

ICS Cable sensors



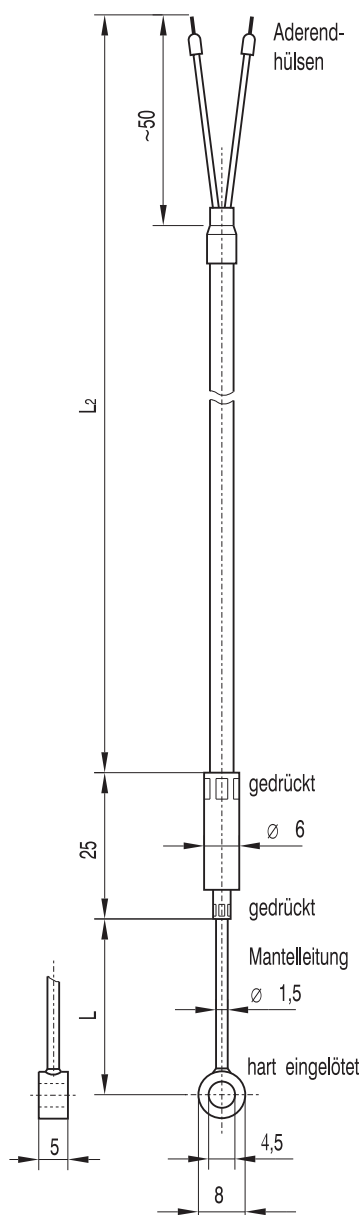
Without attaching parts	
Common cable sensor	K1T, K1W
Cable sensor with small block	K10T, K10W
Cable sensor with infeeding	K12T, K12W
Cable sensor for surface measurement	K13W
Sheathed thermocouple cable sensor with stainless steel ring	500
Thermocouple cable sensor with fixed point cell	FP-KTE

With attaching parts	
Cable sensors with adjustable screwing	K6W, K7W, K6T, K7T
Cable sensor with bayonet lock cap	K9W, K9T
Cable sensor with cable tie	K11W, K11T
Cable sensor with screwing in	K4T, K4W, K8W, K5WZ, K5W, K8T, K5T

Thermocouples

Sheathed Thermocouple

Series 500



Sheathed Thermocouple-Cable Sensor with stainless steel ring and thermo braided wire

Application temperature

up to +800 °C

Thermo junction

J (Fe-CuNi) DIN EN 60584
K (NiCr-Ni) DIN EN 60584
on inquiry

Number of Thermo junction

1 thermocouple
on inquiry

Sheath material

1.4571
on inquiry

Material of the ring

Brass
on inquiry

Measuring point design

insulated of sheath
welded in sheath

Nominal length L

500 mm
on inquiry

Compensating cable length L₂

on inquiry

Type of compensating cable

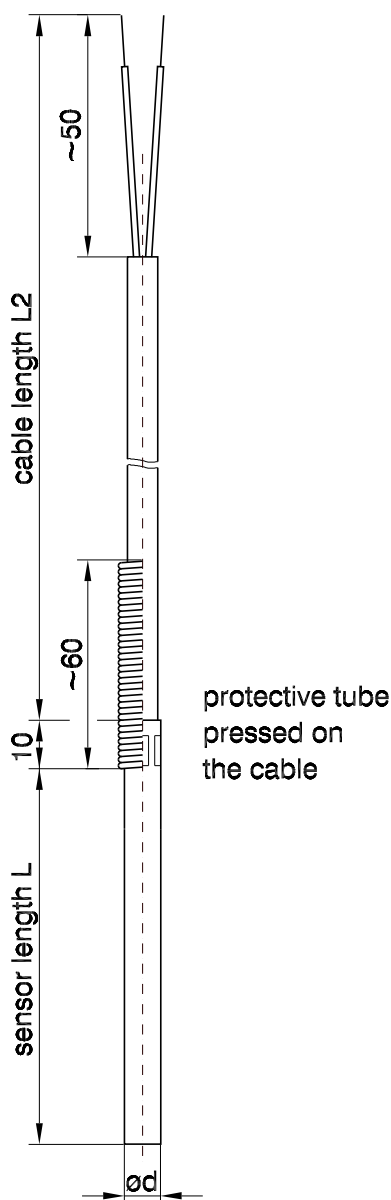
GIGIV 2x0,22
on inquiry

Bending radius of the sheath material $\geq 5x\varnothing d$

Resistance thermometers

Cable sensors

Series K1W



Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751
 1xPt 100 cl. F0,3 acc. to DIN EN 60751
 2xPt 100 cl. F0,15 acc. to DIN EN 60751
 2xPt 100 cl. F0,3 acc. to DIN EN 60751
 on inquiry

Circuitry

2 wire circuit
 3 wire circuit
 4 wire circuit for 1xPt100

Protective tube material

1.4571
 on inquiry

Protective tube diameter d

on inquiry 3 ... 10 mm

Sensor length L

on inquiry 30 ... 1000 mm

Type of connection cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without
 with spiral spring

Connector

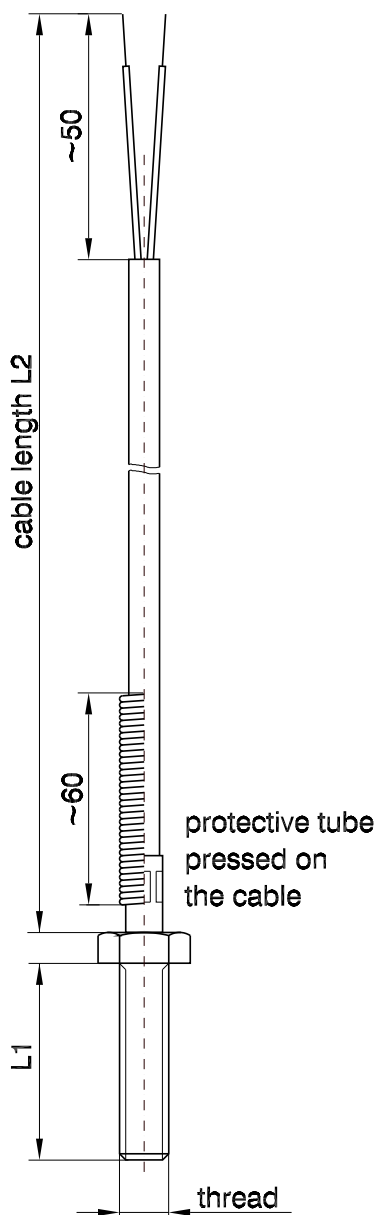
free ends
 connector on inquiry

declare desired temperature range for case of application

Resistance thermometers

Cable sensors

Series K4W



Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751

1xPt 100 cl. F0,3 acc. to DIN EN 60751

2xPt 100 cl. F0,15 acc. to DIN EN 60751

2xPt 100 cl. F0,3 acc. to DIN EN 60751

on inquiry

Circuitry

2 wire circuit

3 wire circuit

4 wire circuit for 1xPt100

Protective tube material

stainless steel

on inquiry

Insert length L_1

on inquiry 10 ... 40 mm

Type of connection cable

on inquiry

Cable length L_2

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Thread

M6

M8

M10

G1/4A

on inquiry

Connector

free ends

connector on inquiry

Resistance thermometers

Cable sensors

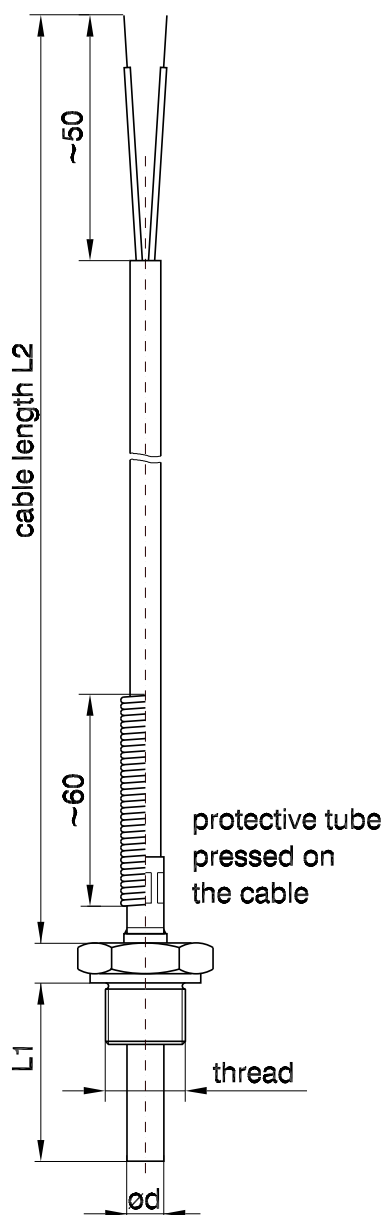
Series K4W

declare desired temperature range for case of application

Resistance thermometers

Cable sensors

Series K5W



Construction

as Resistance Thermometer
as Sheathed Resistance Thermometer

Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 or W0,15 acc. to DIN EN 60751
1xPt 100 cl. F0,3 or W0,3 acc. to DIN EN 60751
2xPt 100 cl. F0,15 or W0,15 acc. to DIN EN 60751
2xPt 100 cl. F0,3 or W0,3 acc. to DIN EN 60751
on inquiry

Circuitry

2 wire circuit
3 wire circuit
4 wire circuit for 1xPt100

Protective tube material

1.4571
on inquiry

Protective tube diameter d

on inquiry 3 ... 6 mm

Insert length L₁

on inquiry min. length of thread + 10 ... 1000 mm

Type of connection cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without
with spiral spring

Thread

M10
G1/4A
G1/2A
on inquiry

Resistance thermometers

Cable sensors

Series K5W

Connector

free ends
connector on inquiry

declare desired temperature range for case of application

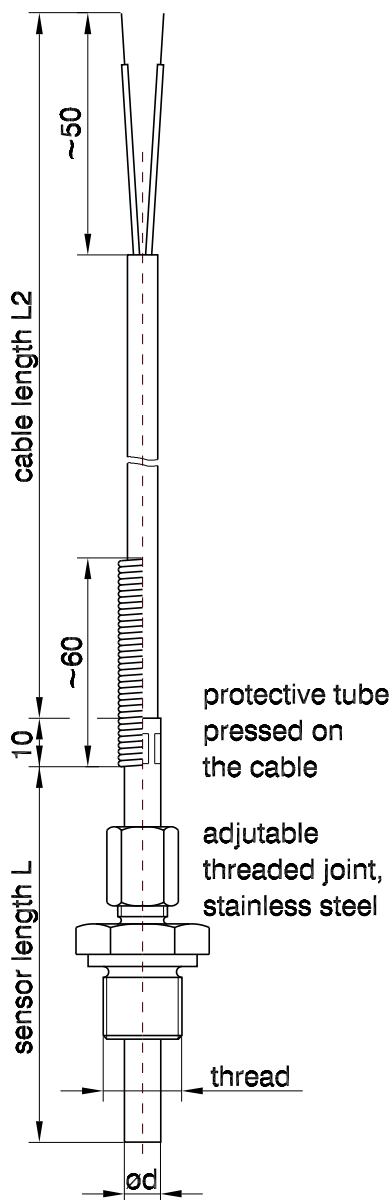
Bitte beachten Sie, dass der
gesuchte Temperaturfühler aus dem
Sortiment genommen wurde.

*Please note the desired
temperature sensor has been
removed from the assortment.*

Resistance thermometers

Cable sensors

Series K6W



Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751

1xPt 100 cl. F0,3 acc. to DIN EN 60751

2xPt 100 cl. F0,15 acc. to DIN EN 60751

2xPt 100 cl. F0,3 acc. to DIN EN 60751

on inquiry

Circuitry

2 wire circuit

3 wire circuit

4 wire circuit for 1xPt100

Protective tube material

1.4571

on inquiry

Protective tube diameter d

on inquiry 3 ... 10 mm

Sensor length L

on inquiry (length of screwing +10 ... 1000 mm)

Type of connection cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Locking ring in the screw connection

teflon clamp ring

metal clamp ring

Thread

on inquiry M8x1 ... G1/2A

Resistance thermometers

Cable sensors

Series K6W

Connector

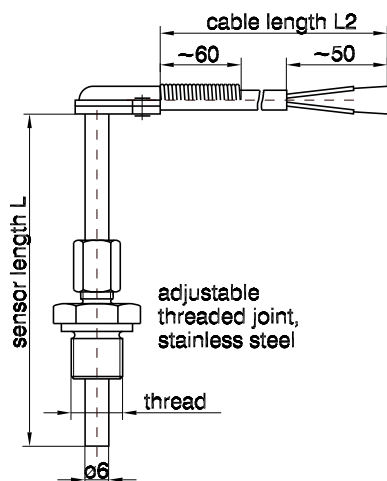
free ends
connector on inquiry

declare desired temperature range for case of application

Resistance thermometers

Cable sensors

Series K7W



Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751

1xPt 100 cl. F0,3 acc. to DIN EN 60751

2xPt 100 cl. F0,15 acc. to DIN EN 60751

2xPt 100 cl. F0,3 acc. to DIN EN 60751

on inquiry

Circuitry

2 wire circuit

3 wire circuit

4 wire circuit for 1xPt100

Protective tube material

1.4571

on inquiry

Protective tube diameter d

6 mm

on inquiry

Sensor length L

on inquiry (length of screwing +10 ... 1000 mm)

Type of connection cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Thread

M10x1

G1/4A

G1/2A

on inquiry

Resistance thermometers

Cable sensors

Series K7W

Connector

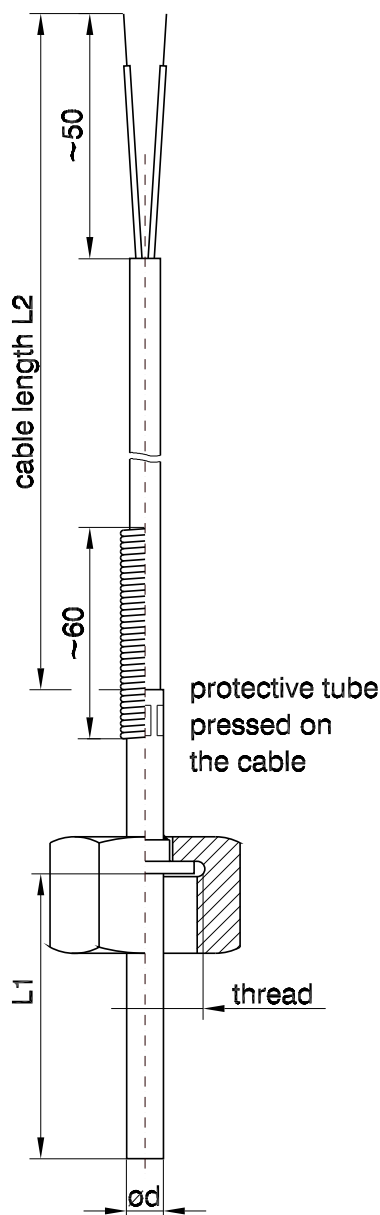
free ends
connector on inquiry

declare desired temperature range for case of application

Resistance thermometers

Cable sensors

Series K8W



Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751

1xPt 100 cl. F0,3 acc. to DIN EN 60751

2xPt 100 cl. F0,15 acc. to DIN EN 60751

2xPt 100 cl. F0,3 acc. to DIN EN 60751

on inquiry

Protective tube material

1.4571

on inquiry

Protective tube diameter d

on inquiry 3 ... 10 mm

Insert length L₁

on inquiry min. length of thread + 10 ... 1000 mm

Type of connection cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Thread

M10x1

G1/2A

on inquiry

Connector

free ends

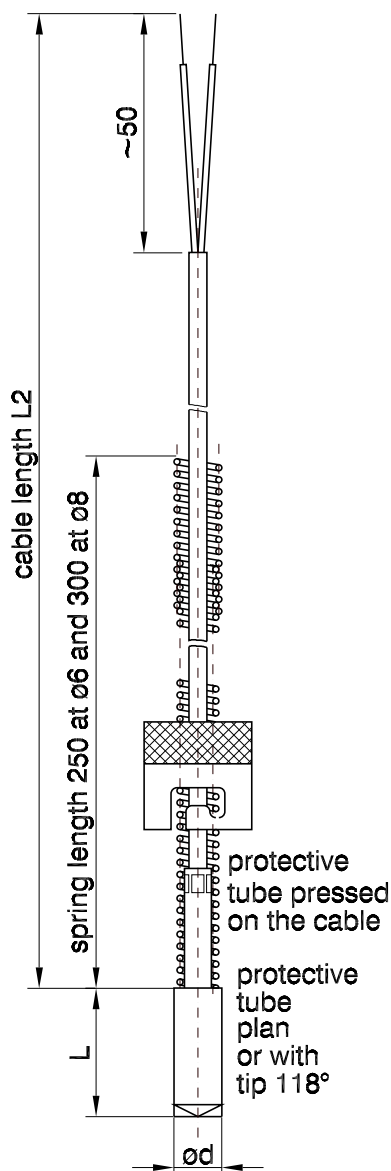
connector on inquiry

declare desired temperature range for case of application

Resistance thermometers

Cable sensors

Series K9W



Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751
 1xPt 100 cl. F0,3 acc. to DIN EN 60751
 2xPt 100 cl. F0,15 acc. to DIN EN 60751
 2xPt 100 cl. F0,3 acc. to DIN EN 60751
 on inquiry

Circuitry

2 wire circuit
 3 wire circuit
 4 wire circuit for 1xPt100

Protective tube form

planar
 pointed 118°

Protective tube material

1.4305
 on inquiry

Protective tube diameter d

6 mm
 8 mm
 on inquiry

Sensor length L

on inquiry 10 ... 30 mm

Type of connection cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Construction of bajonett cap

for thread nipple (bayonett matching part) ø 12
 for thread nipple (bayonett matching part) ø 14

Connector

free ends
 connector on inquiry

Resistance thermometers

Cable sensors

Series K9W

Thread nipple

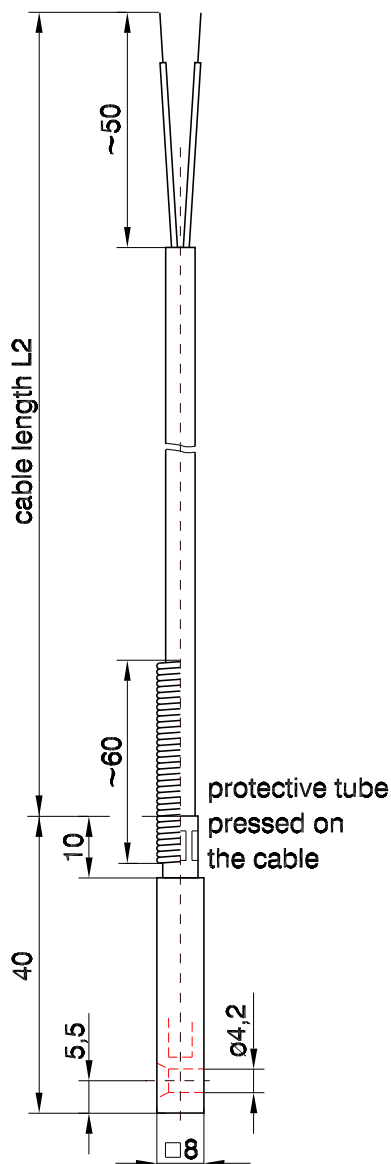
none
on inquiry

declare desired temperature range for case of application

Resistance thermometers

Cable sensors

Series K10W



Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751

1xPt 100 cl. F0,3 acc. to DIN EN 60751

2xPt 100 cl. F0,15 acc. to DIN EN 60751

2xPt 100 cl. F0,3 acc. to DIN EN 60751

on inquiry

Circuitry

2 wire circuit

3 wire circuit

4 wire circuit for 1xPt100

Protective tube material

aluminium

stainless steel

Brass

on inquiry

Type of connection cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Connector

free ends

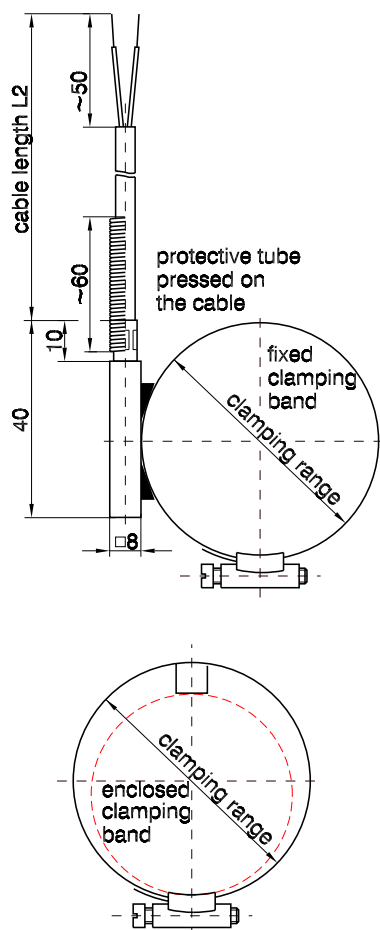
connector on inquiry

declare desired temperature range for case of application

Resistance thermometers

Cable sensors

Series K11W



Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751

1xPt 100 cl. F0,3 acc. to DIN EN 60751

2xPt 100 cl. F0,15 acc. to DIN EN 60751

2xPt 100 cl. F0,3 acc. to DIN EN 60751

on inquiry

Circuitry

2 wire circuit

3 wire circuit

4 wire circuit for 1xPt100

Protective tube material

stainless steel

Brass

on inquiry

Type of connection cable

on inquiry

Cable length L_2

on inquiry min. 100 mm

Clamping band

fixed

enclosed

Clamping range

20 - 32 mm

32 - 50 mm

50 - 70 mm

70 - 90 mm

90 - 100 mm

on inquiry

Bend protection

without

with spiral spring

Resistance thermometers

Cable sensors

Series K11W

Connector

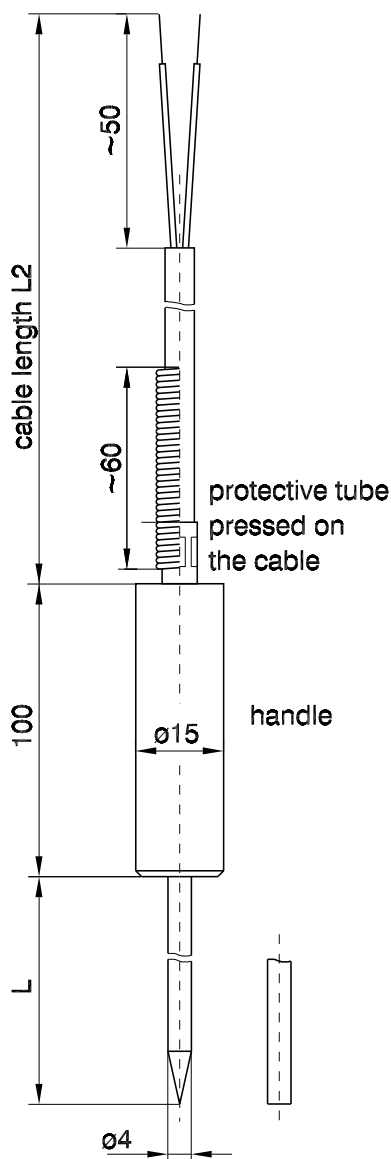
free ends
connector on inquiry

declare desired temperature range for case of application

Resistance thermometers

Cable sensors

Series K12W



Application temperature

on inquiry, dependent on sensor and protective tube material

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751

1xPt 100 cl. F0,3 acc. to DIN EN 60751

2xPt 100 cl. F0,15 acc. to DIN EN 60751

2xPt 100 cl. F0,3 acc. to DIN EN 60751

on inquiry

Circuitry

2 wire circuit

3 wire circuit

4 wire circuit for 1xPt100

Handle material

stainless steel

PTFE (Teflon, max. 260 °C)

Protective tube form

planar

with penetration point

Protective tube material

stainless steel

on inquiry

Protective tube diameter d

4 mm

on inquiry

Sensor length L

on inquiry 20 ... 190 mm

Type of connection cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Resistance thermometers

Cable sensors

Series K12W

Connector

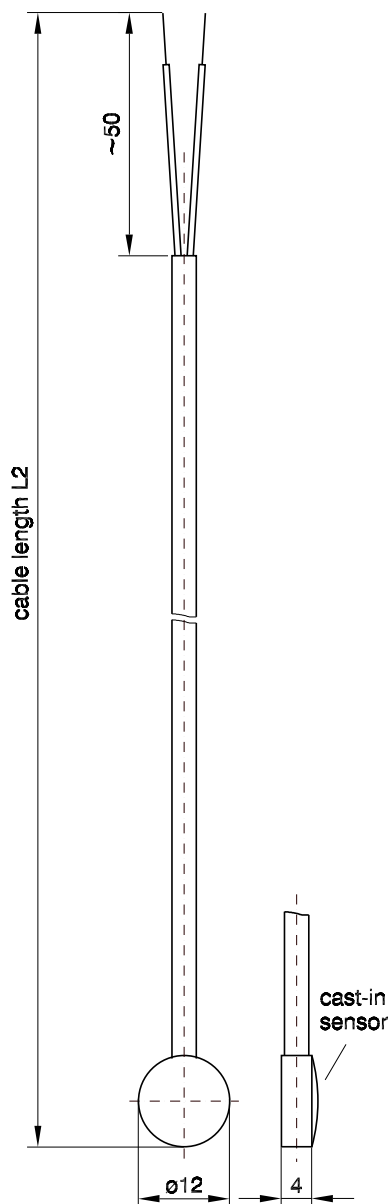
free ends
connector on inquiry

declare desired temperature range for case of application

Resistance thermometers

Cable sensors

Series K13W



Construction

as Resistance Thermometer

Temperatursensor

1xPt 100 cl. F0,15 acc. to DIN EN 60751

1xPt 100 cl. F0,3 acc. to DIN EN 60751
on inquiry

Circuitry

2 wire circuit

3 wire circuit

4 wire circuit

Housing material

stainless steel

on inquiry

Case dimensions

ø 12 X 4

Sealing compound

for temperature range -40 ... 80 °C

for temperature range -40 ... 180 °C

Type of connection cable

TeSi 2xAWG24

TeSi 3xAWG26

TeSi 4xAWG26

on inquiry

Cable length L₂

on inquiry min. 100 mm

Connector

free ends

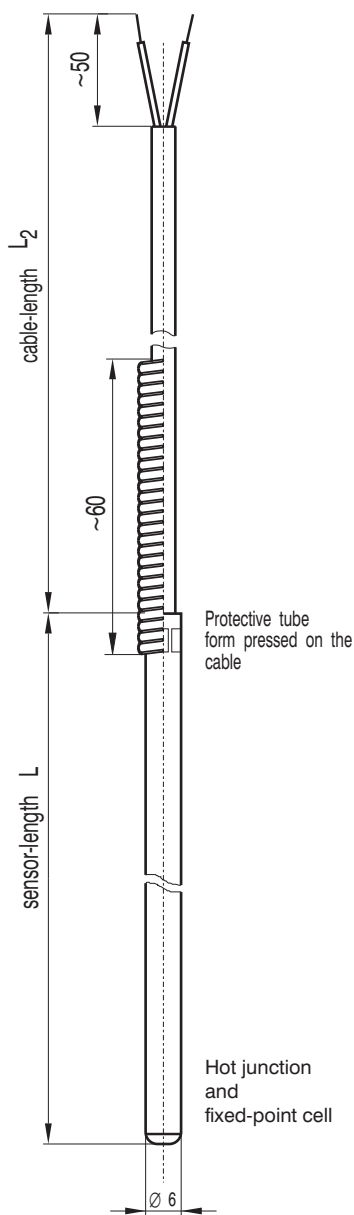
connector on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series FP-KTE



Applications

Thermocouple with high stability fixed-point cell; the fixed-point substance forces a typical signal during its melting and freezing (fixed-point plateau); calibration curve deviations of the whole measuring circuit will be recognisable and could be corrected

Thermo junction

L (Fe-CuNi) DIN 43 710
 J (Fe-CuNi) DIN EN 60584
 K (NiCr-Ni) DIN EN 60584
 N (NiCrSi-NiAl) DIN EN 60584
 S (PtRh10-Pt) DIN EN 60584
 B (PtRh30-PtRh6) DIN EN 60584

Number of Thermo junction

1 thermocouple

Fixed point material

Bi33In67 72,5 °C
 In 156,59 °C
 Sn 231,93 °C
 Zn 419,53 °C
 Al67Cu33 548,2 °C
 Al87Si13 578,8 °C
 Al 660,32 °C
 Ag28Cu72 779,6 °C

Measuring point design

insulated, integrated in fixed point cell

Protective tube material

1.4571
 on inquiry

Protective tube diameter d

6 mm
 on inquiry

Sensor length L

on inquiry 50 ... 1000 mm

Thermocouples
Cable sensors
Series FP-KTE

Compensating cable length L₂

on inquiry

Type of compensating cable

on inquiry

Bend protection

without
with spiral spring

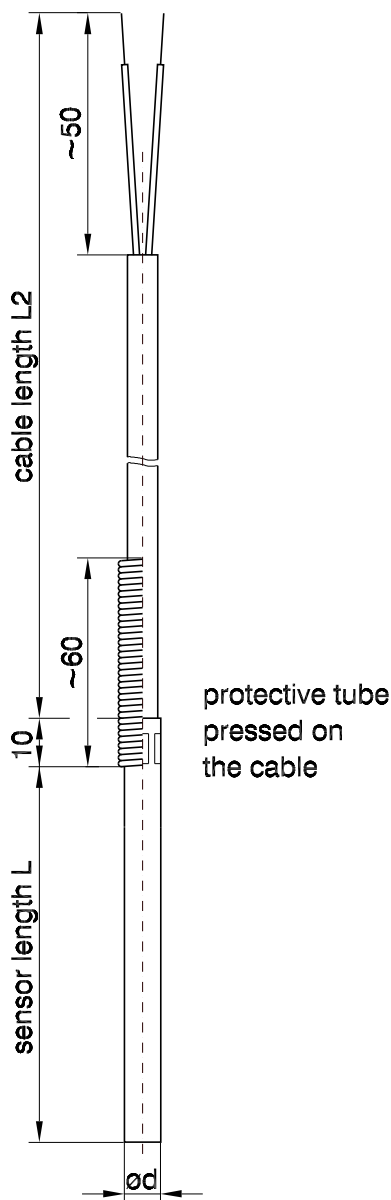
Connector

free ends
connector on inquiry

Thermocouples

Cable sensors

Series K1T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584

K (NiCr-Ni) DIN EN 60584

on inquiry

Number of Thermo junction

1 thermocouple

2 thermocouples

Protective tube material

1.4571

Protective tube diameter d

on inquiry 3 ... 10 mm

Sensor length L

on inquiry 30 ... 1000 mm

Type of compensating cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Connector

free ends

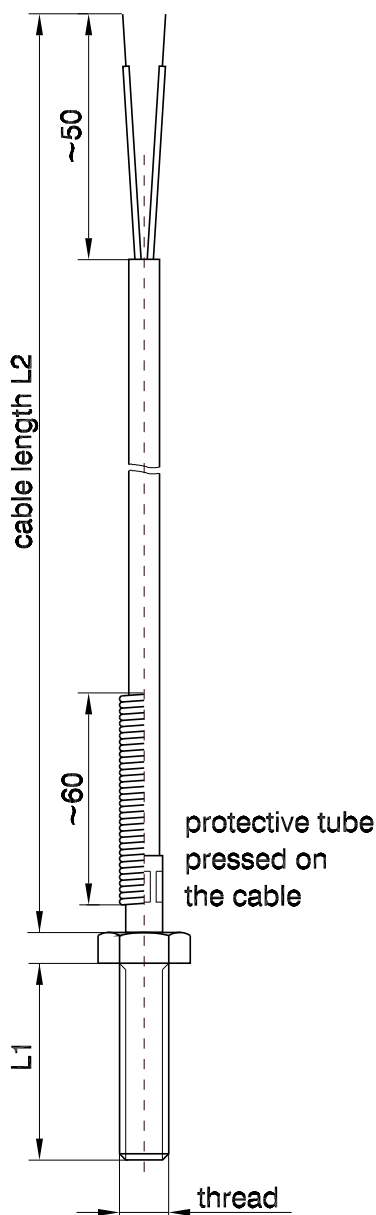
connector on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series K4T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584
K (NiCr-Ni) DIN EN 60584
on inquiry

Number of Thermo junction

1 thermocouple
2 thermocouples

Protective tube material

stainless steel
on inquiry

Insert length L_1

on inquiry 10 ... 40 mm

Type of compensating cable

on inquiry

Cable length L_2

on inquiry min. 100 mm

Bend protection

without
with spiral spring

Thread

M6
M8
M10
G1/4A
on inquiry

Connector

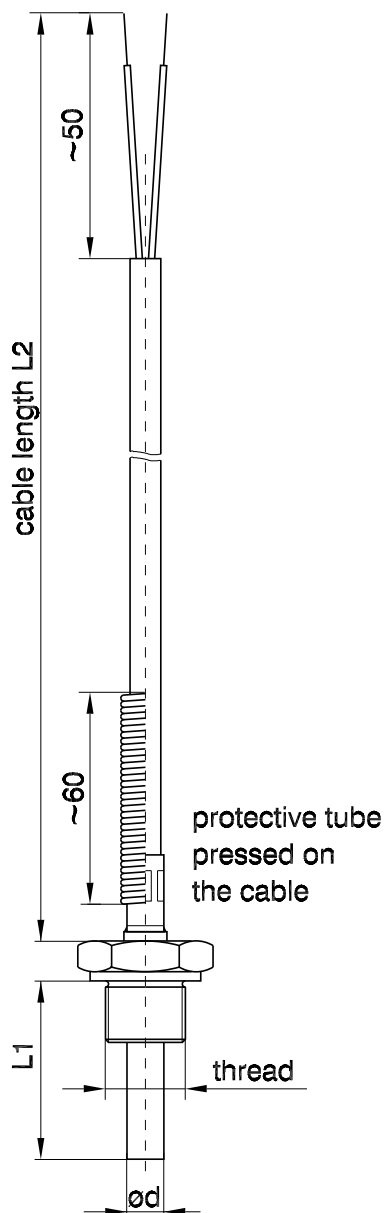
free ends
connector on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series K5T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584

K (NiCr-Ni) DIN EN 60584

on inquiry

Number of Thermo junction

1 thermocouple

2 thermocouples

Measuring point design

insulated of protective tube

connected to protective tube

disconnected bead at 2 thermocouples

connected bead at 2 thermocouples

Protective tube material

1.4571

on inquiry

Protective tube diameter d

on inquiry 3 ... 6 mm

Insert length L_1

on inquiry min. length of thread + 10 ... 1000 mm

Type of compensating cable

on inquiry

Cable length L_2

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Thread

M10

G1/4A

G1/2A

on inquiry

Thermocouples
Cable sensors
Series K5T

Connector

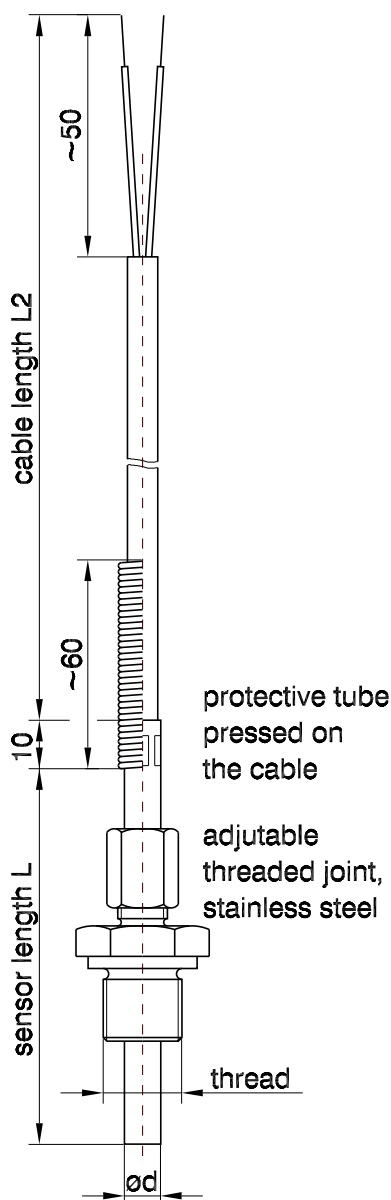
free ends
connector on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series K6T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584
K (NiCr-Ni) DIN EN 60584
on inquiry

Number of Thermo junction

1 thermocouple
2 thermocouples

Protective tube material

1.4571
on inquiry

Protective tube diameter d

on inquiry 3 ... 10 mm

Sensor length L

on inquiry (length of screwing +10 ... 1000 mm)

Type of compensating cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without
with spiral spring

Locking ring in the screw connection

teflon clamp ring
metal clamp ring

Thread

on inquiry M8x1 ... G1/2A

Connector

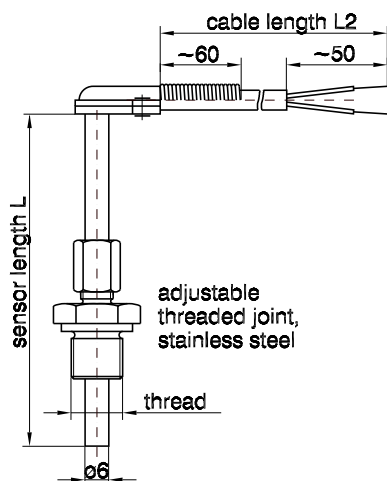
free ends
connector on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series K7T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584

K (NiCr-Ni) DIN EN 60584

Number of Thermo junction

1 thermocouple

2 thermocouples

Protective tube material

1.4571

on inquiry

Protective tube diameter d

6 mm

on inquiry

Sensor length L

on inquiry (length of screwing +10 ... 1000 mm)

Type of compensating cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Thread

M10x1

G1/4A

G1/2A

on inquiry

Connector

free ends

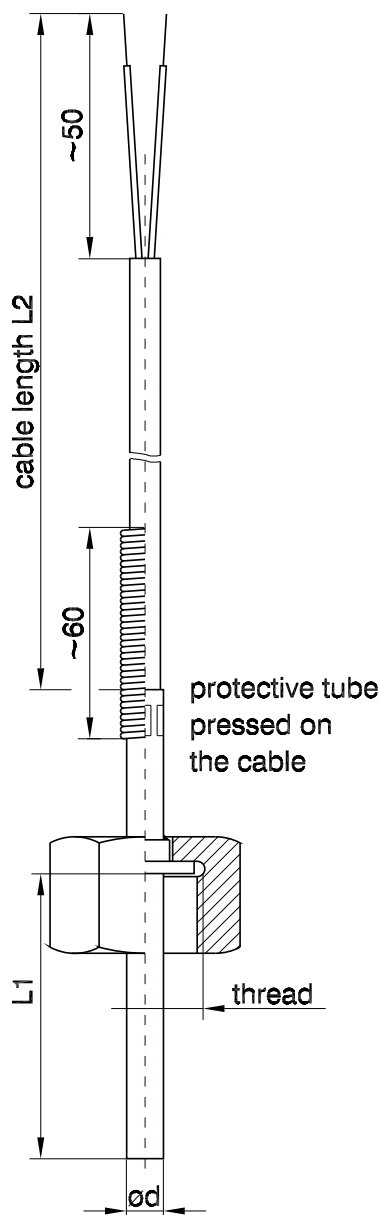
connector on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series K8T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584

K (NiCr-Ni) DIN EN 60584

on inquiry

Number of Thermo junction

1 thermocouple

2 thermocouples

Protective tube material

1.4571

on inquiry

Protective tube diameter d

on inquiry 3 ... 10 mm

Insert length L_1

on inquiry min. length of thread + 10 ... 1000 mm

Type of compensating cable

on inquiry

Cable length L_2

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Thread

M10x1

G1/2A

on inquiry

Connector

free ends

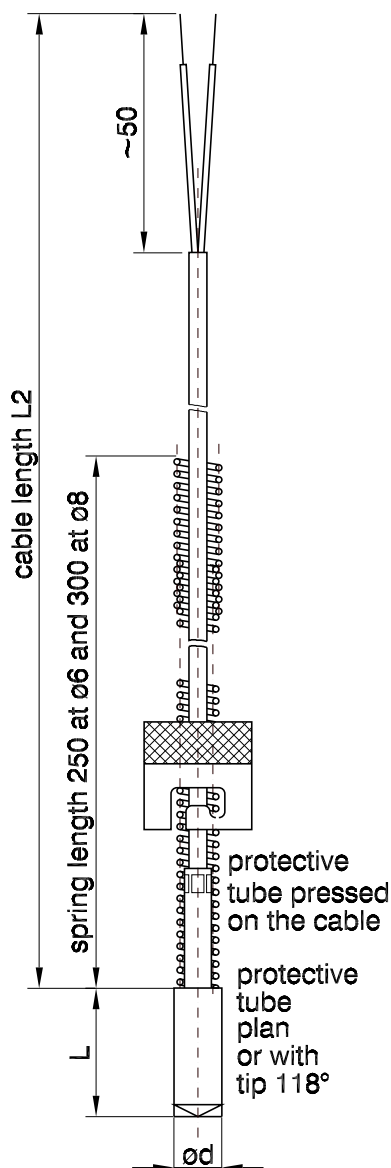
connector on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series K9T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584

K (NiCr-Ni) DIN EN 60584

on inquiry

Number of Thermo junction

1 thermocouple

2 thermocouples

Protective tube form

planar

pointed 118°

Protective tube material

1.4305

on inquiry

Protective tube diameter d

6 mm

8 mm

on inquiry

Sensor length L

on inquiry 10 ... 30 mm

Type of compensating cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Construction of bajonett cap

for thread nipple (bayonet matching part) ø 12

for thread nipple (bayonet matching part) ø 14

Connector

free ends

connector on inquiry

Thermocouples
Cable sensors
Series K9T

Thread nipple

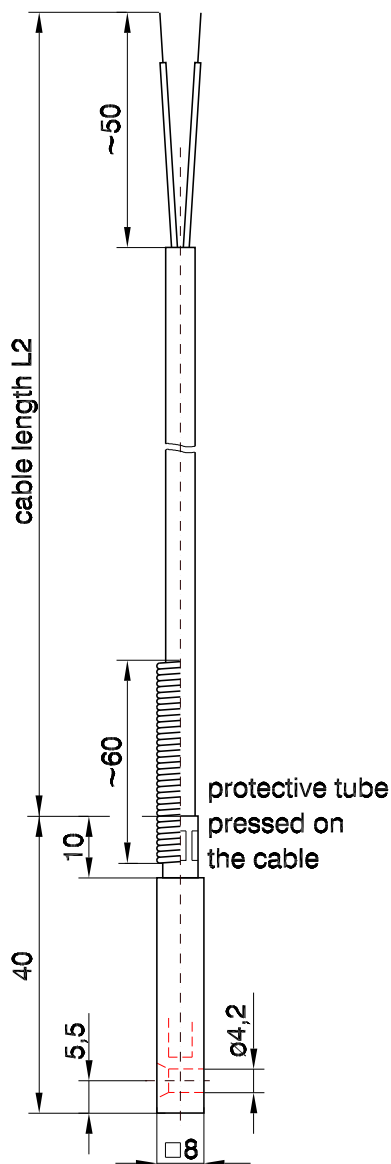
none
on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series K10T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584

K (NiCr-Ni) DIN EN 60584

on inquiry

Number of Thermo junction

1 thermocouple

2 thermocouples

Protective tube material

aluminium

stainless steel

Brass

on inquiry

Type of compensating cable

on inquiry

Cable length L_2

on inquiry min. 100 mm

Bend protection

without

with spiral spring

Connector

free ends

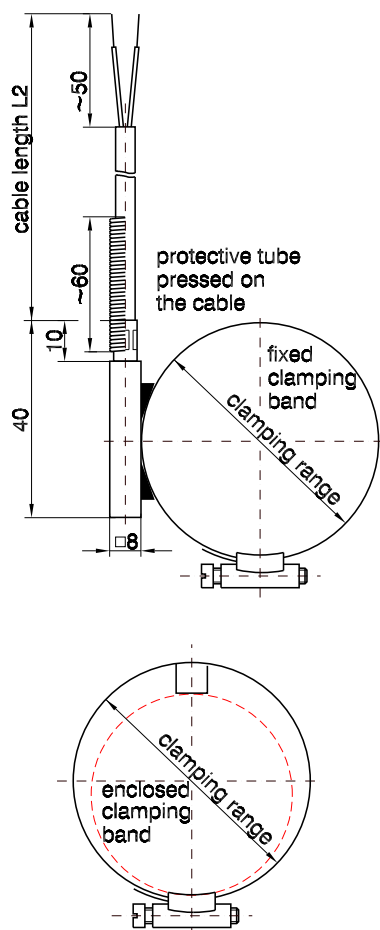
connector on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series K11T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584

K (NiCr-Ni) DIN EN 60584

on inquiry

Number of Thermo junction

1 thermocouple

2 thermocouples

Protective tube material

stainless steel

Brass

on inquiry

Type of compensating cable

on inquiry

Cable length L_2

on inquiry min. 100 mm

Clamping band

fixed

enclosed

Clamping range

20 - 32 mm

32 - 50 mm

50 - 70 mm

70 - 90 mm

90 - 100 mm

on inquiry

Bend protection

without

with spiral spring

Connector

free ends

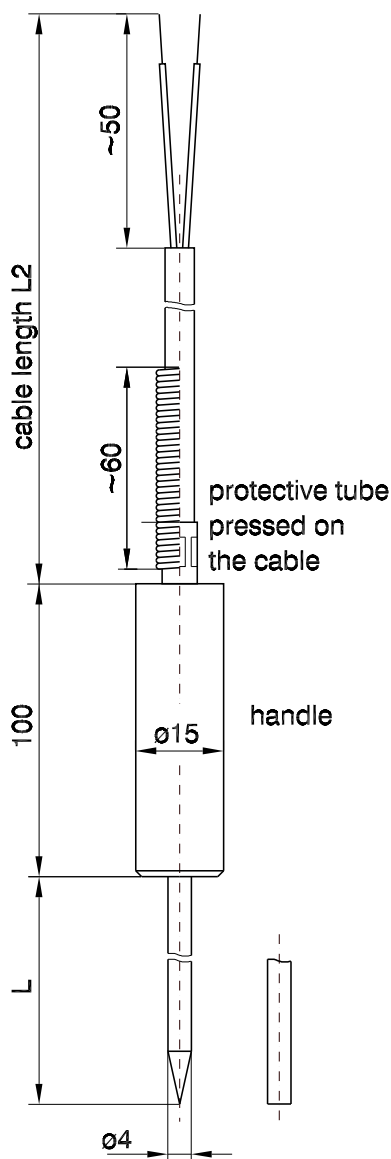
connector on inquiry

declare desired temperature range for case of application

Thermocouples

Cable sensors

Series K12T



Application temperature

on inquiry, dependent on sensor and protective tube material

Thermo junction

J (Fe-CuNi) DIN EN 60584
K (NiCr-Ni) DIN EN 60584
on inquiry

Number of Thermo junction

1 thermocouple
2 thermocouples

Handle material

stainless steel
PTFE (Teflon, max. 260°C)

Protective tube form

planar
with penetration point

Protective tube material

stainless steel
on inquiry

Protective tube diameter d

4 mm
on inquiry

Sensor length L

on inquiry 20 ... 190 mm

Type of compensating cable

on inquiry

Cable length L₂

on inquiry min. 100 mm

Bend protection

without
with spiral spring

Connector

free ends
connector on inquiry

Thermocouples
Cable sensors
Series K12T

declare desired temperature range for case of application