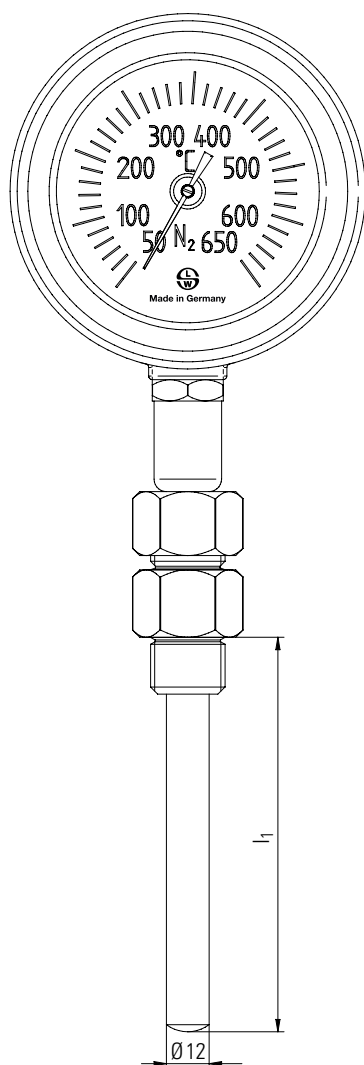


Precision Dial Thermometers Type H 13 for Ship and Diesel Engines



Robust precision dial thermometers type H 13 for ship and diesel engines

These dial thermometers were made for especially tough operating conditions and can withstand the extreme shocks and vibrations of all combustion engines and exhaust ducts in the shipbuilding industry, in machine building and industry. The metal case, dia. 100 mm, is especially sturdy, the instrument can be adjusted to different levels
Stem: dia. 12 mm, security pane: Sekurit glass
Protection class: IP 54, Accuracy: 1% of scale value

Product features

- Especially stable and robust in use
- Water-, dust- and oil-resistant
- Quick response
- Liquid filling to stabilize against strong vibrations
- Corrosion-proof
- Durability even when used in tough operating conditions

Complete instruments with 3-piece steel compressions fitting

Meas. range °C	Thread	Order numbers								
		Built-in length I_1 (mm)								
		$I_1 = 125$	$I_1 = 150$	$I_1 = 200$	$I_1 = 250$	$I_1 = 300$	$I_1 = 350$	$I_1 = 400$	$I_1 = 500$	$I_1 = 600$
+50+650	G 1/2-A	4351041	4351141	4351241	4351341	4351441	4351541	4351641	4351741	4351841
+50+650	G 3/4-A	4351042	4351142	4351242	4351342	4351442	4351542	4351642	4351742	4351842

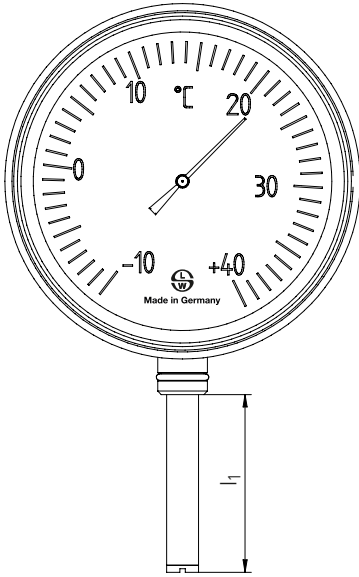
Spare parts for 3-piece compression fitting

Material	Order numbers			
	Thread G 1/2	Thread G 3/4	Thread M27 x 2	Thread M20 x 1,5
Stahl	758880	758890	759000	758882
Edelstahl	758881	758891	759001	758883

Complete instruments with loose steel coupling nut

Meas. range °C	Thread	Order numbers								
		Built-in length I_1 (mm)								
		$I_1 = 125$	$I_1 = 150$	$I_1 = 200$	$I_1 = 250$	$I_1 = 300$	$I_1 = 350$	$I_1 = 400$	$I_1 = 500$	$I_1 = 600$
+50+650	G-1/2-A	4351043	4351143	4351243	4351343	4351443	4351543	4351643	4351743	4351843
+50+650	G-3/4-A	4351044	4351144	4351244	4351344	4351444	4351544	4351644	4351744	4351844

Bimetal Dial Thermometers, Standard Type



Bimetal dial thermometers, standard type

Type: axial/radial

Accuracy class: 2.0

With separate thermowell made of brass (Ms58), dia. 12 mm

With O-ring for thermowell mounting

Case diameter: 63/80/100 or 160 mm

Case material: galvanized steel with nickered bezel

Standard measuring ranges: -30+50/-20+60/0+120/0+160 or 0+200 °C

Standard stem lengths L_1 (incl. thread): 40/63/80/100/160 or 200 mm

Options:

- With fixing screw
- With thread and Philips screw
- Bimetal surface thermometer with fixing spring
- With adjustable flange (for airducts)
- With your logo

Magnet Bimetall Dial Thermometers

Magnet bimetall dial thermometers for surface measurements on smooth surfaces

With two plain magnets in back (for temperatures over 300 °C and for vibrating measuring place, we recommend four magnets)

Accuracy class: 2,5

Case diameter: 63 or 80 mm

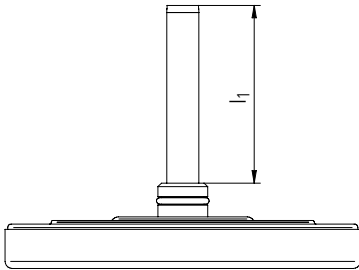
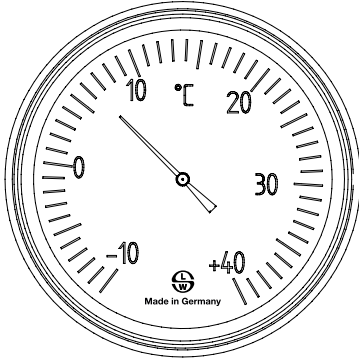
Case material: brass, nickel-plated

Standard ranges: -30+50/0+80/0+120/0+160/0+200/0+300
or 0+400 °C

Options:

- With four plain magnets
- With two strong magnets
- With four strong magnets
- With maximum drag pointer
- With max./min. drag pointer
- Ranges 0+500 or 0+600 °C (only available with case diameter 80 mm and four strong magnets)

Bimetal Dial Thermometers



Bimetal dial thermometer, standard type

Type: axial/radial

With rotating and swiveling case,

Accuracy class: 1.0/1.6

Case diameter: 63/80/100 or 160 mm (34 and 50 mm on request)

Case materials: galvanized steel with nickled bezel,
stainless steel with bezel

Bayonet ring SS 1.4301, IP 65 (water- and airtight)

Standard measuring ranges: -40+40/-30+50/-20+60/0+60/0+100/
0+120/0+160/0+200/0+250/0+300/0+400 or 0+500 °C

(other ranges on request)

Standard stem length L_1 (incl. threading): 45/63/100/160/200/250
or 300 mm (other lengths on request)

Stem diameter: 6/8/9 or 10 mm

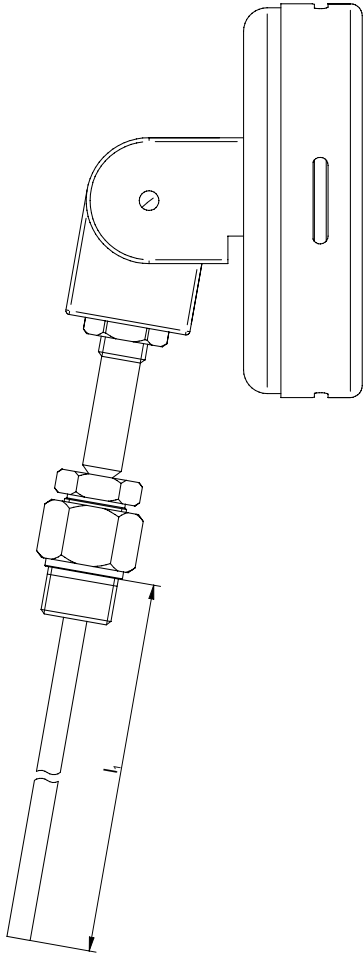
Stem materials: brass Ms58/SS 1.4305 or 1.4571

Connection: fixed thread/loose coupling nut/rotating thread on
compression fitting

Options:

- With separate thermowell (brass Ms58 or SS 1.4305),
dia. 12 mm , with lateral adjusting nut
- With safety glass
- With maximum drag pointer
- With dual scale °C and °F
- With smooth shaft, stem without thread
- With NPT thread
- With adjustable flange (for airducts)
- With insertion tip (for stem dia. 4 and 9 mm)

Gas-filled Dial Thermometers



Gas-filled dial thermometers, stainless steel

Type: axial/radial

With rotating and swiveling case,

Accuracy class: 1.0, Protection class: IP 65,

Case diameters: 63/80/100/160 or 250 mm

(Bayonet ring case SS 1.4301, IP 65)

Standard measuring ranges: -200+50/-100+100/-40+40/0+60/

0+100/0+120/0+160/0+200/0+300/0+400/0+500/0+600/

0+700 or 0+800 °C (other ranges on request)

Stem length L_1 (incl. thread): 63/100/160/200/250/300 or 400 mm

(other lengths on request)

Stem diameter: 6/8/9 or 10 mm

Stem: standard dia. 12 mm, material: 1.4541

(available stem diameters: 6/8/9/10 or 14 mm)

Connection: threaded connection/loose coupling nut/

Revolving thread on clamp mounting

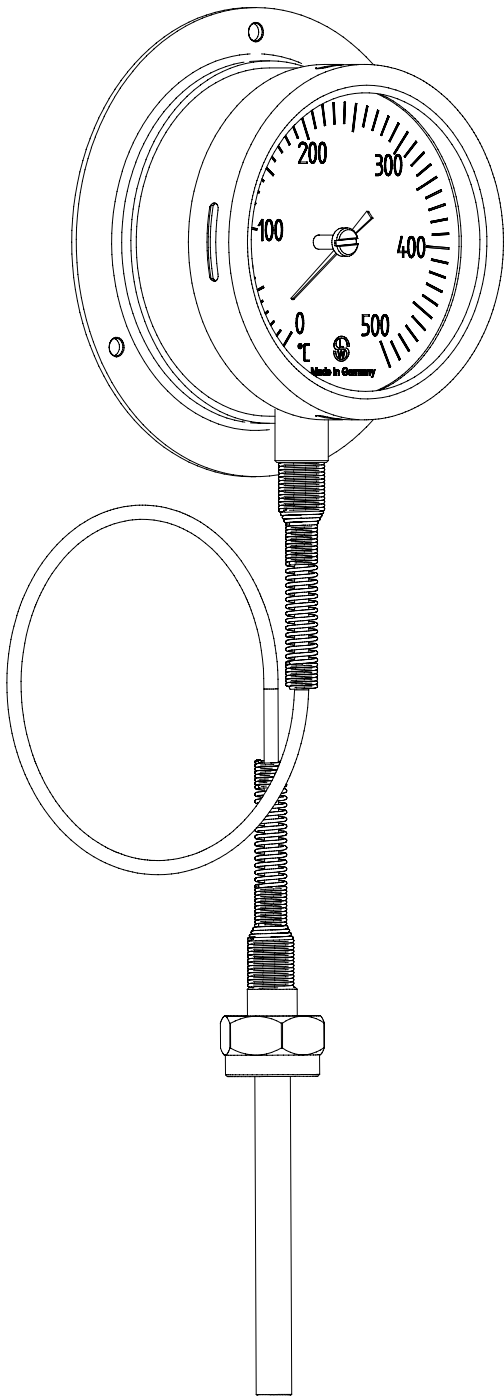
Thread connection: G 1/2; G 3/4, G 1/4; G1; M 18 x 1.5; M 20 x 1.5;

M 24 x 1.5; M 27 x 2

Options:

- With separate thermowell acc. to DIN 43772
(see pages 28, 29, 31, 32 and 34)
- With safety glass
- With maximum drag pointer
- With max./min. drag pointer
- With dual scale °C and °F
- With silicone-filled case
- With smooth shaft, stem without thread
- With contact devices (for case dia. 100 and 160 mm)

Gas-filled Dial Telethermometers



Gas-filled dial telethermometers, stainless steel

Available designs:

With wall mounting (cable going downwards)

With mounting ring against wall (cable going downwards or back)

With mounting ring in front (cable going downwards or back)

With clamp mounting (cable going downwards or back)

Accuracy: 1.0, Protection class: IP 65

Bayonet clasp case: 63/80 or 100 mm, material: SS 1.4301

Standard measuring ranges: -200+50/-100+100/-40+40/0+60/

0+100/0+120/0+160/0+200/0+300/0+400/0+500/0+600/0+700

or 0+800 °C (other ranges per your inquiry)

Standard capillary dia. 2.5 mm, SS 1.4541

(lengths in meters)

Different types of leads:

Stem in SS with PVC coating (dia. 4 mm)

Stem with spiral protection SS 1.4301 (dia. 0.6 mm)

Stem with spiral protection and PVC coating (dia. 7.5 mm)

Stem length acc. to your requirements

Stem: standard dia. 12 mm (material: 1.4541)

(available stem diameters: 6/8/9 or 10 mm)

Connection: threaded connection/loose coupling nut/revolving thread/compression fitting (on stem)/adjustable clamp mounting (on stem)

Threaded connections: G 1/2; G 3/4; G 1/4; G 1; M18 x1.5;

M20 x 1.5; M24 x 1.5; M27 x 2

Options:

- With separate thermowell acc. to DIN 43772 (see pages 28, 29, 31, 32 and 34)
- With safety glass
- With maximum drag pointer
- With dual scale °C and °F
- With silicone-filled case
- With smooth shaft, stem without thread
- With air sensor (dia. 16 mm, spiral length: 140 mm)
- With contact devices (for case dia. 100 and 160 mm)