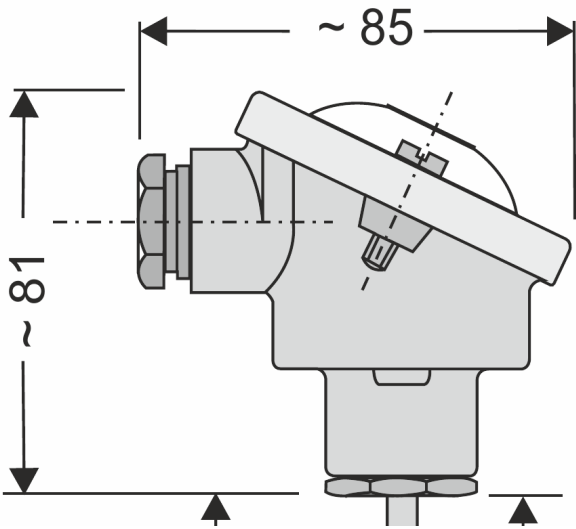


THERMOCOUPLE, HEAD B, GL



- GL TAA00002H3
- TYPE J AND TYPE K
- UP TO +1000 °C
- MAX. 200 MM LENGTH
- PN16



KEY DATA

Property	Value	Property	Value
Type approval	GL TAA00002H3	Operating range	type J -200 ... +700 °C
Sensing element	thermocouple type J or type K		type K -200 ... +1000 °C
Accuracy	DIN EN 60584-2 class 1	Process pressure	PN16
Form	screw-in (ES) or dip-in (ET)	Ø sheath	3 ... 15 mm
Fitting, nominal length	50 ... 200 mm	Product code	KC

Thermocouple with terminal head B in the version with GL type approval. Compared to TKMA it is shorter (max. 200 instead of 2000 mm), carries a process pressure rating and a different set of accessories — it is not the same product with one more mark.



TECHNICAL DATA

SENSING ELEMENT

Thermocouple	1x type J (Fe-CuNi) · 1x type K (NiCr-Ni)
	2x type J · 2x type K
Type	standard element (S) · M.I. element (M)
Form	screw-in sensor (ES) · dip-in sensor (ET)
Accuracy	according to DIN EN 60584-2 class 1
Type J	±1.5 °C (-40 ... 375 °C) ±0.004 t (375 ... 750 °C)
Type K	±1.5 °C (-40 ... 375 °C) ±0.004 t (375 ... 1000 °C)
Insulator	standard: aluminium oxide M.I. element: metal oxide

SHEATH AND LENGTH

Material	1.4571 (316Ti) for standard element 2.4816 (Inconel 600) for M.I. element
Ø standard element	ES 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11 · 15 mm ET 5 · 6 · 7 · 8 · 9 · 10 · 11 · 15 mm
Ø M.I. element	ES 3 · 6 mm · ET 6 mm
Ø and wall	3x0.4 · 4x0.5 · 5x0.5 · 6x0.5 · 6x1 · 7x0.5 · 7x1 · 8x1 · 9x1 · 10x1 · 11x2 · 15x2 mm
Fitting, nominal length	50 · 100 · 160 · 200 mm · option on request
Maximum length	200 mm
Process pressure	max. PN16
Process connection	1/4" · 3/8" · 1/2" · 1" · 1/4NPT · 3/8NPT · 1/2NPT
Bend radius	min. 5 x Ø sheath (M.I. element)

TERMINAL HEAD

Material	aluminium
Process connection	M24x1.5
Cable connection	M20x1.5
Connection	ceramic block with terminal posts
Protection	IP 54
Insulation resistance	test voltage 500 VDC

TEMPERATURE AND RESPONSE

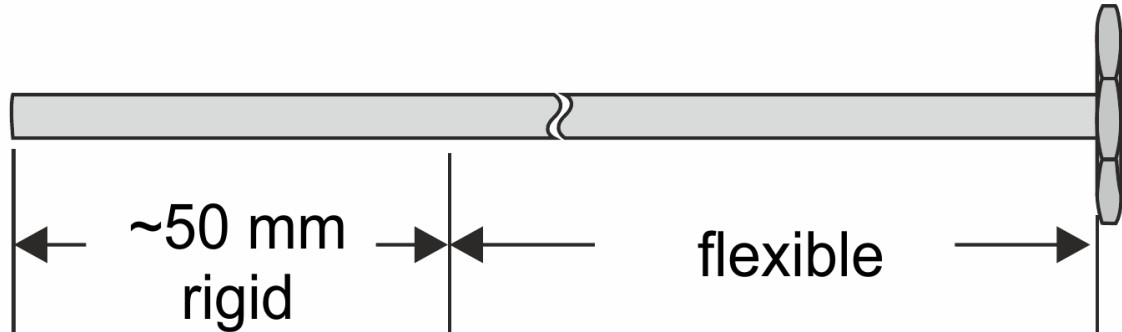
Thermocouple type J	-200 ... +700 °C
Thermocouple type K	-200 ... +1000 °C
Sheath 1.4571	up to 600 °C
Sheath 2.4816	up to 1100 °C
Terminal head	up to 480 °C (1)
Compression fitting	-75 ... +250 °C
Response 6x0.5 mm	t90 15 s · t50 5 s
Response 3x0.4 mm	t90 6 s · t50 4 s

(1) The terminal head limits the application: 480 °C at its own surroundings, not at the medium.



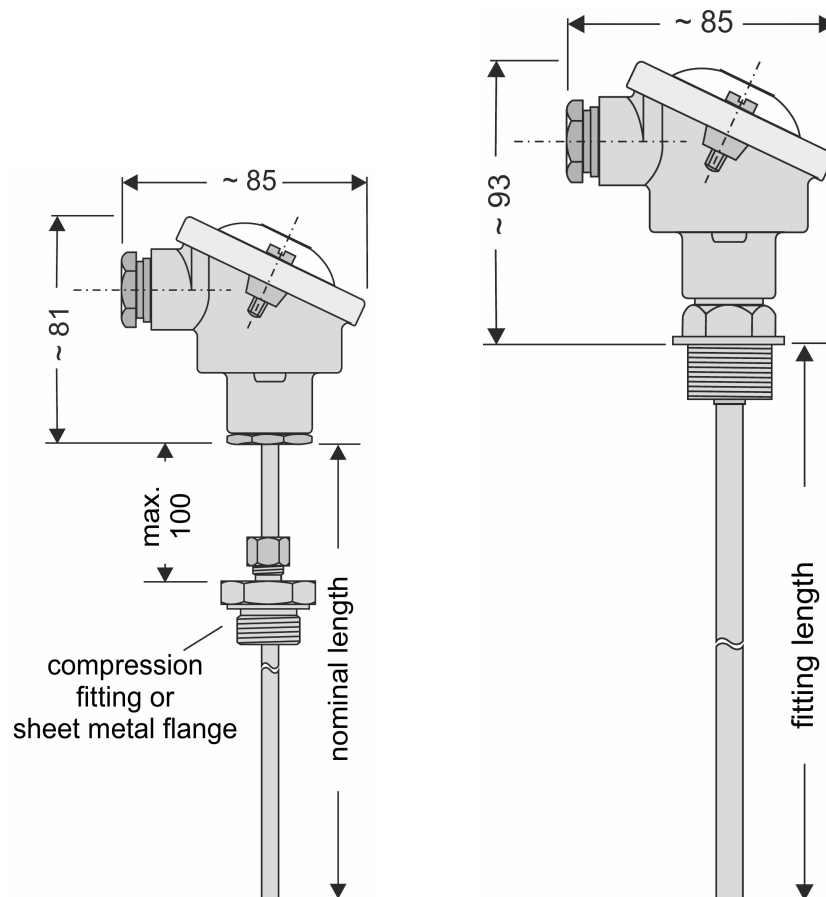
CONNECTION AND SHEATH

Terminal head B holds a ceramic block with terminal posts; the cable enters through the M20x1.5 gland.



Sheath of the mineral insulated element: the first approx. 50 mm from the terminal head are rigid, the rest is flexible. The bend radius is limited to at least five times the sheath diameter.

DIMENSIONS



Dip-in version (ET) — no process thread of its own; it is fixed with an accessory. The dimension shown is the nominal length. The compression fitting or sheet metal flange sits at most 100 mm below the head.

Screw-in version (ES) — with a process thread on the sheath. The dimension shown is the fitting length.



CONFORMITY

Type approval	GL TAA00002H3
Accuracy standard	DIN EN 60584-2 class 1 — it governs the tolerance of the thermocouple, it is not a product approval
Protection	IP 54 at the terminal head

ORDER INFORMATION

Accessories

- Connection cable (max. 6 m) · compression fitting · sheet metal flange.

ORDER KEY

Field	Value	Meaning
Product code	KC	the same code as TKMA (2)
Thermocouple	4 ... 7	1× type J · 1× type K · 2× type J · 2× type K (2)
Type	0 · 1	standard element (S) · M.I. element (M)
Form	0 · 1	screw-in sensor (ES) · dip-in sensor (ET)
Sheath material	0 · 1	1.4571 (316Ti) for S · 2.4816 (Inconel 600) for M
Ø sheath	1 ... B	1 = 3 mm (S, M, ES only) up to B = 15 mm (S) · without 0 and 3
Fitting, nominal length	0 ... 4	50 · 100 · 160 · 200 mm · 4 = other, max. 200 mm
Process connection	0 ... 6	1/4" · 3/8" · 1/2" · 1" · 1/4NPT · 3/8NPT · 1/2NPT
Used temperature range	—	to be stated by the purchaser, in °C

The order code is formed from the product code and the fields of the key.

(2) Both versions carry the product code KC. They are told apart by the first field alone: 0 ... 3 is TKMA, 4 ... 7 TKMB.

