

# PENNINGVAC PTR 90

## Active cold cathode ionisation / Pirani combination vacuum gauge

- Measuring range 1000 to  $5 \times 10^{-9}$  mbar
- High operating reliability due to automatic ignition of the cold cathode at the optimal ignition pressure
- Integration of two measurement principles into one gauge saves mounting and wiring time and effort
- Installation of a baffle is recommended to protect the gauge against contamination, heat radiation etc.
- Easy, cost and space saving installation
- Improved reliability in argon processes (sputtering)
- Easy operation

### Typical applications

- Vacuum deposition
- Analytical instrumentation
- Vacuum furnaces
- General vacuum measurement and control at medium and high vacuum



## Technical data

<b>Measurement range</b>	1000 to 5 x 10 <sup>-9</sup> mbar
<b>Measurement principle</b>	Inverted magnetron (cold cathode) and heat loss according to pirani
<b>Accuracy</b>	30% (in the range 100 to 1 x 10 <sup>-8</sup> mbar)
<b>Reproducibility</b>	5% (in the range 100 to 1 x 10 <sup>-8</sup> mbar)
<b>Operating temperature</b>	5 to 55 °C (ambient)
<b>Materials in vacuum</b>	Stainless steel, ceramics, Mo, Ni, Au, W
<b>Analog output</b>	0 to 10,5 V; analog signal (log-linear): 1,82 to 8,6 V (0,6 V / decade); Error signal < 0,5 V no power, > 9,5 V Pirani wire breakage
<b>Power supply</b>	15 to 30 V DC
<b>Electrical connection</b>	FCC68 socket, 8-pin
<b>Overpressure resistance</b>	10 bar (abs.)
<b>Protection category</b>	IP40
<b>Operating units</b>	MVC3

## Order data

<b>Order code</b>	<b>Description</b>
LH-230070	PTR 90, DN25KF
LH-230071	PTR 90, DN40KF
LH-230072	PTR 90, DN40CF

## Accessories

<b>Order code</b>	<b>Description</b>
MVC3-0M	MVC3 2-channel vacuum controller
MVC3-AM	MVC3 3-channel vacuum controller
LSL3/5/10	Gauge cable for DISPLAY ONE, MVC3, FCC68 (8-pin) at both ends, 3/5/10 m

## VACOM

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