

## ■ GENERAL INFORMATION

- This specification document is for **gas-filled thermometers** manufactured by:

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

- STIKO® is a manufacturer of mechanical instruments in the area of temperature, pressure and calibration. We offer thermometers, pressure gauges, pressure and/or temperature recorders, as well as calibration equipment. We develop and manufacture all our instruments to ISO-9001-2008 standards.
- In order to construct your instrument please proceed as follows:

### EXAMPLE 1

		PAGE:
1 Instrument type (head)	TXR100XA	5
2 Glycerine filling	X→L: TXR100LA	5
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### EXAMPLE 2

		PAGE:
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5 Connection	½"BSP, Type CS3, AISI304	25-27
6 Electrical device	--	
7 Any options	drag pointer	32

- Abbreviations used in this document: O.D. = ON DEMAND; N.A. = NOT AVAILABLE
- Dimensions used in this document are in: millimeters (mm).
- Your order will be confirmed by e-mail.
- Other variations which are not mentioned in this document are on demand (if possible).

## ■ 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 R V A - D K D (Dutch - German National Standards). The results are recorded in a certificate which include calibration date, instrument serial number, type number and the R V A or D K D standard used.
- Material Certificates according to EN 10204 3.1 for all STIKO® manufactured products are also available. These certificates indicate specifications of the materials used.

## ■ WARRANTY AND REPAIR SERVICE

- An efficient repair and sparepart service is available at competitive rates for STIKO® products and 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. Within two days after receiving the instruments, you will get a full detailed offer for the repair job.
- **A warranty period of 24 months is applicable for all instruments sold as of january 1st, 2018**

# RIGID STEM DIAL THERMOMETERS TYPE TXR

TYPE	DRAWING	DIMENSIONS mm																																															
<p><b>A</b></p> <p>TXRxxxXA</p>		<table border="1"> <thead> <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> </thead> <tbody> <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> </tbody> </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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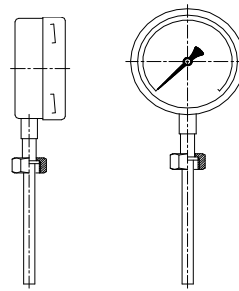
# RIGID STEM DIAL THERMOMETERS

## Type TXR, with stainless steel case according to EN 13190

### STANDARD MODEL:

<b>CASE</b>	: bayonet lock, AISI304/1.4301, IP-65
<b>STEM - BULB</b>	: AISI321/1.4541, see page 8 - 11
<b>WINDOW</b>	: mineral glass 4 mm
<b>DIAL</b>	: aluminium, black figures on white
<b>POINTER</b>	: aluminium, black
<b>CONNECTION</b>	: see page 8 - 11
<b>RANGES</b>	: from -200 upto +800°C, see page 26-28

### EXAMPLE:



TXR100XA

<b>OVERLOAD</b>	: up to 30% F.S. (but max. 800°C)
<b>ACCURACY</b>	: ±1% F.S. / class 1
<b>MOVEMENT</b>	: brass
<b>OPTIONS</b>	: see page 30
<b>CONTACTS</b>	: see page 31-34
<b>PT-100</b>	: see page 39
<b>TRANSMITTER</b>	: see page 39

TYPE	MODEL	CASE DIAMETER (Ø in mm)				
		63	80	100	160	250
<b>A</b> 1130		TXR063XA	TXR080XA	TXR100XA	TXR160XA	TXR250XA
<b>E</b> 1131		TXR063XE	TXR080XE	TXR100XE	TXR160XE	TXR250XE
<b>T</b> 1133-x (x=A,B,C or D)		TXR063XT-x	TXR080XT-x	TXR100XT-x	TXR160XT-x	TXR250XT-x
<b>F</b> 1138		TXR063XF	TXR080XF	TXR100XF	TXR160XF	TXR250XF
<b>OPTION</b>		<b>EXTRA COSTS</b>				
<b>Lx</b>	<b>LIQUID FILLED CASE:</b> GLYCERINE (in combination with electrical device: Ondina oil, (see page 43))	TXR063Lx	TXR080Lx	TXR100Lx	TXR160Lx	TXR250Lx

## BULB LENGTH AND DIAMETER FOR TYPE TXR

TYPE	STANDARD MODEL	bulb diameter Ø d	EXTRA COSTS per 100 mm STAINLESS STEEL AISI321/1.4541
<b>A</b> plain stem		9, 10, 12	per 100 mm
		6, 6.35, 8, 11, 12.5, 13, 14	per 100 mm
		7, 15, 16, 17, 18, 20	per 100 mm
FOR SHORTEST SENSITIVE PART "Ls": SEE PAGE 31		FOR OPTIONS ON BULB LENGTH AND DIAMETER: SEE PAGE 11	

## CONNECTIONS FOR RIGID STEM MODELS TYPE TXR

TYPE	MODEL FOR OPTIONS ON CONNECTIONS: SEE PAGE 11	DIMENSIONS				EXTRA COSTS STAINLESS STEEL AISI304/1.4301	
		connection	HEX-1	HEX-2	T		d max
<b>B</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	
		M24x1.5	32	-	9	Ø 18	
<b>BL</b> coupling nut (long model)		1/2"BSP	27	-	14	Ø 15	
		3/4"BSP	32	-	16	Ø 20	
		1"BSP	41	-	18	Ø 20	
<b>C</b> fixed 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	
		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			
<b>CL</b> fixed nipple (long model)		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

# CONNECTIONS FOR RIGID STEM MODELS TYPE TXR

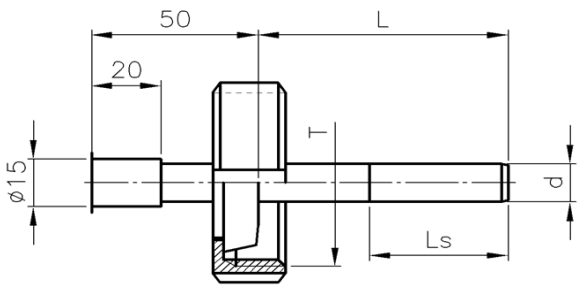
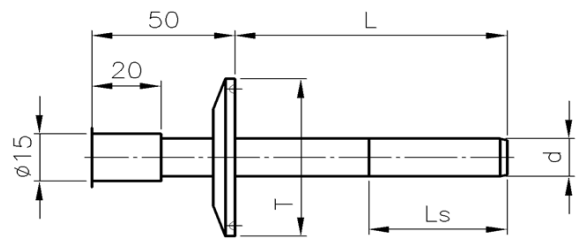
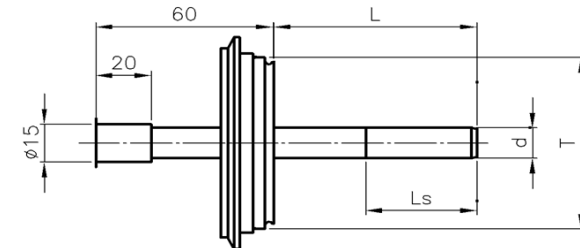
TYPE	MODEL FOR OPTIONS ON CONNECTIONS: SEE PAGE 11	DIMENSIONS				EXTRA COSTS	
		connection	HEX-1	HEX-2	T	d max	STAINLESS STEEL AISI304/1.4301
<b>A 04</b> turning nipple (standard model)		1/4" BSP	17	-	12	Ø 8	
		3/8" BSP	22	-	12	Ø 11	
		1/2" BSP	22	-	14	Ø 15	
		3/4" BSP	30	-	16	Ø 20	
		1" BSP	36	-	18	Ø 20	
		M18x1.5	22	-	12	Ø 12	
		M20x1.5	22	-	14	Ø 14	
		M24x1.5	27	-	14	Ø 18	
<b>AL04</b> 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>B 01</b> coupling nut + double nipple	<p>THREAD BETWEEN HEX-1 and HEX-2: 1/2" BSP</p>	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	27	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	
<b>CS 3</b> adjustable connection, sliding on stem	<p>THREAD BETWEEN HEX-1 and HEX-2: 1/2" BSP</p>	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	27	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	
	<b>FOR CONNECTION TYPE CS3</b>		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

# CONNECTIONS FOR RIGID STEM MODELS TYPE TXR

TYPE	MODEL	DIMENSIONS			EXTRA COSTS
		L	d-1	d-2	STAINLESS STEEL
					AISI321/1.4541
<b>S</b> surface bulb: fixed type		-	-	-	
<b>SA</b> surface bulb: adjustable type		-	-	-	
<b>HA</b> helical air bulb		-	-	-	
<b>HP</b> with handle and point		1000	10 12	22	
		1000	14 16	22	
		1000	18	22	

## SANITARY CONNECTIONS FOR RIGID STEM MODELS TYPE TXR

TYPE	MODEL WITH POLISHED BULB	DIMENSIONS		EXTRA COSTS
		connection	T	STAINLESS STEEL AISI316/1.4401
<b>CM</b>  <i>acc. to DIN 11851</i>	 <p style="text-align: center;">(also available in SMS, RJT, IDF etc.)</p>	1" - DN25	rd 52x1/6	
		1 1/2" - DN40	rd 65x1/6	
		2" - DN50	rd 78x1/6	
		3" - DN80	rd 104x1/6	
<b>TC</b>  <i>TRI CLAMP acc. to ISO 2852</i>		1"	Ø 50.5	
		1 1/2"	Ø 50.5	
		2"	Ø 64	
<b>TV</b>  <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				

### OPTIONS FOR BULB AND STEM

OPTION	EXTRA COSTS	PER 100 MM
		BULB AND STEM AISI316/1.4401
BULB AND STEM POLISHED (MECHANICAL)	for all diameters	
BULB AND STEM PTFE® LINING (max.250° C)	MAXIMUM 1000 mm (longer: ON DEMAND)	first 100 mm: O D
BULB AND STEM HALAR® COATED (max.120° C)		per 100 mm extra: O D

## TEMPERATURE RANGES for all types:

TEMPERATURE RANGES			EXTRA COSTS
(in °C)	SCALE DIVISION		CASE DIMENSIONS ( in mm)
	cl. 1	option cl. 0.6	ALL CASE DIMENSIONS
-200 ...+50	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 ...+15	0.5	0.2	x
-10 ...+30	1	0.2	
-10 ...+50	1	0.5	
-10 ...+110	2	1	
-10 ...+150	5	1	
0 ...+25	0.5	0.2	x
0 ...+40	1	0.2	
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	

x NOT AVAILABLE

• STANDARD / NO EXTRA PRICE

**ALMOST EVERY RANGE IS POSSIBLE! PRICES ON REQUEST**



## TEMPERATURE RANGES for TXR-DIESEL:

TEMPERATURE RANGES				
(in °C)	SCALE DIVISION	CASE DIMENSIONS ( in mm)		
	cl. 1	Ø 63	Ø 80	Ø 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			

## OPTIONS ON TEMPERATURE RANGES

OPTIONS	EXTRA COSTS											
<b>RANGE IN °F or °K</b>												
Standard ranges	•											
Non-standard ranges	•											
<b>DUAL SCALE IN °C/°F</b>												
Standard ranges	•											
Non-standard ranges	O D											
<b>OTHER OPTIONS</b>												
Non-standard scale division												
<b>ACCURACY</b>												
±1% F.S. / class 1	•	•	•	•	•	•	•	•	•	•	•	•
±0.6 / 0.5% F.S. (class 0.6 or 0.5) <i>(Without external adjustment)</i>	x	x					x	x				
Mirrorscale (for anti-parallax)	x	x	x				x	x	x	x	x	x

x NOT AVAILABLE

• STANDARD / NO EXTRA PRI

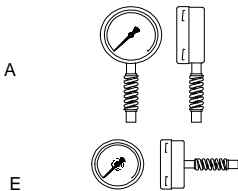
## MARKING FOR TEMPERATURE GAUGES

OPTION	EXTRA PRICE
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 acc. to EN 10204 3.1	
ATEX certification, including ATEX on the dial; only possible with STIKO logo. For gauges without contact: <b>INSTRUMENTS WITH ATEX CERTIFICATION MUST ALSO HAVE SAFETY GLASS AND A BLOW - OUT</b>	<b>PER ORDER</b>
ATEX certification, including ATEX on the dial; only possible with STIKO logo. For gauges with inductive contact: <b>INSTRUMENTS WITH ATEX CERTIFICATION MUST ALSO HAVE SAFETY GLASS AND A BLOW - OUT</b>	<b>PER INSTRUMENT</b>

## OPTIONS FOR THERMOMETERS

OPTION		CASE DIAMETER (Ø in mm)				
		63	80	100	160	250
<b>SILICONE OIL FILLING</b>	AGAINST HEAVY VIBRATIONS					
<b>CASE MATERIAL AISI316L/1.4404</b> <small>(i.o. AISI304/1.4301)</small>	CASE + BAYONETRING		N.A.		*	N.A.
	FRONT -OR BACKFLANGE	N.A.	N.A.		9,00*	N.A.
<b>ANTI-VIBRATIONSRING</b> <small>for model: TXR, Type A and E SEE ALSO TXR-DIESEL</small>	 <p>A</p> <p>E</p>					
<b>+AVS</b>		+AVS	+AVS	+AVS	+AVS	+AVS
<b>PLEXIGLASS</b>	PMMA					
<b>SAFETY GLASS</b>	REQUIRED FOR ATEX					
<b>BLOW OUT</b>						
<b>DRAG POINTER</b> <small>RESETABLE WITH KEY</small>	Single Drag Pointer					
	Double Drag Pointer	N.A.	N.A.			
<b>DRAG POINTER</b> <small>IN COMBINATION WITH CONTACT RESETABLE WITH KEY</small>	ONLY FOR "HZ" CONTACTS	N.A.	N.A.			N.A.
<b>OVERLOAD RESISTANCE EXECUTION</b>	OVERLOAD POSSIBLE UPTO 100% DEPENDING ON RANGE MAXIMUM +800°C	OD	OD	OD	OD	OD
<b>STAINLESS STEEL MOVEMENT</b>	AISI304/1.4301					
<b>MICROMETER POINTER</b>	ADJUSTABLE POINTER					

\* 160mm SS316L cases not available with electrical contacts