



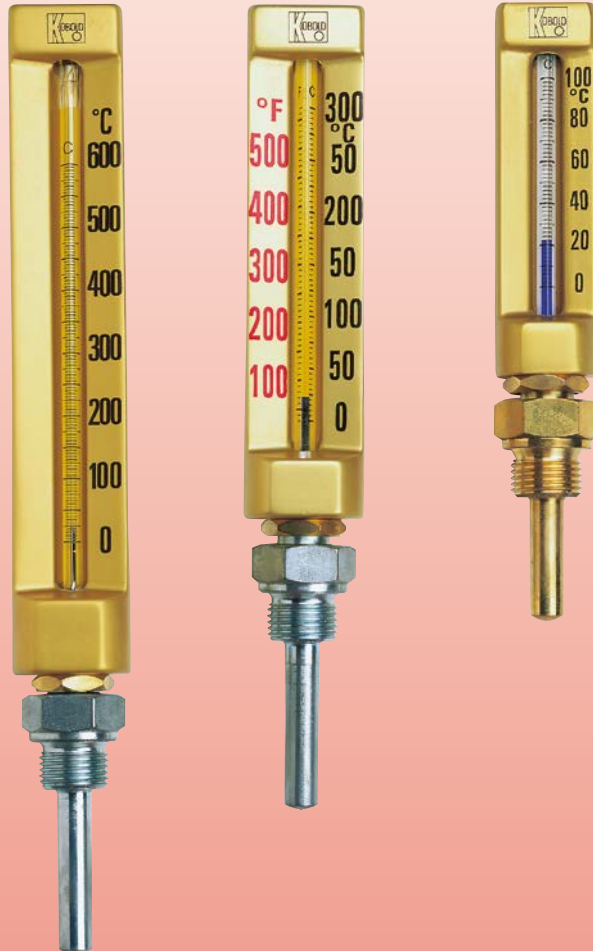
V-Form Glass Thermometers for Machines

according to DIN 16181 - 16195



measuring
•
monitoring
•
analysing

TGL/TGK



- Measuring ranges:
-60 ... +40 °C to 0 ... 200 °C
- Max. pressure: 15 bar
- Accuracy class: 1.0
- Connection: G 1/2 M, 1/2" NPT
- Bulb: brass
- Fill: blue thermometer fluid
- Option: with plastic casing
light weight and economically
priced
- Anodized numbers
- Engraved glass scale

T2



KOBOLD companies worldwide:

ARGENTINA, AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHILE, CHINA, COLOMBIA, CZECHIA, EGYPT, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, ROMANIA, SINGAPORE, SPAIN, SWITZERLAND, TAIWAN, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

KOBOLD Messring GmbH
Nordring 22-24
D-65719 Hofheim/Ts.
Head Office:
+49(0)6192 299-0
+49(0)6192 23398
info.de@kobold.com
www.kobold.com



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.

Scale numbering is black. The indicating capillary is backed in white with a wide easy-to-read indicating column filled with blue indicator fluid. The graduation is diffused into the glass and is thus resistant to aggressive service environments.

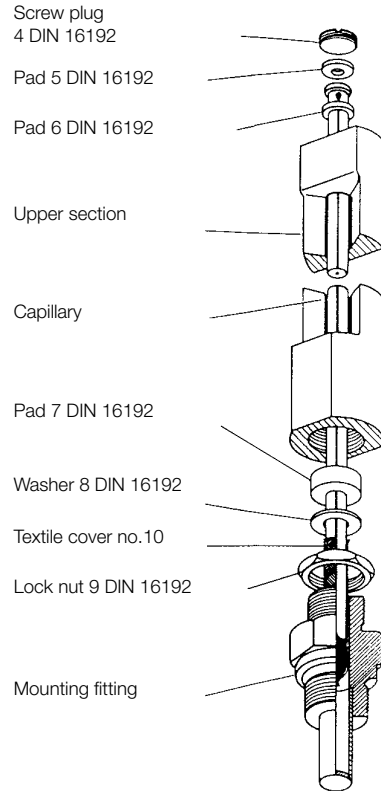
The indicating accuracy is 1% of full scale value. The capillary is manufactured from PTB approved thermometer glass, N16B or 8409 Supremax glass.

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. Max. operating pressure is 15 bar.

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 36 mm, form B acc. to DIN 16181 connection G 1/2 A or 1/2" NPT, straight version


	Model	Measuring range/ scaling	Dial	Immersion length L1	Connection
	TGL-1164...	-60...+ 40/2 °C	...C... = °C ...F... = dual scale °C/°F	...040... = 40 mm	...G = G 1/2 male ...N = 1/2" NPT
	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 $\frac{1}{2}$ " A or $\frac{1}{2}$ " NPT, straight version

	Model	Measuring range/ scaling	Dial	Immersion length L1	Connection
	TGL-5164...	-60... + 40/2 °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 $\frac{1}{2}$ male ...N = $\frac{1}{2}$ " NPT
	TGL-5135...	-30... + 50/1 °C			
	TGL-5106...	0... + 60/1 °C			
	TGL-5110...	0... + 100/2 °C			
	TGL-5112...	0... + 120/2 °C			
	TGL-5116...	0... + 160/2 °C			
TGL-5120...	0... + 200/2 °C				


Plastic casing 150 x 36 mm, form B according to DIN 16185 connection G $\frac{1}{2}$ " A or $\frac{1}{2}$ " NPT, straight version

	Model	Measuring range/ scaling	Dial	Immersion length L1	Connection
	TGK-5164...	-60... + 40/2 °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 $\frac{1}{2}$ male ...N = $\frac{1}{2}$ " NPT
	TGK-5135...	-30... + 50/1 °C			
	TGK-5106...	0... + 60/1 °C			
	TGK-5110...	0... + 100/2 °C			
	TGK-5112...	0... + 120/2 °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 $\frac{1}{2}$ " A or $\frac{1}{2}$ " NPT, angular version

	Model	Measuring range/ scaling	Dial	Immersion length L1	Connection
	TGL-5264...	-60... + 40/2 °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 $\frac{1}{2}$ male ...N = $\frac{1}{2}$ " NPT
	TGL-5235...	-30... + 50/1 °C			
	TGL-5206...	0... + 60/1 °C			
	TGL-5210...	0... + 100/2 °C			
	TGL-5212...	0... + 120/2 °C			
	TGL-5216...	0... + 160/2 °C			
TGL-5220...	0... + 200/2 °C				

Plastic casing 150 x 36 mm, form B according to DIN 16186 connection G $\frac{1}{2}$ " A or $\frac{1}{2}$ " NPT, angular version

	Model	Measuring range/ scaling	Dial	Immersion length L1	Connection
	TGK-5264...	-60... + 40/2 °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 $\frac{1}{2}$ male ...N = $\frac{1}{2}$ " NPT
	TGK-5235...	-30... + 50/1 °C			
	TGK-5206...	0... + 60/1 °C			
	TGK-5210...	0... + 100/2 °C			
	TGK-5212...	0... + 120/2 °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 G½ A or ½" NPT, straight version

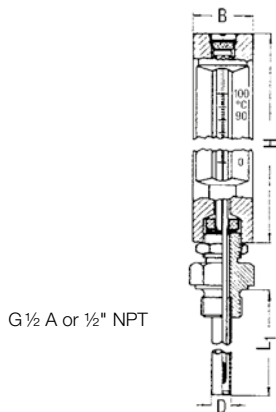
	Model	Measuring range/ scaling	Dial	Immersion length L1	Connection
	TGL-2164...	-60... + 40/1 °C	...C... = °C ...F... = dual scale °C/°F	...040... = 40 mm ...050... = 50 mm ...063... = 63 mm ...100... = 100 mm ...160... = 160 mm	...G = G½ male ...N = ½" NPT
	TGL-2135...	-30... + 50/1 °C			
	TGL-2106...	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				

Aluminium casing 200 x 36 mm, form B according to DIN 16190 connection G½ A, angular version

	Model	Measuring range/ scaling	Dial	Immersion length L1	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 = G½ male ...N = ½" 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				

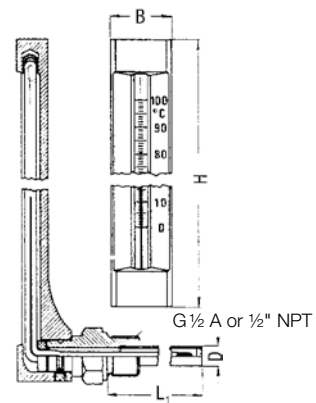
Dimensions [mm]

Straight version



G½ A or ½" NPT

Angular version



G½ A or ½" NPT

Model	H [mm]	B [mm]	L ₁ [mm]	D [mm]
TGL-11...	110	30	40, 50, 63, 100, 160	10
TGK-51/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]
TGK-52/TGL-52...	150	36	40, 50, 63, 100, 160	10
TGL-22...	200	36	40, 50, 63, 100, 160	10