxC) II-3
- Capillary type square case (TPC) II-4

STEP 1a - CAPILLARY

- Capillary tube II-5
- Capillary tube coverings II-5

STEP 2 - TEMPERATURE RANGE

- Range between -200 / +800°C II-6
- Dual scales, accuracy and dial options II-6

STEP 3 - BULB STYLE

- Plain bulb or special bulb (e.g. surface or helical) II-7
- Shortest sensitive length check II-8

STEP 4 - CONNECTIONS *(optional)*

- Rotating nut, fixed nipple, turning nipple or sliding compression II-9
- Sanitary connection, DIN, SMS, RJT, IDF, Triclamp, Varivent, etc II-11

STEP 5 - OPTIONS

- Options, case material, window material, certificates, wetted parts II-12

DRAWINGS AND GENERAL INFORMATION

- Drawings TxC II-13
- TxC + TPC II-14

Please check our actual lead-times at www.stiko.com/currentleadtimes

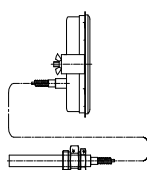
REMOTE READING THERMOMETERS

Type TXC, with stainless steel case according to EN 13190

STANDARD MODEL:

CASE	: bayonet lock, AISI304/1.4301, IP-65
CAPILLARY TUBE	: see page II-6 (up to 100 meters)
STEM AND BULB	: AISI321/1.4541, see pages II-8 and II-9
CONNECTION	: AISI304/1.4301, see pages II-10 to II-12
WINDOW	: mineral glass 4 mm
DIAL	: aluminium, black figures on white
POINTER	: aluminium, black
RANGES	: from -200 upto +800°C, see page II-7

EXAMPLE:



TXC160XH

ADJUSTMENT	: +/- 6 % F.S. with adj. screw at the side
OVERLOAD	: up to 30% F.S. (but max. 800°C)
ACCURACY	: ±1% F.S. / class 1
MOVEMENT	: brass
OPTIONS	: see page II-13
CONTACTS	: see Booklet III
PT-100	: see Booklet III
TRANSMITTER	: see Booklet III

TYPE	MODEL	CASE DIAMETER (Ø in mm)				
		63	80	100	160	250
A 1140		TXC063XA	TXC080XA	TXC100XA	TXC160XA	TXC250XA
B 1142		TXC063XB	TXC080XB	TXC100XB	TXC160XB	TXC250XB
D 1141		TXC063XD	TXC080XD	TXC100XD	TXC160XD	TXC250XD
F 1148		TXC063XF	TXC080XF	TXC100XF	TXC160XF	TXC250XF
G 1145		TXC063XG	TXC080XG	TXC100XG	TXC160XG	TXC250XG
H 1146		TXC063XH	TXC080XH	TXC100XH	TXC160XH	TXC250XH
I -		TXC063XI	TXC080XI	TXC100XI	TXC160XI	TXC250XI
Y	pipe mount model	TXC063XY	TXC080XY	TXC100XY	TXC160XY	TXC250XY
OPTION		EXTRA COSTS				
Lx (for case filling in combination with an electrical device, see Booklet III)	GLYCERIN-FILLED CASE	TXC063Lx	TXC080Lx	TXC100Lx	TXC160Lx	TXC250Lx
	SILICON OIL FILLED CASE (for lower environmental temperatures)	TXC063Lx	TXC080Lx	TXC100Lx	TXC160Lx	TXC250Lx
	RESISTANCE OIL FILLED CASE (movement becomes stainless steel, included in price)	TXC063Lx	TXC080Lx	TXC100Lx	TXC160Lx	TXC250Lx
Connection at 3/9/12 hrs						

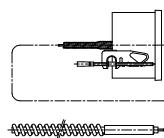
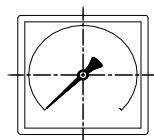
REMOTE READING THERMOMETERS

Type TPC, with glassfibre reinforced black Noryl case

STANDARD MODEL:

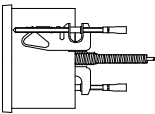
CASE	: glassfibre reinforced black Noryl, IP45 square shaped for panel mounting
CAPILLARY TUBE	: see page II-6 (up to 100 meter)
STEM AND BULB	: AISI321/1.4541, see pages II-8 and II-9
CONNECTION	: AISI304/1.4301, see pages II-10 to II-12
WINDOW	: plexi-glass PMMA 3 mm
DIAL	: aluminium, black figures on white
POINTER	: aluminium, black

EXAMPLE:



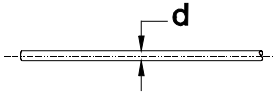
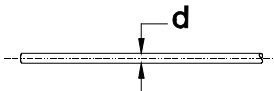
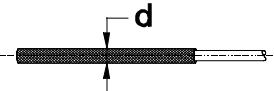
TPC96x96XS

RANGES	: from -200 up to +800°C, see page II-7
ADJUSTMENT	: +/- 6 % F.S. with adj. screw at the side
OVERLOAD	: up to 30% F.S. (but max. 800°C)
ACCURACY	: ±1% F.S. / class 1
MOVEMENT	: brass
OPTIONS	: see page II-13
CONTACTS	: see Booklet III
PT-100	: see Booklet III
TRANSMITTER	: see Booklet III

TYPE	SQUARE MODEL	CASE DIMENSIONS (in mm)			
		72x72	96x96	144x144	192x192
S 1201...1204	 	TPC72x72XS	TPC96x96XS	TPC144x144XS	TPC192x192XS

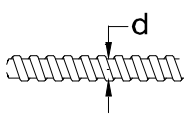
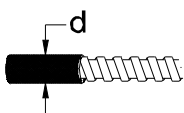
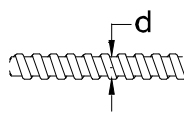
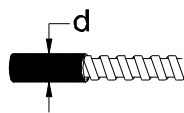
NOTE: LIQUID FILLING FOR TYPE TPC IS NOT POSSIBLE (→ TXC WITH SPECIAL SQUARE FRONT FLANGES: O.D.)

CAPILLARY FOR REMOTE READING THERMOMETERS

MATERIAL	MODEL	Ø d (mm)	Tmin	Tmax	CAPILLARY LENGTH Lc	
			°C		EXTRA COSTS	
STAINLESS STEEL AISI321 / 1.4541		2	-200	+800	per 1000 mm	
STAINLESS STEEL AISI316L / 1.4404		2	-200	+400	per 1000 mm	
STAINLESS STEEL AISI321 / 1.4541 + PVC		4	-60	+120	per 1000 mm	

CAPILLARY COVERINGS *

Price surplus over the above indicated prices

MATERIAL	MODEL	Ø d (mm)	Tmin	Tmax	CAPILLARY LENGTH Lc	
			°C		EXTRA COSTS	
FLEXIBLE STAINLESS STEEL AISI304/1.4301		7	-200	+800	per 1000 mm	
FLEXIBLE STAINLESS STEEL AISI304/1.4301 +PVC		8	-60	+120	per 1000 mm	
FLEXIBLE STAINLESS STEEL AISI316/1.4401		7	-200	+800	per 1000 mm	
FLEXIBLE STAINLESS STEEL AISI316/1.4401 +PVC		8	-60	+120	per 1000 mm	

* N.B. combining capillary coverings with very narrow bulbs (ø6mm, ø6,35mm, ø7mm) is not possible when using CS2 connections, because the capillary covering will be wider than the bulb.

TEMPERATURE RANGES for all types:

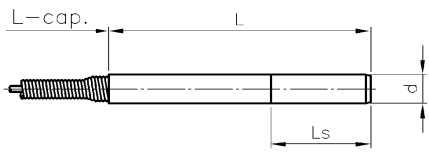
TEMPERATURE RANGES				EXTRA COSTS							
(in °C)		SCALE DIVISION		MINIMUM SPAN IS 60°C							
		cl. 1	option cl. 0.6	ALL CASE DIMENSIONS							
-200	...+50	5	2								
-200	...+100	5	2								
-200	...+150	5	2								
-120	...+40	2	1								
-110	...+50	5	1								
-100	...+100	5	1								
-100	...+50	5	1								
-80	...+40	2	1								
-60	...+40	2	0.5								
-60	...+60	2	1								
-50	...+50	2	0.5								
-50	...+100	5	1								
-40	...+20	1	0.5								
-40	...+40	1	0.5								
-40	...+60	2	0.5								
-40	...+80	2	1								
-40	...+110	5	1								
-40	...+120	2	0.5								
-40	...+160	5	1								
-30	...+30	1	0.5								
-30	...+50	1	0.5								
-30	...+70	2	0.5								
-30	...+170	5	1								
-20	...+40	1	0.5								
-20	...+60	1	0.5								
-20	...+80	2	0.5								
-20	...+100	2	1								
-20	...+120	2	1								
-20	...+180	5	1								
-15	...+45	1	0.5								
-10	...+50	1	0.5								
-10	...+110	2	1								
-10	...+150	5	1								
0	...+60	1	0.5								
0	...+80	1	0.5								
0	...+100	2	0.5								
0	...+120	2	1								
0	...+160	5	1								
0	...+200	5	1								
0	...+250	5	2								
0	...+300	5	2								
0	...+400	10	2								
0	...+500	10	5								
0	...+600	10	5								
0	...+700	10	5								
0	...+800	10	5								

OPTIONS ON TEMPERATURE RANGES

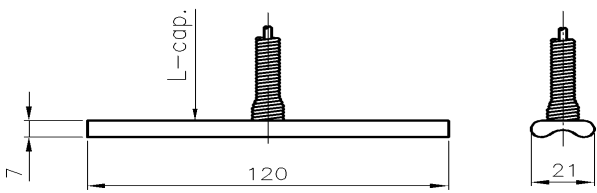
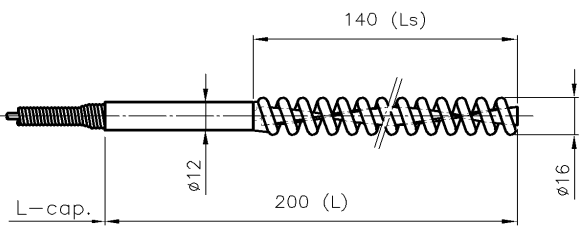
	CASE DIMENSIONS (in mm)								
	ø63	ø80	ø100	ø160	ø250	72x72	96x96	144x144	192x192
NON-STANDARD RANGES IN °C									
Non-standard ranges									
DUAL SCALE IN °C/°F									
Standard ranges									
Non-standard ranges	on demand								
RANGE IN °F or °K									
Standard ranges	on demand								
ACCURACY									
±1% F.S. / class 1	•	•	•	•	•	•	•	•	•
±0.6 / 0.5% F.S. (class 0.6 or 0.5) (Without external adjustment)	x	x					x		
Mirrorscale (for anti-parallax)	x	x				x	x	x	x

x NOT AVAILABLE

• STANDARD / NO EXTRA PRICE

STEM TYPE AND LENGTH			
TYPE	STANDARD MODEL	bulb diameter * Ø d	EXTRA COSTS per 100 mm STAINLESS STEEL AISI321/1.4541
A <i>plain stem</i>	 FOR SHORTEST POSSIBLE SENSITIVE PART "Ls": SEE PAGE II-9	9, 10, 12	
		6, 6.35, 8, 11, 12.5, 13, 14	
		7, 15, 16, 17, 18, 20	
		FOR BULB OPTIONS: SEE PAGE II-13	

* For very narrow bulbs (ø6mm, ø6,35mm, ø7mm) in combination with capillary coverings, please refer to note on page II-6.

SPECIAL BULB					
TYPE	MODEL	DIMENSIONS			EXTRA COSTS
		L	d-1	d-2	STAINLESS STEEL AISI316/1.4404
S surface bulb		-	-	-	
HA helical air bulb		-	-	-	

SHORTEST POSSIBLE LENGTH FOR SENSITIVE PART OF STEM

TABLE 1 THERMOMETERS WITHOUT CONTACT

Ø	DIAMETER AND LENGTH OF SENSITIVE PART mm (Ls)														CAPILLARY LENGTH mm					
	6	6,35	7	8	9	10	11	12	12.5/13	14	15	16	18	20	<2000	<5000	<10000	<20000	< 30000	
Ls	70	60	50	35	30	25	20	18	17	15	14	13	13	12	80	100	120	n.a.	n.a.	Temperature span
	120	96	80	60	45	35	30	25	25	20	20	17	16	15	60	80	80	100	120	
	190	155	125	90	60	55	45	35	35	30	25	25	20	20	60	80	80	80	100	
	--	--	190	135	100	80	65	55	50	40	35	30	30	26	60	60	80	80	100	
	--	--	--	170	130	100	80	65	60	50	45	40	35	31	60	60	60	80	100	
	--	--	--	--	190	150	120	95	90	70	60	55	50	43	60	60	60	60	60	

Others on demand

TABLE 2 THERMOMETERS WITH CONTACT

Ø	DIAMETER AND LENGTH OF SENSITIVE PART mm (Ls)														CAPILLARY LENGTH mm					
	6	6.35	7	8	9	10	11	12	12.5/13	14	15	16	18	20	<2000	<5000	<10000	<20000	< 30000	
Ls	70	60	50	35	30	25	20	18	17	15	14	13	13	12	160	160	160	160	160	Temperature span
	120	96	80	60	45	35	30	25	25	20	20	17	16	15	80	80	80	80	100	
	190	155	125	90	60	55	45	35	35	30	25	25	20	20	80	80	80	80	100	
	--	--	190	135	100	80	65	55	50	40	35	30	30	26	60	60	80	80	80	
	--	--	--	170	130	100	80	65	60	50	45	40	35	31	60	60	60	80	80	
	--	--	--	--	190	150	120	95	90	70	60	55	50	43	60	60	60	60	80	

Others on demand

HOW TO USE:

Instrument without contact and with 5000mm capillary

Bulb diameter: 10mm

Range: -20/+40C (= 60C span)

QUESTION: What is the shortest possible sensitive length of the stem?

No contact → TABLE 1

On the right side of the table, start in column <5000 mm capillary.

Go down until you reach the 60°C span.

Go left to the diameter and length side and stop at the column corresponding to 10mm bulb diameter.

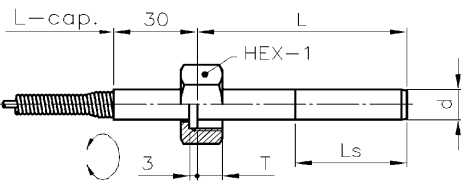
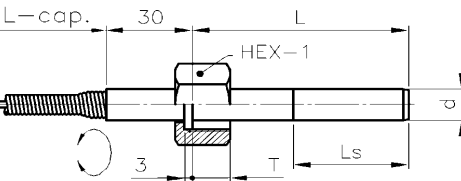
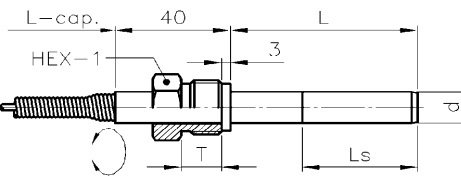
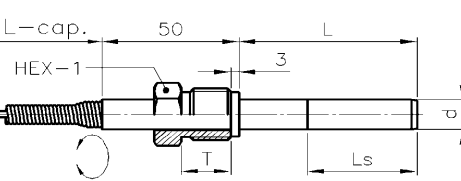
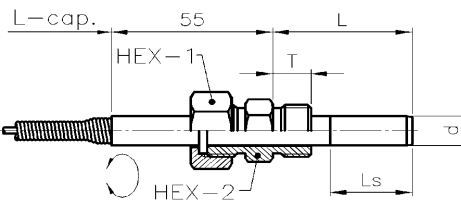
The minimum sensitive length is 80 mm.

If this is too long, then choose a larger diameter, a higher temperature range, or a shorter capillary length.

TABLE 1 THERMOMETERS WITHOUT CONTACT

Ø	DIAMETER AND LENGTH OF SENSITIVE PART mm (Ls)														CAPILLARY LENGTH mm					
	6	6.35	7	8	9	10	11	12	12.5/13	14	15	16	18	20	<2000	<5000	<10000	<20000	< 30000	
Ls						10										100				Temperature span
																80				
																80				
																80				
						80										60				

CONNECTIONS FOR REMOTE READING THERMOMETERS

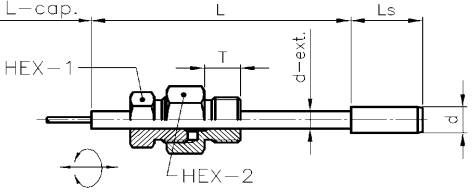
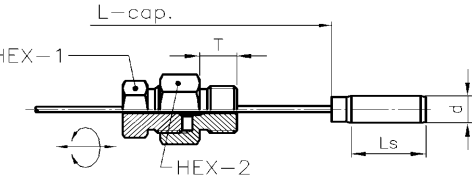
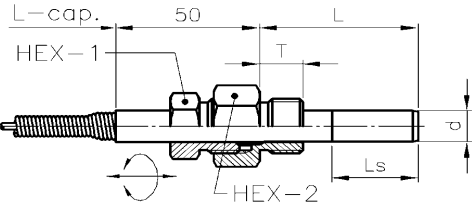
TYPE	MODEL	DIMENSIONS					EXTRA COSTS
		connection	HEX-1	HEX-2	T	d max	STAINLESS STEEL AISI303/1.4305
B coupling nut (standard model)		1/4"BSP	22	-	7	Ø 8	
		3/8"BSP	27	-	9	Ø 11	
		1/2"BSP	27	-	9	Ø 15	
		3/4"BSP	32	-	9	Ø 20	
		1"BSP	41	-	13	Ø 20	
		M18x1.5	27	-	8	Ø 12	
		M20x1.5	27	-	9	Ø 14	
BL coupling nut (long model)		1/2"BSP	27	-	14	Ø 15	
		3/4"BSP	32	-	16	Ø 20	
		1"BSP	41	-	18	Ø 20	
A04 turning nipple (standard model)		1/4"BSP	17	-	12	Ø 8	
		3/8"BSP	22	-	12	Ø 11	
		1/2"BSP	22	-	14	Ø 15	
		3/4"BSP	30	-	16	Ø 20	
		1"BSP	36	-	18	Ø 20	
		M18x1.5	22	-	12	Ø 12	
		M20x1.5	22	-	14	Ø 14	
AL04 turning nipple (long model)		1/2"BSP	22	-	18	Ø 15	
		3/4"BSP	30	-	20	Ø 20	
		1"BSP	36	-	25	Ø 20	
B 01 coupling nut + double nipple	 THREAD BETWEEN HEX-1 and HEX-2: 1/2"BSP	1/4"BSP	27	22	12	Ø 8	
		3/8"BSP	27	22	12	Ø 11	
		1/2"BSP	27	22	14	Ø 15	
		3/4"BSP	27	27	16	Ø 20	
		1"BSP	27	36	18	Ø 20	
		1/4"NPT	27	22	14	Ø 8	
		1/2"NPT	27	22	20	Ø 15	
		3/4"NPT	27	32	20	Ø 20	
		1"NPT	27	36	25	Ø 20	
		M18x1.5	27	22	12	Ø 12	
		M20x1.5	27	22	14	Ø 14	
		M24x1.5	27	27	14	Ø 18	

All other connections, if technically possible, EUR 75,00 for quantities of < 10 pieces per connection, larger quantities on request

All threaded connections (except CS2) are pressure tight up to 25 bar

OPTION	EXTRA COSTS
CONNECTION IN AISI316/1.4401	for connections B/BL, C/CL, A04/AL04
	for connections B01, CS1, CS2, CS3

CONNECTIONS FOR REMOTE READING THERMOMETERS

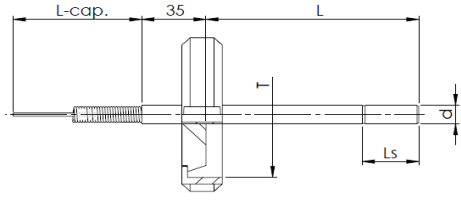
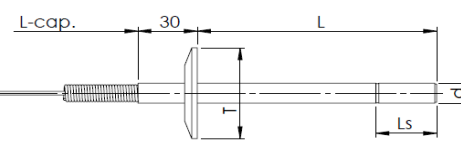
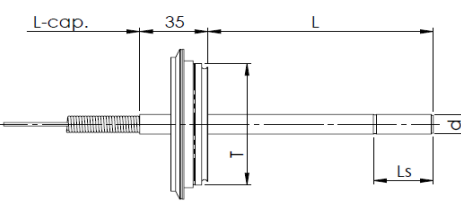
TYPE	MODEL	DIMENSIONS					EXTRA COSTS
		connection	HEX-1	HEX-2	T	d max	STAINLESS STEEL AISI303/1.4305
CS 1 <i>adjustable connection, sliding on extension tube</i>	 THREAD BETWEEN HEX-1 and HEX-2: 1/2"BSP	1/4"BSP	22	27	12	Ø 11	
		3/8"BSP	22	27	12	Ø 14	
		1/2"BSP	22	27	14	Ø 18	
		3/4"BSP	22	32	16	Ø 23	
		1"BSP	22	36	18	Ø 30	
		1/4"NPT	22	27	14	Ø 13	
		1/2"NPT	22	27	20	Ø 20	
		3/4"NPT	22	32	20	Ø 25	
		1"NPT	22	36	25	Ø 32	
		M18x1.5	22	27	12	Ø 16	
		M20x1.5	22	27	14	Ø 18	
		M24x1.5	22	27	14	Ø 22	
CS 2 <i>adjustable connection, sliding on capillary</i>	 THREAD BETWEEN HEX-1 and HEX-2: 1/2"BSP Please refer to note on page II-6, for use with capillary covering and narrow bulbs.	1/4"BSP	22	27	12	Ø 11	
		3/8"BSP	22	27	12	Ø 14	
		1/2"BSP	22	27	14	Ø 18	
		3/4"BSP	22	32	16	Ø 23	
		1"BSP	22	36	18	Ø 30	
		1/4"NPT	22	27	14	Ø 13	
		1/2"NPT	22	27	20	Ø 20	
		3/4"NPT	22	27	20	Ø 25	
		1"NPT	22	36	25	Ø 32	
		M18x1.5	22	27	12	Ø 16	
		M20x1.5	22	27	14	Ø 18	
		M24x1.5	22	27	14	Ø 22	
CS 3 <i>adjustable connection, sliding on stem</i>	 THREAD BETWEEN HEX-1 and HEX-2: 1/2"BSP	1/4"BSP	22	27	12	Ø 8	
		3/8"BSP	22	27	12	Ø 11	
		1/2"BSP	22	27	14	Ø 15	
		3/4"BSP	22	32	16	Ø 20	
		1"BSP	22	36	18	Ø 20	
		1/4"NPT	22	27	14	Ø 8	
		1/2"NPT	22	27	20	Ø 15	
		3/4"NPT	22	32	20	Ø 20	
		1"NPT	22	36	25	Ø 20	
		M18x1.5	22	27	12	Ø 12	
		M20x1.5	22	27	14	Ø 14	
		M24x1.5	22	27	14	Ø 18	
		1/2"BSPT	22	27	20	Ø 15	
	FOR CONNECTION TYPE CS3	1/2"BSP female					
		3/4"BSP female					
		1"BSP female					

All other connections, if technically possible, EUR 75,00 for quantities of < 10 pieces per connection, larger quantities on request

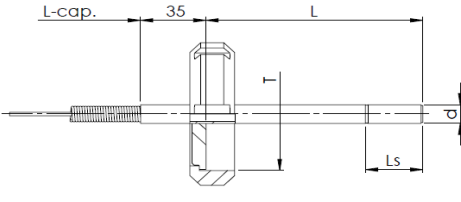
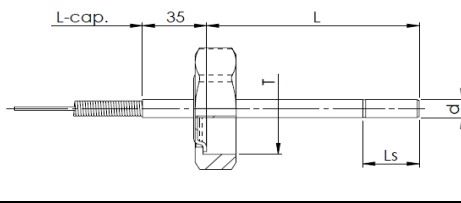
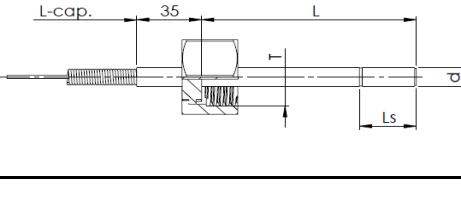
All threaded connections (except CS2) are pressure tight up to 25 bar

OPTION	EXTRA COSTS
CONNECTION IN AISI316/1.4401	for connections B/BL, C/CL, A04/AL04
	for connections B01, CS1, CS2, CS3

SANITARY CONNECTIONS FOR REMOTE READING THERMOMETERS

TYPE	MODEL WITH POLISHED BULB	DIMENSIONS		EXTRA COSTS
		connection	T	STAINLESS STEEL AISI316/1.4401
CM <i>acc. to DIN 11851</i>		1" - DN25	rd 52 x 1/6	
		1 1/2" - DN40	rd 65 x 1/6	
		2" - DN50	rd 78 x 1/6	
		3" - DN80	rd 104 x 1/6	
TC <i>TRI CLAMP acc. to BS4825, ISO2852 and DN32676</i>		1"	Ø 50.5	
		1 1/2"	Ø 50.5	
		2"	Ø 64	
TV <i>Varivent® In-Line</i>		DN50	Ø 50	
		Suitable for in-line housing DN25		
		DN68	Ø 68	
		Suitable for in-line housing DN40 and up		

Also available in SMS, RJT, IDF etc.

SMS <i>SMS 1145</i>		<i>On demand</i>
APV <i>APV- RJT</i>		<i>On demand</i>
IDF <i>IDF (ISO2853)</i>		<i>On demand</i>

OPTIONS FOR REMOTE-READING THERMOMETERS

OPTION		CASE DIAMETER (Ø in mm)				
		63	80	100	160	250
CASE MATERIAL AISI316L/1.4404 (i.o. AISI304/1.4301)	CASE + BAYONETTING		N.A.		*	N.A.
	FRONT -OR BACKFLANGE	N.A.	N.A.			N.A.
PLEXIGLASS or POLYCARBONATE						
SAFETY GLASS						
 EX certified instrument Manufactured with safety glass + blow out + special text on dial and sticker + STIKO logo. <i>For certificates and Ex zone, see below.</i>	Instrument without contact					
	Instrument with contact	N.A.	N.A.			N.A.
DRAG POINTER <i>RESETABLE WITH KEY</i>	Single Drag Pointer					
	Double Drag Pointer	N.A.	N.A.			
DRAG POINTER IN COMBINATION WITH CONTACT <i>RESETABLE WITH KEY</i>		N.A.	N.A.			N.A.
OVERLOAD RESISTANCE EXECUTION	OVERLOAD POSSIBLE UPTO 100% DEPENDING ON RANGE	O D	O D	O D	O D	O D
STAINLESS STEEL MOVEMENT	AISI304/1.4301					
MICROMETER POINTER	ADJUSTABLE POINTER					

* 160mm SS316L cases not available in combination with electrical contacts

OPTIONS FOR BULB AND STEM

OPTION	EXTRA COSTS PER 100 MM
BULB AND STEM AISI316/1.4401 (Tmax = 400°C)	for diameter 6, 8, 9, 10, 12, 13, 14, 15, 16, 18
BULB AND STEM POLISHED (MECHANICAL)	for all diameters
BULB AND STEM PTFE® LINING (max.250° C)	ON DEMAND
BULB AND STEM HALAR® COATED (max.120° C)	

MARKING FOR TEMPERATURE GAUGES

OPTION	EXTRA COSTS
TAG number on dial	
TAG number on AISI304/1.4301 TAG plate 55x25 mm	
Lettering on dial	
Red mark on dial	

CERTIFICATES FOR TEMPERATURE GAUGES

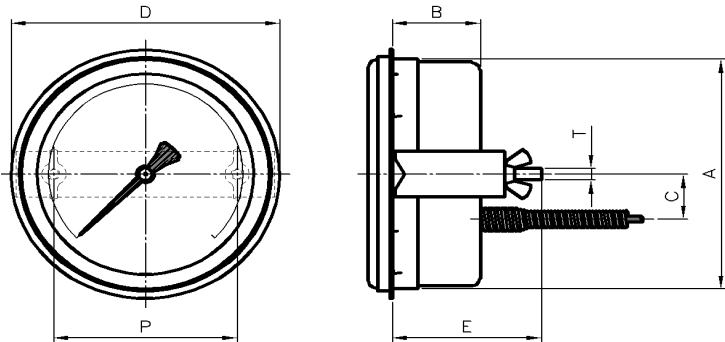
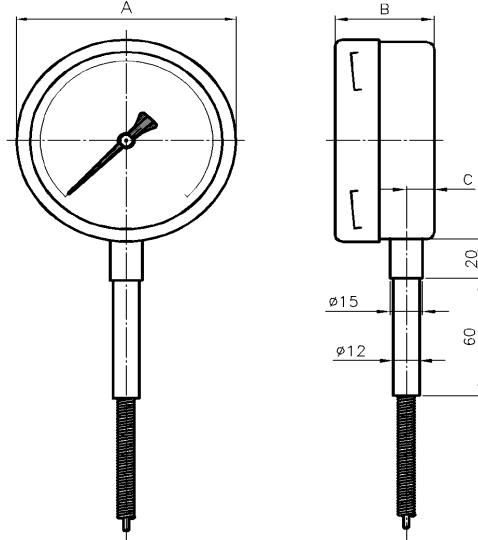
TYPE OF CERTIFICATE	NET PRICES
Certificate of Conformity acc. to EN 10204 2.2.	
Calibration certificate (Traceable to international standards)	
Material certificate wetted parts (EN10204 3.1 copy from material supplier)	
 EX certificate See options above for instrument modification requirements	For mechanical gauges - without contact CE II 2G Ex h IIC T6...T1 Gb X II 2D Ex h IIIC T85°C...450°C Db X For gauges with inductive contact CE II 2G Ex ia IIC T4...T6 Gb or II 2D Ex ia IIIC T135°C...T85°C Db KEMA 10ATEX0158
	PER ORDER
	PER INSTRUMENT

REMOTE READING THERMOMETERS TYPE TXC

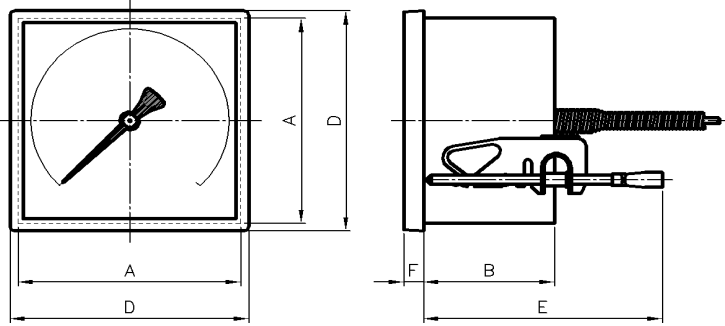
TYPE	DRAWING	DIMENSIONS mm																																															
A TXCxxxXA		<table><tr><th rowspan="2">DIM.</th><th colspan="5">CASE DIAMETER</th></tr><tr><th>63</th><th>80</th><th>100</th><th>160</th><th>250</th></tr><tr><td>A</td><td>65</td><td>83</td><td>101</td><td>161</td><td>252</td></tr><tr><td>B</td><td>38</td><td>37</td><td>45</td><td>45</td><td>55</td></tr><tr><td>C</td><td>13</td><td>13</td><td>13</td><td>13</td><td>13</td></tr></table>	DIM.	CASE DIAMETER					63	80	100	160	250	A	65	83	101	161	252	B	38	37	45	45	55	C	13	13	13	13	13																		
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For types H and I, see page II-15

REMOTE READING THERMOMETERS TYPE TXC

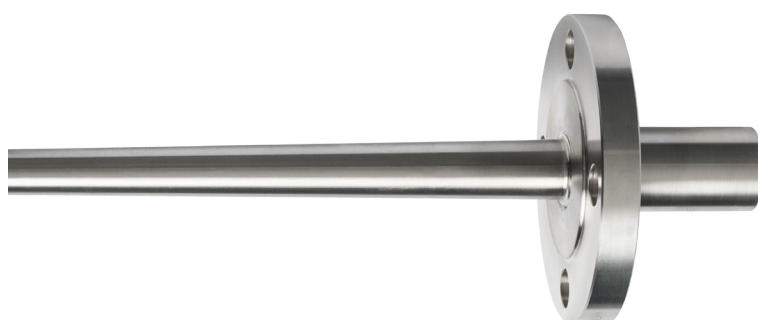
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CAPILLARY DIAL THERMOMETERS TYPE TPC

TYPE	DRAWING	DIMENSIONS mm																																		
S TPCxxxxxXS		<table><tr><th rowspan="2">DIM.</th><th colspan="4">CASE DIAMETER</th></tr><tr><th>72 x 72</th><th>96 x 96</th><th>144x 144</th><th>192x192</th></tr><tr><td>A</td><td>66</td><td>90</td><td>136</td><td>183</td></tr><tr><td>B</td><td>53</td><td>53</td><td>53</td><td>89</td></tr><tr><td>D</td><td>72</td><td>96</td><td>144</td><td>195</td></tr><tr><td>E</td><td>95</td><td>95</td><td>95</td><td>95</td></tr><tr><td>F</td><td>8</td><td>8</td><td>8</td><td>8</td></tr></table>	DIM.	CASE DIAMETER				72 x 72	96 x 96	144x 144	192x192	A	66	90	136	183	B	53	53	53	89	D	72	96	144	195	E	95	95	95	95	F	8	8	8	8
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E	95	95	95	95																																
F	8	8	8	8																																

STIKO

TEMPERATURE
PRESSURE
CALIBRATION



BOOKLET III

**ADD-ONS: CONTACTS, 4-20 MA,
WELDED POCKETS**

INDEX ADD-ONS: CONTACTS, 4-20 mA, WELDED POCKETS

CONTACTS

- Magnetic contacts III-3
- Inductive contacts III-4
- Microswitch (5 A @ 125 Vac) III-5
- Electronic contacts III-6

PT-100 / 4-20 mA TRANSMITTERS

- PT-100 / 4-20 mA transmitters III-7

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- Add-on contacts III-8
- Cable III-8
- Relays III-8

WELDED (FABRICATED) POCKETS - THERMOWELLS

- Welded / fabricated pockets, PN25 III-9
- Samples of thermowells III-10

DRAWINGS

- TXR with contact III-11
- TXR+K360 with contact III-12
- TXC with contact III-13
- TPC with contact III-14

Please check our actual lead-times at www.stiko.com/currentleadtimes

BUILT-IN LOW-ACTION CONTACT TYPE M

TYPE M Hz

INSTRUMENT	: class 1
MINIMAL RANGE	: 60 °C
CONNECTOR	: cable junction box, SEE BELOW
HYSTERESIS	: max. 1% up and down
SETPOINT(S)	: from outside with key
WINDOW	: Polycarbonate for round case : PMMA - plexiglass for square case
POINTER	: black
CONTACT POINTER(S)	: red

example:

TXR100XA
+ M-12 Hz



ELECTRICAL SWITCH CAPACITY

AC	: 50 VA (max. 250V)
DC	: 30 W (max. 250V)

CONTACT TYPE	SWITCH FUNCTION	CABLE JUNCTION BOX	CASE DIMENSIONS			
			100	160	96x96	144x144
M-1 Hz*						
M-2 Hz*						
M-3 Hz*						
M-11 Hz						
M-12 Hz						
M-21 Hz						
M-22 Hz						
M-xx Hz +GS*	 example: M-21 Hz GS					
M-33 Hz						
M-33 Hz+GS*						
M-xxx Hz	functions to be specified at order					
M-xxxx Hz	functions to be specified at order			O.D.	O.D.	O.D.
OPTION			EXTRA COSTS			
Liquid filling - RESISTANCE OIL (movement becomes stainless steel)					N.A.	N.A.
Safety glass in combination with contact					N.A.	N.A.

BUILT-IN INDUCTIVE CONTACT TYPE I

TYPE I Hz

INSTRUMENT	: class 1
MINIMAL RANGE	: 60 °C
CONNECTOR	: cable junction box, SEE BELOW
HYSTERESIS	: max. 1% up and down
SETPOINT(S)	: from outside with key
WINDOW	: Polycarbonate for round case : PMMA - plexiglass for square case
POINTER	: black
CONTACT POINTER(S)	: red

ELECTRICAL SWITCH CAPACITY

Nominal voltage : 8VDC (Ri=1 Kohm)

Regulations : EN 60947-5-2

example:

TXC100XB
+ I-x Hz

Also available with
ATEX-certification:



CE II 2G Ex ia IIC T4...T6 Gb or
II 2D Ex ia IIIC T135°C...T85°C Db
KEMA 10ATEX0158



CONTACT TYPE	SWITCH FUNCTION OPERATING CURRENT	CABLE JUNCTION BOX	CASE DIMENSIONS			
			100	160	96x96	144x144
I-1 Hz <i>Si 2-K08-Y1 (Turck)</i> <i>SJ3.5N (Pepperl+Fuchs)</i>			Turck	P+F	Turck	Turck
I-2 Hz <i>Si 2-K08-Y1 (Turck)</i> <i>SJ3.5N (Pepperl+Fuchs)</i>			Turck	P+F	Turck	Turck
I-x Hz+2SN <i>SJ 2 SN (Pepperl+Fuchs)</i>				N.A.		N.A.
I-x Hz+3.5SN <i>SJ 3.5 SN (Pepperl+Fuchs)</i>			N.A.		N.A.	
I-11 Hz <i>Si 2-K08-Y1 (Turck)</i>						
I-12 Hz <i>Si 2-K08-Y1 (Turck)</i> <i>SJ3.5N (Pepperl+Fuchs)</i>			Turck	P+F	Turck	Turck
I-21 Hz <i>Si 2-K08-Y1 (Turck)</i> <i>SJ3.5N (Pepperl+Fuchs)</i>			Turck	P+F	Turck	Turck
I-22 Hz <i>Si 2-K08-Y1 (Turck)</i>						
I-xx Hz+2SN <i>SJ 2 SN (Pepperl+Fuchs)</i>	function to be specified at order			N.A.		N.A.
I-xx Hz+3.5SN <i>SJ 3.5 SN (Pepperl+Fuchs)</i>	function to be specified at order		N.A.		N.A.	
I-xxx Hz <i>Si 2-K08-Y1 (Turck)</i>	function to be specified at order		O.D.	O.D.	O.D.	O.D.
I-xxxx Hz <i>Si 2-K08-Y1 (Turck)</i>	function to be specified at order		O.D.	O.D.	O.D.	O.D.
OPTION			EXTRA COSTS			
Liquid filling - RESISTANCE OIL (movement becomes stainless steel)					N.A.	N.A.
Safety glass in combination with contact					N.A.	N.A.

BUILT-IN MICROSWITCH TYPE Q

TYPE Q Hz (low hysteresis)

STANDARD MODEL

INSTRUMENT	: class 1
MINIMAL RANGE	: 60 °C
CONNECTOR	: cable junction box, SEE BELOW
HYSTERESIS	: max. 1% up and down
SETPOINT(S)	: from outside
WINDOW	: Polycarbonate for round case : PMMA - plexiglass for square case
POINTER	: micro adjustable
CONTACT POINTER(S)	: first red, (second yellow)

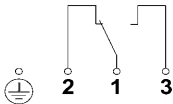
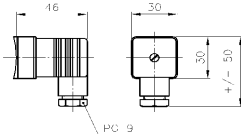
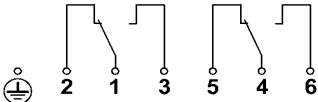
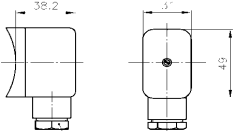
ELECTRICAL SWITCH CAPACITY

125 Vac	: 5A (ind. load 3A)
250 Vac	: 3A (ind. load 2A)
DC 30 V	: 5A (ind. load 3A)
DC 125 V	: 0.4A (ind. load 0,4A)
DC 250 V	: 0.2A (ind. load 0,2A)

example: TXC100XB + Q - 33 Hz



Class 1 and 5 Amp!!

CONTACT TYPE	SWITCH FUNCTION	CABLE JUNCTION BOX	CASE DIMENSIONS			
			100	160	96x96	144x144
Q - 3 Hz* *Potential free SPDT		 Hirschmann				
Q - 33 Hz* *Potential free DPDT		 Wiebrock				
OPTION			EXTRA COSTS			
SETPOINT	FIXED SETPOINT (without setpoint adjustment)		0	0	0	0
LIQUID FILLING NOT POSSIBLE WITH MICROSWITCH						
SAFETY GLASS NOT POSSIBLE WITH MICROSWITCH						

BUILT-IN ELECTRONIC CONTACT TYPE E

TYPE E Hz

INSTRUMENT	: class 1
MINIMAL RANGE	: 60 °C
CONNECTOR	: cable junction box, SEE BELOW
HYSTERESIS	: max. 1% up and down
SETPOINT(S)	: from outside with key
WINDOW	: Polycarbonate for round case : PMMA - plexiglass for square case
POINTER	: black
CONTACT POINTER(S)	: red

ELECTRICAL SWITCH CAPACITY

Nominal voltage	: 10...30 V dc
Proximity sensor	: Si-K08-AP6 (Turck)
Output	: 3-wire, PNP
Regulations	: EN 60947-5-2

example:

TXR100XA
+ E-12 Hz



CONTACT TYPE	SWITCH FUNCTION	CABLE JUNCTION BOX	CASE DIMENSIONS			
			100	160	96x96	144x144
E-1 Hz						
E-2 Hz						
E-11 Hz						
E-12 Hz						
E-21 Hz						
E-22 Hz						
E-xxx Hz	function to be specified with order		O.D.	O.D.	O.D.	O.D.
E-xxxx Hz	function to be specified with order		O.D.	O.D.	O.D.	O.D.
OPTION			EXTRA COSTS			
Liquid filling - RESISTANCE OIL (movement becomes stainless steel)					N.A.	N.A.
Safety glass in combination with contact					N.A.	N.A.

BUILT-IN PT-100 / TRANSMITTERS

With PT-100 sensor

SENSOR	: PT-100
ACCURACY	: 1/3 DIN class B, IEC751
INSTRUMENT	: class 1
MINIMAL RANGE	: 60 °C
BULB SIZE	: minimal Ø8 mm
CONNECTOR	: cable junction box, SEE BELOW



TXR100XA + PT-100



TXR100XA + TRP

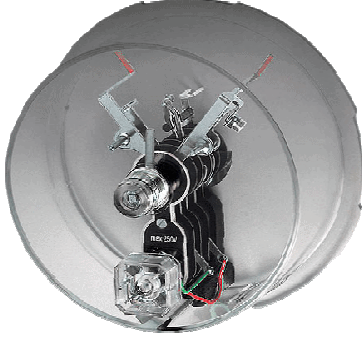
TYPE	FUNCTION	CABLE JUNCTION BOX	ALL CASE DIMENSIONS
PT-100	PT-100 sensor 3 wire	Wiebrock	first 100 mm bulb per 100 mm extra First 1000 mm capillary per 1000 mm extra:
TRP	4...20 mA, 13...35Vdc, 2-wire	Hirschmann	excluding PT-100 sensor

With potentiometer

TYPE	FUNCTION	CABLE JUNCTION BOX	CASE DIMENSIONS			
			100	160	96x96	144x144
R	0...100 ohm, 3-wire	Hirschmann				

ADD-ON ELECTRICAL CONTACTS

ADD-ON UNIT (built on top of dial) with PG cable conduit and 1500 mm cable

DIN16085/16196		EXTRA COSTS	
TYPE	Switch function in clockwise direction	CASE DIMENSIONS (in mm)	
MAGNETIC ADD-ON CONTACT (=30W/-50VA)		Ø 100	Ø 160
M -1	contact closes		
M -2	contact opens		
M -3	single change-over contact (SPDT)		
M -11	1st contact closes, 2nd contact closes		
M -12	1st contact closes, 2nd contact opens		
M -21	1st contact opens, 2nd contact closes		
M -22	1st contact opens, 2nd contact opens		
M -xx+GS	double acting contact with separate circuits		
M -xxx	triple acting contact, 1=closes, 2=opens		
INDUCTIVE ADD-ON CONTACT (=8V, Ri=1 kohm, EEx ia IIC T6)		Ø 100	Ø 160
I -1	contact closes (operating current)		
I -2	contact opens		
I -x+SN	single contact with safety oscillator (SN)		
I -11	1st contact closes, 2nd contact closes		
I -12	1st contact closes, 2nd contact opens		
I -21	1st contact opens, 2nd contact closes		
I -22	1st contact opens, 2nd contact opens		
I -xx+SN	double contact with safety oscillator (SN)		

OPTIONS FOR ELECTRICAL CONTACTS

OPTIONS	DESCRIPTION	Ø 100	Ø 160	96 x 96	144 x 144
OIL FILLING	for HZ electrical contacts only			N.A.	N.A.
CABLE	Cable connected to junction box for HZ electrical contacts	First 1500 mm: per 1000 mm extra:			
MSR-010	Protection relay for single acting contacts (supply 230Vac)				
MSR-020	Protection relay for double acting contacts (supply 230Vac)				
WE 77/Ex-1	Protection relay for single inductive contacts Eex ia ib IIC 230Vac				
WE 77/Ex-2	Protection relay for double inductive contacts Eex ia ib IIC 230 Vac				

EXPLANATION OF CONTACT FUNCTIONS (for clockwise rotation)

English						
STIKO contact	Magnetic	Inductive	Electrical	Translation:		
1				NO	HIGH	Normally open; makes on rise
2				NC	LOW	Normally closed, breaks on rise
Deutsch						
STIKO contact	Magnetspring	Induktiv	Elektronik	Übersetzung:		
1				NO		Schließer
2				NC		Öffner
Français						
STIKO contact	Magnétique	Inductive	Électronique	Traduction:		
1				FM	MAXI	Fermeture à pression croissante
2				OM	MINI	Ouverture à pression croissante
Italiano						
STIKO contact	Magnetico	Induttivo	Elettrico	Traduzione		
1				NA		Normalmente aperto
2				NC		Normalmente chiuso
Español						
STIKO contact	Magnético	Inductivo	Eléctrico	Traducción		
1				NA		Normalmente abierto
2				NC		Normalmente cerrado

FABRICATED STAINLESS STEEL POCKETS

WELDED POCKETS (THREADED), P_{max} = 25 bar

STANDARD MODEL:

MATERIAL

: AISI304/1.4301, AISI321/1.4541

CONNECTION FOR TYPE 02; 04

: 1/2"BSP, type B, see page I-10 or II-10

CONNECTION FOR TYPE 03; 05

: 1/2"BSP, type A04 or CSx see page I-11 or II-10 and II-11

OPTIONS

: other materials or stem diameters
others threads



Type 02

THREADED TYPE		STANDARD DIMENSIONS (in mm)									COSTS	per 100 mm extra
02	03	bulb dia.	L pocket	d1	d2	d3	T	D	HEX-1	HEX-2		
 For type B $L1 = L\text{-pocket} + 20 \text{ mm}$	 For type CS1, 2, 3 $L1 = L\text{-pocket} + 10 \text{ mm}$ For type A04 $L1 = L\text{-pocket}$	10	100	1/2"BSP	1/2"BSP	10.5	14	12.5	22	27		
		10	100	1/2"BSP	3/4"BSP	10.5	16	12.5	27	32		
		10	100	1/2"BSP	1"BSP	10.5	18	12.5	36	36		
		10	100	1/2"BSP	1/2"NPT	10.5	20	12.5	22	27		
		10	100	1/2"BSP	3/4"NPT	10.5	20	12.5	27	32		
		10	100	1/2"BSP	1"NPT	10.5	25	12.5	36	36		
		10	100	1/2"BSP	M20x1.5	10.5	14	12.5	22	27		
		10	100	1/2"BSP	M24x1.5	10.5	14	12.5	27	27		
		12,5	63	1/2"BSP	1/2"BSP	13	14	15	22	27		
		12,5	63	1/2"BSP	3/4"BSP	13	16	15	27	32		
		12,5	63	1/2"BSP	1"BSP	13	18	15	36	36		
		12,5	63	1/2"BSP	1/2"NPT	13	20	15	22	27		
		12,5	63	1/2"BSP	3/4"NPT	13	20	15	27	32		
		12,5	63	1/2"BSP	1"NPT	13	25	15	36	36		
		12,5	63	1/2"BSP	M24x1.5	13	14	15	27	27		

WELDED TYPE		STANDARD DIMENSIONS (in mm)									COSTS	per 100 mm extra
04	05	bulb dia.	L pocket	d1	d2	d3	T	D	HEX-1	HEX-2		
 $L1 = L\text{-pocket} + 20 \text{ mm}$	 For type CS1, 2, 3 $L1 = L\text{-pocket} + 10 \text{ mm}$ For type A04 $L1 = L\text{-pocket}$	10	100	1/2"BSP	18	10.5	14	12.5	22	27		
		10	100	1/2"BSP	23	10.5	16	12.5	27	32		
		10	100	1/2"BSP	28	10.5	18	12.5	36	36		
		12.5	63	1/2"BSP	18	13	14	15	22	27		
		12.5	63	1/2"BSP	23	13	16	15	27	32		
		12.5	63	1/2"BSP	28	13	18	15	36	36		

POCKET OPTIONS		EXTRA COSTS
POCKET MATERIAL AISI316/1.4401 (T _{max} = 400°C)		Fixed surplus
		Variable surplus per 100mm length

OTHER DESIGNS, BULB DIAMETERS AND MATERIALS ON DEMAND
MATERIAL CERTIFICATE ACC TO EN 10204 3.1 see page I-13 or II-13

STAINLESS STEEL THERMOWELL (BAR STOCK)

*All styles are available; in SS316L, MONEL, DUPLEX, Titanium
Also available with PTFE / HALAR / PFA coating*



Please contact us for the possibilities

THERMOMETERS TYPE TXR WITH CONTACT

TYPE	DRAWING	DIMENSIONS mm																										
A TXRxxxXA Hirschman cable junction box		<table> <tr> <th rowspan="2">DIM.</th><th colspan="2">CASE DIAMETER</th></tr> <tr> <th>100</th><th>160</th></tr> <tr> <td>A</td><td>101</td><td>161</td></tr> <tr> <td>B</td><td>104</td><td>108</td></tr> <tr> <td>K</td><td>92</td><td>122</td></tr> </table>	DIM.	CASE DIAMETER		100	160	A	101	161	B	104	108	K	92	122												
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T TXRxxxXT Hirschman cable junction box		<table> <tr> <th rowspan="2">DIM.</th><th colspan="2">CASE DIAMETER</th></tr> <tr> <th>100</th><th>160</th></tr> <tr> <td>A</td><td>101</td><td>161</td></tr> <tr> <td>B</td><td>104</td><td>108</td></tr> <tr> <td>K</td><td>92</td><td>122</td></tr> </table>	DIM.	CASE DIAMETER		100	160	A	101	161	B	104	108	K	92	122												
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THERMOMETERS TYPE TXR+K360 WITH CONTACT

TYPE	DRAWING	DIMENSIONS mm														
A TXRxxxXA + knee joint 180° Hirschman cable junction box		<table> <tr> <th rowspan="2">DIM.</th><th colspan="2">CASE DIAMETER</th></tr> <tr> <th>100</th><th>160</th></tr> <tr> <td>A</td><td>101</td><td>161</td></tr> <tr> <td>B</td><td>104</td><td>108</td></tr> <tr> <td>K</td><td>92</td><td>122</td></tr> </table>	DIM.	CASE DIAMETER		100	160	A	101	161	B	104	108	K	92	122
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THERMOMETERS TYPE TXC WITH CONTACT

TYPE	DRAWING	DIMENSIONS mm																																
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THERMOMETERS TYPE TPC WITH CONTACT

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S TPCxxxXS Hirschman cable junction box		<table><tr><th rowspan="2">DIM.</th><th colspan="2">CASE DIMENSIONS</th></tr><tr><th>96x96</th><th>144x144</th></tr><tr><td>A</td><td>90x90</td><td>138x138</td></tr><tr><td>B</td><td>99</td><td>136</td></tr><tr><td>C1</td><td>25</td><td>0</td></tr><tr><td>C2</td><td>11</td><td>0</td></tr><tr><td>D</td><td>96x96</td><td>144x144</td></tr><tr><td>K1</td><td>142</td><td>180</td></tr><tr><td>K2</td><td>18</td><td>16</td></tr><tr><td>K3</td><td>27</td><td>41</td></tr></table>	DIM.	CASE DIMENSIONS		96x96	144x144	A	90x90	138x138	B	99	136	C1	25	0	C2	11	0	D	96x96	144x144	K1	142	180	K2	18	16	K3	27	41
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