

CAPILLARY PRESSURE TTK THERMOMETER

diameter 63, 80, 100, 160mm
bottom, back connection
cantilever or flange mounting



DESCRIPTION:

- bayonet case 17 240/1.4301
- stainless steel capillary 17 248/1.4541, PVC braiding or spiral protection
 - glass inspection hole
 - individual capillary lengths, sensor and connection designs, other variations
 - back, bottom connection

APPLICATION:

- food industry
- petrochemical industry
 - cooling industry
- semi-heavy and heavy industry
 - pharmaceutical industry
 - hydraulics

TECHNICAL PARAMETERS:

- diameters: 63, 80, 100, 160mm
- temperature ranges: -40+40, -40+60, -30+50, -20+50, -20+40, -20+60, 0-60, 0-80, 0-100, 0-120, 0-160, 0-200, 0-250, 0-300, 0-350, 0-400, 0-500, 0-600°C
- capillary lengths: 1; 1,6; 2,5; 4; 6; 10; 12; 16; 25m
- sensor lengths: 125, 160, 200, 250, 315, 400mm, individual
 - sensor diameter: 6, 8, 10mm, individual
 - accuracy: $\pm 1\%$
 - protection: IP 65

SPECIFICATION:

Capillary pressure thermometers use for measuring a closed pressure circuit with Bourdon tube. Compared to the bimetallic thermometers, this system is remarkable for its higher accuracy, stability and resistance. They may be used in all kinds of operations due to the wide range of types and versions. Capillary pressure thermometers come in wide range of designs. You may choose from various connection and case designs, different stem lengths from 1 to 25 m, sensor design, etc. Choose from other accessories: silicone or glycerine damping, magnetic or inductive contacts, indication needle, lazy needle, etc. Specify the capillary pressure thermometer features in the order by modification of the order code, see technical page.

ORDER CODE

Code		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Version	TTK																

Case dimensions mm		Code A
Diameter	Height	
63	45	1
80	45	2
100	50(85)	3
160	50(100)	4

Temperat. range °C	B	C
-40+40	0	1
-40+60	0	2
-30+50	0	3
-20+40	0	4
-20+60	0	5
0-60	0	6
0-80	0	7
0-100	0	8
0-120	0	9
0-160	1	0
0-200	1	1
0-250	1	2
0-300	1	3
0-350	1	4
0-400	1	5
0-500	1	6
0-600	1	7

Case mounting	Code D
cantilever(bottom only)	1
front flange	2
rear flange	3

Case design	Code E
steel	1
st.steel 17 240/1.4301	2

Accessories	Code F
none	0
compensatory	1
glycerine damper	2
silicone damper	3
indication needle	4
lazy needle	5
magnetic contacts	6
inductive contacts	7

Accessories	Code F
Contact type:	8
1 Max	8a
1 Min	8b
Change-over	8c
Min/Max	8d
Max/Max	8e
Min/Min	8f
change-over/ch.-over	8g

Capillary length m	Code G
1	1
1,6	2
2,5	3
4	4
6	5
10	6
12	7
16	8
25	9

Capillary connection	Code H
bottom	1
back	2

Capillary design	Code I
stainless steel	1
PVC protection	2
spiral protection	3

Stem length mm	Code J
125	1
160	2
200	3
250	4
315	5
400	6

Sensor diameter mm	Code K
6	1
8	2
10	3
individ. requirements	4

Sensor fitting	Code L
bare	0
union nut	1
fixed external thread	2
turning external thread	3

Sensor thread	Code M
G1/4	0
G1/2	1
G3/4	2
G1	3
M18x1,5	4
M20x1,5	5
M24x1,5	6
M27x2	7
M30x2	8
M33x2	9

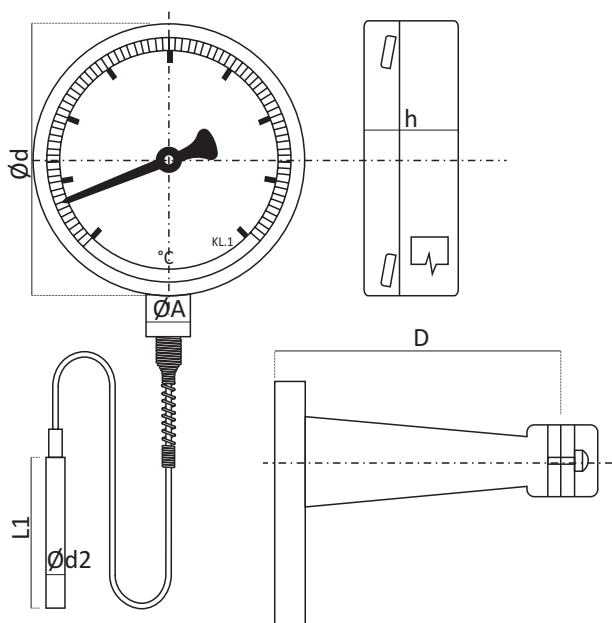
Sensor design	Code N
brass	1
st.steel 17 348/1.4571	2

Thermowell type	Code O
none	0
sliding thread socket	1
standard	2
highpressure	3

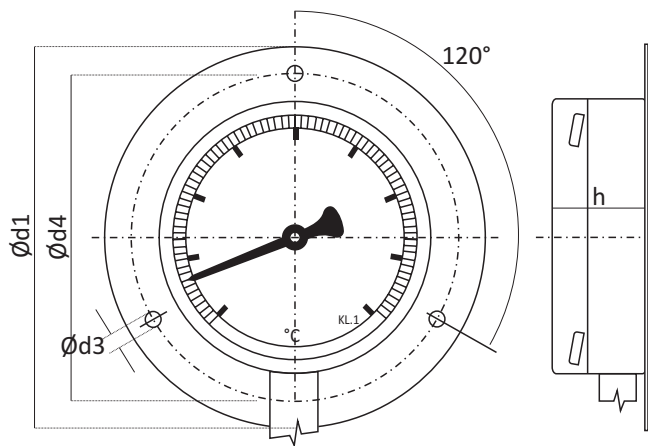
Thermowell thread	Code P
G1/2	1
G3/4	2
G1	3
M18x1,5	4
M20x1,5	5
M24x1,5	6
M27x2	7
M30x2	8
welding cone	9
individ. requirements	10

	TTK	TTK
Connection	bottom	back
Diameters	63, 80, 100, 160mm	
Temperature ranges	-40+40, -40+60, -30+50, -20+40, -20+60, 0-60, 0-80, 0-100, 0-120, 0-160, 0-200, 0-250, 0-300, 0-350, 0-400, 0-500, 0-600°C	
Accuracy	1%	
Case	bayonet, stainless steel 17 240/1.4301	
Connection	threadless, nut, external thread	
Stem	brass, stainless steel 17 348/1.4571	
Stem thread	G1/2, G3/4, G1, M18x1,5, M20x1,5, M24x1,5, M27x2, M30x2	
Well types	according to connection see catalogue page Thermowells	
Damping	glycerine filling (up to 100°C), silicone damping (up to 250°C)	
Protection	IP 65 (EN 60529/IEC529)	

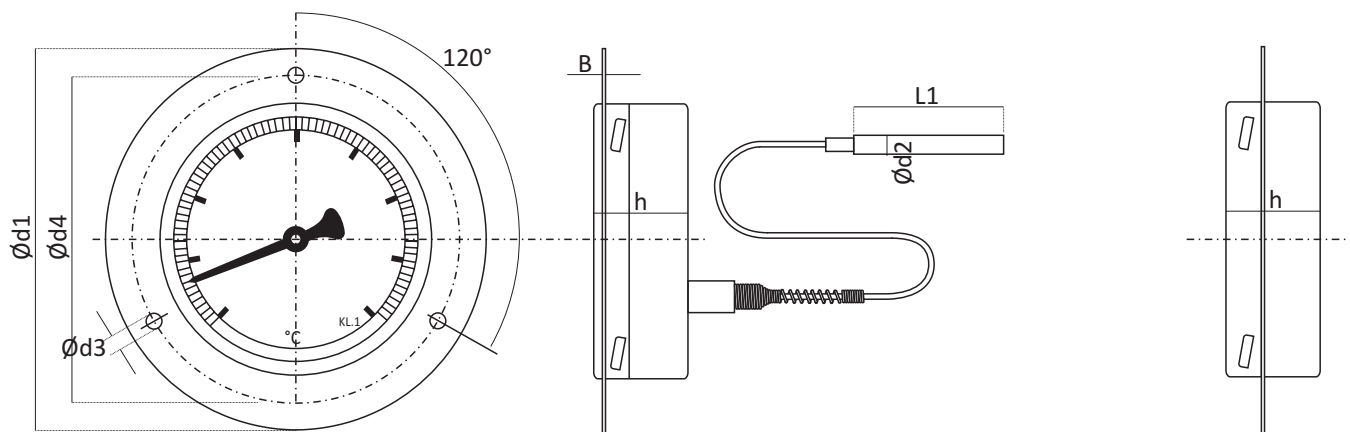
• TTK bottom connection - cantilever mounting



• TTK bottom connection - back flange mounting

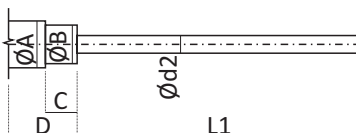


• TTK back connection - front flange mounting

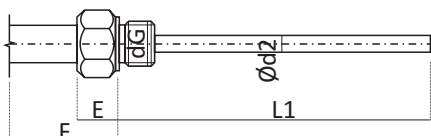


Dimensions in mm							
Nom. size	Ød	h	d1	d3	d4	B	D
63	63	45	85	4,5	75	3	105
80	80	45	110	4,5	95		
100	100	50	132	4,8	116		
160	160	50	196	5,8	178		

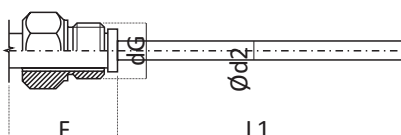
- threadless connection



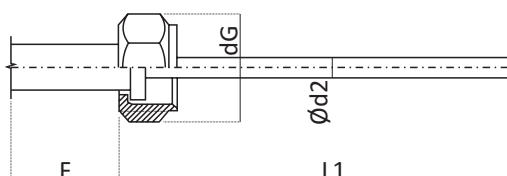
- fixed connection



- turning connection



- union nut



Dimensions in mm					
A	B	C	D	L1	d2
18	14	10	25	125-1000	6, 8, 10

CONTACTS:

Contact wiring diagram:

max. voltage 230V
max. load 30W

MIN / contacts:



Electric circuit is switched on in the black section.
When reaching the preset temperature the
circuit is disconnected.

MAX / contacts:



Electric circuit is switched on in the black section.
When reaching the preset temperature the
circuit is connected.

Contact versions:

1x Min

Min/ min

Max/ min

- magnetic

1x Max

Min/ max

Max/ max

- inductive

1x Change-over

Min/ change-over

Max/ change-over
change-over/ change-over

Contact types: