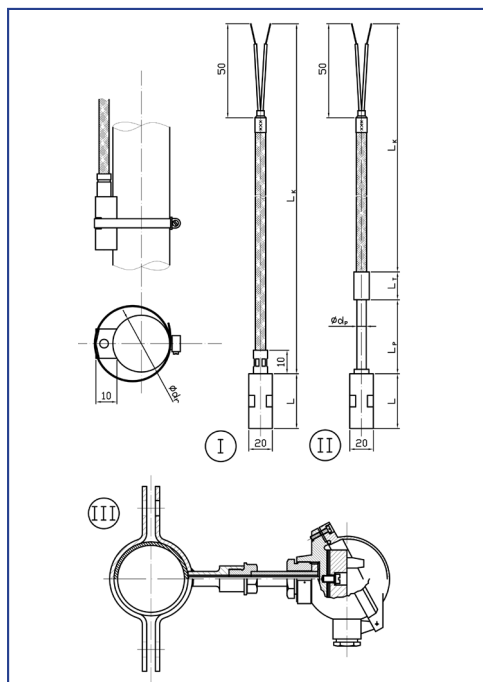


TER-SpKbm-84

Contact Thermocouple Fe-CuNi(J), NiCr-Ni(K) for pipelines

Contact thermocouple type TOP-SpKbm-84 is for temperature measurement of pipelines's walls and other cylinders in the temp. range -40°C to +400°C, using thermo-element Fe-CuNi(J), NiCr-Ni(K).

Thermocouple is mounted on the pipeline using metal band.



Type	Execution	Version
TER-SpKbm-84	Basic - acc to catalog card	I or
TER-SpKbm-84/ExiM1	Intrinsic safe for mining purposes – acc to Atex	II or
TER-SpKbm-84/Exi	Intrinsic safe – acc to Atex	III

Technical specification

Sheathed sensor insert	Temp. range - Class 1	Characteristic
1xFe-CuNi (J), 2xFe-CuNi (J)	-40°C..+300°C	acc. EN 60584-1
1xNiCr-NiAl (K), 2xNiCr-NiAl (K)	-40°C..+400°C	

Sheath diameter d_p [mm]	Material acc. DIN/AISI	Sheath length L_p [mm]
$\varnothing 3, \varnothing 4.5, \varnothing 5, \varnothing 6$	2.4816/Inconel 600 1.4571/316Ti	on request

Pipeline diameter d_l [mm]	Contact ending material acc. DIN/AISI	Contact ending length L [mm]
on request	1.4571/316Ti MO59/CuZn39Pb2	on request (min. 35 mm)

Connection head (valid only for Model III)	Transmitter
on request (e.g. NA, DANA, XE-DANA)	on request

Thermocouple	Configuration	Dimension	Compensation cable type	Insulation	Temp. limits
Single	2 wire (1-pair)	$\varnothing 3,2$	L2GGD-J-0,22mm2	glass fibre, glass fibre, screen	+400°C
		$\varnothing 3,3$	L2GGD-K-0,22mm2		
		$\varnothing 3,0$	L2TDT-J-0,22mm2	teflon, screen, teflon	+260°C
		$\varnothing 4,2$	L2TDT-K-0,22mm2		

Non-standard models available.

Ordering Information

TER-SpKbm-84	A	B	C	D	E	F	G	H	I	J	K	L	M
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A Execution	
I	Basic with cable
II	Basic sheathed with cable
III	Basic with distance tube and head
I/ExiM1	Intrinsic safe for mining purposes - with cable
II/ExiM1	Intrinsic safe for mining purposes - sheathed with cable
III/ExiM1	Intrinsic safe for mining purposes - with distance tube and head
I/Exi	Intrinsic safe with cable
II/Exi	Intrinsic safe sheathed with cable
III/Exi	Intrinsic safe with distance tube and head

B Type of thermocouple	
1xJ	Single Fe-CuNi
1xK	Single NiCr-NiAl

C Contact ending length L	
	specify in mm (min. 35 mm)

D Contact ending material	
1.4571	1.4571/316Ti
MO59	MO59/CuZn39Pb2

E Sheath diameter d_p	
4,5	$d_p = 4,5 \text{ mm}$
6	$d_p = 6 \text{ mm}$

F Sheath material	
Inconel600	2.4816/Inconel 600
1.4571	1.4571/316Ti

G Sheath length L_p	
	specify in mm

H Compensation cable type	
2p-L2GGD-J	2 wire (L2GGD-J-0,22)
2p-L2TDT-J	2 wire (L2TDT-J-0,22)
2p-L2GGD-K	2 wire (L2GGD-K-0,22)
2p-L2TDT-K	2 wire (L2TDT-K-0,22)

I Cable length L_k	
	specify in mm

J Pipeline diameter d_r	
	specify in mm

K Operating temperature	
	specify in °C

L Connection head (valid only for Model III)	
	specify head type

M Transmitter (valid only for Model III)	
	specify type and temp. range in °C

Ordering Example

TER-SpKbm-84-I/Exi-1xK-60-MO59-4,5-Inconel600-250-2p-L2GGD-K-2000-50-180

stands for: Contact thermocouple, intrinsic safe, with connection cable, with thermo-element NiCr-NiAl, ending length L=60 mm, contact ending material MO59, sheath diam $\varnothing 4,5$ and material Inconel 600, Sheath length $L_R=250$ mm, configuration 2-wire, cable type L2GGD-K, length $L_k=2000$ mm, pipeline diameter 50mm, operating temp. up to +180°C.