



Sensors

Sensors are used to detect certain quantities such as temperature and irradiation. Platinum sensors, which change their electrical resistance proportionally to the temperature, are used for temperature measurements.

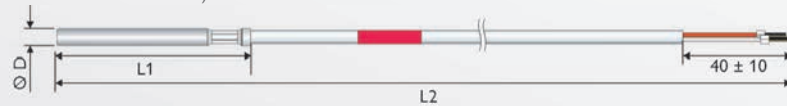
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The sensor type is indicated by the third letter "P", for example: FKP or FRP. FK designates the sensor of the heat source (e. g. collector sensor) and FR the reference sensor (e. g. store sensor). These sensor types have the same electrical features. They differ only in the connecting cable.



Temperature sensors

(for installation into immersion sleeves) Pt1000 version



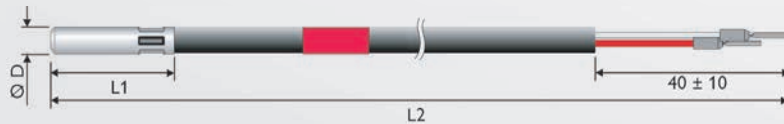
Sensor extension cable

PVC LiYY 2 x 0.5 mm²
(100 m cable coil)

Article no.: **280 051 00**
Price bracket C

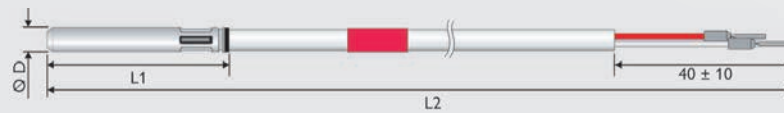
FKP4

D [mm]	L1 [mm]	L2 [mm]	Material	Application	Temperature range	Article no.
4	40	1000	Silicone cable	Collector	-50 ... +180 °C	155 000 10



FKP5,5 FRP5,5

D [mm]	L1 [mm]	L2 [mm]	Material	Application	Temperature range	Article no.
5,5	28	1500	Silicone cable	Collector	-50 ... +180 °C	155 003 10
5,5	28	2500	PVC cable	Store	-5 ... +80 °C	155 003 20



FRP6

FKP6

FKP6

FKP6

FKP6

FKP6

FKP6

D [mm]	L1 [mm]	L2 [mm]	Material	Application	Temperature range	Article no.
6	45	2500	PVC cable	Store	-5 ... +80 °C	155 000 80
6	45	1500	Silicone cable	Collector	-50 ... +180 °C	155 000 20
6	45	2500	Silicone cable	Collector	-50 ... +180 °C	155 004 40
6	45	5000	Silicone cable	Collector	-50 ... +180 °C	155 004 50
6	45	10000	Silicone cable	Collector	-50 ... +180 °C	155 004 60
6	45	20000	Silicone cable	Collector	-50 ... +180 °C	155 006 10

Pt500

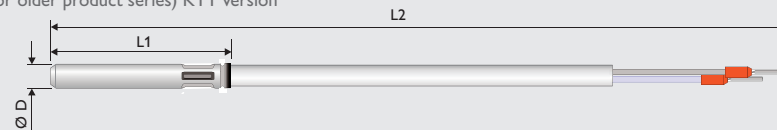
FKP6/500

FRP6/500

6	45	2500	Silicone cable	Collector	-50 ... +180 °C	155 009 20
6	45	2500	PVC cable	Store	-5 ... +80 °C	155 006 80

Semiconductor sensors

(spare part for older product series) KTY version



FRY6

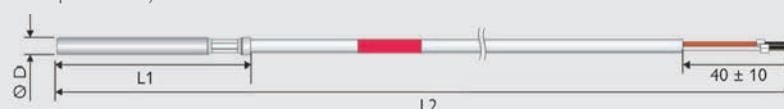
FKY6

D [mm]	L1 [mm]	L2 [mm]	Material	Application	Temperature range	Article no.
6	45	2500	PVC cable	Store	-5 ... +80 °C	151 000 80
6	45	1500	Silicone cable	Collector	-50 ... +180 °C	151 000 20



High-temperature sensors

(for temperatures up to 300 °C) Pt1000 version



FKP4/H

FKP6/H

D [mm]	L1 [mm]	L2 [mm]	Material	Application	Temperature range	Article no.
4	40	1000	PTFE cable	Collector	-50 ... +250 °C	155 001 10
6	46	1500	Silicone cable	Collector	-50 ... +230 °C	155 001 20

Note: The temperature range refers to the insulation of the sensor cable!

Flatscrew sensors

(for installation on plane surfaces) Pt1000 version



Further lengths are available on request!

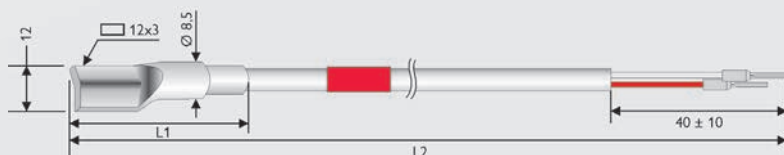


	L1 [mm]	L2 [mm]	Material	Application	Temperature range	Article no.
FKP9	32	1500	Silicone cable	Collector	-50 ... +180 °C	155 003 60
FRP9	32	2500	PVC cable	Store	-5 ... +80 °C	155 003 70

All silicone cables are UV- and ozone-resistant.

Cylindrical clip-on sensors

(for surface mounting on tubes) Pt1000 version



	L1 [mm]	L2 [mm]	Material	Application	Temperature range	Article no.
FKP21	39	1500	Silicone cable	Collector	-50 ... +180 °C	155 003 30
FRP21	39	2500	PVC cable	Store	-5 ... +80 °C	155 005 40

incl. pipe clip

FRP22	39	2500	PVC cable	Store	-5 ... +80 °C	155 008 80
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incl.: 1 bracket, 1 cable tie (up to 105 °C), 1 tin of heat conductive paste



Complete sensors

(Temperature sensors complete with immersion sleeve and strain relief)



	Sensor	Immersion depth [mm]	Material	Temperature range	Article no.
FKP30	FKP5,5	30	Brass	-50 ... +180 °C	155 001 90
FRP30	FRP5,5	30	Brass	-5 ... +80 °C	155 002 80
FKP45	FKP6	45	Brass	-50 ... +180 °C	155 002 00
FRP45	FRP6	45	Brass	-5 ... +80 °C	155 002 10
FKP60	FKP6	60	Copper	-50 ... +180 °C	155 002 20
FRP60	FRP6	60	Copper	-5 ... +80 °C	155 002 30
FKP100	FKP6	100	Copper	-50 ... +180 °C	155 002 40
FRP100	FRP6	100	Copper	-5 ... +80 °C	155 002 50
FKP150	FKP6	150	Copper	-50 ... +180 °C	155 002 60
FRP150	FRP6	150	Copper	-5 ... +80 °C	155 002 70
FKP30V	FKP6	30	Stainless steel	-50 ... +180 °C	155 006 60
FRP30V	FRP6	30	Stainless steel	-5 ... +80 °C	155 006 70
FKP60V	FKP6	60	Stainless steel	-50 ... +180 °C	155 003 80
FRP60V	FRP6	60	Stainless steel	-5 ... +80 °C	155 003 90
FKP100V	FKP6	100	Stainless steel	-50 ... +180 °C	155 004 00
FRP100V	FRP6	100	Stainless steel	-5 ... +80 °C	155 004 10
FKP150V	FKP6	150	Stainless steel	-50 ... +180 °C	155 004 20
FRP150V	FRP6	150	Stainless steel	-5 ... +80 °C	155 004 30

Sensor extension cable

PVC LiYY 2 x 0.5 mm²
(100 m cable coil)

Article no.: **280 051 00**
Price bracket C

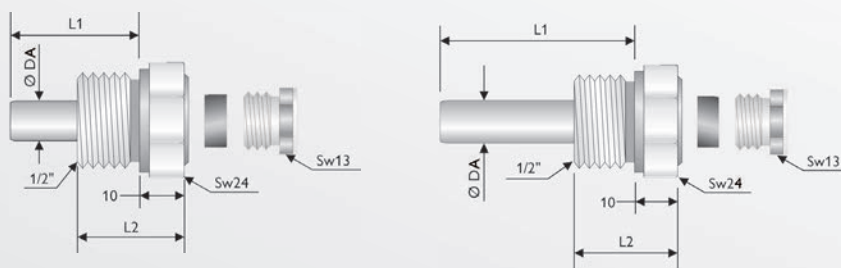
Note: The temperature range refers to the insulation of the sensor cable!

NPT versions available on request!



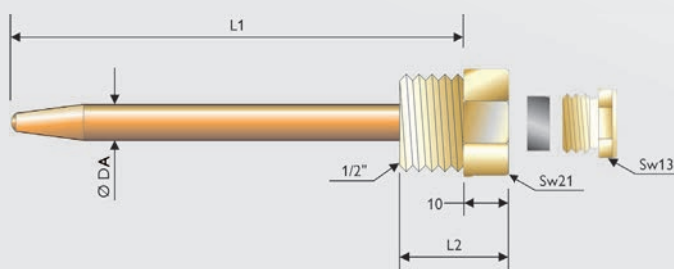
Because of the short component length, it is recommended to use the TH30 immersion sleeve with the FKP5,5 or FRP5,5 temperature sensor.

Immersion sleeves



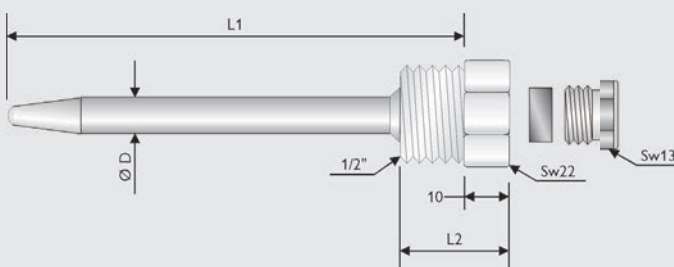
	DA [mm]	DI [mm]	L1 [mm]	L2 [mm]	Material	Article no.
TH30	9	6.2	30	23	Nickel-plated brass	280 005 60
TH45	10	6.2	45	23	Nickel-plated brass	280 000 30

PN10 at 90 °C



	DA [mm]	DI [mm]	L1 [mm]	L2 [mm]	Material	Article no.
TH60	8	6.2	60	23	Nickel-plated copper/brass	280 000 40
TH100	8	6.2	100	23	Nickel-plated copper/brass	280 000 50
TH150	8	6.2	150	23	Nickel-plated copper/brass	280 000 60
TH200	8	6.2	200	23	Nickel-plated copper/brass	280 000 70
TH300	8	6.2	300	23	Nickel-plated copper/brass	280 000 90

PN10 at 90 °C



	DA [mm]	DI [mm]	L1 [mm]	L2 [mm]	Material	Article no.
TH30V	8	6.2	30	23	Stainless steel	280 012 30
TH45V	8	6.2	45	23	Stainless steel	280 010 20
TH60V	8	6.2	60	23	Stainless steel	280 001 00
TH60V/4	5	4.2	60	23	Stainless steel	290 002 20
<small>(for FKP4/H high-temperature sensors)</small>						
TH100V	8	6.2	100	23	Stainless steel	280 002 10
TH100V/4	5	4.2	100	23	Stainless steel	290 002 30
<small>(for FKP4/H high-temperature sensors)</small>						
TH150V	8	6.2	150	23	Stainless steel	280 002 20
TH200V	8	6.2	200	23	Stainless steel	280 002 30
TH300V	8	6.2	300	23	Stainless steel	280 012 70
TH400V	8	6.2	400	23	Stainless steel	290 002 50
TH500V	8	6.2	500	23	Stainless steel	280 005 90

PN16 at 90 °C