



GÜNTHER^{GmbH}

Temperaturmesstechnik



**Product category 14-TES
Thermocouple Assemblies
with Threaded Socket**

14-TES

Thermocouple Assemblies with Threaded Socket



Application Examples for Thermocouple Assemblies with Threaded Socket:



Waste Recycling / Incineration



Plant and Machine Construction



Automobile Industry



Chemical Industry



Energy Production

14-TES

Thermocouple Assemblies with Threaded Socket

Thermocouple assemblies with threaded socket (14-TES) are used for common temperature measurement in low-pressure gaseous, liquid and plastic media environments, depending on the properties of protective tube and surrounding media up to a temperature of 1200°C.

A threaded socket is welded to the protective tube, providing for the stability of the process connector in this component assembly. Depending on the application, the socket is welded to the protective pipe either directly beneath the connection head or with a gap of 100 or 200 mm, for example.

The protective fittings are usually made from a single seamlessly drawn high-grade steel tube with a circular blank welded inside.

Optionally, our thermocouple assemblies with threaded sockets may be fitted with an internal ceramic tube, which significantly increases the long-term stability and electrical insulation of the measuring thermocouple in many application scenarios.

Further technical information for this product line is available on our website:

<http://www.guenther.eu/en/products/thermocouples/14-tes/screw-in-thermocouples>



Visit us online at: www.guenther.eu



1 Connection Head

B (M24 x 1,5)	BUSH
BUS	BUZH
BUZ	NA
BBK	DL / MA (M10 x 1)
other	

2 Process Connector

	G 1 A
	G 1/2 A
	M18 x 1,5
	G 3/4 A
	M20 x 1,5
Combined:	M24 x 1,5 / G 1/2 A
	M10 x 1 / G 1/2 A
Other	

3 Outer Protective Tube Material / Dimensions

St. 35.8	Mat. No. 1.0305
Stainless Steel	Mat. No. 1.4571
X10Cr Al 24	Mat. No. 1.4762
X15CrNi Si 25 20	Mat. No. 1.4841
Inconel	Mat. No. 2.4816
Kanthal	
Diameter:	6 - 22 mm
Wall:	0,75 - 3 mm

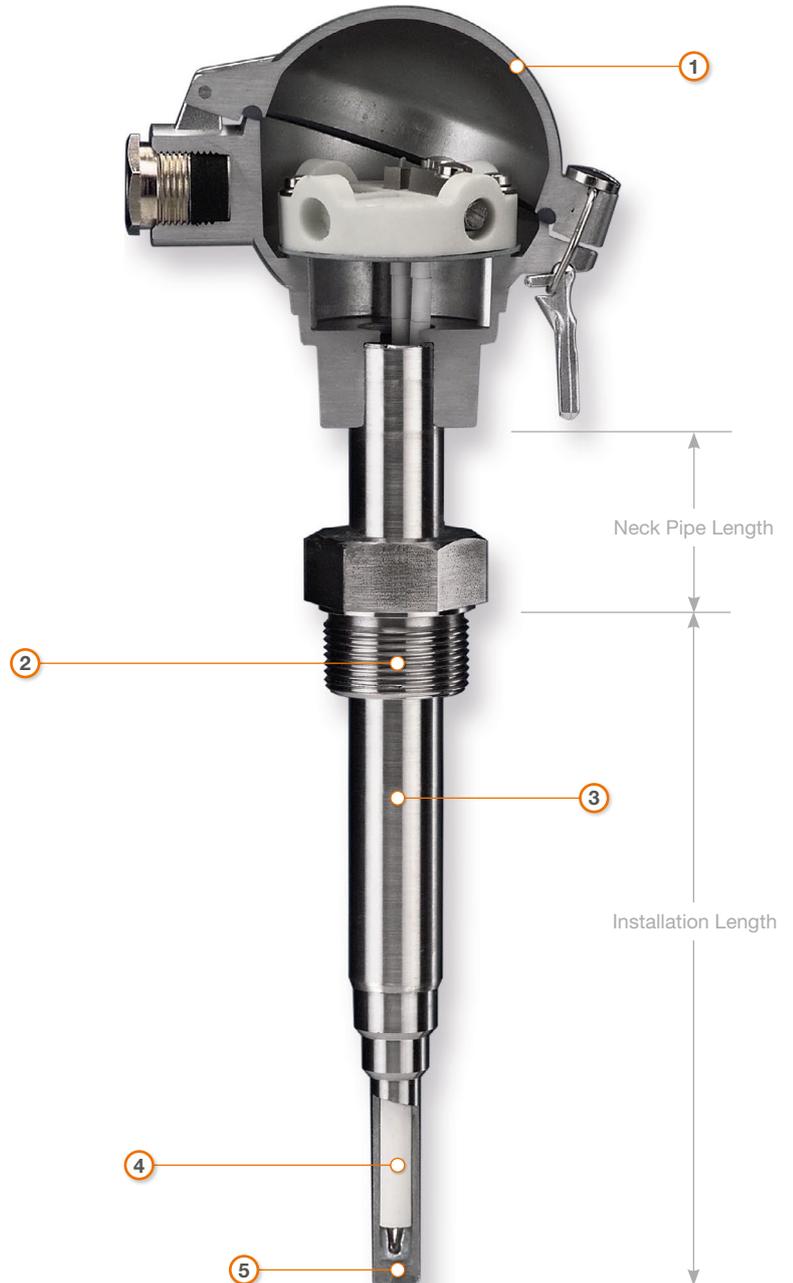
4 Mineral-Insulated Gauge Slide

Thermocouple Type / Mantle Material:	
Fe-CuNi / L	1.4541
Fe-CuNi / J	1.4541
Nicrosil-Nisil / K	Inconel 2.4816
Nicrosil-Nisil / N	Inconel 2.4816
Gauge Slide:	1,5 - 6 mm
Thermocouple:	1 - 3 mm
Single or Double	

5 Configuration

Normal (Straight Protective Tube)
Fast Reacting
(Tapered Protective Tube):
Tube Tip Diameter: 6-15 mm

Example of a common implementation in this product line



Individual Solutions such as, for example materials, process connectors, accessories, etc. not listed here, are often viable.

Please contact us for further information!

14-TES

Product Number Code

14 - TES // Screw-in thermocouples

1 4 -

Installation length / Neck pipe length in mm

Connection head

B (M24 x 1.5)	1	BUSH	6
BUS	2	BUZH	7
BUZ	3	NA	8
BBK	4	DL / MA (M10x1)	9
	5	Other	0

Screw-in-thread plug

Screwed plug, combined, M24 x 1.5 / G 1/2 A	1
Screwed plug, combined, M10 x 1 / G 1/2 A	2
Screwed plug G 1 A	3
Screwed plug G 1/2 A	4
Screwed plug M18x1.5	5
Screwed plug G 3/4 A	6
Screwed plug M20x1.5	7
Other	0

Outer protection tube Material / dimensions No thermowell 99

ø	No.1.0305	No.1.4571	No.1.4762	No.14841	No.2.4816	Kanthal
6 x 0.75	01	12	23	34	45	56
8 x 1	02	13	24	35	46	57
9 x 1	03	14	25	36	47	58
10 x 1.5	04	15	26	37	48	59
11 x 1	05	16	27	38	49	50
11 x 2	06	17	28	39	40	61
12 x 1.5	07	18	29	30	51	62
12 x 2.5	08	19	20	41	52	63
15 x 2	09	10	31	42	53	64
15 x 3	00	21	32	43	54	65
22 x 2	11	22	33	44	55	66

Type/number of thermocouples / sheath material / diameter

	mm	NiCr-Ni / K Alloy 600 2.4816		Fe-CuNi/L 1.4541		Fe-CuNi/J 1.4541		Nicrosil-Nisil / N Alloy 600 2.4816	
		Standard	Double	Standard	Double	Standard	Double	Standard	Double
Sheath	1,5	03	13	23	33	43	53	63	73
measuring	2	04	14	-	-	-	-	-	-
insert	3	05	15	25	35	45	55	65	75
	4,5	06	16	26	36	46	56	66	76
	6	07	17	27	37	47	57	67	77
Thermocouple	1,0	08	18	28	38	48	58	68	78
	2,0	09	19	29	39	49	59	69	79
	3,0	00	10	20	30	40	50	60	70

Design

Straight	[protection tube not tapered]	0
Fast response	[protection tube tapered]	
Tube point	15 mm ø	1
Tube point	12 mm ø	2
Tube point	9 mm ø	3
Tube point	6 mm ø	4
Tube point	Other	9

Neck pipe No 0 Yes 1

Custom designs:

1 4 -

9 9 1 4 x x x x

Installation length / Neck pipe length in mm

Consecutive no.

Installation length / Neck pipe length in mm



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