

HT 4090 Glass industry Single or Tri-level thermocouple

Protection tube

Construction	Platinum Rhodium tip suitable for molten glass
Support tube	Ceramic 710 (C799), 24x18mm
Insertion length	1000 mm

Noble metal tip

Standard	Pt 10% Rh
Optional	Oxide Dispersion Strengthened, ODS® Platinum
Diameter tip	9.0x1.0mm
Tip length "L"	Customer to specify
Temperature	1800°C maximum

Connection head

Type	Type A (showed), other connectionheads possible
Material	Aluminium or Stainless Steel
Cable entry	M20x1.5 standard, other threads possible

Process connection

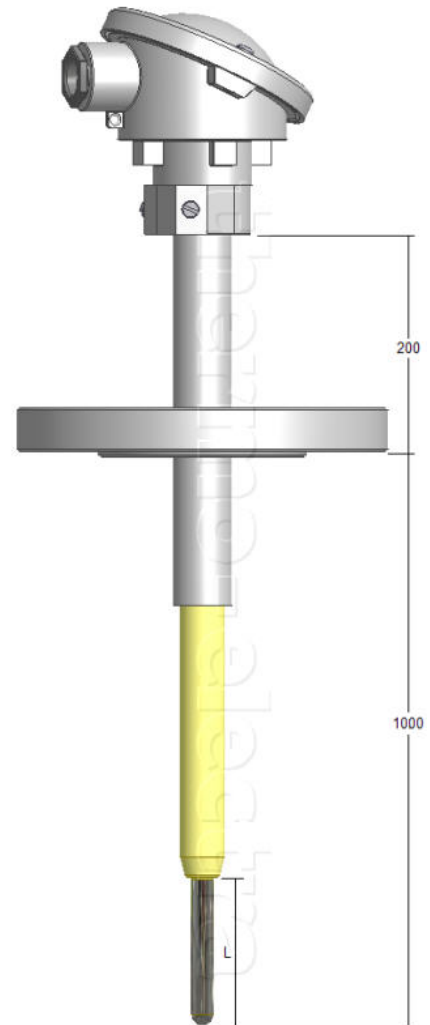
Flange	According to ANSI or DIN standard, to specify
Material	To specify

Thermocouple

Single thermocouple	R, S or B
Tri-level thermocouple	Type B standard
Improved wire option	HTX grade for R and S
Accuracy	According IEC 60584-1
Wire size	0.35mm or 0.5mm

Options

Wire grade	Type R/S available in HTX grade
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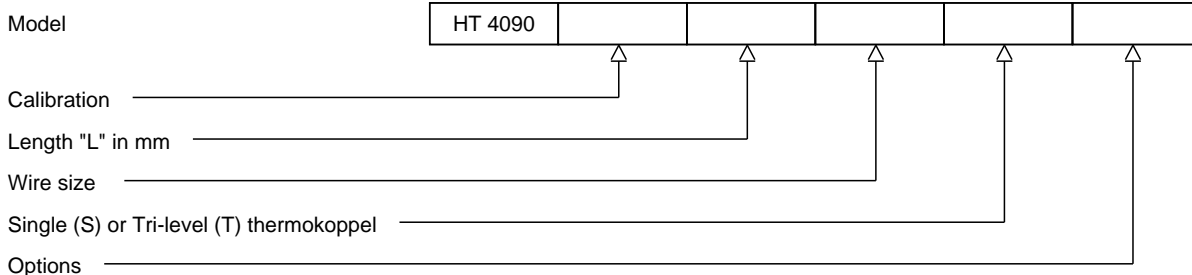
Thermokoppel kleurcodes

Thermocouple Extension Type	ANSI	IEC
JX + Iron - Constantan ®		
KX + Chromel ® - Alumel ®		
TX + Copper - Constantan ®		
EX + Chromel ® - Constantan ®		
NX + Nicrosil ® - Nisil ®		
SX + Copper RX - Alloy 11		
BX + Copper-S - Copper-E		

Toleranties volgens IEC 584-2

Type	Class	Temperature range	Fixed value °C	Tolerance to temp. t (°C)
T	1	- 40°C to + 350°C	± 0,5	± 0,004 · t
	2	- 40°C to + 350°C	± 1	± 0,0075 · t
	3	- 200°C to + 40°C	± 1	± 0,015 · t
E	1	- 40°C to + 800°C	± 1,5	± 0,004 · t
	2	- 40°C to + 900°C	± 2,5	± 0,0075 · t
	3	- 200°C to + 40°C	± 2,5	± 0,015 · t
J	1	- 40°C to + 750°C	± 1,5	± 0,004 · t
	2	- 40°C to + 750°C	± 2,5	± 0,0075 · t
	3	-	-	-
K and N	1	- 40°C to + 1000°C	± 1,5	± 0,004 · t
	2	- 40°C to + 1200°C	± 2,5	± 0,0075 · t
	3	- 200°C to + 40°C	± 2,5	± 0,015 · t
R and S	1	0°C to + 1600°C	± 1,0	± [1+0,003·(t-1100)]°C
	2	0°C to + 1600°C	± 1,5	± 0,0025·t
	3	-	-	-
B	1	-	-	-
	2	+ 600°C to + 1700°C	± 1,5	± 0,0025·t
	3	+ 600°C to + 1700°C	± 4	± 0,005·t

Ordering code



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