

## PBR 260

### Pirani / Bayard-Alpert Hot Cathode Gauge

The INFICON PBR 260 is a combination gauge that operates as two gauges in one single and compact unit. The leading measuring principle is a hot cathode gauge according to the Bayard-Alpert principle, which will be completed and supported by a Pirani thermal conductivity measuring principle. The PBR 260 Pirani/Bayard-Alpert hot cathode combi gauge measures from UHV range ( $5 \times 10^{-10}$ ) mbar to ATM range (1000 mbar). One of PBR 260 key benefits is its drop in compatibility with other manufacturers PBR 260 gauge types, thanks to equal analog output signal and electrical interface used. This offers simple installation/exchange, setup and process integration. The PBR 260 Pirani/Bayard-Alpert hot cathode combi gauge provides the most economical solution for obtaining affordable and reliable base pressure measurements on the market.



#### ADVANTAGES

- PBR 260 Pirani/Bayard-Alpert hot cathode combination gauge for general vacuum measurement and control in the ATM to UHV range with just one compact device
- Flange: DN 25 ISO-KF, DN 40 CF-R, DN 40 ISO-KF
- Maximum pressure applies to inert gases and temperatures of less than  $55^{\circ}\text{C}$
- Highly accurate, excellent repeatability in the process range  $10^{-8} \dots 10^{-2}$  mbar
- Bayard-Alpert sensor ON/OFF automatically controlled by Pirani sensor
- Long-life yttrium oxide coated iridium filament
- RoHS compliance
- Easy to exchange/replace sensor head

#### Drop in compatible to other manufacturers PBR 260 Pirani/Bayard-Alpert hot cathode gauges

- Partnumber IGG27000 matches PT R27 000
- Partnumber IGG27001 matches PT R27 001
- Partnumber IGG27002 matches PT R27 002

#### APPLICATIONS

- General pressure measurement in Semiconductor and Analytical process environment
- Optical and other industrial coating processes

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### ORDERING INFORMATION

| Type                              | PBR 260 |            |
|-----------------------------------|---------|------------|
| DN 25 ISO-KF                      |         | IGG27000   |
| DN 40 ISO-KF                      |         | IGG27001   |
| DN 40 CF-F                        |         | IGG27002   |
| Replacement sensor head 25 ISO-KF |         | IN846517-T |
| Replacement sensor head 40 ISO-KF |         | IN846518-T |
| Replacement sensor head 40 CF-R   |         | IN846519-T |

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### SPECIFICATIONS

|                                       |                 | PBR 260                              |
|---------------------------------------|-----------------|--------------------------------------|
| Measurement range                     | mbar            | $5 \times 10^{-10}$ ... 1000         |
| Bakeout temperature                   | °C              | 150                                  |
| Accuracy $10^{-8}$ ... $10^{-2}$ mbar | % of reading    | 15                                   |
| Repeatability                         | % of reading    | 5                                    |
| Supply Voltage                        | V DC            | 20 ... 28                            |
| Supply Power consumption max.         | W               | 16                                   |
| Output signal                         |                 |                                      |
| Pressure range                        | V               | 0.774 ... 10                         |
| Sensor error below                    | V               | 0.5                                  |
| Minimum load                          | kOhm            | 10                                   |
| Temperature                           |                 |                                      |
| Operating                             | °C              | 0 ... +50                            |
| Storage                               | °C              | -20 ... +70                          |
| Filament                              |                 | tungsten                             |
| Cathode                               |                 | iridium yttriated                    |
| Materials exposed to vacuum           |                 | Cu, Glass, NiFe, Mo, St. steel, NiCr |
| Pressure max.                         | bar             | 2                                    |
| Cable length, max.                    | m               | 100                                  |
| Flange                                |                 | stainless steel                      |
| Internal volume                       |                 |                                      |
| DN 25 ISO-KF                          | cm <sup>3</sup> | 24                                   |
| DN 40 ISO-KF                          | cm <sup>3</sup> | 24                                   |
| DN 40 CF-R                            | cm <sup>3</sup> | 25                                   |
| Weight                                |                 |                                      |
| DN 25 ISO-KF                          | g               | 285                                  |
| DN 40 ISO-KF                          | g               | 315                                  |
| DN 40 CF-R                            | g               | 550                                  |

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## DIMENSIONS

[mm]

