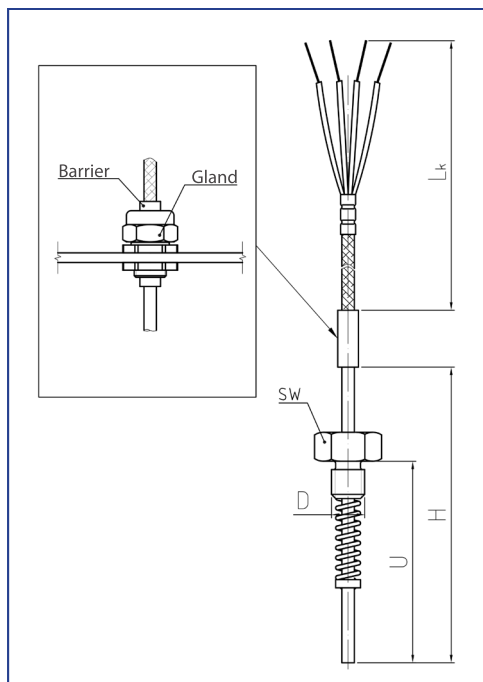


TER-PZKbm-46

Thermocouple with flexible cable



Thermocouple with flexible cable type TER-PZKbm-46 has been designed for temperature measurement of bearings, injection moulding press cylinders, moulding and vulcanization forms, heat plates using thermo-element Fe-CuNi (J), NiCr-NiAl (K) in the range from -40°C up to +400°C.

Threaded process connection fitting features easy and quick installation, replace and dismantling of the thermocouple and connection cable with metal screen protects against external factors and allows access to far away tag points.

In the case of the problem of migration of oil in the cable, it is possible to use a design that solves this problem.

A spring mounted in a thermocouple provides proper pressure between the tip of thermocouple and the bearing surface.

Type	Execution	Version
TER-PZKbm-46	Basic - acc to catalog card	Basic or Oil proof
TER-PZKbm-46/ExiM1	Intrinsic for mining purposes – acc to Atex	
TER-PZKbm-46/Exi	Intrinsic – acc to Atex	

Technical specification

Sheathed sensor insert	Temp. range - Class 1	Material	Characteristic	Junction
1xFe-CuNi (J), 2xFe-CuNi (J)	-40°C..+300°C	Inconel 600	wg PN-EN 60584-1	ungrounded
1xNiCr-NiAl (K), 2xNiCr-NiAl (K)	-40°C..+400°C			grounded

Thermocouple	Configuration	Dimension	Compensation cable type	Insulation	Temp. limits
Single	2 wire (1-pair)	ø 4,4	L2VDV-K-0,22mm2	PVC-screen-PVC	+105°C
		ø 4,5	L2TDT-J-0,22mm2	teflon-screen-teflon	+200°C
Double	4 wire (2-pair)	ø 3,2	L2TDT-K-0,22mm2	PVC-screen-PVC	+105°C
		ø 5,2	L4VDV-K-0,22mm2		

Compensation cables: oil-proof

Non-standard models available.

Ordering Information

TER-PZKbm-46	A	B	C	D	E	F	G	H	I	J	K
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A Execution

I	Basic
II	Oil proof
I/ExiM1	Intrinsic safe for mining purposes - basic
II/ExiM1	Intrinsic safe for mining purposes - oil proof
I/Exi	Intrinsic safe - basic
II/Exi	Intrinsic safe - oil proof

B Type of thermocouple

1xJ	Single Fe-CuNi
2xJ	Double Fe-CuNi
1xK	Single NiCr-NiAl
2xK	Double NiCr-NiAl

C Sheath diameter d

3	d= 3 mm
4	d= 4 mm
5	d= 5 mm
6	d= 6 mm

D Sheath material

2.4816	2.4816 / Inconel 600
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E Process connection fitting
D(thread) / SW(hexagon)

M8	D=M8, SW=13 mm
M10x1	D=M10x1, SW=17 mm
M12x1	D=M12x1, SW=19mm

F Immersion length U

specify in mm

G Thermocouple length H

specify in mm

H Compensation cable type

2p-L2VDV-K	2 wire (L2VDV-K-0,22)
4p-L4VDV-K	4 wire (L4VDV-K-0,22)
2p-L2TDT-J	2 wire (L2TDT-J-0,22)
2p-L2TDT-K	2 wire (L2TDT-K-0,22)

I Cable length L_k

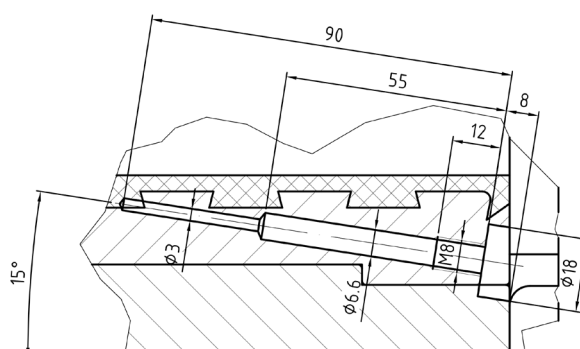
specify in mm

J Junction

O	ungrounded
Z	grounded

K Operating temperature

	specify in °C
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Ordering Example

TER-PZKbm-46-I-1xK-6-Inconel600-M12x1-90-200-2p-L2VDV-K-4000-O-200

stands for: Sheathed thermocouple with basic execution, without oil-proof option, with thermoelement 1xNiCr-NiAl, sheath diameter $\phi 6$ mm, material Inconel600, process connection thread M12x1, length U=90mm, length H=200mm, configuration 2-wire, cable type L2VDV-K, length Lk=4000 mm, ungrounded junction, operating temp up to 200°C.