

# Digital Differential Pressure Transmitter **DE90**



# **FISCHER PRO-LINE**<sup>®</sup>

The flexible device concept for your industriel applications

C



# 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
- A 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

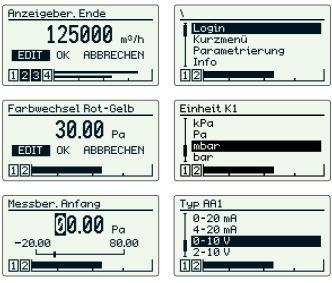
- ▲ Sturdily designed, industrial-compliant membrane keypad
- ▲ Simple appliance parameterisation with plain text display on the unit itself or using FISCHER in touch® PC software
- A Parameter cloning with a simple USB stick





# Large LC display with colour-change indicator

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







# Flexible and fast installation

 System linkage using supplied wall/ top-hat rail adapter

# **Technical data**

#### Input parameters

- Differential pressure, under/ over-pressure 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 (non-linearity and hysteresis)

#### Interfaces

- Electrical connection via circular connector M12 (4-, 5- and 8-pole)
- I<sup>2</sup>C 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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