## DIGITAL DIFFERENTIAL PRESSURE SWITCH / TRANSMITTER

## with colour-change LCD selectable pressure units

DRUCK \& TEMPERATUR

This type is a multi-functional switching unit with an optional transmitter output. It is suitable for measuring overpressure, negative pressure and differential pressure in gaseous media. The device is to be exclusively used for the applications agreed between the manufacturer and the user.

## Applications

Filter equipment
Precision air channel measurement
Clean room pressure equalisation
Burner under-pressure measurement


Furnace circulating air control

| Type | 5354 |  | Options |
| :---: | :---: | :---: | :---: |
| Measuring ranges | $0 \ldots 0,25$ mbar up to $0 \ldots 10 \mathrm{mbar} ;-0,25 \ldots 0,25 \mathrm{mbar}$ up to - <br> 1... 1 mbar |  |  |
| Static operating press. | max. 100 kPa |  |  |
| Bursting pressure | max. 170 kPa |  |  |
| Accuracy | max. 1,0\% FS |  |  |
| Case | Polyamide (PA) 6.6 |  |  |
| Wetted parts | Silicon, PVC, aluminium and brass |  |  |
| Process connection | 2 x aluminium hose screw connection for $6 / 4 \mathrm{~mm}$ hose |  | for $8 / 6 \mathrm{~mm}$ hose; <br> 2x pneumatic plug connector for <br> 6/4 or $8 / 6 \mathrm{~mm}$ hose |
| Allowed temperatures | Area $-10^{\circ} \mathrm{C} \ldots+7$ <br> Media $-10^{\circ} \mathrm{C} \ldots+7$ <br> Storage $-20^{\circ} \mathrm{C} \ldots+7$ |  |  |
| Power supply | Rated voltage <br> Admissible operating voltage <br> Power consumption <br> Electrical connection | 24V AC/DC $\mathrm{U}_{\mathrm{b}}=20 . .32 \mathrm{~V}_{\mathrm{DC} / \mathrm{AC}}$ <br> 2 x round plug connector M12 typ. 2,2 W, max. 3,5 W |  |
| Output signal | Output signal (3-wire) <br> $0 . . .20 \mathrm{~mA}, 4 . . .20 \mathrm{~mA}$ <br> $0 . . .10 \mathrm{~V}$ | Signal range <br> 0,0...21,0 mA <br> 0,0...11,0 V |  |
| Switching outputs | 2 potential-free relay contacts | 2 potential-free semiconductor switches (MOSFET) |  |
| progr. switch. Function max. switch. voltage max. switch. current max. switch. output | Normally open (NO) <br> Normally close (NC) <br> 32 V AC/DC <br> 2 A <br> 64 W (VA) | One-pin activator (NO) One-pin deactivator (NC) <br> 3... 32 V AC/DC <br> 0,25 A <br> $8 \mathrm{~W} / 8 \mathrm{VA} ; \operatorname{Ron} \leq 4 \Omega$ |  |
| Display | 4...6 digit LCD, full graphic, colour backlighting |  |  |
| Mounting | Boreholes on rear for attaching to level mounting plates |  | Wall mounting plate, panel mounting set |
| Accessories | see page 3 |  |  |

all values at reference conditions (acc. to IEC 61298-1)

## Wall mounting



## Installation of front panel



## Assembly of the mounting rails



Installation of the panel


## Electrical connections

## Connector 1 - Supply and output signal



Connector 1 (Supply and output signal)
A Coding
B Bridge
1 Power supply (+Ub)
2 Output (- Sig)
3 Power supply (-Ub)
4 Output (+ Sig)
5 not connected

## Connector 2 - Switching outputs



Connector 2 (Switching outputs)
A Coding
1 Switch output 1
2 Switch output 2
3 Switch output 2
4 Switch output 1

Programming via membrane key-switches or by using PC-programming interface

Damping
Switching outputs

Measuring range unit

Output signal
Zero-point suppression

Offset correction
Output characteristic curve
Password
$0,0 \ldots 100,0 \mathrm{~s}$ (step response time $10 / 90 \%$ )
activation point, de-activation point, response time delay
(0...1800s), function (Normally open, Normally Close)
bar, PSI, kPa, "free unit"
start value, end value and decimal place for "free unit"
can be set at any point of measuring range
$0 . .1 / 3$ of measuring range (measured value deviation symetric about zero are set to zero)
$\pm 1 / 3$ of measuring range (Zero calibration setting may change with mounting orientation) linear, square rooted, table (3... 30 entries)
001...999 (000 = password protection disabled)

## Accessories

Transmitter PC Interface incl. PC-Software

