

Capillar thermometer

Case: stainless steel

Model T4700



Description

The equipment in this product line is made from stainless steel. This provides safety and protection from a multitude of aggressive substances and environmental influences.

Measurements are recorded by the liquid-filled measuring system, which consists of a temperature sensor, a capillary tube and a Bourdon spring. These three components combine to form a closed tube system.

The internal pressure in this system changes depending on the temperature, which causes the pointer axle connected to the spring to rotate and display the temperature value on the scale.

Temperatures of between -40°C and +400°C are rapidly and accurately indicated by the closed system.

The capillary tube, which is between 500 mm and 10000 mm in length, allows measurements to be taken at any point using a mechanical remote display.

Features

- i Fast response time
- i Stainless steel housing for aggressive measuring substances
- i Measuring point and display in different locations
- i Wide range of standard versions

Measuring ranges

-40 ... 60 °C up to 0 ... 400 °C

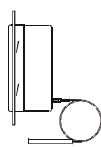
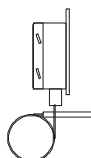
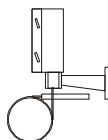
Options

- i Display range °F, °C/°F (two different scales)
- i Connection on the back
- i Laminated safety glass, acrylic
- i Accuracy class 1.0
- i Stainless steel measuring device holder
- i Liquid damping

Applications

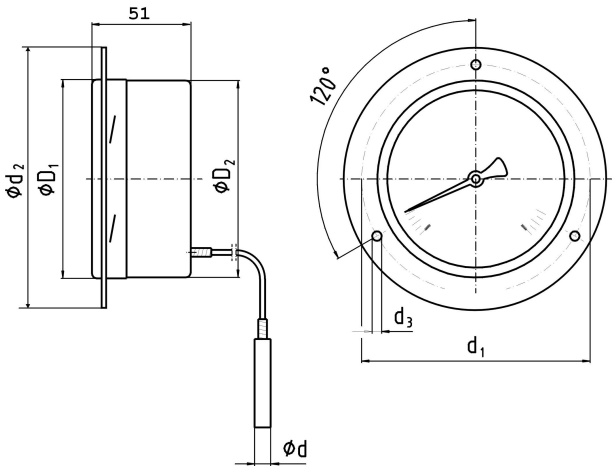
Mechanical engineering
Refrigeration engineering
Process technology
Food industry

Technical data

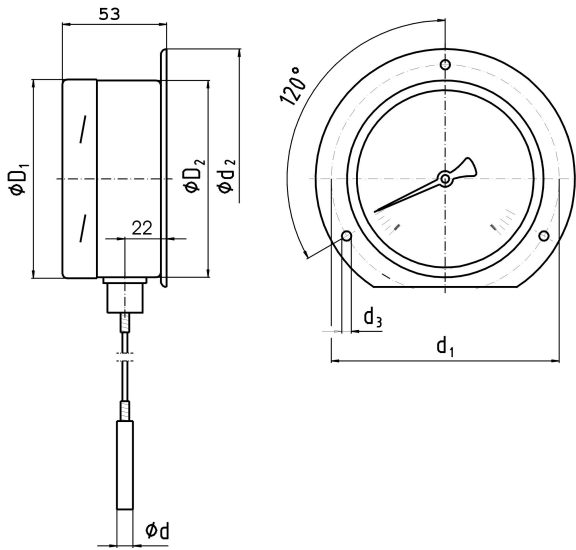
Model	T4700			Options
Symbol				
Nominal size	100			
Type of mounting	bezel on bottom	bezel on back	device holder	
Accuracy class	Class 2 (EN13 190)			Class 1
Measuring ranges and scale division	Measuring range in °C	limit of error ± °C	scale division in °C	
	-40... +40	2	1	
	-40... +60	2	1	
	-30... +50	2	1	
	-20... +60	2	1	
	-20... +80	2	1	
	0... 60	2	1	
	0... 80	2	1	
	0... 100	2	1	
	0... 120	4	2	
	0... 160	4	2	
	0... 200	4	2	
	0... 250	5	5	
	0... 300	10	5	
0... 400	10	5		
Case / Bezel	stainless steel 1.4571			
Window	glas lens			
Dial	Aluminium white, scale and black imprint			
Pointer	Aluminium black, adjustable pointer			
Scale angle	approx. 270 °			
Connection	capillary tube back	plain, capillary tube on the bottom		
- Material	stainless steel 1.4571			
Capillary tube	Ø 2 mm, stainless steel1.4571, smallest bending radius 6 mm			
Stem	stainless steel 1.4571			
Filled media	< 350°C Xylol, >350°C silicone oil			
Measuring principle	fluid expansion			
Protection class	IP 56 (EN 60529/ IEC 529)			
Weight (kg)	approx. 1,4 kg			

Dimensions

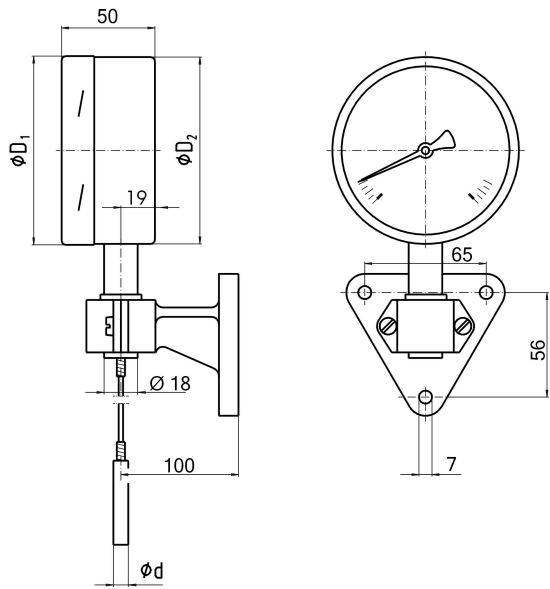
Model T4700 front bezel



Model T4700 back bezel



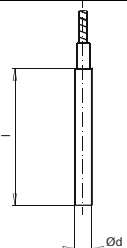
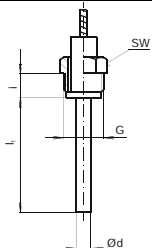
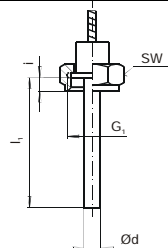
Model T4700 with device holder

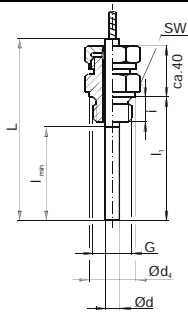
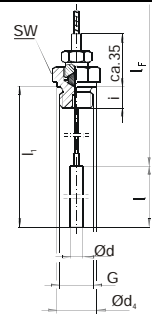
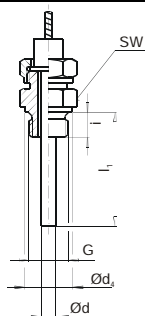


ND	Dimensions in mm						Weight in kg
	d	d ₁	d ₂	d ₃	D ₁	D ₂	
100	8	116	132	4,8	101	99	1,400

Stem



Type of connection:	plain without thread	turnable; male thread	union nut; female thread		
Material	1.4571	1.4571	1.4571		
Stem length l ₁	140 mm 200 mm 240 mm 290 mm	80 mm 140 mm 180 mm 230 mm	89 mm 126 mm 186 mm 226 mm 276 mm		
Stem diameter	d = 8 mm	d = 8 mm	d = 8 mm		
Dimensions					
		SW	i	SW	i
G ½		27	20	27	8,5
G ¾		---	---	32	10,5
M24x1,5		---	---	32	13,5

Type of connection:	adjustable compression fitting, adjustable on stem	adjustable compression fitting, adjustable on capillary tube length: $L = l_1 + \text{ca. } 35 \text{ mm}$	union nut with lose connection $G\frac{1}{2} / G\frac{1}{2}$, $G\frac{1}{2} / G\frac{3}{4}$ $M24 \times 1,5 / M18 \times 1,5$						
Material	1.4571	1.4571	1.4571						
Stem length l_1	140 mm 200 mm 240 mm 290 mm $l_{\min} = 60 \text{ mm}$	140 mm 200 mm 240 mm 290 mm	63 mm 100 mm 160 mm 200 mm 250 mm						
Stem diameter	$d = 8 \text{ mm}$	$d = 8 \text{ mm}$	$d = 8 \text{ mm}$						
Dimensions									
G	SW	d₄	i	SW	d₄	i	SW	d₄	i
$G\frac{1}{2}$	27	26	14	27	26	14	27	26	14
$G\frac{3}{4}$	32	32	16	32	32	16	32	32	16
M18x1,5	24	23	12	---	---	---	24	23	12
$\frac{1}{2}$ NPT	22	---	19	22	---	19	22	---	19

Ordering informations

Model / Measuring range / length of capillary tube / stem / options

AE 1020 a

Subject to technical changes