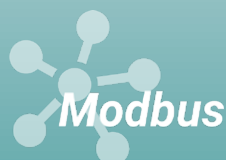
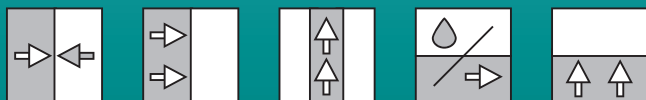


Humidity and temperature measuring device with optional (differential) pressure measurement

FT90



Wide range of application options*



* Differential pressure, pressure, flow, temperature/humidity, level



FISCHER PRO-LINE®

The flexible device concept for your industrial applications

Benefits at a glance:

Humidity and temperature measuring device for air and neutral gases

- ▲ Durable and low-maintenance
- ▲ 4 freely configurable switch outputs
- ▲ Optional switchable signal outputs (current/voltage)
- ▲ Optional digital interface with Modbus RTU protocol
- ▲ Optional (differential) pressure measurement

Flexible and precise

- ▲ 0 to 100% rH, typical measurement deviation 1.5 ... 2% rH
- ▲ -40 to +100 °C, typical measurement deviation 0.1 ... 0.3 °C
- ▲ Differential pressure, typical characteristic curve deviation, < 1% FS
- ▲ Wide measuring range from 25 Pa to 25 kPa
- ▲ Various characteristic curve functions and parameterisation options

Safe and reliable

- ▲ Optional use in ATEX Zones 2 and 22

Beneficially applicable

- ▲ Measurement of temperature/relative humidity, supply or exhaust air in ventilation systems
- ▲ Precise room pressure/single-room control in clean rooms and safety laboratories
- ▲ Can be integrated into clean-room control panels or technical centres



Large LC display with colour-change indicator

- ▲ Displays up to 3 measured values and barograph displays
- ▲ Very good readability
- ▲ Colour-change backlight display for clear and vivid presentation of operating states

Easy operation and parameterisation

- ▲ Robust, industrial-grade membrane keypad
- ▲ Simple device parameterisation using the clear text display on the device or via the FISCHER inTouch PC software
- ▲ Simple cloning of device parameterisation settings via USB stick



Variable connection concept

- ▲ Electrical connections using M12 connectors as industry standard
- ▲ Various pressure and sensor connections to ensure optimum adaptation to the process
- ▲ Direct mounting of the humidity and temperature sensor
- ▲ Alternatively, a cable can be used for flexible installation at the desired location



Flexible and fast installation

- ▲ System linkage using supplied wall/top-hat rail adapter



Left-hand: ATEX version
Central: Rigid FT sensor version
Right-hand: Flexible FT sensor version



Technical data

Measuring range, temperature and humidity

- ▲ 0 to 100% rH
- ▲ -40 to +100 °C

Measuring ranges, pressure

- ▲ Differential pressure, negative and positive pressure measurement with neutral gaseous media
- ▲ Measuring ranges (unidirectional) 0...25 Pa to 0...25 kPa
- ▲ Measuring ranges (bidirectional) ± 25 Pa to ± 25 kPa
- ▲ Piezo-resistive measuring principle with long-term stability
- ▲ Switchable between all common pressure units

Output parameters

- ▲ 4 potential-free semiconductor switches (MOSFET) 3...32 V AC/DC, 0.25 A, 8 W/8 VA
- ▲ Optional switchable output signals

0...20 mA, 4...20 mA, 0...10 V, 2...10 V, 1...5 V

- ▲ Optional Modbus RTU

Measurement accuracy

- ▲ Typical measurement deviation < 1% FS (from MR 40 Pa) at differential pressure
- ▲ Typical measurement deviation 1.5 ... 2% rH
- ▲ Typical measurement deviation 0.1...0.3 °C

Interfaces

- ▲ Electr. connection via M12 circular connector (5- and 8-pin)
- ▲ Optional digital Modbus RTU interface
- ▲ USB OTG interface for parameterisation and firmware updates

Process connections, pressure

- ▲ Aluminium screw fitting for 6/4 mm and 8/6 mm tubing
- ▲ Pneumatic plug-in connections for 6/4 mm and 8/6 mm hard hose
- ▲ Stainless steel cutting ring fitting for 6 mm and 8 mm pipe

Display and user interface

- ▲ Wide range of parameterisation options for optimum adaptation of the device to the respective process/application
- ▲ High-resolution display with RGB background lighting and customisable colour change

Certificates and approvals

- ▲ Suitable for ATEX Zones 2 and 22

Menu languages

- ▲ Several menu languages available

www.fischermesstechnik.de

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