

## Platinum Resistance Temperature Detector

M 1020

M series PRTDs are designed for large volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications are Automotive, White Goods, HVAC, Energy Management, Medical and Industrial equipment.

Nominal Resistance R0	Tolerance DIN EN 60751 1996-07	Tolerance DIN EN 60751 2009-05	Order Number Plastic Bag	Order Number Blister reel
100 Ohm at 0°C	Class 1/3 B	F 0.1	32 208 180	32 208 428
	Class A	F 0.15		32 208 429
	Class B	F 0.3		32 208 280
500 Ohm at 0°C	Class B	F 0.3	32 208 201	32 208 285
1000 Ohm at 0°C	Class 1/3 B	F 0.1	32 208 191	32 208 483
	Class A	F 0.15		32 208 439
	Class B	F 0.3		32 208 286

The measuring point for the nominal resistance is defined at 8mm from the end of the sensor body.

**Specification** DIN EN 60751 (according to IEC 751)

**Temperature range** -70°C to +500°C (continuous operation)  
(temporary use to 550°C possible)  
Tolerance Class B: -70°C to +500°C  
Tolerance Class A: -50°C to +300°C  
Tolerance Class 1/3 DIN: 0°C to +150°C

**Temperature coefficient** TC = 3850 ppm/K

**Leads** Pt clad Ni- wire  
Recommend connection technology:  
Welding, Crimping and Brazing

**Lead lengths (L)** 10mm ±1 mm

**Long-term stability** max. R<sub>0</sub>-drift 0.04% after 1000h at 500°C

**Vibration resistance** at least 40g acceleration at 10 to 2000 Hz,  
depends on installation

**Shock resistance** at least 100g acceleration with 8ms half sine wave,  
depends on installation

**Environmental conditions** unhusd for dry environments only

**Insulation resistance** > 100 MΩ at 20°C; > 2 MΩ at 500°C

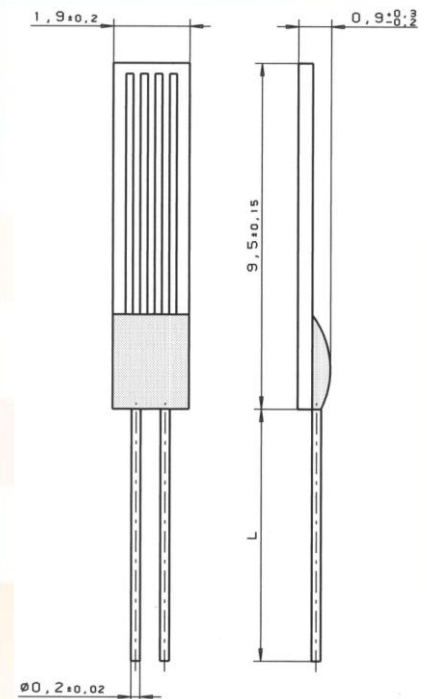
**Self heating** 0.2 K/mW at 0°C

**Response time** water current (v= 0.4m/s): t<sub>0.5</sub> = 0.10s  
t<sub>0.9</sub> = 0.30s  
air stream (v= 2m/s): t<sub>0.5</sub> = 4.0s  
t<sub>0.9</sub> = 12.0s

**Measuring current** 100Ω: 0.3 to 1.0mA  
500Ω: 0.1 to 0.7mA  
1000Ω: 0.1 to 0.3mA  
(self heating has to be considered)

**Note** Other tolerances, values of resistance and wire lengths are  
available on request.

We reserve the right to make alterations and technical data printed. All technical data serves as a guideline and does not guarantee particular properties to any products.



### Heraeus Sensor Technology USA

1901 Route 130  
North Brunswick, NJ 08902  
Phone 732-940-4400 Fax 732-940-4445  
Email [info.hst-us@heraeus.com](mailto:info.hst-us@heraeus.com)  
<http://heraeus-sensor-technology-us.com>

Name of document: 30910024 Index B  
Status: 06/2010

# AMEYA360

## Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit [www.ameya360.com](http://www.ameya360.com)

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd  
Minhang District, Shanghai , China

➤ Sales :

Direct +86 (21) 6401-6692

Email [amall@ameya360.com](mailto:amall@ameya360.com)

QQ 800077892

Skype ameyasales1 ameyasales2

➤ Customer Service :

Email [service@ameya360.com](mailto:service@ameya360.com)

➤ Partnership :

Tel +86 (21) 64016692-8333

Email [mkt@ameya360.com](mailto:mkt@ameya360.com)