



- Diaphragm element
- Smallest measuring range 0...50 Pa
- Analog output 0...10 V or 4...20 mA
- Supply voltage 24 Vac or 24 Vdc
- Version with 3-digit LCD-Display (DS85-A)
- Version with adjustable contact (DS85-GS)
- Square root output signal possible
- Compact size of about ca. 70 mm
- Protection class IP 65

Sensor with diaphragm element for transmission of measured values of pressure, vacuum or differential pressure of non-aggressive gases.



Overload protection: 0.2 bar
 Static pressure: max. 0.2 bar
 Zero point calibration: Adjustable by REEDcontact, no cyclic zero-point calibration required
 Reaction time: direct

PERFORMANCE:

Zero drift: ± 0.75 %
 Sum of linearity and hysteresis: ± 0.5 %
 Temperature drift zero point: ± 0.3 % / 10 K
 Temperature drift measuring range: ± 0.2 % / 10 K

ACCURACY / ERROR LIMIT:



Operating mode: Measuring mode
 Measuring medium: Air or non-aggressive gases
 Measuring principle: Electromechanical diaphragm measuring system
 Measuring unit: Pa
 Smallest measuring range: 0...50 Pa (0.5 mbar)
 Largest measuring range: 0...10000 Pa (100 mbar)
 Measuring range: 0...50 Pa (0.5 mbar), 0...100 Pa (1 mbar), 0...200 Pa (2 mbar), 0...500 Pa (5 mbar), 0...1000 Pa (10 mbar), 0...2000 Pa (20 mbar), 0...4000 Pa (40 mbar), 0...6000 Pa (60 mbar), 0...10000 Pa (100 mbar)
 Measuring range selection: factory preset
 Characteristic: linear or radiated
 Ambient temperature: -10...50 °C
 Storage temperature: -25...+60 °C
 Limit signal Output / alarm output: open Collector, max 50 mA

TECHNICAL SPECIFICATIONS:

PHYSICALLY:

Housing: Ultramid
 Dimensions: diameter 70 mm, depth 50 mm
 Weight: approx. 90 g
 Protection class: IP65 according EN 60529
 Display: only in combination with three-wire system
 3-digit LCD display, character height 9 mm, indications in pressure units
 Electrical connections: 3- or 4-wires cable, 50 cm length, colour coded, electronic protected against false polarity
 Pressure connections: Hose connections 5 mm ø
 Operational position: Vertical, position dependence when rotated through 90° approx. 25 Pa

ELECTRONIC:

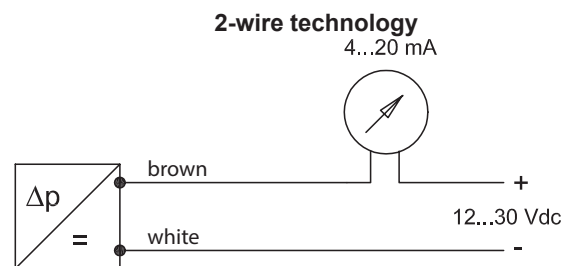
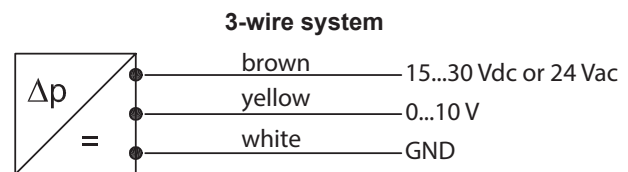
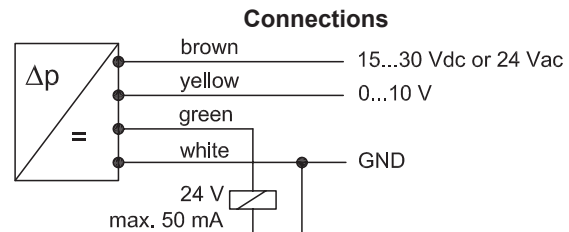
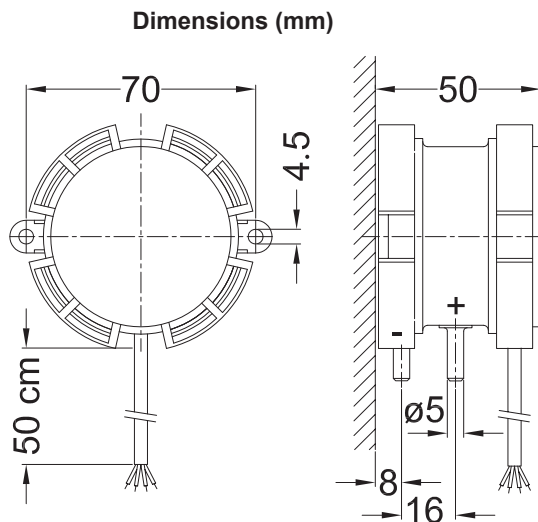
Power supply: 15...30 Vdc; 24 Vac (+/-15%)
 12 ... 30 Vdc with two-wire circuit
 Power consumption: approx. 10 mA (@ 24 Vdc)
 Output: two-wire circuit: 4...20 mA
 three-wire circuit: 0...10 V
 (Output square root possible at extra charge)

CONFORMITY:

EMC: EN 61000-6-2, EN 61000-6-3, CE-mark
 RoHS: According RoHS-directive 2011/65/EU

Special feature DS85 with limit switch

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|--|---|
| Setpoint setting: Limit signal output / alarm output: Time delay: Switching function: | TECHNICAL SPECIFICATIONS: Poti with scale 0 ... 100% Open collector, max 50 mA Adjustable via potentiometer 0 ... 7 s Min. or max. (Please specify when ordering!) |
|--|---|



| | | Item no. |
|--|--|--------------|
| Differential pressure sensor DS85 | | 2510 |
| Measurement range: Customer-specific presetting required! Output: 0...10 V, 3-wire technology; supply voltage 24 Vac or 24 Vdc | | |
| Differential pressure sensor DS85Z | | 2511 |
| Measurement range: Customer-specific presetting required! Output: 4...20 mA, 2-wire technology; supply voltage 12...30 Vdc | | |
| ACCESSORIES | | |
| Mounting set M-DS with screws, hose liners and 2 m plastic hose (4 x 1.5 mm) | | 25110 |
| SURCHARGE | | |
| Digital display (only for 3-wire technology - 2510) | | 25101 |
| Limit-contact min. or max. (only for 3-wire technology - 2510) | | 25102 |
| Min. or max.: Customer-specific presetting required! | | |
| Special measuring range as far as possible | | 25103 |
| Output square root 0...10 V or 4... 20 mA version | | 25107 |
| Test certificate | | 25108 |