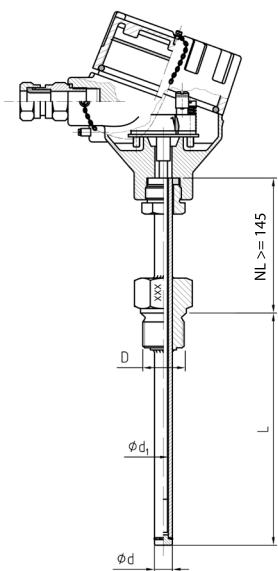


TER-Exd-PKG-232

Thermocouple Flame-proof acc. to ATEX with threaded thermowell



Thermocouple type TER-Exd-PKG-232 signed II 2 G Ex db IIC T* Gb has been designed for temperature measurement in explosion zone 1 or 2 of gases area and can work with non-intrinsic safe wire configuration.

Thermocouple type TER-Exd-PKG-232 signed II 1/2 D Ex ta IIIC T*°C Da/Db for use in dust area with non-intrinsic safe wire configuration.

Connection head is optionally equipped with 1 or 2 cable inserts, and with terminal block or transmitter.

Technical specification

Sheathed sensor insert	Temp. range - Class 1	Characteristic	Junction
1xFe-CuNi (J), 2xFe-CuNi (J)	-40°C..(+750°C)*	wg EN 60584-1	Ungrounded
1xNiCr-NiAl (K), 2xNiCr-NiAl (K)	-40°C..(+1000°C)*		
1xCu-CuNi(T), 2xCu-CuNi(T)	-40°C..(+350°C)*		
1xNiCrSi-NiSiMg(N), 2xNiCrSi-NiSiMg(N)	-40°C..(+1000°C)*		
1xNiCr-CuNi(E), 2xNiCr-CuNi(E)	-40°C..(+900°C)*		

* upper temperature is limited by work environment and protection tube material

Protection tube diameter d [mm]	Material	Immersion length L [mm]	Process connection thread D
ø10x1,5; ø11x2; ø12x1,5; ø12x2,5; ø13.5x2,3; ø15x3	stainless steel, acid resistant steel, heat-resisting steel, boiler steel, alloy steel	on request (max L up to 2000 mm)	on request (e.g. M12x1,5; M14x1,5; M16x1,5; M18x1,5; M20x1,5; M24x1,5; M27x2; M33x3; G1/2"; G3/4"; G1"; 1/2"NPT; 3/4"NPT; 1"NPT)

Connection head	Temp. range (depends on connection head sealing)	Cable gland thread	Purpose	Transmitter
XD-AHH; XD-AD; XD-ADwin; XD-AHwin; XD-SD; XD-SB; XD-SH	-50°C..+150°C (o-ring silicon);	Typ 501/421	for basic cables	w/o transmitter (with terminal block) or with transmitter
	-50°C..+85°C (o-ring silicon with hole); -20°C..+200°C (o-ring fluoroelastomer)	Typ 501/453	for armored cable	

Non-standard models available.

Ordering Information

TER-Exd-PKG-232

A **B** **C** **D** **E** **F** **G** **H** **I** **J** **K** **L**

A Type of thermocouple

1xJ	Single Fe-CuNi
2xJ	Double Fe-CuNi
1xK	Single NiCr-NiAl
2xK	Double NiCr-NiAl
1xT	Single Cu-CuNi
2xT	Double Cu-CuNi
1xN	Single NiCrSi-NiSiMg
2xN	Double NiCrSi-NiSiMg
1xE	Single NiCr-CuNi
2xE	Double NiCr-CuNi

B Sheathed insert diameter d_i

6	$d_i = 6$ mm
8	$d_i = 8$ mm

C Protection tube diameter d

10	$d = 10 \times 1,5$ mm
11	$d = 11 \times 2$ mm
12	$d = 12 \times 1,5$ mm
13,5	$d = 13,5 \times 2,3$ mm
15	$d = 15 \times 3$ mm
	or bigger (minimal wall thickness 1,5 mm)

D Immersion length L (max L up to 2000 mm)

	specify in [mm]
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E Protection tube material

1.4571	1.4571 / 316Ti
1.4841	1.4841 / 314
2.4602	2.4602 / Hastelloy C22
	specify other material

F Process connection thread D

	specify type of thread
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G Neck tube length NL ($NL \geq 145$ mm)

	specify in [mm]
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H Connection head

	specify head type
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I Cable gland (flameproof)

1x 501/421	1x type 501/421
2x 501/421	2x type 501/421
1x 501/453	1x type 501/453
2x 501/453	2x type 501/453

J Operating temperature

	specify in °C
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K Transmitter

	specify type and temp. range in °C
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L Explosion Zone

Zone 1	Non-intrinsic safe circuit
Zone 20/21	Non-intrinsic safe circuit

Ordering Example

TER-Exd-PKG-232-1xK-8-15-1000-1.4571-M20x1,5-145-XD-AD-1x501/421-400

stands for: Thermocouple flame-proof with threaded fitting, 1xNiCr-NiAl, sheath diameter $\varnothing 8$ mm, protection tube diameter $\varnothing 15$ mm, length $L=1000$ mm, material 1.4571, thread M20x1,5, neck tube length $NL=145$ mm, connection head type XD-AD, cable insert 1 x type 501/421, operating temp up to 400°C, w/o transmitter.