

> Product Information

Cleaning Room Sensor | Type PMDS4



intelligent electronics

FSM[®]

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PMDS is a suitable positive and negative pressure monitoring of non-aggressive gases in cleaning rooms. Due to the construction of the device it can be directly installed into the partition. Up to four additional sensors for temperature and humidity can be connected to the device and displayed. The calibration and adjustment is made simply by using the front panel.

Fields Of Application

Clean room technology; Chemical industry; Medical technology; Filter technology...

Technical Details

Measurement range	-1...+1 hPa (other ranges on request)
Measurement principle	inductive
Overpressure safety	Overpressure recognition pos. overpressure +1,15hPa +/-0,075 hPa neg. overpressure -1,15hPa +/-0,075 hPa For differential measurements: Max. Systemdruck 1 bar (higher overpressure protection on request)
Medium	Non aggressive gases
Parts in contact with medium	Ni, Al, CuBe, PU
Linearity	+/- 1% of f.v. Option: +/- 0,5% of f.v. +/- 0,2% of f.v.; other ranges >= 2,5 hPa
Hysteresis	0,1% of f.v.
Supply	15 - 35 VDC Option: 100 - 240 VAC (50 - 60 Hz)
Current consumption	6 VA
Protection	500 mAT
Supply influence	< 0,05%
Output signal	0 - 10 V (load <= 500 Ohm) Option: 0- 20 mA, (0) 4- 20 mA (load <= 500 Ohm)
Resolution	12 Bit (4096 points)
Temperature drift	Zero point max. +/- 0,03%/K Span max. +/- 0,03%/K
Temperature range	Specified range +15°C to + 50°C
Humidity	bis 80% relativer Feuchte
Storage temperature	-10°C to + 70°C
Long term stability	+/- 0,5 % p. a. typ.
Housing	Material ABS, dimensions see below
Panel	Stainless steel
Pressure connectors	Ø 3 x 4mm (flexible hoses Ø 3) Ø 4,6 x 9mm (flexible hoses Ø 4)
Electric outlet	Screw terminal max. 1,5 mm ²

Technical Details

Protection class	II
Protection type	IP 20
Standards	EN 61000-6-1, EN6100-6-2, EN61000-6-3, EN61000-6-4, EN 61010
Weight	ca. 1,2 kg (ca. 1,3 kg mit Netzteil)
Impact strength	10 g
Sensor volume	aprox. 10 ml
Volume increase	aprox. 0,2 ml for nominal pressure
Display	4x7 segment LED-display; 4 digits, height of digit 14,2 mm, 4x14 segment LED-display 2 digits, height of digit 13,8 mm
Zeroing	zeroing is adjustable Manual automatic (after system start then after 10 min, 20 min. and 1 hour. Then every hour)
Option	Output RS485 and with Modbus ASCII protocol
Limit contacts	2 limit contacts (current consumption aprox. 35/45 mA) Relais output changer: 6 A / 230 VAC Status displayed via 2 LED Programmable: Hysteresis, power-on/ power-off delay, Opener/ NO switch Warning by flashing the display (value set)