

Dräger PSD 3000

Sampling unit for Gas Detection Systems

The Dräger PSD 3000 is a sampling unit for continuous sampling of gas and air mixtures. Combined with Dräger Gas Detectors, the Dräger PSD 3000 serves as a sampling system for gas monitoring purposes. The internal vibrating diaphragm pump has a superior life expectancy, due to the lack of rotating parts.



ST-74B-2006

The Dräger PSD 3000 can be used for most industrial gases. An electronic circuit monitors the flow rate internally and advises if the flow rate in the input line falls below a predefined minimum threshold. The device offers a flexible programmable messaging of the low-flow signal to the control system.

FAST AND EASY INSTALLATION

The sampling unit can be placed either before or behind a gas transmitter depending on application requirements. Two instant tube fittings allow a fast and easy connection of stiff sample lines without tools or manual force. Electrically the sampling unit is installed between the gas transmitter and the central control system. There are cable glands and terminals provided for the respective connections. The 4 to 20 mA signal from the transmitter as well as a separate 24 V wire can be passed through the sampling unit.

OPERATION

A multicoloured LED indicates the operational status of the device. The LED indicates conditions such as normal operation, a blocked sampling line or a broken supply voltage connection. The flow rate of the sampling line can be adjusted internally to adapt to special needs in certain circumstances. A dust filter protects the sampling pump from dust and aerosols.

LOW-FLOW MONITOR

The Dräger PSD 3000 generates a signal in case the flow in the inlet line drops below a predefined value. This signal can alternatively be transmitted via the 4 to 20 mA line to the control system or by a separate switching contact. The latter option is useful if a digital communication between the transmitter and the controller should be maintained during a low-flow condition. In addition the operation LED indicates with a red colour that the low-flow condition has been triggered.



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Sampling unit for remote gas sampling.

TECHNICAL DATA

| | | |
|--------------------------------|--|--------------------|
| Type | Electronic sampling unit with vibrating diaphragm pump | |
| Voltage | (DC) 24 V ± 2.4 V | |
| Power | < 6.5 W | |
| Flow rate | Adjustable 0.3 l/min up to approx. 1.0 l/min | |
| | Factory default approx. 0.75 l/min | |
| Low-flow alarm | 0.3 l/min | |
| Switching contact rating | Ohmic loads only $U_{max} = 30$ V DC, $I_{max} = 2$ A, $P_{max} = 60$ W | |
| Ambient condition | Operation 0 °C to 50 °C; 32 °F to 120 °F | |
| | 0 %rh to 95 %rh, non condensing | |
| | During storage – 40 °C to 70 °C; – 40 °F to 160 °F | |
| Materials used in the gas path | Hose connection | Metal, NBR |
| | Hoses | Viton, PTFE |
| | Hose connection | PP |
| | Dust filter | PE, PP |
| | Internal restrictor | Glass |
| | Pump | PP, EPDM, silicone |
| Enclosure | IP 54; ABS | |
| Dimensions | Approx. 123 x 147 x 83 mm (W x H x D) | |
| Weight | Approx. 0.65 kg | |
| CE markings | Electromagnetic Compatibility (89/336/EEC) | |
| Certificate | RoHS (2002/95/EG) (Restriction of the use of certain hazardous substances in electrical and electronic equipment) | |
| Cable glands (2x) | M 20; cross section 6 to 12 mm | |
| Wire cross section | 0.5 to 1.5 mm ² | |
| Hose connection | Inside diameter 4 mm, outside diameter 6 mm | |

ORDER INFORMATION

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|--|-----------|
| Dräger PSD 3000 | 83 19 270 |
| Sampling point filter (glassfibre/cellulose) | 68 06 743 |
| Filter insert | 67 37 352 |
| Gassing adapter DrägerSensor | 68 06 978 |
| Gassing adapter DrägerSensor AC | 68 09 380 |

HEADQUARTERS:

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