

Gas thermometers Stainless steel version with capillary

Nominal size ND 63 and 80
Accuracy class 1

According to DIN EN 13 190

Features

Fulfills highest measurement technology requirements
Gas pressure with inert gas filling is physiological harmless
Short response time

Applications

Chemical and petrochemical industry
Energy economy , Process engineering
Container and pipe construction
Mechanical engineering and apparatus manufacture,
Special customised versions available,
Food industry

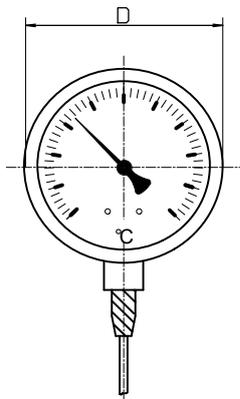


Model and ND	TG-32 63	TG-37 63	TG-32 80	TG-37 80
Connection	bottom with capillary	back, eccentric with capillary	bottom with capillary	back, eccentric with capillary
Ranges	-50...+50°C, -30...+50°C, -30...+170°C, -20...+60°C, -20...+80°C 0...80°C, 0...100°C, 0...120°C, 0...160°C, 0...200°C, 0...300°C, 0...350°C 0...400°C, 0...500°C, 0...+600°C, 50...300°C, 50...400°C, 100...500°C, 100...600°C *)			
Case	CrNi-Stahl in Bördelringausführung			
Benzel	CrNi-Stahl			
Window	Glass lens			
Dial	Aluminium hite, scale black			
Pointer	Aluminium, black			
Measuring element	Gas pressure system with inert gas filling			
Display correction	at case, max. 6 %			
Probe	CrNi steel			
Connection	refer "Sensors for thermometers with gas pressure system models TG 32 and TG 37"			
Length	63, 100, 150, 200, 250, 300, 350, 400, 450, 500 mm, other lengts possible*)			
max. pressure	25 bar at probe, without protective tube			
Protection	IP 55 according EN 60529 / IEC 529			
Weight	0,4 kg	0,4 kg	0,5 kg	0,5 kg

*) Measuring ranges and diameter must be tuned

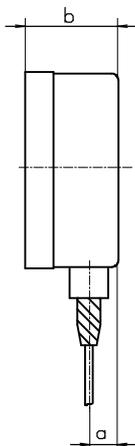
Dimensions

Connection bottom

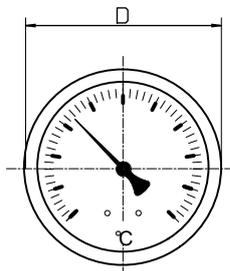


Diameter front flange

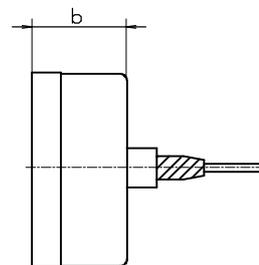
Connection back, eccentric



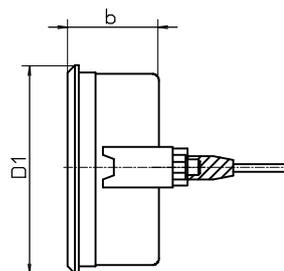
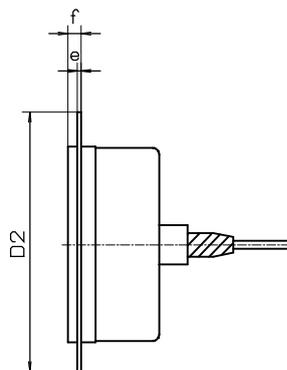
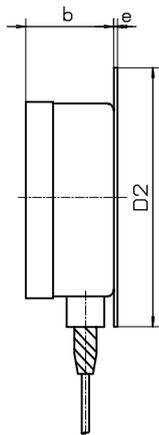
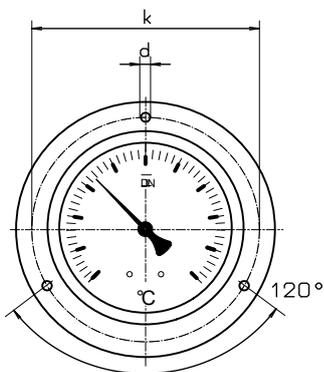
Width back



Front flange



With triangular bezel and mounting bracket



Dimensions [mm]											
Model	NG	D	a	b	h	D1	D2	e	f	k	d
TG-32	63	64	12	39	60	-	85	2	6	75	3,6
TG-37	63	64	12	39	60	86	85	2	6	75	3,6
TG-32	80	81	15	50	60	-	110	2	6	95	4,8
TG-37	80	81	15	50	60	86	110	2	6	95	4,8

Model specification:

Model	Connection	Nominal size	Measuring range	Probe length	Probe type
TG-3	2 oder 7	ex. 63	ex. 120	ex. 100	ex F2

Connection bottom = 2
 Connection back = 7

refer rangespecifications
 ex.. 0...120 °C

refer last page

Case with NG 63 = 63
 Case with NG 80 = 80

Probe length in mm

Gas thermometers Stainless steel version with capillary

Nominal size ND 100 and 160
Accuracy class 1,0

according to DIN 16203 and 16205

Features

Fulfills highest measurement technology requirements,
Gas pressure with inert gas filling is physiological harmless
Short response time
For aggressive media

Applications

Chemical and petrochemical industry
Energy economy , Process engineering
Container and pipe construction
Mechanical engineering and apparatus manufacture,
Special customised versions available,
Food industry

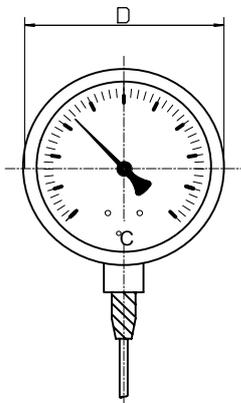


Model and ND	TG-32 100	TG-37 100	TG-32 160	TG-37 160
Connection	bottom with capillary	back, eccentric with capillary	bottom with capillary	back, eccentric with capillary
Ranges	-50...+50°C, -30...+50°C, -30...+120, -30...+170°C, -20...+60°C, -20...+80°C 0...80°C, 0...100°C, 0...120°C, 0...150°C, 0...160°C, 0...200°C, 0...300°C, 0...350°C 0...400°C, 0...500°C, 0...+600°C, 50...300°C, 50...400°C, 100...500°C, 100...600°C *)			
Application	Full scale value			
Case	CrNi steel			
Bezel	CrNi steel			
Window	Glass lens			
Dial	Aluminium white ,scale black			
Pointer	Aluminium, black			
Measuring element	Gas pressure system with inert gas filling			
Display correction	at case , max. 6 %			
Probe	CrNi steel			
Connection	lock at data sheet T 290			
Length	63, 100, 150, 200, 250, 300, 350, 400, 450, 500 mm, other length possible *)			
Max. pressure	25 bar at probe , without thermowell			
Protection	IP 55 according EN 60529 / IEC 529			
Weight	0,6 kg	0,6 kg	1,1 kg	1,1 kg

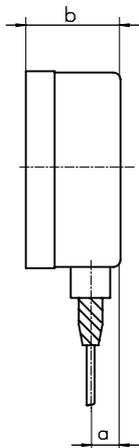
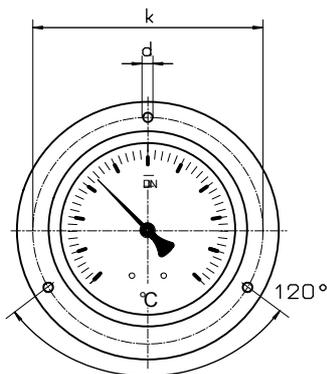
*) Ranges and iameter must be tuned ,

Dimensions

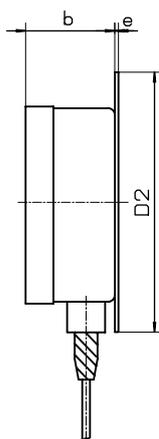
Connection bottom



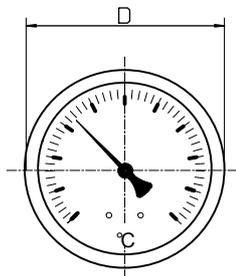
Hole diagram for front flange



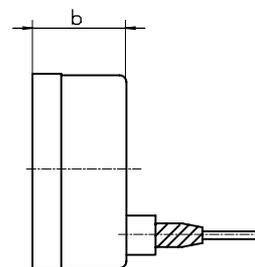
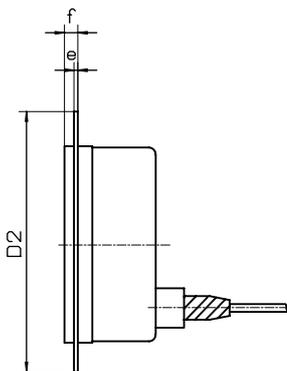
rear flange



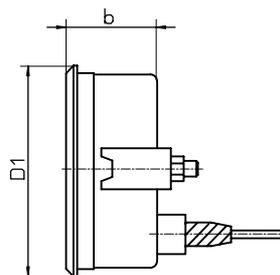
Connection back, eccentric



front flange



with triangular bezel and mounting bracket

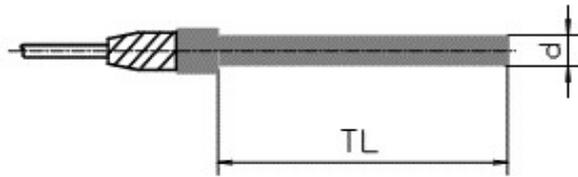


Dimensions in mm											
Model	NG	D	a	b	h	D1	D2	e	f	k	d
TG-32	100	101	16	55	60	107	132	2	6	116	4,8
TG-37	100	101	16	55	60	107	132	2	6	116	4,8
TG-32	160	160	16	50	60	-	196	2	6	178	5,8
TG-37	160	160	16	50	60	-	196	2	6	178	5,8

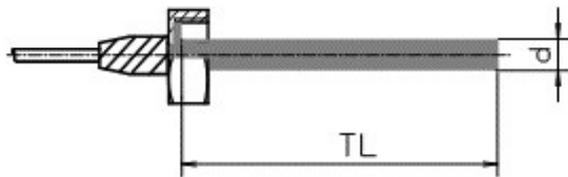
Modelspecification

Model	Connection	Nominal size	Range	Probe length	Probe type
TG-3	2 or 7	ex. 100	ex. 120	ex. 100	ex. F 2
	Connection bottom = 2 with capillary Connection back = 7 with capillary Case with NG 100 = 100 Case with NG 160 = 160		after range specification or direct ex. 120 °C	Probe length in mm	refer last page

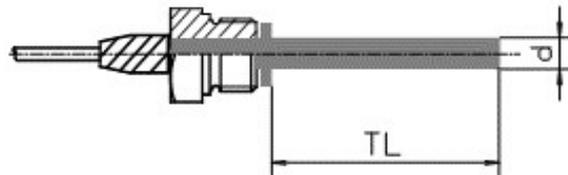
Sensors for thermometers with gas pressure system models TG 32 and TG 37



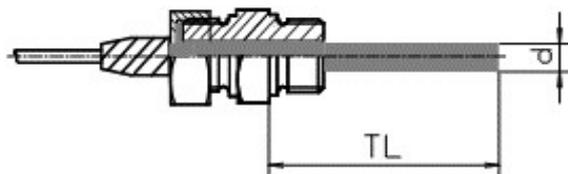
Sensor model F1:
Flat without thread



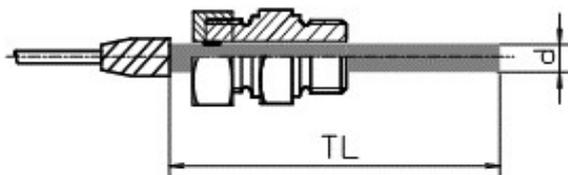
Sensor model F4:
Loose union nut



Sensor model F5:
Rotatable connection pin
Can only be used in conjunction with a protective tube!



Sensor model F6:
Loose union nut (F4) with screw connection



Sensor model F7:
Flat (F1) with compression fitting

Sensor model	Min. immersion probe lengths TL								
	F1, F4, F5			F6			F7		
Probe diameter	12	10	8	12	10	8	12	10	8
Temperature									
<500°C	55	65	95	50	60	90	90	100	130
>500 °C	95	125	185	90	120	180	130	160	220