

## ZS 1 ( 0 - 10 mbar )

### Parameter

### ZS1

#### Special

- output:  
ZS1-010                    0-10V  
ZS1-420                    4-20mA
- supply voltage:  
optional                    24VDC  
                                  24VAC or 230VAC
- pressure range            0 -10 mbar  
                                  Look at rear page

#### Advantage

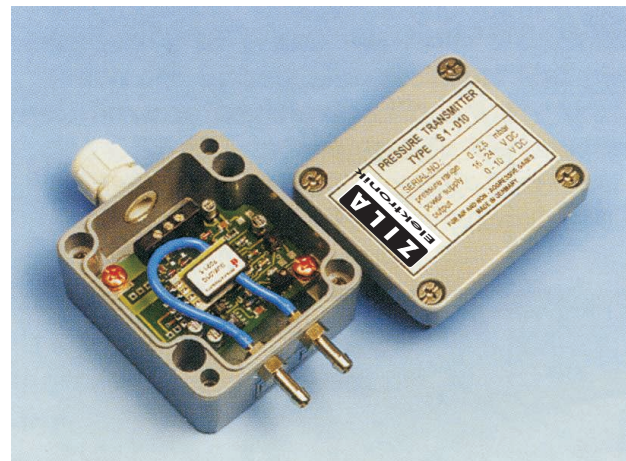
The pressure transmitters of the series ZS1-010 and ZS1-420 works in air and non aggressive gases. They measure difference- and absolut pressure, relative pressure and optionally velocity of flow.

The 4-20 mA pressure transmitter is build in two wire technic. For measurement of velocity of flow its possible to order the square root output. Because of the piezoresistive cell ZS1 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. This guarantees good EMC-properties.

Optionally DS1 can be completed with electronic signal damping, power supply 24VAC or 230 VAC.

#### Operating conditions

- storage temperature:    -30 to +60°C
- operating temperature: -20 to +50°C
- EMV and ESD acc. to:    EN 50082-1 and  
                                  EN 50082-2



### Application

- 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

## INFORMATION

## Technical Data

### technical Data ZS1-010 und ZS1-420 (difference pressure)

Pressure range (bar)	Pressure-range (kPa)	max. over-pressure (mbar)	max. linear error (±% FS)	max. - temp.- error (±% FS) 0-50°C	lang-term-stability (±%FS/year)	repeat-precision (±% FS)	response-time (ms)
0 - 0,5	0 - 0,05	250	0,5	4	4	2	50
0 - 1	0 - 0,1	250	0,8	3	2,5	1	50
0 - 2,5	0 - 0,25	250	0,8	2	2	0,3	50
0 - 5	0 - 0,5	250	0,8	1	1	0,3	50
0 - 10	0 - 1	250	0,8	1	0,5	0,2	50

**Temperature range:** -20 bis +50 °C

**Hysteresis:** 0.1%

**Medium:** air, and all non aggressive gases

**Output conditions**

	ZS1-010	0...10 V	R <sub>L</sub> ≥ 2 kΩ,	15-30 V DC
	ZS1-420	4...20 mA	R <sub>b</sub> ... 20...400 Ω,	15-30 V DC

**connector:**

electrical:	screwpins for 0.14-1.5 mm <sup>2</sup>
air:	2 connector for tubes with 4 or 6mm-Ø
cable:	PG7

**Pinout**

**ZS1 - 010:**  
 1: +24 V DC  
 2: Output 0 - 10 V  
 3: GND

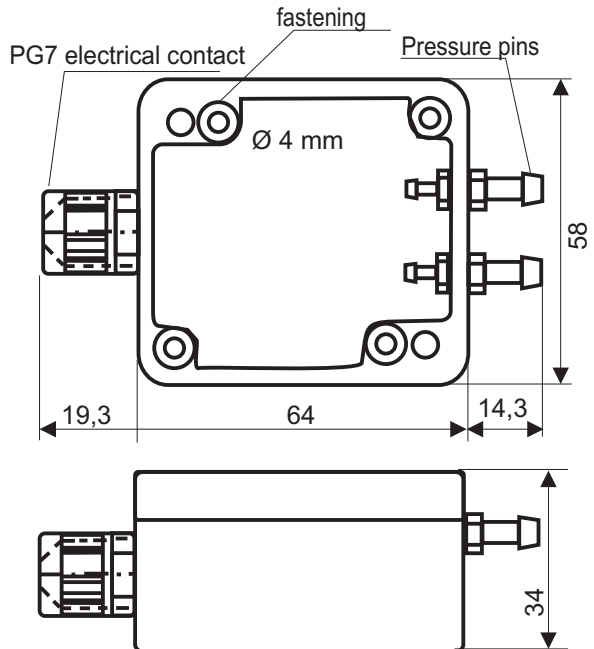
**ZS1 - 420:**  
 1: +24 V DC\*  
 2: Output 4...20 mA\*

**weight** about 170 g

**Protection mode:** IP65

**Order code:**

ZS1-010 bzw. ZS1-420: 0...0,5 bis 0...10 mbar



Technical changes possible