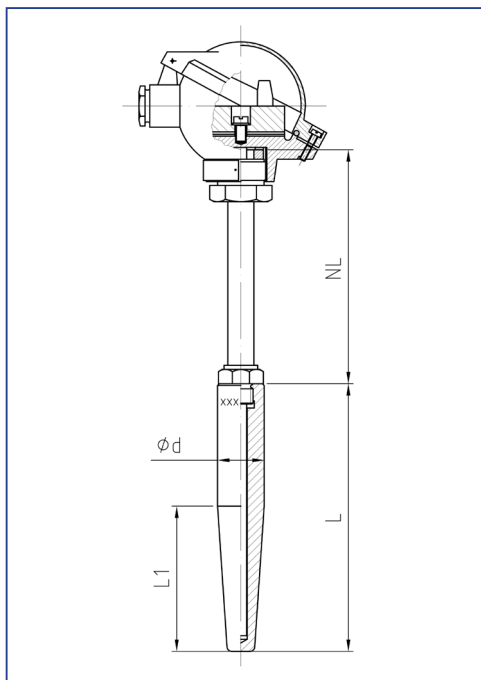


TER-W-11

Straight Thermocouple (Type J, K, N) for high pressure application

Thermocouple TER-W-11 has been designed for rugged condition applications in pipelines and boilers, at operating temperature up to +600°C and operating pressure up to 40 MPa.

Pressure resistant weld-in thermowell (acc to DIN 43772, form 4) is made of 1.7380 or 1.7335. Thermocouple is equipped with replaceable sheathed measuring insert.



Type	Execution
TER-W-11	Basic - acc to catalog card
TER-W-11/ExiM1	Intrinsic safe for mining purposes – acc to Atex
TER-W-11/Exi	Intrinsic safe – acc to Atex
TER-W-11/Exe	Increased safety – acc to Atex

Technical specification

Sheathed sensor insert	Version	Temp. range - Class 1	Characteristic	Connection head
1xFe-CuNi (J), 2xFe-CuNi (J) 1xNiCr-NiAl (K), 2xNiCr-NiAl (K)	Ø 3 Ø 6	-40°C..+600°C	acc. EN 60584-1	on request (e.g. BAEG, NA, DAN, DANAW)

T-well length L[mm]	T-well diam. d[mm]	Material acc. DIN/AISI	Max operating temp.	Transmitter
110, 140, 170, 200, 260 or 410 mm	Ø18h7 Ø24h7 Ø26h7	1.7335 / A182 Grade F11	+600°C	on request
		1.7380 / A182 Grade F22		
		1.4903 / A182 Grade F91	+650°C	
		1.4541 / SS321	+900°C	

Junction	Response time ($T_{0,9}$)		Operating pressure
	d = Ø18h7	d = Ø24h7 ; Ø26h7	
ungrounded	$T_{0,9} = 20$ sec	$T_{0,9} = 30$ sec	up to 40 MPa
grounded	$T_{0,9} = 60$ sec	$T_{0,9} = 70$ sec	

Non-standard models available.

Ordering Information

TER-W-11	A	B	C	D	E	F	G	H	I	J	K
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A Execution	
PS	with replaceable insert
PS/ExiM1	Intrinsic safe for mining purposes with replaceable insert
PS/Exi	Intrinsic safe with replaceable insert
PS/Exe	Increased safety with replaceable insert

B Type of thermocouple	
1xJ	Single Fe-CuNi
2xJ	Double Fe-CuNi
1xK	Single NiCr-NiAl
2xK	Double NiCr-NiAl

C Weld-in thermowell diameter	
18	d= 18h7 mm
24	d= 24h7 mm
26	d= 26h7 mm

D Weld-in thermowell length L	
	specify in [mm]

E Weld-in thermowell cone length L1	
	specify in [mm]

F Weld-in thermowell material	
1.7335	1.7335 / A182 Grade F11
1.7380	1.7380 / A182 Grade F22
1.4903	1.4903 / A182 Grade F91
1.4541	1.4541 / SS321

G Neck tube length NL	
	specify in [mm]

H Connection head	
	specify head type, acc. to catalog card – <i>Connection Heads</i>

I Junction	
O	ungrounded
Z	grounded

J Operating temperature	
	specify in °C

K Transmitter	
	specify type and temp. range in °C

Ordering Example

TER-W-11-PS-1xK-18-200-65-1.7335-145-NA-O

stands for: High pressure thermocouple with replaceable insert, element type 1 x NiCr-NiAl, protection tube diameter $\varnothing 18h7$, thermowell length L=200 mm, cone length L1=65 mm, material 1.7335, neck tube length NL=145 mm, connection head type NA, junction ungrounded, without transmitter