Convection-Enhanced Pirani Sensors from HPS®

The HPS® convection-enhanced Pirani sensor provides dependable and stable pressure measurement at a very low cost.

Since the only materials exposed to vacuum are stainless steel, nickel, glass, and platinum, the sensor is compatible with a wide array of process gases and is especially suitable for UHV applications. The platinum alloy filament effectively eliminates any reading variance throughout a convection sensor's higher measuring range.

More accurate than a thermocouple sensor, the HPS® convection-enhanced Pirani sensor measures over a wider pressure range and responds more rapidly to process pressure changes. The upper measuring limit of a convection-enhanced Pirani sensor is increased over that of a traditional Pirani sensor from 100 Torr to 1000 Torr. This higher limit is useful when monitoring the pumpdown of a vacuum system from atmosphere to a base pressure.

The sensor is compensated for any changes in room temperature ranging from 10 to 50°C. This sensor can be baked to 100°C, with the electronics removed and the cable and controller disconnected. A version of the sensor that can be baked to 250°C is available as a special.

Fitting | A
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NW 16 KF | 2.76/(70)
NW 25 KF | 2.76/(70)
1-1/3" CF | 3.06/(78)
2-3/4" CF | 2.73/(69)
8 VCR-F | 2.83/(72)
4 VCR-F | 2.51/(64)
1/8" NPT-M | 2.93/(74)
15 & 18 mm tube | 3.19/(81)
Need help?

Contact an Application Specialist by sending an email to MKS Vacuum Technology or call 303-449-9861.