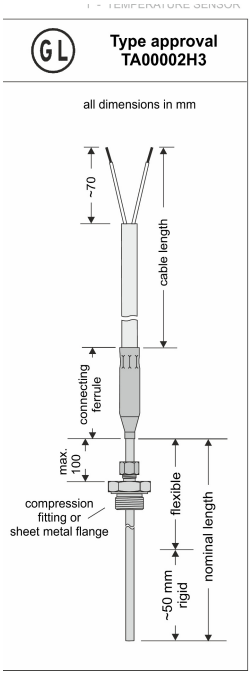
M.I. THERMOCOUPLE, GL



- GL TAA00002H3
- TYPE J AND TYPE K
- UP TO +1000 °C
- MAX. 200 MM LENGTH
- IP 65

IP65

Stainless Steel

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
Sheath	2.4816 (Inconel 600)	Cable decides	-5 … +550 °C by type
Ø and wall	1.9×0.2 · 3×0.25 · 4.5×0.36 · 6×0.51	Protection	IP 65 up to 250 °C
Nominal length	standard 100 mm, max. 200 mm	Product code	KB

Mineral insulated thermocouple in the version with GL type approval. Compared to TBMA it is limited to 200 mm and its cable to 6 m. The operating range is set by the cable: PVC ends at 70 °C.

TECHNICAL DATA

SENSING ELEMENT

Thermocouple	type J (Fe-CuNi) · type K (NiCr-Ni)
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	metal oxide

SHEATH AND LENGTH

Material	2.4816 (Inconel 600)
Connecting sleeve	1.4571 (316Ti)
Ø and wall	1.9×0.2 · 3×0.25 · 4.5×0.36 · 6×0.51 mm
Nominal length	standard 100 mm · option on request
Maximum length	200 mm
Bend radius	min. 5 × Ø sheath
Connection	open ends 70 mm stripped · TC plug
	standard or mini · without cable 20 mm stripped
Sleeve to cable	hexagonal crimp · option ring crimp
Cable length	standard 2 m · max. 6 m

CONNECTING CABLE

Connecting cable	PVC-PVC · PTFE-silicone · PTFE-PTFE ·
	PTFE-braided screen-PTFE ·
	glass silk-glass silk-braided screen
Cable length	standard 2 m · option on request, max. 6 m
Protection	IP 65 (up to 250 °C) (1)
Insulation resistance	test voltage 500 VDC

TEMPERATURE AND RESPONSE

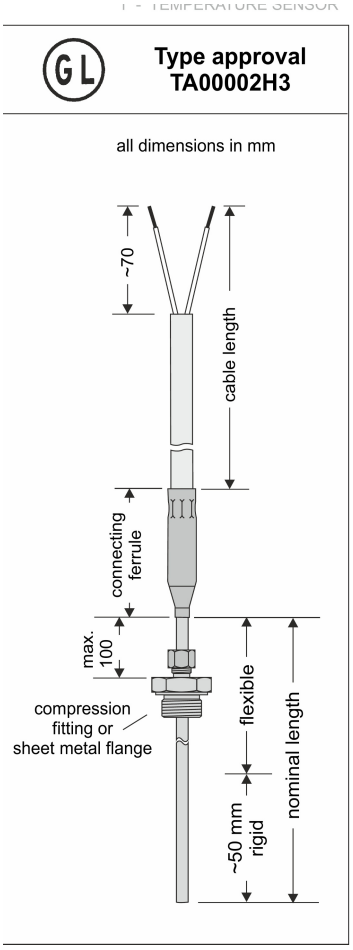
Thermocouple type J	-200 ... +700 °C
Thermocouple type K	-200 ... +1000 °C
Sheath 2.4816	up to 1100 °C
Compression fitting	-75 ... +250 °C
Cable PVC	-5 ... +70 °C
Cable silicone	-45 ... +180 °C
Cable PTFE	-75 ... +250 °C
Cable glass silk	-60 ... +550 °C

(1) IP 65 does not apply to the braided-screen version.

CONNECTION

Cable with open ends, 70 mm; the transition to the cable is a hexagonal crimp, optionally a ring crimp.

DIMENSIONS


T - TEMPERATURE SENSOR
GL
Type approval
TA00002H3
all dimensions in mm
~70
cable length
connecting ferrule
max. 100
compression fitting or sheet metal flange
flexible
nominal length
~50 mm rigid

CONFORMITY

Type approval	GL TAA00002H3
Accuracy standard	DIN EN 60584-2 class 1 — it governs the tolerance of the sensing element, it is not a product approval
Protection	IP 65 up to 250 °C, not for the braided-screen version

ORDER INFORMATION

Accessories

- Accessories: compression fitting and sheet metal flange.

ORDER KEY

Field	Value	Meaning
Product code	KB	stands at the beginning of every order code
Type of thermocouple	2 · 3	1× type J · 1× type K (2)
Sheath material	0	2.4816 (Inconel 600)
Ø sheath	1 … 4	1 = 3 · 2 = 4.5 · 3 = 6 · 4 = 1.9 mm
Nominal length	0 · 1	100 mm · other length, maximum 200 mm
Connecting cable	0 … 5	PVC · PTFE-silicone · PTFE · PTFE braided · glass silk · none
Connection	0 … 3	open ends 70 mm · TC plug standard · mini · other length
Cable length	0 · 1	2 m · other length, max. 6 m
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 KB; they are told apart by this field alone: 0 · 1 is TBMA, 2 · 3 is TBMB.