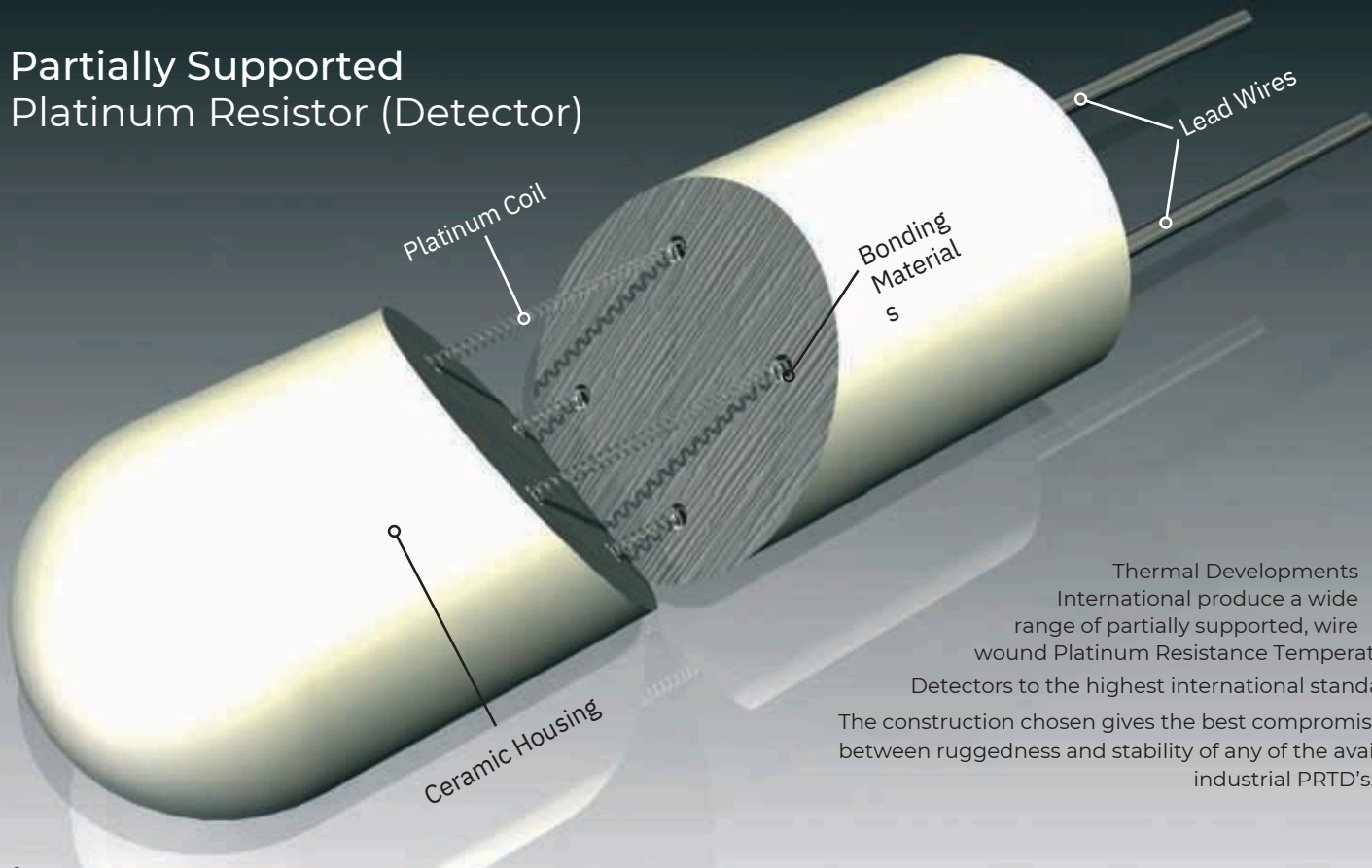
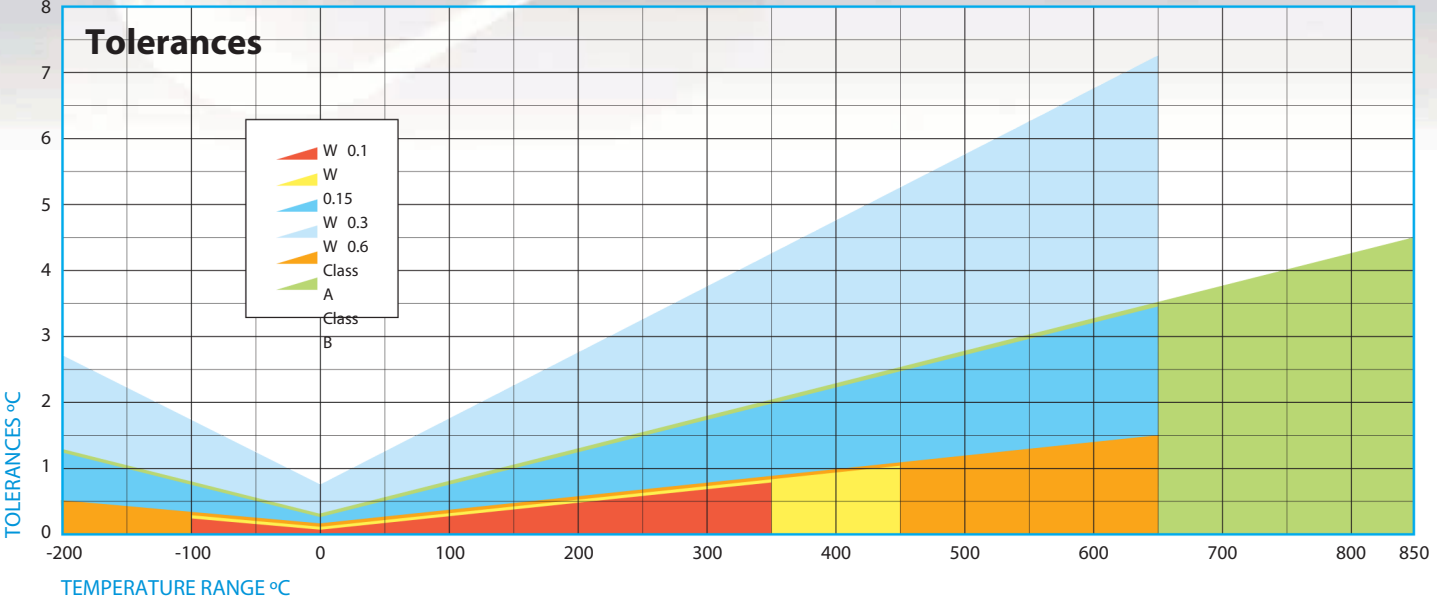


Partially Supported Platinum Resistor (Detector)



Thermal Developments International produce a wide range of partially supported, wire wound Platinum Resistance Temperature Detectors to the highest international standards. The construction chosen gives the best compromise between ruggedness and stability of any of the available industrial PRTD's.



Tolerance Values as a Function of Temperature for 100Ω sensors

Note: Class A and Class B relate to IEC 751 1983 / BSEN 60751:1996. The vast majority of TDI customers select tolerances tighter than the published standards. The newer standard, IEC 60751 Edition 2.0 2008-07 introduces a new scheme of tolerance class.

For Wire wound resistors	Temperature Range °C	Tolerance, °C
W0.1	-100 to 350	$\pm(0.1 + 0.0017 t)$
W0.15	-100 to 450	$\pm(0.15 + 0.002 t)$
W0.3	-196 to 660	$\pm(0.3 + 0.005 t)$
W0.6	-196 to 660	$\pm(0.6 + 0.01 t)$

Note that W0.15 and W0.3 have a tolerance of the same magnitude as the earlier Class A & B but are valid over narrower temperature ranges.

Other Tolerances: These have been commonly specified as being a fraction of the Class B, now W0.3 tolerance, also known by many as DIN B from the earlier DIN 43760 standard.

Interchangeability at	
0°C	1/2 Class B (or DIN B)
±0.05%	1/3 Class B (or DIN B)
±0.03%	1/5 Class B (or DIN B)
±0.02%	1/10 Class B (or DIN B)
±0.01%	

As the sensor is used further away from 0°C these errors can be expected to rise in accordance with an alpha uncertainty of ±3ppm.

Images shown here are actual size. All measurements in millimeters. All tolerances 0.1% at 0°C.

Model Number		Ceramic Length	Ceramic Diameter	Sensing Length
P100/7040		70	4	65 ±1
P100/5024		50	2.4	47 ±1
P2100/5024				
P100/5015		50	1.5	47 ±1
P2100/5015				
P100/3045		30	4.5	27 ±1
P2100/3045				
P100/3038		30	3.8	27 ±1
P2100/3038				
P100/2532		25	3.2	22 ±1
P2100/2532				
P100/2528		25	2.8	22 ±1
P2100/2528				
P100/2524		25	2.4	22 ±1
P2100/2524				
P100/2516		25	1.6	22 ±1
P2100/2516				
P100/2515		25	1.5	22 ±1
P2100/2515				
P100/2020		20	2.0	17 ±1
P2100/2020				
P100/1545		15	4.5	12 ±1
P2100/1545				
P100/1532		15	3.2	12 ±1
P2100/1532				
P100/1530		15	3.0	12 ±1
P2100/1530				
P100/1528		15	2.8	12 ±1
P2100/1528				
P100/1524		15	2.4	12 ±1
P2100/1524				
P100/1520		15	2.0	12 ±1
P2100/1520				
P100/1516		15	1.6	12 ±1
P2100/1516				
P100/1516/16 square		15	1.6	12 ±1
P100/1515		15	1.5	12 ±1
P2100/1515				
P100/1512		15	1.2	12 ±1
P100/1509		15	0.9	12 ±1
P100/1508		15	0.8	12 ±1
P100/1016		10	1.6	8 ±1
P100/1016/5 Flat		10	5(W) x 1.6 (H)	10 ±1
P100/1012		10	1.2	8 ±1
P100/1008		10	0.8	8 ±1
P100/0815		08	1.5	8 ±1
P100/0620		06	2.0	6 ±1
P100/0445		04	4.4	3 ±1

Guide only - other types available, call for details