



GÜNTHER^{GmbH}

Temperaturmesstechnik



Product category 55-WES
Resistance Thermometers with Threaded
Socket and Mineral-Insulated Gauge Slide



55-WES

Resistance Thermometers with Threaded Socket and Mineral-Insulated Gauge Slide

Resistance thermometers with threaded socket and mineral-insulated gauge slide (55-WES) are used for general temperature measurement in low-pressure gaseous, liquid and plastic media environments, depending on the properties of the protective tube and surrounding media, up to a temperature of 800°C.

A threaded socket is welded to the protective tube, providing for the stability of the process connector in sensors of this product line. 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 200mm, for example.

The protective fittings are usually made from a single seamlessly drawn high-grade steel tube with a circular blank welded inside. In order to facilitate particularly quick temperature change measurements, we offer sensors with a tapered sensor tip.

For specialised applications (precision, long-term stability, etc.) we recommend the application of precision resistors with narrowed tolerance.

Resistance values and tolerances of our resistance thermometers are pursuant to DIN EN 60751.

Our resistance thermometers are also available in explosion protected ATEX models.

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

<http://www.guenther.eu/en/products/resistance-thermometers/55-wes/screw-in-resistance-thermometers-with-sheath-measurement-inserts>

Application Examples for Resistance Thermometers with Threaded Socket and Mineral-Insulated Gauge Slide:

-  Waste Recycling / Incineration
-  Plant and Machine Construction
-  Automobile Industry
-  Chemical Industry
-  Laboratories
-  Energy Production





① Connection Head

B	BUSH
BUS	BUZH
BUZ	NA
BBK	DL / MA

② Process Connector (Detachable)

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

③ Outer Protective Tube Materials/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

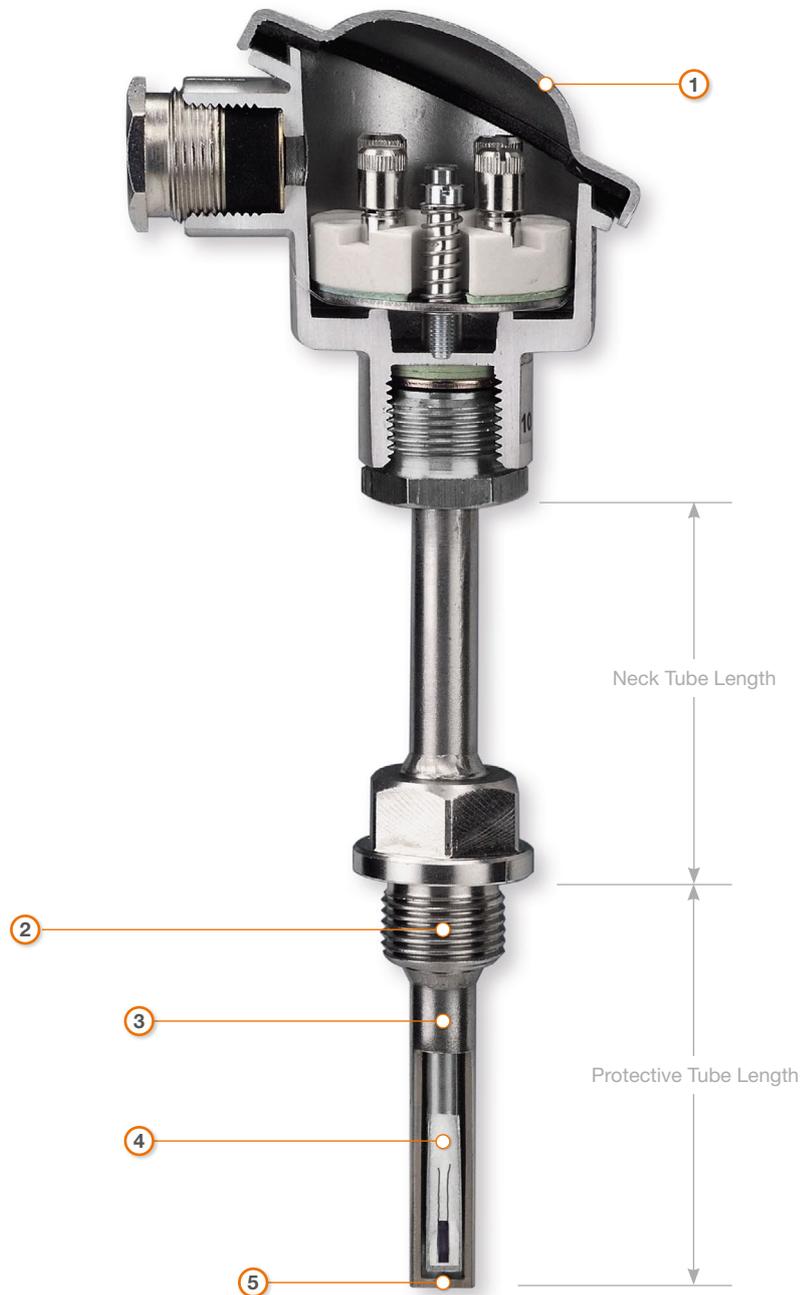
④ Mineral-Insulated Gauge Slide

Mantle Diameter:	1,5 - 8,0 mm
Tip Diameter:	2,0 - 10,0 mm
Connection:	
	1 x Pt100 up to 3 x Pt100 Ohm
	2-Wire up to 4-Wire

⑤ Configuration

Straight
or Tapered to between 6 and 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!

55-WES

Product Number Code

55 - WES // Screw-in resistance thermometers

Pt 100 Ω, metal + sheath

5 5 - [] [] [] [] [] [] [] [] [] [] / [] [] [] [] [] [] [] []

Connection head

B (M24 x 1.5)	1	BUSH	6
BUS	2	BUZH	7
BUZ	3	NA	8
BBK	4	DL / MA (M10 x 1)	9
BFS	5		0

Installation length / neck pipe length
in mm

Sheath measurement inserts

Rigid design

Sheath ø [mm]	2.0	3.0	4.5	6.0	6.0	6.0	8.0	8.0	
Point ø [mm]	2.0	3.0	4.5	6.0	8.0	10.0	8.0	10.0	

Circuit

1xPt100 Ω									
2-wire	00	10	20	30	40	50	60	70	80
1xPt100 Ω									
3-wire	01	11	21	31	41	51	61	71	81
1xPt100 Ω									
4-wire	02	12	22	32	42	52	62	72	82
2xPt100 Ω									
2-wire	03	13	23	33	43	53	63	73	83
2xPt100 Ω									
3-wire	04	14	24	34	44	54	64	74	84
3xPt100 Ω									
2-wire	05	15	25	35	45	55	65	75	85
2xPt100 Ω									
4-wire	06	16	26	36	46	56	66	76	86

Screwed plug

Screw joint, combined, M24 x 1.5 / G 1/2 A	1
Screw joint, combined, M10 x 1 / G 1/2 A	2
Screw joint G 1 A	3
Screw joint G 1/2 A	4
Screw joint M18x1,5	5
Screw joint G 3/4 A	6
Screw joint M20x1,5	7
Other	9

Outer protection tube material / dimensions

	1.0305	1.4571	1.4762	1.4841	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
No protection tube	99			Other		88

Design

Standard [protection tube not tapered] 0

Fast response

[protection tube tapered]

Protection tube point	15 mm ø	1	Protection tube point	10 mm ø	5
Protection tube point	12 mm ø	2	Protection tube point	8 mm ø	6
Protection tube point	9 mm ø	3			
Protection tube point	6 mm ø	4	Other		9

Neck pipe None 0 Present 1

Custom designs:

5 5 - 9 9 5 5 x x x x - [] [] [] [] [] [] [] [] [] [] / [] [] [] [] [] [] [] []

Consecutive no.

Installation length / Neck pipe length
in mm



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