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TCT

COMPACT, RUGGED, PRECISE

Temperature sensors

SICK
Sensor Intelligence.

COMPACT, RUGGED, PRECISE



Product description

The TCT is a universal Pt100 resistance thermometer in a compact stainless steel housing for temperature measurement in liquids and gases. Available with a variety of process connections and insertion lengths, it can be adapted to specific applications. The TCT is available with or without compression fittings and with various connection threads,

for example. Designs with protective pipe can also be supplied. The Pt100 element is located inside the tip of the probe. Wetted parts are made from high-grade stainless steel 1.4571. The TCT is available with Pt100 output or an integrated measuring transducer with 4 mA ... 20 mA output signal.

At a glance

- Pt100 element, accuracy class A according to IEC 60751
- Measuring ranges -50 °C ... +150 °C and -50 °C ... +250 °C
- Wetted parts made from corrosion resistant stainless steel 1.4571
- Various mechanical adaptations and insertion lengths, also available with thermowell
- Pt100 (4-wire) or 4 mA ... 20 mA (2-wire)
- Circular connector M12 x 1 (IP 67) or L-connector according to DIN EN 175301-803 A (IP 65)

Your benefits

- Reliable operation through rugged design and high-quality materials
- Very good long-term stability, accuracy and linearity
- Quick and safe installation
- Convenient system integration through compact dimensions and industry-standard output signals
- Optimal solutions for individual requirements due to versatile configurability



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→ www.sick.com/TCT

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



Detailed technical data

Features

Measuring ranges	-50 °C ... +150 °C -50 °C ... +250 °C
Sensor element	Pt100
Signal outputs and maximum ohmic load R_A	Pt100, 4-wire 4 mA ... 20 mA, 2-wire ($R_A \leq (L^+ - 9 \text{ V}) / 0.023 \text{ A [Ohm]}$)

Performance

Accuracy of sensor element	Class A according to IEC 60751
Accuracy of the opt. measuring transducer	$\leq \pm 1,0 \%$ of span
Linearity of optional transmitter	$\leq 0.1 \%$ of span
Response time ¹⁾	$T_{50}: \leq 2.8 \text{ s}$ $T_{90}: \leq 9,1 \text{ s}$

¹⁾ Depending on sensor configuration, according to IEC 60751.

Mechanics/electronics

Process connection	Without process connection Thread G ¼ B, thread G ½ B Thread ¼" NPT, thread ½" NPT Compression fitting G ¼ B, CrNi stainless steel ferrule Compression fitting G ½ B, stainless steel ferrule Compression fitting ¼" NPT, CrNi stainless steel ferrule Compression fitting ½" NPT, CrNi stainless steel ferrule Compression fitting G ¼ B, PTFE ferrule Compression fitting G ½ B, PTFE ferrule Compression fitting ¼" NPT, PTFE ferrule Compression fitting ½" NPT, PTFE ferrule Thermowell G ¼ B Thermowell G ½ B Thermowell ¼" NPT Thermowell ½" NPT Thermowell weld-in diameter 18 mm
Insertion lengths/diameter of probe ¹⁾	25 mm / 3 mm 50 mm / 3 mm 100 mm / 6 mm 150 mm / 6 mm 250 mm / 6 mm 350 mm / 6 mm
Wetted parts	Stainless steel 1.4571
Pressure resistance	Max. 40 bar with compression fitting with stainless steel ferrule included in scope of delivery Max. 100 bar with supplied compression fitting with stainless steel ferrule Max. 120 bar with threaded process connection Max. 220 bar with variants with thermowell ²⁾
Housing material	Stainless steel 1.4571
Electrical connection	Round connector M12 x 1, 4-pin, IP 67L-connector (DIN EN 175301-803 A), 4 pin, IP 65
Measuring current	0.3 mA ... 1 mA, (for variant with output signal Pt100)
Supply voltage	10 V DC ... 36 V DC for variant with transmitter 4 mA ... 20 mA
Maximum current consumption	$\leq 30 \text{ mA}$ for variant with transmitter 4 mA ... 20 mA
Electrical safety	Protection class: III dielectric Strength: 500 V AC Reverse polarity protection of variant with transmitter 4 mA ... 20 mA: L ⁺ towards M

¹⁾ For measuring range -50 °C ... +250 °C insertion lengths from 50mm required.

²⁾ Pressure resistance at room temperature.

RoHS certificate	✓
Weight	Ca. 145 g (depending on configuration)
Initialization time	< 10 ms

¹⁾ For measuring range -50 °C ... +250 °C insertion lengths from 50mm required.

²⁾ Pressure resistance at room temperature.

Ambient data

Ambient temperature	-40 °C ... +85 °C for variant with transmitter 4 mA ... 20 mA -40 °C ... +85 °C for variant with output signal Pt100 and L-connector (DIN EN 175301-803 A) -40 °C ... +125 °C for variant with output signal Pt100 and circular plug M12 x 1
Storage and transport temperature	-40 °C ... +85 °C
Shock resistance according to IEC 60751	500 g
Vibration resistance according to IEC 60751	3 g

Type code

Output signal	
P	Output signal Pt100, 4-wire
A	Transmitter 4 mA ... 20 mA, 2-wire
Measuring range	
A	-50 °C ... +150 °C
B	-50 °C ... +250 °C
Process connection	
ZZ	Without process connection
G1	Thread G ¼ B
GE	Thread G ½ B
N4	Thread ¼" NPT
N2	Thread ½" NPT
S1	Compression fitting G ¼ B, CrNi stainless steel ferrule
SE	Compression fitting G ½ B, CrNi stainless steel ferrule
S4	Compression fitting ¼" NPT, CrNi stainless steel ferrule
S2	Compression fitting ½" NPT, CrNi stainless steel ferrule
P1	Compression fitting G ¼ B, PTFE ferrule
PE	Compression fitting G ½ B, PTFE ferrule
P4	Compression fitting ¼" NPT, PTFE ferrule
P2	Compression fitting ½" NPT, PTFE ferrule
T1	Thermowell, thread G ¼ B
TE	Thermowell, thread G ½ B
T4	Thermowell, thread ¼" NPT
T2	Thermowell, thread ½" NPT
TW	Thermowell, weld-in, diameter 18 mm
Insertion length / diameter	
0253	25 mm / 3 mm
0503	50 mm / 3 mm
1006	100 mm / 6 mm
1506	150 mm / 6 mm
2506	250 mm / 6 mm
3506	350 mm / 6 mm
Electrical connection / enclosure rating	
M	M12 x 1, 4-pin, IP 67
L	L-connector, DIN EN 175301-803 A, IP 65
Design specifics	
Z	Without design specifics
G	Free from oil and grease

TCT -	1								
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Not all variations of the type code can be combined!

Ordering information

The part numbers below show a selection of our common configurations and represent only a portion of the product portfolio. The type code on page 4 indicates all possible configurations that can be ordered.

- **Electrical connection/enclosure rating:** round connector M12 x 1, 4-pin, IP 67

Measuring range	Output signal	Process connection	Insertion length/ diameter of probe	Insertion length/ diameter of probe	Type	Part no.
-50 °C ... +150 °C	Pt100, 4-wire	Without process connection	25 mm / 3 mm	25 mm	TCT-1PAZZ0253MZ	6043158
			50 mm / 3 mm	50 mm	TCT-1PAZZ0503MZ	6043159
			100 mm / 6 mm	100 mm	TCT-1PAZZ1006MZ	6043160
			150 mm / 6 mm	150 mm	TCT-1PAZZ1506MZ	6043161
			250 mm / 6 mm	250 mm	TCT-1PAZZ2506MZ	6043162
			350 mm / 6 mm	350 mm	TCT-1PAZZ3506MZ	6043163
		Thread G ¼ B	25 mm / 3 mm	25 mm	TCT-1PAG10253MZ	6043164
			50 mm / 3 mm	50 mm	TCT-1PAG10503MZ	6043165
			100 mm / 6 mm	100 mm	TCT-1PAG11006MZ	6043166
			150 mm / 6 mm	150 mm	TCT-1PAG11506MZ	6043167
			250 mm / 6 mm	250 mm	TCT-1PAG12506MZ	6043168
			350 mm / 6 mm	350 mm	TCT-1PAG13506MZ	6043169
		Thread G ½ B	25 mm / 3 mm	25 mm	TCT-1PAGE0253MZ	6043170
			50 mm / 3 mm	50 mm	TCT-1PAGE0503MZ	6043172
		Thread G ½ B	100 mm / 6 mm	100 mm	TCT-1PAGE1006MZ	6043173
			150 mm / 6 mm	150 mm	TCT-1PAGE1506MZ	6043174
			250 mm / 6 mm	250 mm	TCT-1PAGE2506MZ	6043175
			350 mm / 6 mm	350 mm	TCT-1PAGE3506MZ	6043176
		Thread ¼" NPT	350 mm / 6 mm	350 mm	TCT-1PAN43506MZ	6043242
		Thread ½" NPT	350 mm / 6 mm	350 mm	TCT-1PAN23506MZ	6043243
				250 mm	TCT-1PAN22506MZ	6060353
		Compression fitting G ¼ B, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1PAS10253MZ	6043177
			50 mm / 3 mm	50 mm	TCT-1PAS10503MZ	6043178
			100 mm / 6 mm	100 mm	TCT-1PAS11006MZ	6043179
			150 mm / 6 mm	150 mm	TCT-1PAS11506MZ	6043180
		Compression fitting G ¼ B, CrNi stainless steel ferrule	250 mm / 6 mm	250 mm	TCT-1PAS12506MZ	6043181
			350 mm / 6 mm	350 mm	TCT-1PAS13506MZ	6043183
		Compression fitting G ½ B, stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1PASE0253MZ	6043185
			50 mm / 3 mm	50 mm	TCT-1PASE0503MZ	6043186
			100 mm / 6 mm	100 mm	TCT-1PASE1006MZ	6043187
			150 mm / 6 mm	150 mm	TCT-1PASE1506MZ	6043188
			250 mm / 6 mm	250 mm	TCT-1PASE2506MZ	6043189
			350 mm / 6 mm	350 mm	TCT-1PASE3506MZ	6043190
		Compression fitting ¼" NPT, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1PAS40253MZ	6043191
		Compression fitting ½" NPT, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1PAS20253MZ	6043192
		Compression fitting G ¼ B, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1PAP10253MZ	6043244

Measuring range	Output signal	Process connection	Insertion length/ diameter of probe	Insertion length/ diameter of probe	Type	Part no.
-50 °C ... +250 °C	Pt100, 4-wire	Compression fitting G ½ B, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1PAPE0253MZ	6043245
		Compression fitting ¼" NPT, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1PAP40253MZ	6043246
		Compression fitting ½" NPT, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1PAP20253MZ	6043247
		Thermowell G ¼ B	100 mm / 6 mm	100 mm	TCT-1PAT11006MZ	6043193
			150 mm / 6 mm	150 mm	TCT-1PAT11506MZ	6043194
			250 mm / 6 mm	250 mm	TCT-1PAT12506MZ	6043195
			350 mm / 6 mm	350 mm	TCT-1PAT13506MZ	6043196
		Thermowell G ½ B	100 mm / 6 mm	100 mm	TCT-1PATE1006MZ	6043197
			150 mm / 6 mm	150 mm	TCT-1PATE1506MZ	6043198
			250 mm / 6 mm	250 mm	TCT-1PATE2506MZ	6043199
			350 mm / 6 mm	350 mm	TCT-1PATE3506MZ	6043200
		Thermowell ¼" NPT	100 mm / 6 mm	100 mm	TCT-1PAT41006MZ	6043248
		Thermowell ½" NPT	100 mm / 6 mm	100 mm	TCT-1PAT21006MZ	6043249
		Thermowell weld-in diameter 18 mm	100 mm / 6 mm	100 mm	TCT-1PATW1006MZ	6043250
		Without process connection	100 mm / 6 mm	100 mm	TCT-1PBZZ1006MZ	6043299
		Thread G ¼ B	100 mm / 6 mm	100 mm	TCT-1PBG11006MZ	6043300
		Thread G ½ B	100 mm / 6 mm	100 mm	TCT-1PBGE1006MZ	6043301
		Thread ¼" NPT	100 mm / 6 mm	100 mm	TCT-1PBN41006MZ	6043302
		Thread ½" NPT	100 mm / 6 mm	100 mm	TCT-1PBN21006MZ	6043303
		Compression fitting G ¼ B, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1PBS11006MZ	6043304
		Compression fitting G ½ B, stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1PBSE1006MZ	6043305
		Compression fitting ¼" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1PBS41006MZ	6043306
		Compression fitting ½" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1PBS21006MZ	6043307
		Thermowell G ¼ B	100 mm / 6 mm	100 mm	TCT-1PBT11006MZ	6043308
		Thermowell G ½ B	100 mm / 6 mm	100 mm	TCT-1PBTE1006MZ	6043309
		Thermowell ¼" NPT	100 mm / 6 mm	100 mm	TCT-1PBT41006MZ	6043310
		Thermowell ½" NPT	100 mm / 6 mm	100 mm	TCT-1PBT21006MZ	6043311
		Thermowell weld-in diameter 18 mm	100 mm / 6 mm	100 mm	TCT-1PBTW1006MZ	6043312
	4 mA ... 20 mA, 2-wire ($R_A \leq (L^* - 9 \text{ V}) / 0.023 \text{ A}$ [Ohm])	Without process connection	100 mm / 6 mm	100 mm	TCT-1ABZZ1006MZ	6043313
		Thread G ¼ B	100 mm / 6 mm	100 mm	TCT-1ABG11006MZ	6043314

Measuring range	Output signal	Process connection	Insertion length/ diameter of probe	Insertion length/ diameter of probe	Type	Part no.
-50 °C ... +250 °C	4 mA ... 20 mA, 2-wire ($R_A \leq (L^* - 9 \text{ V}) / 0.023 \text{ A}$ [Ohm])	Thread G ½ B	100 mm / 6 mm	100 mm	TCT-1ABGE1006MZ	6043315
				250 mm	TCT-1ABGE2506MZ	6060637
		Thread ¼" NPT	100 mm / 6 mm	100 mm	TCT-1ABN41006MZ	6043316
		Thread ½" NPT	100 mm / 6 mm	100 mm	TCT-1ABN21006MZ	6043317
		Compression fitting G ¼ B, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1ABS11006MZ	6043318
		Compression fitting G ½ B, stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1ABSE1006MZ	6043319
		Compression fitting ¼" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1ABS41006MZ	6043320
		Compression fitting ½" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1ABS21006MZ	6043321
		Thermowell G ¼ B	100 mm / 6 mm	100 mm	TCT-1ABT11006MZ	6043322
				250 mm	TCT-1ABT12506MZ	6060222
		Thermowell G ½ B	100 mm / 6 mm	100 mm	TCT-1ABTE1006MZ	6043323
		Thermowell ¼" NPT	100 mm / 6 mm	100 mm	TCT-1ABT41006MZ	6043324
		Thermowell ½" NPT	100 mm / 6 mm	100 mm	TCT-1ABT21006MZ	6043325
		Thermowell weld-in diameter 18 mm	100 mm / 6 mm	100 mm	TCT-1ABTW1006MZ	6043326
-50 °C ... +150 °C		Without process connection	25 mm / 3 mm	25 mm	TCT-1AAZZ0253MZ	6043201
			50 mm / 3 mm	50 mm	TCT-1AAZZ0503MZ	6043202
			100 mm / 6 mm	100 mm	TCT-1AAZZ1006MZ	6043203
			150 mm / 6 mm	150 mm	TCT-1AAZZ1506MZ	6043204
			250 mm / 6 mm	250 mm	TCT-1AAZZ2506MZ	6043205
			350 mm / 6 mm	350 mm	TCT-1AAZZ3506MZ	6043206
		Thread G ¼ B	25 mm / 3 mm	25 mm	TCT-1AAG10253MZ	6043210
			50 mm / 3 mm	50 mm	TCT-1AAG10503MZ	6043211
			100 mm / 6 mm	100 mm	TCT-1AAG11006MZ	6043212
			150 mm / 6 mm	150 mm	TCT-1AAG11506MZ	6043213
			250 mm / 6 mm	250 mm	TCT-1AAG12506MZ	6043214
			350 mm / 6 mm	350 mm	TCT-1AAG13506MZ	6043215
		Thread G ½ B	25 mm / 3 mm	25 mm	TCT-1AAGE0253MZ	6043216
			50 mm / 3 mm	50 mm	TCT-1AAGE0503MZ	6043217
			100 mm / 6 mm	100 mm	TCT-1AAGE1006MZ	6043218
			150 mm / 6 mm	150 mm	TCT-1AAGE1506MZ	6043219
			250 mm / 6 mm	250 mm	TCT-1AAGE2506MZ	6043220
			350 mm / 6 mm	350 mm	TCT-1AAGE3506MZ	6043221
		Thread ¼" NPT	100 mm / 6 mm	100 mm	TCT-1AAN41006MZ	6043251
		Thread ½" NPT	100 mm / 6 mm	100 mm	TCT-1AAN21006MZ	6043252
		Compression fitting G ¼ B, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1AAS10253MZ	6043222
			50 mm / 3 mm	50 mm	TCT-1AAS10503MZ	6043223
			100 mm / 6 mm	100 mm	TCT-1AAS11006MZ	6043224
			150 mm / 6 mm	150 mm	TCT-1AAS11506MZ	6043225

Measuring range	Output signal	Process connection	Insertion length/ diameter of probe	Insertion length/ diameter of probe	Type	Part no.
-50 °C ... +150 °C	4 mA ... 20 mA, 2-wire ($R_A \leq (L^+ - 9 \text{ V}) / 0.023 \text{ A}$ [Ohm])	Compression fitting G ¼ B, CrNi stainless steel ferrule	250 mm / 6 mm	250 mm	TCT-1AAS12506MZ	6043226
			350 mm / 6 mm	350 mm	TCT-1AAS13506MZ	6043227
		Compression fitting G ½ B, stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1AASE0253MZ	6043228
			50 mm / 3 mm	50 mm	TCT-1AASE0503MZ	6043229
			100 mm / 6 mm	100 mm	TCT-1AASE1006MZ	6043230
			150 mm / 6 mm	150 mm	TCT-1AASE1506MZ	6043231
			250 mm / 6 mm	250 mm	TCT-1AASE2506MZ	6043232
			350 mm / 6 mm	350 mm	TCT-1AASE3506MZ	6043233
		Compression fitting ¼" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1AAS41006MZ	6043253
		Compression fitting ½" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1AAS21006MZ	6043254
		Compression fitting G ¼ B, PTFE ferrule	100 mm / 6 mm	100 mm	TCT-1AAP11006MZ	6043255
		Compression fitting G ½ B, PTFE ferrule	100 mm / 6 mm	100 mm	TCT-1AAPE1006MZ	6043256
		Compression fitting ¼" NPT, PTFE ferrule	100 mm / 6 mm	100 mm	TCT-1AAP41006MZ	6043257
		Compression fitting ½" NPT, PTFE ferrule	100 mm / 6 mm	100 mm	TCT-1AAP21006MZ	6043258
		Thermowell G ¼ B	100 mm / 6 mm	100 mm	TCT-1AAT11006MZ	6043234
			150 mm / 6 mm	150 mm	TCT-1AAT11506MZ	6043235
			250 mm / 6 mm	250 mm	TCT-1AAT12506MZ	6043236
			350 mm / 6 mm	350 mm	TCT-1AAT13506MZ	6043237
		Thermowell G ½ B	100 mm / 6 mm	100 mm	TCT-1AATE1006MZ	6043238
			150 mm / 6 mm	150 mm	TCT-1AATE1506MZ	6043239
			250 mm / 6 mm	250 mm	TCT-1AATE2506MZ	6043240
			350 mm / 6 mm	350 mm	TCT-1AATE3506MZ	6043241
		Thermowell ¼" NPT	100 mm / 6 mm	100 mm	TCT-1AAT41006MZ	6043259
		Thermowell ½" NPT	100 mm / 6 mm	100 mm	TCT-1AAT21006MZ	6043260
		Thermowell weld-in diameter 18 mm	100 mm / 6 mm	100 mm	TCT-1AATW1006MZ	6043261

- **Electrical connection/enclosure rating:** L-connector (DIN EN 175301-803 A), 4 pin, IP 65

Measuring range	Output signal	Process connection	Insertion length/ diameter of probe	Insertion length/ diameter of probe	Type	Part no.
-50 °C ... +250 °C	Pt100, 4-wire	Without process connection	100 mm / 6 mm	100 mm	TCT-1PBZZ1006LZ	6043327
		Thread G ¼ B	100 mm / 6 mm	100 mm	TCT-1PBG11006LZ	6043328
		Thread G ½ B	100 mm / 6 mm	100 mm	TCT-1PBG1006LZ	6043329
		Thread ¼" NPT	100 mm / 6 mm	100 mm	TCT-1PBN41006LZ	6043330
		Thread ½" NPT	100 mm / 6 mm	100 mm	TCT-1PBN21006LZ	6043331
		Compression fitting G ¼ B, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1PBS11006LZ	6043332
		Compression fitting G ½ B, stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1PBSE1006LZ	6043333
		Compression fitting ¼" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1PBS41006LZ	6043334
		Compression fitting ½" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1PBS21006LZ	6043335
		Thermowell G ¼ B	100 mm / 6 mm	100 mm	TCT-1PBT11006LZ	6043336
		Thermowell G ½ B	100 mm / 6 mm	100 mm	TCT-1PBTE1006LZ	6043337
		Thermowell ¼" NPT	100 mm / 6 mm	100 mm	TCT-1PBT41006LZ	6043338
		Thermowell ½" NPT	100 mm / 6 mm	100 mm	TCT-1PBT21006LZ	6043339
		Thermowell weld-in diameter 18 mm	100 mm / 6 mm	100 mm	TCT-1PBTW1006LZ	6043340
-50 °C ... +150 °C		Without process connection	25 mm / 3 mm	25 mm	TCT-1PAZZ0253LZ	6043262
		Thread G ¼ B	25 mm / 3 mm	25 mm	TCT-1PAG10253LZ	6043263
		Thread G ½ B	25 mm / 3 mm	25 mm	TCT-1PAGE0253LZ	6043264
		Thread ¼" NPT	25 mm / 3 mm	25 mm	TCT-1PAN40253LZ	6043265
		Thread ½" NPT	25 mm / 3 mm	25 mm	TCT-1PAN20253LZ	6043266
		Compression fitting G ¼ B, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1PAS10253LZ	6043267
		Compression fitting G ½ B, stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1PASE0253LZ	6043268
		Compression fitting ¼" NPT, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1PAS40253LZ	6043269
		Compression fitting ½" NPT, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1PAS20253LZ	6043270
		Compression fitting G ¼ B, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1PAP10253LZ	6043271
		Compression fitting G ½ B, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1PAPE0253LZ	6043273

Measuring range	Output signal	Process connection	Insertion length/ diameter of probe	Insertion length/ diameter of probe	Type	Part no.
-50 °C ... +250 °C	4 mA ... 20 mA, 2-wire ($R_A \leq (L^+ - 9 V) / 0.023 A$ [Ohm])	Compression fitting ¼" NPT, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1PAP40253LZ	6043272
		Compression fitting ½" NPT, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1PAP20253LZ	6043274
		Thermowell G ¼ B	100 mm / 6 mm	100 mm	TCT-1PAT11006LZ	6043275
		Thermowell G ½ B	100 mm / 6 mm	100 mm	TCT-1PATE1006LZ	6043276
		Thermowell ¼" NPT	100 mm / 6 mm	100 mm	TCT-1PAT41006LZ	6043277
		Thermowell ½" NPT	100 mm / 6 mm	100 mm	TCT-1PAT21006LZ	6043278
		Thermowell weld-in diameter 18 mm	100 mm / 6 mm	100 mm	TCT-1PATW1006LZ	6043279
		Without process connection	100 mm / 6 mm	100 mm	TCT-1ABZZ1006LZ	6043341
		Thread G ¼ B	100 mm / 6 mm	100 mm	TCT-1ABG11006LZ	6043342
		Thread G ½ B	100 mm / 6 mm	100 mm	TCT-1ABGE1006LZ	6043343
		Thread ¼" NPT	100 mm / 6 mm	100 mm	TCT-1ABN41006LZ	6043344
		Thread ½" NPT	100 mm / 6 mm	100 mm	TCT-1ABN21006LZ	6043345
		Compression fitting G ¼ B, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1ABS11006LZ	6043346
		Compression fitting G ½ B, stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1ABSE1006LZ	6043347
		Compression fitting ¼" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1ABS41006LZ	6043348
		Compression fitting ½" NPT, CrNi stainless steel ferrule	100 mm / 6 mm	100 mm	TCT-1ABS21006LZ	6043349
		Thermowell G ¼ B	100 mm / 6 mm	100 mm	TCT-1ABT11006LZ	6043350
		Thermowell G ½ B	100 mm / 6 mm	100 mm	TCT-1ABTE1006LZ	6043351
		Thermowell ¼" NPT	100 mm / 6 mm	100 mm	TCT-1ABT41006LZ	6043352
		Thermowell ½" NPT	100 mm / 6 mm	100 mm	TCT-1ABT21006LZ	6043353
		Thermowell weld-in diameter 18 mm	100 mm / 6 mm	100 mm	TCT-1ABTW1006LZ	6043354
-50 °C ... +150 °C		Without process connection	25 mm / 3 mm	25 mm	TCT-1AAZZ0253LZ	6043280
		Thread G ¼ B	25 mm / 3 mm	25 mm	TCT-1AAG10253LZ	6043281
		Thread G ½ B	25 mm / 3 mm	25 mm	TCT-1AAGE0253LZ	6043282
		Thread ¼" NPT	25 mm / 3 mm	25 mm	TCT-1AAN40253LZ	6043283
		Thread ½" NPT	25 mm / 3 mm	25 mm	TCT-1AAN20253LZ	6043284
		Compression fitting G ¼ B, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1AAS10253LZ	6043285
		Compression fitting G ½ B, stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1AASE0253LZ	6043286

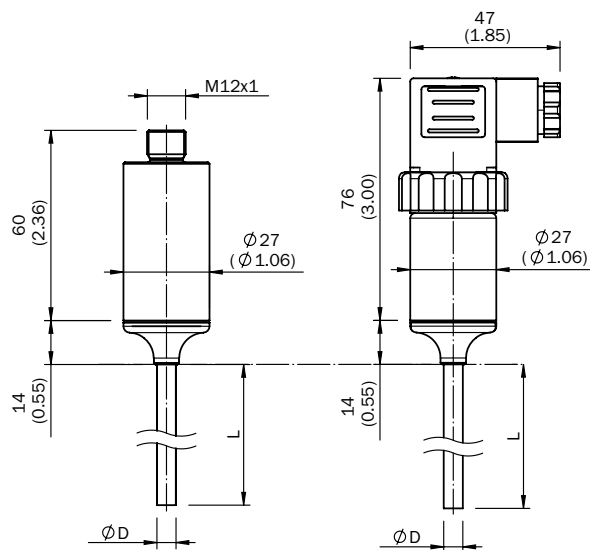
Measuring range	Output signal	Process connection	Insertion length/ diameter of probe	Insertion length/ diameter of probe	Type	Part no.
-50 °C ... +150 °C	4 mA ... 20 mA, 2-wire ($R_A \leq (L^* - 9 \text{ V}) / 0.023 \text{ A}$ [Ohm])	Compression fitting ¼" NPT, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1AAS40253LZ	6043287
		Compression fitting ½" NPT, CrNi stainless steel ferrule	25 mm / 3 mm	25 mm	TCT-1AAS20253LZ	6043288
		Compression fitting G ¼ B, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1AAP10253LZ	6043289
		Compression fitting G ½ B, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1AAPE0253LZ	6043290
		Compression fitting ¼" NPT, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1AAP40253LZ	6043291
		Compression fitting ½" NPT, PTFE ferrule	25 mm / 3 mm	25 mm	TCT-1AAP20253LZ	6043292
		Thermowell G ¼ B	100 mm / 6 mm	100 mm	TCT-1AAT11006LZ	6043293
		Thermowell G ½ B	100 mm / 6 mm	100 mm	TCT-1AATE1006LZ	6043294
		Thermowell ¼" NPT	100 mm / 6 mm	100 mm	TCT-1AAT41006LZ	6043295
		Thermowell ½" NPT	100 mm / 6 mm	100 mm	TCT-1AAT21006LZ	6043296
		Thermowell weld-in diameter 18 mm	100 mm / 6 mm	100 mm	TCT-1AATW1006LZ	6043298

Dimensional drawing (Dimensions in mm (inch))

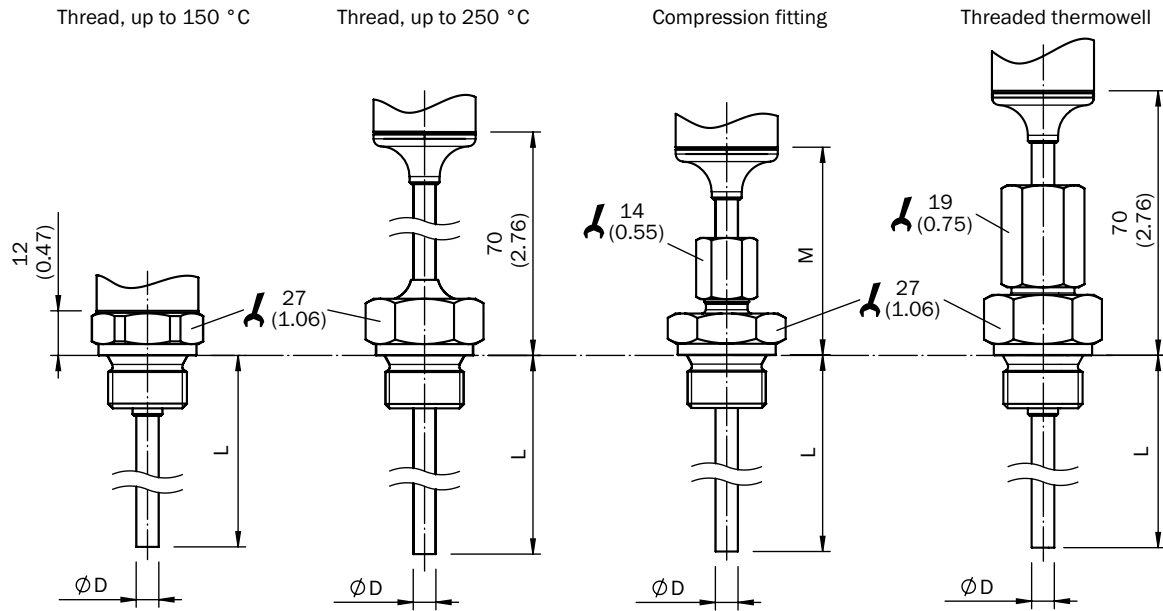
Housing, without process connection

With circular connector M12x1

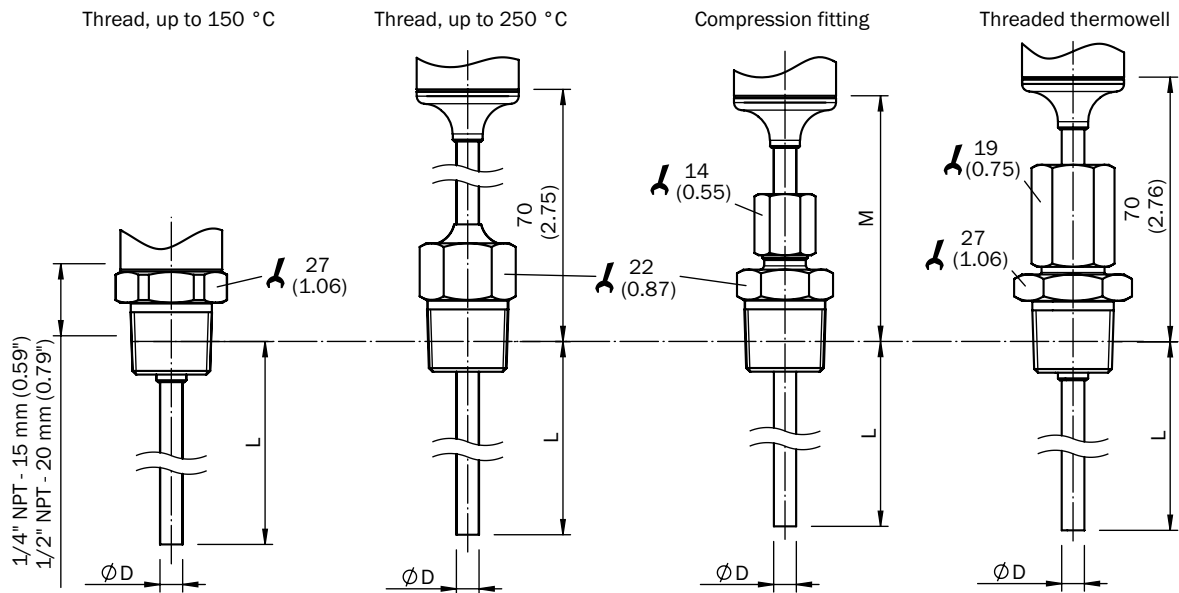
With L-connector (DIN EN 175301-803 A)



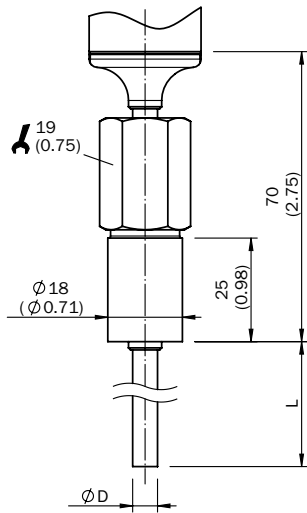
Process connections, cylindrical threads



Process connections, conical threads

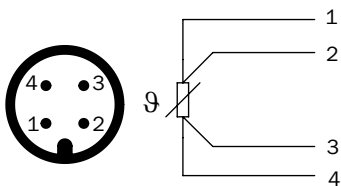


Process connection, weld-in thermowell

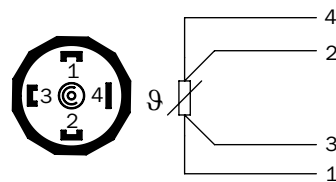


Connection type and diagram

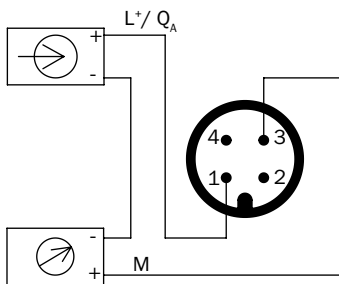
Round connector M12 x 1, output signal Pt100



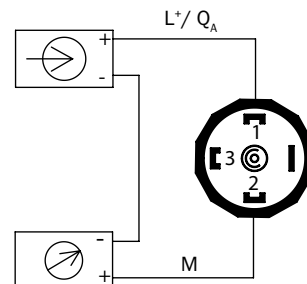
L-connector (DIN EN 175301-803 A), output signal Pt100



Plug M12 x 1, output signal 4 mA ... 20 mA



L-connector (DIN EN 175301-803 A), output signal 4 mA ... 20 mA



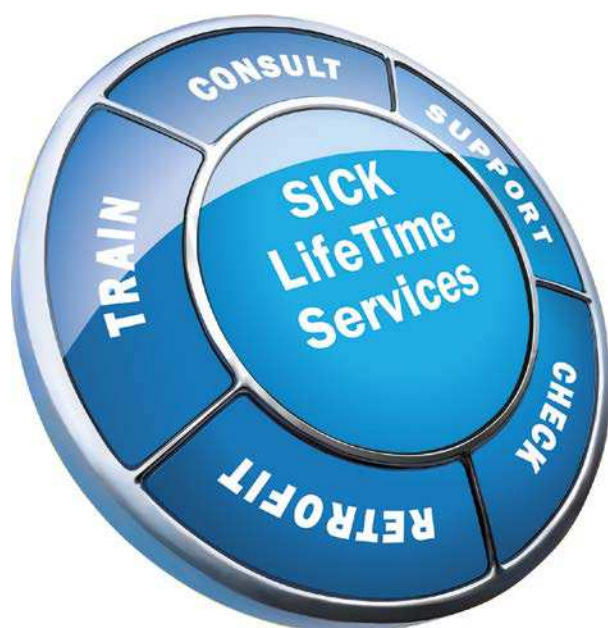
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