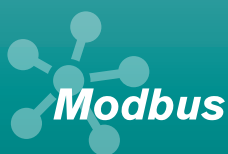
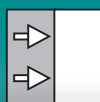
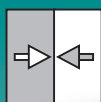


# Digital Differential Pressure Transmitter DE90



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

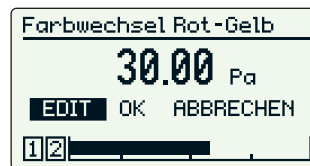
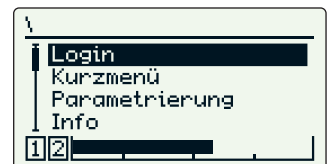


## Large LC display with colour-change indicator

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

## Easy operation and parameterisation

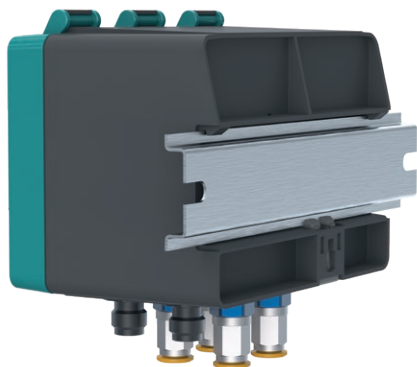
- ▲ Sturdily designed, industrial-compliant membrane keypad
- ▲ Simple appliance parameterisation with plain text display on the unit itself or via FISCHER inTouch PC software
- ▲ Parameter cloning with a simple USB stick



## Variable connection concept

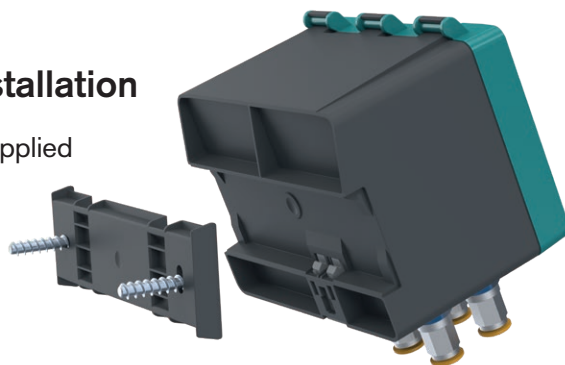
- ▲ Electrical connections using industrial standard M12 connectors
- ▲ Variety of pressure and sensor connections for optimum adaptation to specific processes





## 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  $\pm 25$  Pa to  $\pm 25$  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)
- ▲ 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 parameter-setting 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](http://www.fischermesstechnik.de)

**FISCHER Mess- und Regeltechnik GmbH**

Bielefelder Straße 37a · 32107 Bad Salzuflen · GERMANY · Fon +49 5222 974-270 · Fax +49 5222 7170

Mail: [info@fischermesstechnik.de](mailto:info@fischermesstechnik.de) · Web: [www.fischermesstechnik.de](http://www.fischermesstechnik.de)