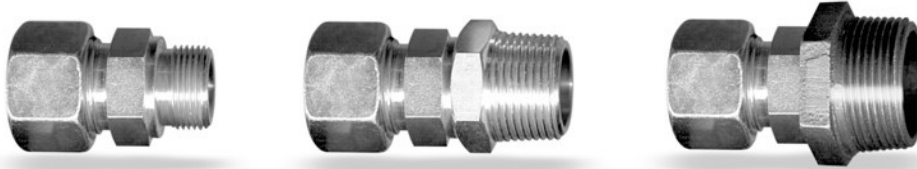


Accessories for RTD temperature sensors

— Connections —

■ Watertight connections

This stainless steel compression fitting allows watertight connection of a temperature sensor using a stainless steel not adjustable ferrule or a teflon adjustable ferrule.



• Technical features

Working temperature :

Stainless steel ferrule (316L).....from -50°C to +400°C (**Not adjustable**)
Teflon ferrule (PTFE).....from -50°C to +250°C (**Adjustable**)



• Part numbers

Probe Ø (mm)	Cylindrical gas	Stainless steel ferrule	Teflon ferrule
3	1/8"	RCI-3/18	RCT-3/18
3	1/4"	RCI-3/14	RCT-3/14
4	1/8"	RCI-4/18	RCT-4/18
4	1/4"	RCI-4/14	RCT-4/14
4	3/8"	RCI-4/38	RCT-4/38
6	1/8"	RCI-6/18	RCT-6/18
6	1/4"	RCI-6/14	RCT-6/14
6	3/8"	RCI-6/38	RCT-6/38
6	1/2"	RCI-6/12	RCT-6/12
8	1/4"	RCI-8/14	RCT-8/14
8	1/2"	RCI-8/12	RCT-8/12
10	1/2"	RCI-10/12	RCT-10/12
12	1/2"	RCI-12/12	RCT-12/12
14	1/2"	-	RCT-14/12

Stainless steel thermowells

• Technical features

Working temperature	from -80°C to +400°C
Protective duct	stainless steel 316 L, Ø 9x1 or Ø 6x1 mm.
Mounting	welded
Contact tip	stainless steel 316L, no welding
Process connection	stainless steel ½" G male (other connection on request)
Probe connection	stainless steel ½" G female (other connection on request) or or fixing screw.

Options :

- Treatment with teflon, halar etc...
- Swaging

Accessories :

Thermo - conducting silicone grease 200g (Part number GST)

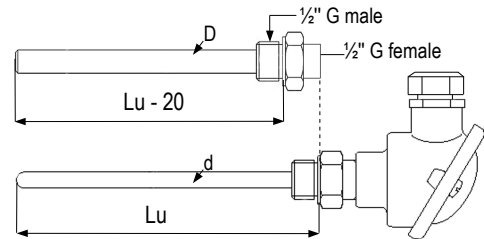


Working temperature : from -60°C to +200°C
Storage : >1 year at room temperature (< 50°C)
Solvent : trichlorethane

Threaded thermowell



• Determination of thermowell length

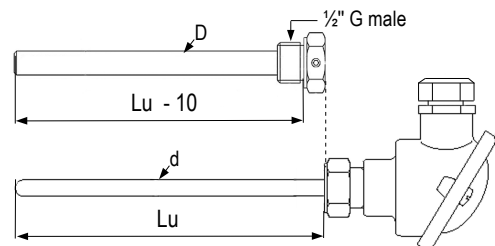


$$Lu_{\text{thermowell}} = Lu_{\text{probe}} - 20\text{mm}$$

Thermowell with screw connection



• Determination of thermowell length



$$Lu_{\text{thermowell}} = Lu_{\text{probe}} - 10\text{mm}$$

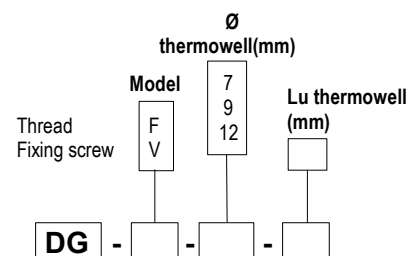
• Determination of thermowell diameter

Informative table :

Probe Ø in mm	Thermowell Ø in mm
4	7
6	9
8	12
10	14
12	21,3
14	21,3

For mounting gap of 3 mm or more, the use of thermo-conducting grease is recommended (GST)

• Thermowell part numbers



Connectors

Standard connector



Connector **three round pins** for the connexion of Pt 100 probe on cables or on mineral insulated cable. Polarized pins.
A system of locating pin prevents the inversion of polarity.

Material : glass silk filled thermoplastic

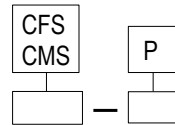
Temperature resistance : from -50°C to +210°C

For wire of diameter : 0.2 mm to 2.0 mm

Connection cable : 8.0 mm maxi.

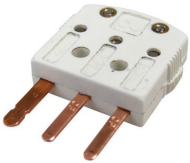
Standard color : blanc

Connector
type



Part numbers :

Miniature connector



Connector **three flat pins** for the connexion of Pt 100 probe on cables or on mineral insulated cable. Polarized pins.

A system of locating pin prevents the inversion of polarity.

Material : glass silk filled thermoplastic

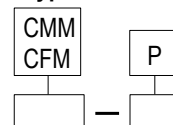
Temperature resistance : from -50°C to +210°C

For wire of diameter : 0.002 mm to 0.6 mm

Connection cable : 4.5 mm maxi.

Standard color : white

Connector
type



Part numbers :

Base

Standard base for panel



Connector **three round pins** for mounting on panel. Polarized pins. A system of locating pin prevents the inversion of polarity.

Material : glass silk filled thermoplastic

Temperature resistance : from -50°C to +210°C

For wire of diameter : 0.2 mm to 2.0 mm

Connection cable : 8.0 mm maxi.

Standard color : white

Part numbers : ES — P

Miniature base for panel



Connector **three flat pins** for mounting on panel. Polarized pins. A system of locating pin prevents the inversion of polarity.

Material : glass silk filled thermoplastic

Temperature resistance : from -50°C to +210°C

For wire of diameter : 0.002 mm to 0.6 mm

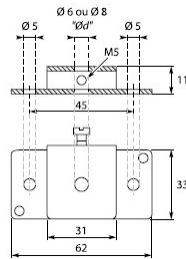
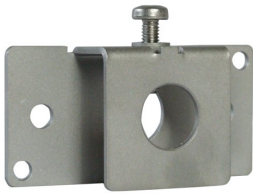
Connection cable : 4.5 mm maxi.

Standard color : white

Part numbers : EM — P

■ Fixations

Mounting brackets

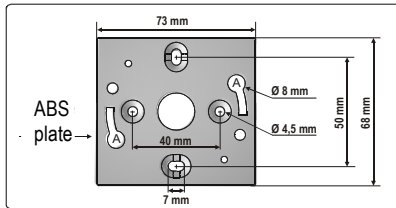


BF - 4 : Stainless steel (316L) mounting brackets for duct fixing of probes Ø 4 et 3mm.

BF - 6 : As above, Ø 6 mm.

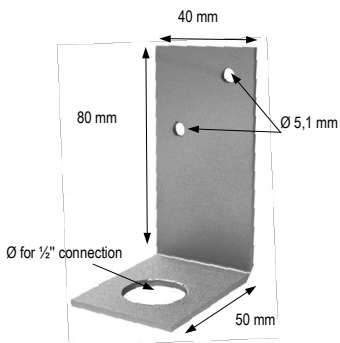
BF - 8 : As above, Ø 8 mm.

Wall supports



PF - 100 : ABS wall-mount plate for **SG 50** and **SG 100** sensors.

Wall fixing support for probe with connection



BF-M : Stainless steel (316 L) wall fixing support. Delivered with a 1/2" G screw nut.

Wall fixing support for probe on cable

For **SF 50** with a probe of 100mm minimum length



SFM - 4 : Wall fixing support made of translucent polycarbonate for probe Ø 4 mm and with 100 mm minimum length.

SFM - 6 : As above, Ø 6 mm.

SFM - 8 : As above, Ø 8 mm.

■ Cord for resistive probe

Normal cord



Cord for probes connection. You have to determine cable selection, cable length and configuration : male / male or male / female

Cable		Cable length (m)	Connector	
PB	from -40°C to +105°C	1	CMM	CMM
TB	from -40°C to +260°C	2	CMF	CMF
		3	CSM	CSM
			CSF	CSF

Part numbers : CD - P - - - - -

Coiled cord



Cord for probes connection. You have to determine cable selection, cable length and configuration : male / male or male / female

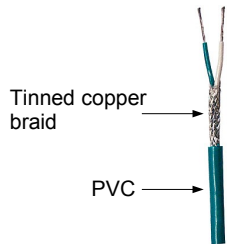
- Length at rest : 450 mm
- Developed length : 2000 mm
- Material : PVC
- Max. temperature : 105°C

Connector	
CMM	CMM
CMF	CMF
CSM	CSM
CSF	CSF

Part numbers : CDS - P - -

■ Instrumentation cable for the link of resistive probe

PVC / Tinned copper braid / PVC



- Conductors section : 3 x 0,75 mm²
- Braid : Cu Sm 85% (tinned copper)
- Color : 2 red conductors
1 white conductor
- Max. temperature : 70°C

Cable length (m)
1
2
10
50
100

Part numbers : CI - P -

■ Cable of resistive probe

Not shielded

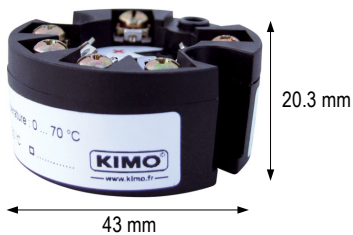
Nature of the cable	Working temperature	Section of conductors	Number of conductors	Part numbers
PVC	From -40 to +105 °C	0.22 mm ²	3	CE-PVC-3
			4	CE-PVC-4
Silicone	From -60 to +180 °C	0.22 mm ²	3	CE-SIL-3
			4	CE-SIL-4
Teflon	From -190 to +260 °C	0.22 mm ²	3	CE-PFA-3
			4	CE-PFA-4

Shielded

Nature of the cable	Working temperature	Section of conductors	Number of conductors	Part numbers
PVC	From -40 to +105 °C	0.22 mm ²	3	CE-PB-3
			4	CE-PB-4
			6	CE-PB-6
Silicone	From -60 to +180 °C	0.22 mm ²	3	CE-SB-3
			4	CE-SB-4
			6	CE-SB-6
Teflon	From -190 to +260 °C	0.22 mm ²	3	CE-TB-3
			4	CE-TB-4
			6	CE-TB-6
Glass silk	From -60 to +400 °C	0.22 mm ²	3	CE-SvB-3
			4	CE-SvB-4
			6	CE-SvB-6

Convertors

CO-P transmitter



Sensor : Pt100 (100Ω at 0 °C)
Mounting of the element : 2 or 3 wires
Linearization : EN60751, IEC 751
Current in the sensor : <1 mA
Measuring range : from -200 to +850 °C
Default range : from 0 to 100 °C
Minimum measuring range : 25 °C
Influence of connection wires : negligible with coupled wires
Speed conversion : 2 measurements per second
Accuracy : from -100 to + 500 °C : ±0.1 °C ±0.1% of reading
 beyond : ±0.2 °C ±0.2% of reading
Sensitivity to variations of feeding voltage : 0.01 °C/°C
Sensitivity to variations of voltage supply : 0.005% FC / Vdc
Storage temperature : from -40 to +80 °C
Working temperature : from 0 to +70 °C

Output : 4-20 mA (or 20-4 mA), 22 mA in case of programming error or temperature out of range* (fig1)

Resolution : 2 μA

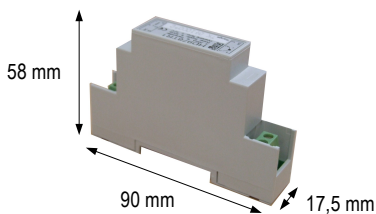
Power supply voltage : 7-30 Vdc (protection against inversions of polarity)

$$\text{Load resistance} : R_{L_{\max}} = \frac{V_{dc} - 7}{0.022}$$

$$\Rightarrow R_{L_{\max}} = 770 \Omega @ V_{cc} = 24 \text{ Vdc}$$

Temperature range to be specified

CRD-P transmitter (Passive / 2 wires)



Mounting : rail DIN symetric or asymmetrical
Input : PT100 3 wires
Output : 4-20 mA 2 wires
Accuracy : ±0.1°C ±0.1% of reading (-100 to +500°C)
 ±0.2°C ±0.2% of reading (-200 to +650°C)
Linearisation : En 60751, IEC 751, BS 1904 (α=0,00385)
Operating voltage : 7 to 30 VDC polarity protected
Power supply influence : ±0.02 % /V in relation to 24 V
Resistance influence : 0.4 μA/V
Working temperature : from 0 to +70°C
Storage temperature : from -40 to +70°C
Temperature dependence : ±0.01°C/°C
Measuring range : from -200 to 650°C
Measuring range minimum : 25°C
Safety : max. 22 mA
Charge calculation according to power supply : $R_{L_{\max}} (\Omega) = (V - 9) / 0.022 = 680 \Omega$ at 25 Vdc
Dimensions (mm) : depth 90, width 17,5, height 58

Temperature range to be specified

CRD-A transmitter (Active / 4 wires)



Mounting : rail DIN symetric or asymmetrical
Input : PT100 2, 3, 4 wires
Output : 4-20 mA or 0-10 V
Accuracy : ±0,2 %
Input resistance : 10 MΩ
Charge (min.) : 500 kΩ
Operating voltage : 230 Vac, 24 Vac, 24 Vdc and 110 Vac
Working temperature : from -20 to +60°C
Storage temperature : from -20 to +60°C

To be specified :

- Temperature range
- Power supply
- Output 4-20 mA
0-10 V

Options

Indicator / Programming front (IF-CRD)



- Communication interface for parameters modification
- Can be transferred from one transmitter to another one
- Display for data process and state

Miscellaneous

Regulated power supply

• Alternating current



KI - AL - 100 A : Class 2 power supply for **SG100** sensors. Mounting with integrated brackets. Input voltage : 230 Vac, output voltage 24Vac, intensity 100mA.

• Direct current



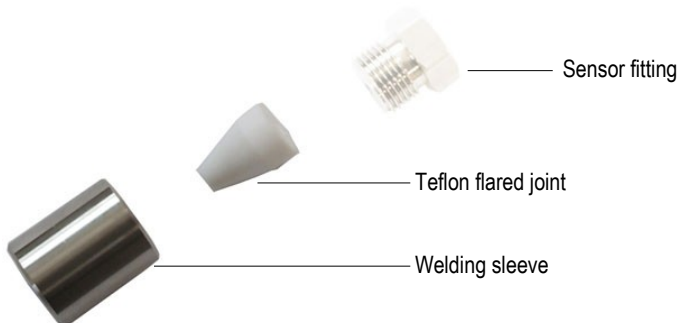
KI - AL - 100 C : Class 2 power supply for **SG100** sensors, Input voltage : 230 Vac, Output voltage : 24Vdc, intensity 250mA.

Configuration software (for SG 100)



LCC - 100 : Configuration software for **SG 100** sensors with user manual and RS 232 connection cable.

Soldering union



MES-6-12 : Stainless steel soldering union is for applications of type « hygienic » such as food stuffs industry, pharmaceutical...
It is made of a welding sleeve and a Teflon flared seal.

www.kimo.fr

Distributed by :



EXPORT DEPARTMENT

Tel : + 33. 1. 60. 06. 69. 25 - Fax : + 33. 1. 60. 06. 69. 29

e-mail : export@kimo.fr