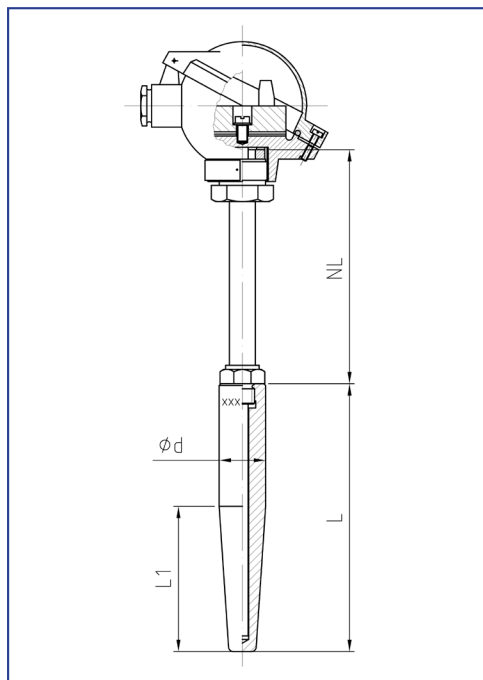


TOP-W-12

Resistance Thermometer Pt100 for high pressure application



Resistance thermometer TOP-W-12 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 protection tube is made of boiler quality steel, which allows installation by welding. Resistance thermometer is equipped with replaceable sheathed, spring loaded measuring insert.

Type	Execution
TOP-W-12	Basic - acc to catalog card
TOP-W-12/ExiM1	Intrinsic safe for mining purposes – acc to Atex
TOP-W-12/Exi	Intrinsic safe – acc to Atex
TOP-W-12/Exe	Increased safety – acc to Atex

Technical specification

RTD type	Version	Characteristic	Measuring range (standard/*shockproof)	Accuracy class	Max. sensor current	Lead wire config.
1xPt100 / 2xPt100	standard / *shockproof	acc. EN-60751	-200°C..+600°C / *(-70°C..+500°C)	B	8 mA	2, 3, 4 wire
			-100°C..+450°C / *(-50°C..+300°C)	A	5 mA	3, 4 wire
			-50°C..+250°C / *(0°C..+150°C)	1/3B (AA)	3 mA	

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

Medium	Response time ($T_{0.9}$)		Operating pressure
	d = Ø18h7	d = Ø24h7 ; Ø26h7	
Air	$T_{0.9} = 360$ sec	$T_{0.9} = 410$ sec	up to 40 MPa
Water	$T_{0.9} = 52$ sec	$T_{0.9} = 92$ sec	

Non-standard models available.

Ordering Information

TOP-W-12	A	B	C	D	E	F	G	H	I	J	K	L	M
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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 Resistor	
1xPt100	Single Pt100
2xPt100	Double Pt100

C Class	
B	B
A	A
1/3B	1/3B (AA)

D Lead wire configuration	
2p	2-wire
3p	3-wire
4p	4-wire

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

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

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

H 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

I Neck tube length NL	
	specify in [mm]

J Connection head	
	specify head type

K Operating temperature	
	specify in °C

L Transmitter	
	specify type and temp. range in °C

M Version	
Z	Standard (ceramic wire wound element)
W	Shockproof (thin-film element)

Ordering Example

TOP-W-12-PS-1xPt100-3p-18-200-65-1.7335-145-NA-Z

stands for: High pressure resistance thermometer, with replaceable insert, resistance temperature detector 1 x Pt100, 3-wire configuration, protection tube diameter Ø 18 h7, thermowell length L=200 mm, cone length L1=65 mm, material 1.7335, neck tube length NL=145 mm, connection head type NA, w/o transmitter, standard sensor version