

Platinum Temperature Sensors

SPECIFICATIONS

Sensor type	Unless stated all detectors are Pt 100 to DIN 43760:1980 and IEC 751:1983
Nominal resistance(Ro)	100 & 1000 Ohms
Temperature range	Wire wound: -200 to +850°C

Resistance v temperature and tolerances for Pt100 thermometers to IEC 751

Temperature Resistance		Tolerance		Temperature Resistance		Tolerance	
(°C)	(Ω)	Class A	Class B	(°C)	(Ω)	Class A	Class B
		(±°C) (±Ω)	(±°C) (±Ω)			(±°C) (±Ω)	(±°C) (±Ω)
-200	18.52	0.55 0.24	1.3 0.56	500	280.98	1.15 0.38	2.8 0.93
-100	60.26	0.35 0.14	0.8 0.32	600	313.71	1.35 0.43	3.3 1.06
0	100	0.15 0.06	0.3 0.12	650	329.74	1.45 0.46	3.6 1.13
100	138.51	0.35 0.13	0.8 0.30	700	345.28	— —	3.8 1.17
200	175.86	0.55 0.20	1.3 0.48	800	375.7	— —	4.3 1.28
300	212.05	0.75 0.27	1.8 0.64	850	390.48	— —	4.6 1.34
400	247.09	0.95 0.33	2.3 0.79				

Tolerances

Class B	±(0.3°C + 0.005t)
Class A	±(0.15°C + 0.002t)
Where t is the measured temperature	
1/3 Class B	±(0.1°C at 0°C)
1/5 Class B	±(0.06°C at 0°C)
1/10 Class B	±(0.03°C at 0°C)

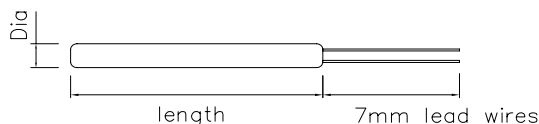
Note: 1/3, 1/5 and 1/10 Class B

Tolerances apply at 0°C

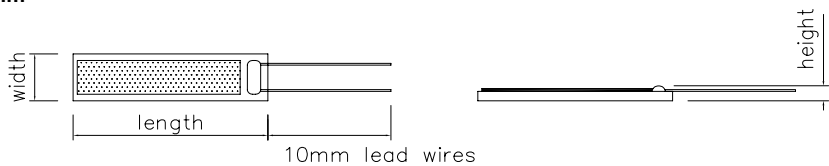
Dimensions

Individual dimensions are given in Order Codes & Dimensions below,

Wire Wound



Flat-film



Wire wound Pt100 sensors

Dimensions	Tolerance	Sensor type
Dia x length (mm)	Class	
2.8x25	B	Pt100Ω
2.8x25	A	Pt100Ω
2.8x25	1/3	Pt100Ω
2.8x25	1/5	Pt100Ω
2.8x25	1/10	Pt100Ω
1.5x25	B	Pt100Ω
2.8x15	B	Pt100Ω
2.8x15	A	Pt100Ω
2.8x15	1/3	Pt100Ω
2.8x15	1/5	Pt100Ω
2.8x15	1/10	Pt100Ω
2.4x15	B	Pt100Ω
1.6x15	B	Pt100Ω
1.5x15	B	Pt100Ω
1.5x15	A	Pt100Ω
1.5x15	1/3	Pt100Ω
1.5x15	1/5	Pt100Ω
1.5x15	1/10	Pt100Ω
0.8x15	B	Pt100Ω
0.8x15	A	Pt100Ω
0.8x15	1/3	Pt100Ω
0.8x15	1/5	Pt100Ω
0.8x15	1/10	Pt100Ω

Flat film Pt100 & Pt1000 sensors

Sensor type	Dimensions	Tolerance	temperature (°C)	Designation
	WxLxH	Class		
	(mm)			
Pt100Ω	2 x 5 x 1.1	B	range -50 to +500	LPT-1503
Pt100Ω	2 x 5 x 1.1	A	range -50 to +400	LPT-1508
Pt100Ω	1.7 x 5 x 1.1	B	range -50 to +600	LPT-1385
Pt100Ω	2 x 10 x 1.4	B	range -50 to +600	LPT-1333
Pt100Ω	2 x 10 x 1.4	A	range -50 to +400	LPT-1334
Pt100Ω	3.9 x 2.1 x 0.9	1/3 B	range 0 to +100	APT-1422
Pt1000Ω	2 x 10 x 1.1	B	range -50 to +500	LPT-1507
Pt1000Ω	2 x 10 x 1.4	B	range -50 to +600	LPT-1367

