

## Miniature PT100 resistor for UHV use, 343-PT100-C2

Allectra offers a very small PT 100 resistor for precise temperature measurement between -70°C and +500°C. The class F0.1 (= 1/3 Class B) resistor offers very low tolerances and a higher stability than thermocouples.

The resistor is offered on its own or with 4 cables connected. Other cable configurations are available on request.



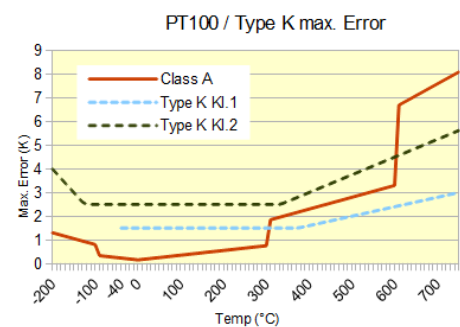
### Specifications

343-PT100-C2	
Vacuum	UHV
Materials	Ceramic, Glass, Platinum
Size	2,1x2,3mm, 0.9mm thick
Connection wires	Ni-Pt, 0.2mm ø, 10mm long
Recommended current	0.3 to 1mA
Temperature range	-70°C ...+500°C
Resistivity	100 Ohm @ 0°C
Response time	t <sub>0,9</sub> : 0.15s (in water)
Tolerance	Class F0.1 = 1/3 B +/-0.1K @0°C +/- (0.1 + (0,0017*ABS(T))) - 0...+150°C +/- (0.15 + (0,002*ABS(T))) +250...+600°C
Wired version	4 wires attached type 311-KAPM-025
Options	2, 3 or 4 wires, 311-KAPM-035 or 301-KAPM025 or 301-KAPM035 (Radiation resistant wires)

Please note:

For good thermal contact we recommend the use of thermal contact foil 317-TCP-30X30. It melts at 58°C and gives with 125W/m K thermal conductivity an optimized contact to the base material. It contains no filler materials.

For this type, no clamp is available.



Maximal allowed errors of PT100 class A, compared to Thermocouples Type K

Max. allowed error of PT100 class A, compared to Thermocouples class 1 and 2

