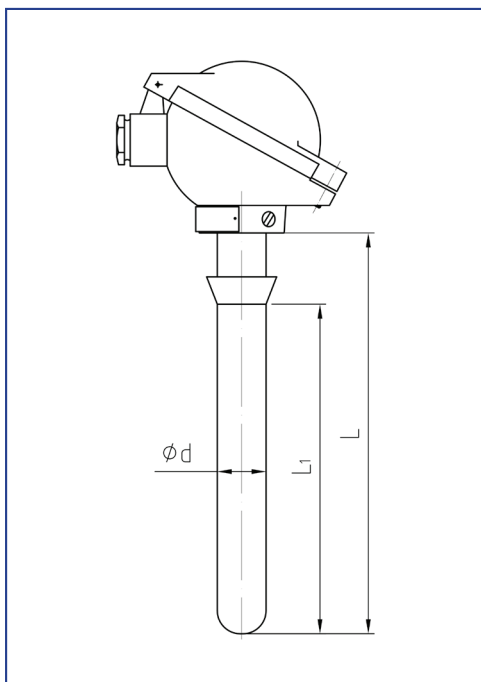


TER-P-45

Straight Thermocouple PtRh10-Pt(S), PtRh30-PtRh6(B)

Straight thermocouple PtRh10-Pt(S), PtRh30-PtRh6(B) type TER-P-45 has been designed for high temperature measurement up to +1600°C by permanent work and +1800°C by short time work mainly in iron blast furnaces, in fire boxes of heat treatment heaters and for other high temperature applications.

Where feasible the thermocouple can be equipped with protection tube to be used for fixing of ceramic protection tube. This additional protection tube is applied along the whole ceramic tube when special mechanical protection is required. However, operating temperature is limited to +1400°C then.



Type	Execution
TER-P-45	Basic

Technical specification

Sheathed sensor insert	Max. operating temp.		Characteristic	Junction
PtRh10-Pt (S)	permanent work	+1150°C	acc. EN 60584-1	ungrounded
	short time work	+1300°C		
PtRh30-PtRh6 (B)	permanent work	+1600°C		
	short time work	+1800°C		

Protection tube diameter d [mm]	Material acc. DIN/AISI	Max. operating temp.	Length L ₁ [mm]
ø22, ø30, ø33,7	1.4841/314	+1150°C	on request
ø19.1, ø22	Kanthal AF	+1400°C	

Ceramic tube diameter	Material acc. DIN/AISI	Max. operating temp.	Length L [mm]
depends on protection tube diam. d	Ker 799 (gas leakage proof)	+1700°C	on request

Connection head	Max operating temp.	Transmitter
DAA, DANA, DANAW	+100°C	on request

Non-standard models available.

Ordering Information

TER-P-45	A	B	C	D	E	F	G	H	I	J
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A Type of thermocouple	
1xS	Single PtRh-Pt10
2xS	Double PtRh-Pt10
1xB	Single PtRh30-PtRh6
2xB	Double PtRh30-PtRh6

B Protection tube diameter d	
19,1	d= 19,1 mm
22	d= 22 mm
30	d= 30 mm
33,7	d= 33,7 mm

C Protection tube material	
1.4841	1.4841/314
Kanthal AF	Kanthal AF

D Length L₁	
	specify in mm

E Ceramic tube material	
Ker799	Ker 799

F Length L	
	specify in mm

G Junction	
O	ungrounded

H Connection head	
	specify head type

I Operating temperature	
	specify in °C

J Transmitter	
	specify type and temp. range in °C

Ordering Example

TER-P-45-1xB-30-1.4841-350-799-400-O-DAA

stands for: Straight thermocouple with thermoelement 1xPtRh30-PtRh6 and protection tube diameter ø30 mm, material 1.4841, length L₁=350 mm, ceramic tube Ker 799, length L=400 mm, ungrounded junction, with connection head type DAA, w/o transmitter.