



**Pressure Transmitter DS 1 and DS 2 for small pressure, vacuum and differential pressure**  
**Ranges from 0/2.5 mbar to 0/1000 mbar**  
**Analogue Output 0-10 V or 4-20 mA**

- Supervision of airblowers and airfilters
- Supervision of liquidlevels
- Controlling of aircurrents
- Pressure controlling in clean rooms
- Medical engineerings



**Description:**

The pressure transmitter DS 1 and DS 2 are measuring positive and negative overpressure and differential pressure. An absolute pressure type is also available. The piezoresistive sensor gives a high reliability and precision. The type DS 2 (low cost version) is designed for applications with less requirements regarding the temperature-stability.

The DS 1 and DS 2 have a very robust aluminium housing, this guarantees also very good EMV-properties.

**Available Types:**

Type	Output Signal
DS 1-010	0-10 V (3-wire)
DS 1-420	4-20 mA (2-wire)
DS 2-010	0-10 V (3-wire) Low Cost Version

**Pressure Ranges (Type DS 1):**

Pressure Range (mbar)	Pressure Range (kPa)	Over-pressure (mbar)	Linear error max.	Temp. error (max) 0-50°C	longtime Stability	Repeat-ability	Response time
0 - 2.5	0 - 0.25	250	± 1% FS	± 2% FS	2% / year	0.3% FS	1 ms
0 - 5	0 - 0.5						
0 - 10	0 - 1						
0 - 25	0 - 2.5	375	± 0.6% FS	± 0.7% FS	0.1%/year	0.1% FS	
0 - 100	0 - 10	750					
0 - 250	0 - 25	1125					
0 - 500	0 - 50	triple					
0 - 1000	0 - 100	triple	±0.9 mbar	±2.3 mbar	0.1%/year	0.1% FS	1 ms
700-1100 absolute	70-110 absolute	triple					





**Technical Data (Type DS):**

Operating temperature: -20°C to +70°C  
Hysteresis: 0.1%  
Compatible media: Air, non-corrosive gases  
Output signals: Type DS 1-010: 0-10 V  $RL \geq 2 \text{ k}\Omega$  Power supply: 15...24 VDC  
Type DS 1-420: 4-20 mA  $RL \leq 400 \Omega$  Power supply: 10...30 VDC  
Electrical connection: Depth clamps for 0.14-1.5 mm<sup>2</sup>  
Cable thread joint: PG 7  
Pressure connections: 2 connections for hose with 4 mm inner diameter  
Weight: appr. 160 g  
Protection: IP 65

**Wiring:**

Type DS 1-010: printclamp 1: +15...+24 VDC  
printclamp 2: output 0-10 V  
printclamp 3: GND

Type DS 2-010: printclamp 1: +15...+24 VDC  
printclamp 2: GND (Masse)  
printclamp 3: output 0-10 V

Type DS 1-420: Because of a special additional circuit, the pressure transmitter cannot be damaged by wrong connection. Both pins are exchangeable

**Dimension:**

