



## FS1205

### Pressure transducer for atmospheric and barometric air pressure, digital output

Measuring size: atm. air pressure, bar. air pressure

Output: Modbus RTU, Relay

Highlights: input altitude above sea level, easy-to-install surface-mounted housing, optional LCD-Display



### Description

The pressure transducer FS1205 registers the atmospheric and barometric air pressure in the range of 500...1150 mbar and converts this measured value into a digital output signal.

In the register the height above sea level, output attenuation, offset value etc. can be specified.

As special equipment a potential-free alternating contact and/or a backlit display are available. The contents of the display can be rotated in steps of 90° by using a command.

As special functions a series of defined measured values from other bus-participants (also cross-manufacturers) can be shown in the display. To display measured values from other bus-participants these are entered into the corresponding register by the bus-Master. The optional alternating contact can be configured for measured values from other bus-participants.

The configuration of address, transmission mode/speed, terminating resistor and master/slave function of the bus-devices can easily be done using the innovative DIP switch technology. Thus devices can quickly and easily be integrated into the system and later parameterised via the master.

The bus-devices can even be reset to the works settings during operation of the master. Thus the basic functionality of the device is recreated in a matter of seconds. This can be necessary in the event of incorrect parameterisations of, e.g. offset, switching threshold, display modes etc..

By means of the FS master/slave topology autarkic nodes without additional SPS master can be installed within the device series. Hereby a bus-device assumes the master function in the node. This requests the measured values from other bus-participants, automatically enters these into the corresponding register and shows them in the internal display. Furthermore the master can evaluate and operate additional actuators in the device series (analogue in- and outputs, relay station).



## Technical Specifications

|                                     |  |
|-------------------------------------|--|
| Measurement range atm. air pressure | 500-1150 mbar  |
| Measurement range bar. air pressure | 500-1150 mbar  |
| Accuracy                            | ±5 mbar (at 20°C)  |
| Temperature dependency              | 1 mbar / 10 K  |
| Linearity inaccuracy                | ±1,0% final value  |
| Offset                              | can be entered in the register   |
| Output attenuation                  | can be entered in the register   |
| Supply voltage                      | 24 V DC (±5%)  |
| Current consumption                 | max. 20 mA + 30 mA (option display) + 20 mA (option relay)                         |
| Digital output                      | Modbus RTU   |
| Alarm output                        | 1 x potential-free change-over contact, 48 V, 1 A                                  |
| Switching Hysteresis Relay          | can be entered in the register   |
| Electrical connection               | push-in terminal, no tools required, time-saving                                   |
| Pressure resistance                 | 5-times of measurement range   |
| Housing                             | Polycarbonate PC UL 94 V0 with hinge locks, color signal white similar to RAL 9003 |
| Dimensions                          | Housing: L 89 x W 80 x H 47 mm   |
| Cable gland                         | PG11 high-strength cable gland with strain relief                                  |
| Display                             | optional LCD display with backlight on/off/auto                                    |
| Protection type                     | IP30   |
| Protection class                    | III  |
| Working range r.H.                  | 0...98% r.H. in contaminant-free, non-condensing air                               |
| Working temperature                 | 0...+50°C  |
| Storage temperature                 | 0...+50°C  |
| Installation                        | screw fastening  |
| Approvals                           | CE, EAC, RoHS  |



## Variants

| Article Number   |            |                |
|------------------|------------|----------------|
| Air pressure     | Output     | Equipment      |
| FS1205-MBR-P4-D  |            |                |
| 500...1150 mbar  | Modbus RTU | Display        |
| FS1205-MBR-P4-DR |            |                |
| 500...1150 mbar  | Modbus RTU | Display, Relay |
| FS1205-MBR-P4-R  |            |                |
| 500...1150 mbar  | Modbus RTU | Relay          |
| FS1205-MBR-P4-X  |            |                |
| 500...1150 mbar  | Modbus RTU | -              |

## Accessories

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SB/E

Snap-on mounting for DIN rails





### Dimensional Drawing

