

Digital Differential Pressure Transmitter

DE90







Various configuration options for different process variables









FISCHER PRO-LINE®

The flexible device concept for your industrial applications





Benefits at a glance

Multifunctional differential pressure transmitter for air and neutral gases

- ▲ Colour-change backlight LC display to facilitate easy detection of operating states
- ▲ Reversible signal outputs (current/voltage)
- ▲ Additional switching outputs

Flexible and precise

- ▲ High measuring accuracy and repeatability of measured values (max. characteristic curve deviation 1 % FS, optional 0.5 % FS)
- ▲ Wide measuring range from 25 Pa to 25 kPa
- ▲ Modbus RTU digital interface
- ▲ Expandable by additional sensors for temperature, relative humidity and air quality

Safety combined with reliability

- ▲ Optional use in ATEX zones 2 or 22
- ▲ Safety indices for safety-critical applications
- ▲ Diversity of characteristic curve functions and parameter-setting facilities

Beneficially applicable

- ▲ Multi-channel monitoring of intake-air and exhaust-air filtration systems as well as extraction systems
- ▲ Controlled volumetric flow measurement for reducing energy costs
- ▲ Dynamic filter monitoring system to ensure early detection of filter blockage
- ▲ Individual room precision-control facilities in clean rooms and safety laboratories
- ▲ Optional integration into clean-room panels or technical control centres



Easy operation and parameterisation

▲ Parameter cloning with a simple USB stick

keypad

PC software

▲ Sturdily designed, industrial-compliant membrane

▲ Simple appliance parameterisation with plain text

display on the unit itself or via FISCHER inTouch

Large LC display with colour-change indicator

- ▲ Up to 4-line display facilities plus bargraph display
- ▲ Excellent readability
- ▲ Colour-change backlight display for clear and vivid presentation of operating states

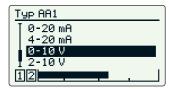














Variable connection concept

- ▲ Electrical connections using industrial standard M12 connectors
- ▲ Variety of pressure and sensor connections for optimum adaptation to specific processes

















Flexible and fast installation

System linkage using supplied wall/top-hat rail adapter



Technical data

Input parameters

- ▲ Differential pressure, under-/ overpressure measurement of neutral gaseous media
- ▲ Measuring ranges/unidirectional 0...25 Pa to 0...25 kPa
- Measuring ranges/bidirectional ± 25 Pa to ± 25 kPa
- ▲ Long-term stable piezo-resistive measuring principle
- Reversible switching facilities between all pressure units in common use

Output parameters

- Reversible output signals 0...20 mA, 4...20 mA, 0...10 V
- ▲ Up to 4 potential-free semiconductor switches (MOSFET) 3...32 V AC/DC, 0.25 A, 8 W/8 VA

Measuring accuracy

▲ Characteristic curve deviation 1% FS, optional 0.5% FS (nonlinearity and hysteresis)

Interfaces

- ▲ Electrical connection via circular connector M12 (4-, 5- and 8-pole)
- ▲ I²C interface with range extender for linkage up to external (remote) sensor system, e.g. temperature/ relative humidity
- Optional digital interface Modbus RTU
- USB-OTG interface for parameterisation and firmware updates

Process connections

▲ Aluminium screw coupling for 6/4 mm and 8/6 mm hose

- ▲ Pneumatic plug connectors for 6/4 mm and 8/6 mm hard hose
- ▲ Cutting-ring screw coupling connection

Display and user interface

- ▲ Whole diversity of parametersetting options for optimum adaptation of appliance to respective processes or uses
- ▲ High-resolution display with RGB backlighting and parameterisable colour-change facilities

Certificates and approvals

- ▲ Optional ATEX zone 2 or 22
- Safety data for safety-critical applications

Menu languages

Several menu languages available

www.fischermesstechnik.de

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