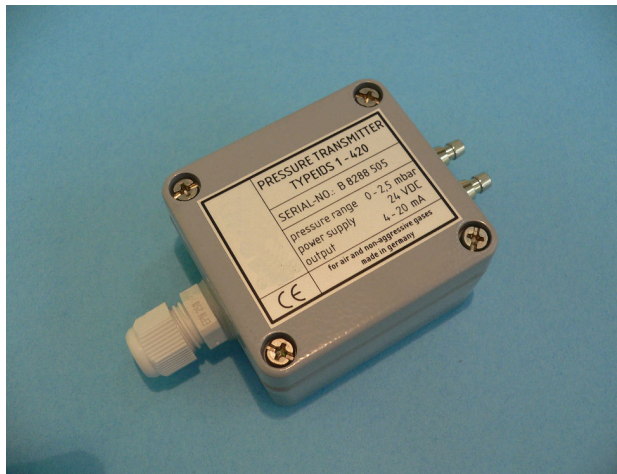


## Datasheet pressure transmitter IDS 2

### description:

For applications with higher pressure ranges there are additionally to IDS1 the type IDS2. The IDS2 measures difference- pressure, positive and negative overpressure or optionally velocity of flow. The analog output signals are 0-10 V or 4-20 mA. Because of the piezoresistive cell the transmitter reach a high reliability and precision. The dependence of zero signal from mounting position is very small. The resistance against overpressure is higher than by using other physical principles. The transmitters are housed in a robust aluminium package. Optionally electronic damping of output signal is possible. Transmitter IDS2-010 can used with power supply 24 VDC, 24 VAC or 230 VAC.



### applications:

- control of airblowers
- supervision of airfilters
- mechanical- and system engineering
- environmental technology
- liquid level control
- pressure control and regulation for instance in pressure chambers
- medical engineering

### order key:

- IDS2-0-10                      0-10V output
- IDS2-420                        4-20mA output

### technical data IDS2-010 and IDS2-420 (difference pressure):

pressure range [mbar]	pressure range [kPa]	max. over-pressure [mbar]	max. linear error [± % F.S.]	max. temp. error [± % F.S.] 0-50 °C	long-term-stability [± % F.S./ year]	repeat-precision [± % F.S.]	response time [ms] without damping
0 - 2.5	0 - 0.25	350	1.0	3.5	2	0.3	50
0 - 5	0 - 0.5	350	1.0	2.5	2	0.3	50
0 - 10	0 - 1	350	1.0	1	0.5	0.2	50
0 - 25	0 - 2.5	350	0.8	1	0.5	0.1	50
0 - 50	0 - 5	350	0.8	1	0.5	0.1	50
0 - 100	0 - 10	350	0.8	1	0.5	0.1	50
0 - 250	0 - 25	x 4	0.5	1	0.1	0.1	50
0 - 500	0 - 50	x 4	0.5	1	0.1	0.1	50
0 - 1000	0 - 100	x 2	0.5	1	0.1	0.1	50

### technical data IDS2-420 with electronic correction of linear error (diff. Pressure):

0 - 100	0 - 10	350	0.2	1	0.1	0.1	50
0 - 250	0 - 25	x 4	0.2	1	0.1	0.1	50
0 - 500	0 - 50	x 4	0.2	1	0.1	0.1	50
0 - 1000	0 - 100	x 2	0.2	1	0.1	0.1	50

For the above given ranges we deliver ex-works. For special-ranges please enquire!

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## Datasheet pressure transmitter IDS2

Operation temperature range:	-20 to + 50 °C		
medium:	air and all non aggressive gases		
output signals and power supply:	IDS2-010:	0-10 V	$R_L \geq 2 \text{ k}\Omega$ 24VDC/AC+-10%
	IDS2-420:	4-20 mA	$R_B \leq 400 \Omega$ 15-30 VDC
connections:	electrical:	screw clamps for 0.14 - 1.5 mm <sup>2</sup>	
	pneumatical:	2 connections for tube with 4 mm or 6 mm diameter inside	
	cable gland:	PG 7	
connection IDS2-010:	plug:	1 : + 24 VDC 2 : output 0 - 10 V 3 : GND	
connection IDS2-420:	plug:	1 : + 24 VDC * 2 : output 4 - 20 mA *	

\* Because of a additional special circuitry the transmitter can't be damaged due to a wrong connection.

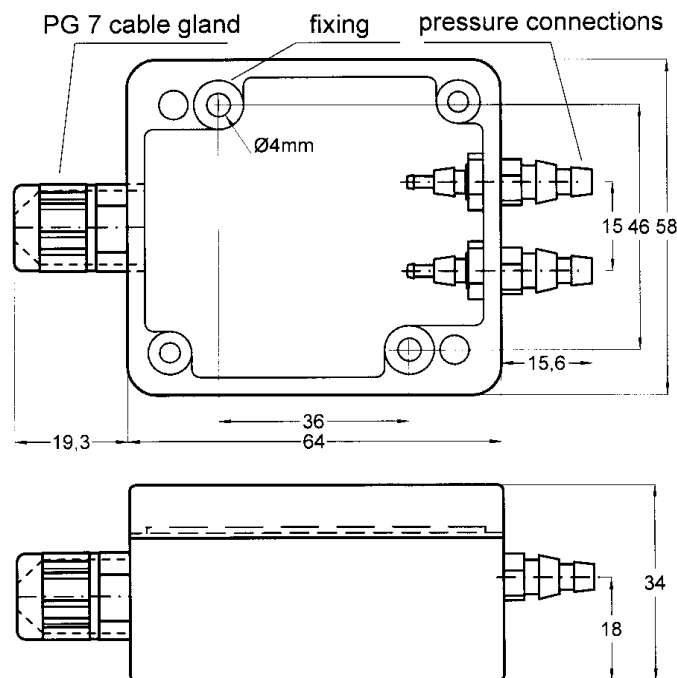
*That means:* both wires can be changed. Between 2 and GND of the power supply should be connected a resistor  $R_B \leq 400 \Omega$  at power supply + 24 VDC.

Option square root output for measurement velocity of flow is available by using larger enclosure.

Option signal damping is available on demand.

weight: ca. 170 g

protection class: IP65



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