

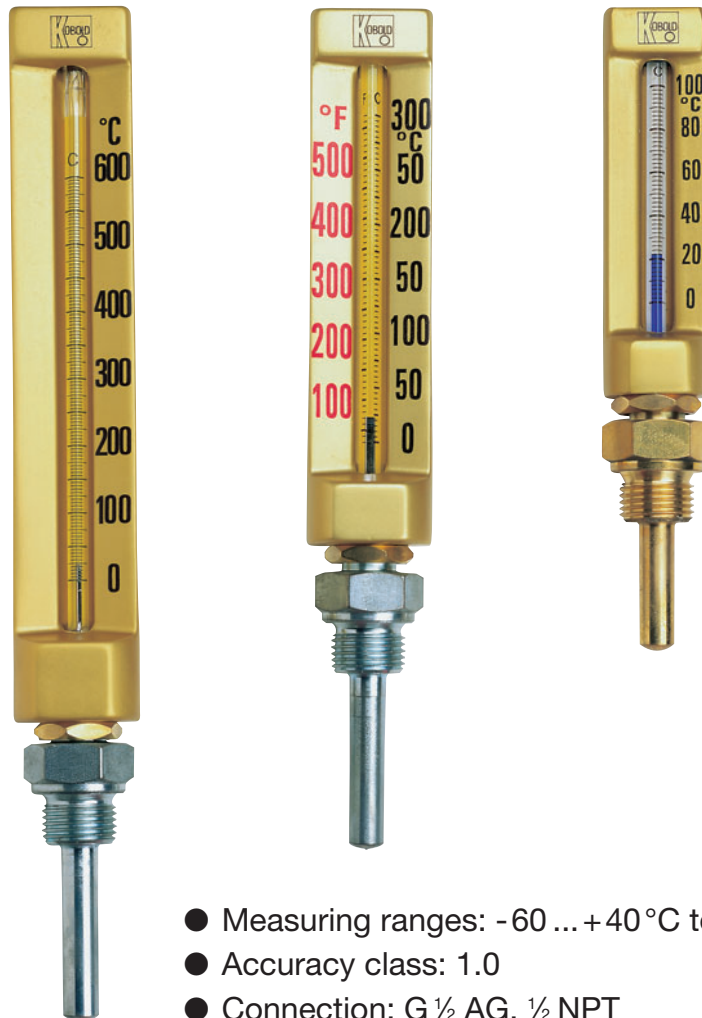


V-Form Glass Thermometers for Machines

according to DIN 6181-16195



measuring
•
monitoring
•
analysing



- Measuring ranges: -60 ... +40 °C to 0 ... 600 °C
- Accuracy class: 1.0
- Connection: G ½ AG, ½ NPT
- Bulb: brass (up to 200 °C), steel (above 300 °C)
- Fill: blue thermometer fluid, above 300 °C mercury
- Option: up to +200 °C with plastic casing light weight and economically priced
- Anodized numbers
- Engraved glass scale



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Model:
TGL, TGK



Description

Liquid-in-glass thermometers for machines are economical and rugged. The use of high-quality glass enables the thermometer to maintain a steady measuring accuracy and repeatability.

The liquid-in-glass thermometers for machines comprise a rugged protective casing, an indicating capillary and the mounting fitting with rigid connection.

The protective casing is made of brass-coloured anodized aluminium or of reasonably-priced gold-coloured plastic for 150 mm lengths up to +200 °C.

Scale numbering is black. The indicating capillary is backed in white with a wide easy-to-read indicating column filled with blue indicator fluid up to +200 °C; or mercury above +200 °C, in which case the indicating capillary is backed in yellow. The graduation is diffused into the glass and is thus resistant to aggressive service environments.

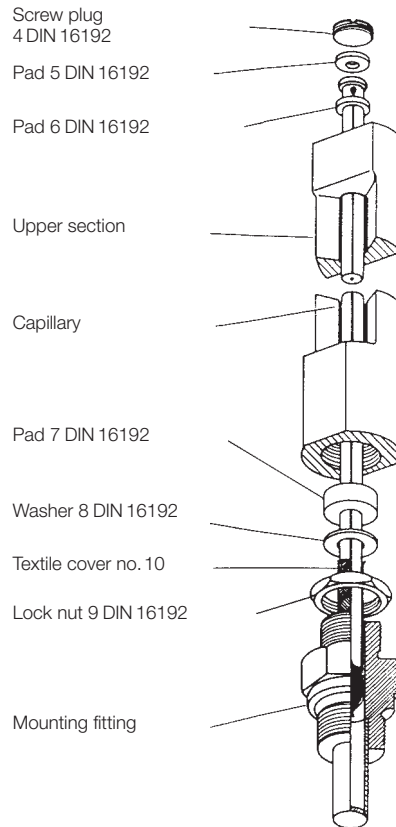
The indicating accuracy is 1 % of full scale value. The capillary is manufactured from PTB approved thermometer glass, N16B or 8409 Supremaxglas.

The mounting fittings are delivered according to DIN form B with G 1/2 or 1/2 NPT external thread. The bulbs are made of solid brass up to a maximum immersion length of 63 mm.

The bulbs are hard soldered for longer immersion lengths. They are made of steel above +300 °C and delivered welded and chromium plated.

The standard liquid-in-glass thermometers for machines are available in instrument lengths 200, 150 and 110 mm in straight and in 90° angular form. Other models upon request.

Design



Applications

V-form thermometers for machines are suited to direct temperature measurement on site of liquid media.

Areas of application include:

- Air conditioning and refrigeration
- Heating systems and kilns
- Equipment and plant engineering
- Engine manufacturing
- District heating power stations



**Aluminium casing 110 x 30 mm, form B according to DIN 16181
Connection G 1/2 A or 1/2 NPT, straight version**

Model	Measuring range/scaling	Dial	Immersion length L ₁	Connection
TGL-1164...	-60 ... +40/2 °C	..C..= °C ..F..= dual scale °C/°F	..040..= 40 mm	..G=G 1/2 AG
TGL-1135...	-30 ... +50/2 °C		..050..= 50 mm	
TGL-1106...	0 ... +60/1 °C		..063..= 63 mm	
TGL-1110...	0 ... +100/2 °C		..100..= 100 mm	
TGL-1112...	0 ... +120/2 °C		..160..= 160 mm	
TGL-1116...	0 ... +160/5 °C			

Important! Minimum order quantity for each item: 5 pieces



Aluminium casing 150 x 36 mm, form B according to DIN 16185
Connection G 1/2 A or 1/2 NPT, straight version

Model	Measuring range/scaling	Dial	Immersion length L ₁	Connection
TGL-5164...	-60 ... +40/1 °C	..C..= °C ..F..= dual scale °C/°F	..040..= 40 mm ..050..= 50 mm ..063..= 63 mm ..100..= 100 mm ..160..= 160 mm	..G=G 1/2 AG ..N=1/2 NPT
TGL-5135...	-30 ... +50/1 °C			
TGL-5106...	0 ... +60/1 °C			
TGL-5110...	0 ... +100/1 °C			
TGL-5112...	0 ... +120/1 °C			
TGL-5116...	0 ... +160/2 °C			
TGL-5120...	0 ... +200/2 °C			
TGL-5130...	0 ... +300/2 °C*			
TGL-5160...	0 ... +600/5 °C*			

*Mercury filling



Plastic casing 150 x 36 mm, form B according to DIN 16185
Connection G 1/2 A or 1/2 NPT, straight version

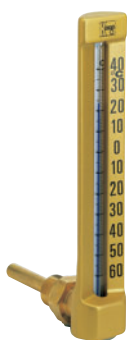
Model	Measuring range/scaling	Dial	Immersion length L ₁	Connection
TGK-5164...	-60 ... +40/1 °C	..C..= °C ..F..= dual scale °C/°F	..040..= 40 mm ..050..= 50 mm ..063..= 63 mm ..100..= 100 mm ..160..= 160 mm	..G=G 1/2 AG ..N=1/2 NPT
TGK-5135...	-30 ... +50/1 °C			
TGK-5106...	0 ... +60/1 °C			
TGK-5110...	0 ... +100/1 °C			
TGK-5112...	0 ... +120/1 °C			
TGK-5116...	0 ... +160/2 °C			
TGK-5120...	0 ... +200/2 °C			



Aluminium casing 150 x 36 mm, form B according to DIN 16186
Connection G 1/2 A or 1/2 NPT, angular version

Model	Measuring range/scaling	Dial	Immersion length L ₁	Connection
TGL-5264...	-60 ... +40/1 °C	..C..= °C ..F..= dual scale °C/°F	..040..= 40 mm ..050..= 50 mm ..063..= 63 mm ..100..= 100 mm ..160..= 160 mm	..G=G 1/2 AG ..N=1/2 NPT
TGL-5235...	-30 ... +50/1 °C			
TGL-5206...	0 ... +60/1 °C			
TGL-5210...	0 ... +100/1 °C			
TGL-5212...	0 ... +120/1 °C			
TGL-5216...	0 ... +160/2 °C			
TGL-5220...	0 ... +200/2 °C			
TGL-5230...	0 ... +300/2 °C*			
TGL-5260...	0 ... +600/5 °C*			

*Mercury filling



Plastic casing 150 x 36 mm, form B according to DIN 16186
Connection G 1/2 A or 1/2 NPT, angular version

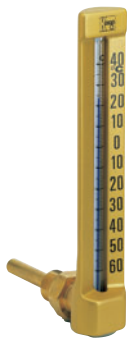
Model	Measuring range/scaling	Dial	Immersion length L ₁	Connection
TGK-5264...	-60 ... +40/1 °C	..C..= °C ..F..= dual scale °C/°F	..040..= 40 mm ..050..= 50 mm ..063..= 63 mm ..100..= 100 mm ..160..= 160 mm	..G=G 1/2 AG ..N=1/2 NPT
TGK-5235...	-30 ... +50/1 °C			
TGK-5206...	0 ... +60/1 °C			
TGK-5210...	0 ... +100/1 °C			
TGK-5212...	0 ... +120/1 °C			
TGK-5216...	0 ... +160/2 °C			
TGK-5220...	0 ... +200/2 °C			



Aluminium casing 200 x 36 mm, form B according to DIN 16189
Connection G 1/2 A or 1/2 NPT, straight version

Model	Measuring range/scaling	Dial	Immersion length L ₁	Connection
TGL-2164...	-60 ... +40/1 °C	..C..= °C ..F..= dual scale °C/°F	..040..= 40 mm ..050..= 50 mm ..063..= 63 mm ..100..= 100 mm ..160..= 160 mm	..G=G 1/2 AG ..N=1/2 NPT
TGL-2135...	-30 ... +50/1 °C			
TGL-2106...	0 ... +60/1 °C			
TGL-2110...	0 ... +100/1 °C			
TGL-2112...	0 ... +120/1 °C			
TGL-2116...	0 ... +160/2 °C			
TGL-2120...	0 ... +200/2 °C			
TGL-2130...	0 ... +300/2 °C*			
TGL-2140...	0 ... +400/5 °C*			
TGL-2150...	0 ... +500/5 °C*			
TGL-2160...	0 ... +600/5 °C*			

*Mercury filling



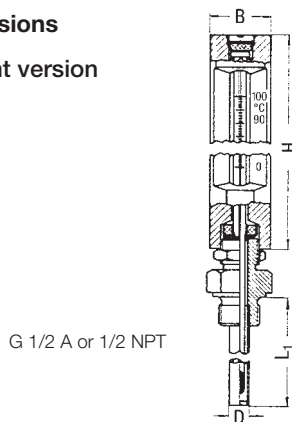
Aluminium casing 200 x 36 mm, form B according to DIN 16190
Connection G 1/2 A, angular version

Model	Measuring range/scaling	Dial	Immersion length L ₁	Connection
TGL-2264...	-60 ... +40/1 °C	..C..= °C ..F..= dual scale °C/°F	..040..= 40 mm ..050..= 50 mm ..063..= 63 mm ..100..= 100 mm ..160..= 160 mm	..G=G 1/2 AG ..N=1/2 NPT
TGL-2235...	-30 ... +50/1 °C			
TGL-2206...	0 ... +60/1 °C			
TGL-2210...	0 ... +100/1 °C			
TGL-2212...	0 ... +120/1 °C			
TGL-2216...	0 ... +160/2 °C			
TGL-2220...	0 ... +200/2 °C			
TGL-2230...	0 ... +300/2 °C*			
TGL-2240...	0 ... +400/5 °C*			
TGL-2250...	0 ... +500/5 °C*			
TGL-2260...	0 ... +600/5 °C*			

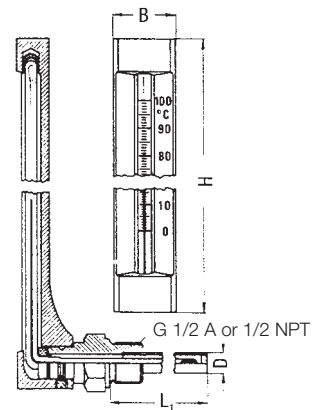
*Mercury filling

Dimensions

Straight version



Angular version



Model	H (mm)	B (mm)	L ₁ (mm)	D (mm)
TGL-11...	110	30	40, 50, 63, 100, 160	10
TGL-51...	150	36	40, 50, 63, 100, 160	10
TGL-21...	200	36	40, 50, 63, 100, 160	10

Model	H (mm)	B (mm)	L ₁ (mm)	D (mm)
TGL-12...	110	30	40, 50, 63, 100, 160	10
TGL-52...	150	36	40, 50, 63, 100, 160	10
TGL-22...	200	36	40, 50, 63, 100, 160	10