

Platinum Resistance Temperature Detector

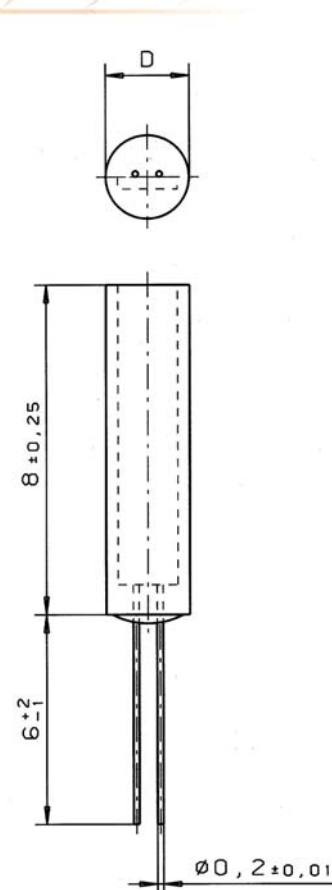
MR 828 and 845

MR series elements are designed for applications where high vibration resistance as well as high temperature stability are vital. Typical industrial applications include analytical and medical equipment, chemical plants and mechanical equipment. Small tolerances on diameter allow problem free installation in protective tubes.

Type	Order Number	Diameter D in mm
1 Pt 100 MR 828	32 209 340	2,8 $\pm 0,3$
1 Pt 500 MR 828	32 209 341	2,8 $\pm 0,3$
1 Pt 1000 MR 828	32 209 342	2,8 $\pm 0,3$
2 Pt 100 MR 828	32 209 343	2,8 $\pm 0,3$
2 Pt 1000 MR 828	32 209 345	2,8 $\pm 0,3$
1 Pt 100 MR 845	32 209 346	4,5 $\pm 0,3$
1 Pt 500 MR 845	32 209 347	4,5 $\pm 0,3$
1 Pt 1000 MR 845	32 209 348	4,5 $\pm 0,3$
2 Pt 100 MR 845	32 209 349	4,5 $\pm 0,3$
2 Pt 1000 MR 845	32 209 351	4,5 $\pm 0,3$

The measuring point for the basic value is situated at 8 mm from the end of the sensor body

Specification	DIN EN 60751 (according to IEC 751), class B
Nominal resistance	100 Ω ; 500 Ω and 1000 Ω at 0°C
Temperature range	-70°C to + 500°C (continuous operation)
Temperature coefficient	TCR = 3850 ppm/K
Leads	Pt clad Ni wire
Longterm stability	max. R ₀ -drift 0,1% after 1000 h at 500°C
Vibration resistance	according to DIN EN 60751
Environmental conditions	unhoused for dry environments only
Insulation resistance	> 100 M Ω at 20°C; > 2 M Ω at 500°C
Measuring current	100 Ω 0.3 to 1.0 mA; 500 Ω 0.1 to 0.7 mA 1000 Ω 0.1 to 0.3 (self heating has to be considered)
Response time	Water (v = 0.4 m/s) Air (v = 2 m/s) MR 828: t _{0,5} = 0.9 s t _{0,9} = 2.7 s , t _{0,5} = 12.3 s t _{0,9} = 39.5 s MR 845: t _{0,5} = 1.5 s t _{0,9} = 4.6 s , t _{0,5} = 24.8 s t _{0,9} = 78.8 s
Self heating	MR 828 (Pt 100/500/1000): 0,05 K/mW at 0°C MR 828 (2 Pt 100/1000): 0,16 K/mW at 0°C MR 845 (Pt 100/500/1000): 0,04 K/mW at 0°C MR 845 (2 Pt 100/1000): 0,08 K/mW at 0°C
Packaging	blister reel
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.

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