

HUBA CONTROL

Relative and differential pressure transmitter 450

Type 450

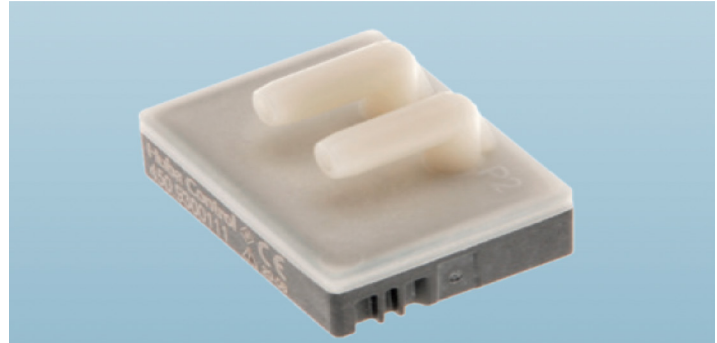
DESCRIPTION

The pressure transmitter type 450 is a robust sensor integrated in a compact housing for the use in various applications with air or neutral gases. Pollutions with small particles do not harm the function of this pressure transmitter. The type 450 is ideal for HVAC applications.

Additionally to the analogue output the pressure transmitter type has a digital output I2C. These output signals are temperature compensated, linear and reinforced. The transmitter is fitted directly on a PCB.

FEATURES

- Suitable for low pressure measurements
- Excellent accuracy and long term stability at whole measuring range
- Output sensor signal temperature compensated from -10°C ... +80°C



SPECIFICATIONS

GENERAL

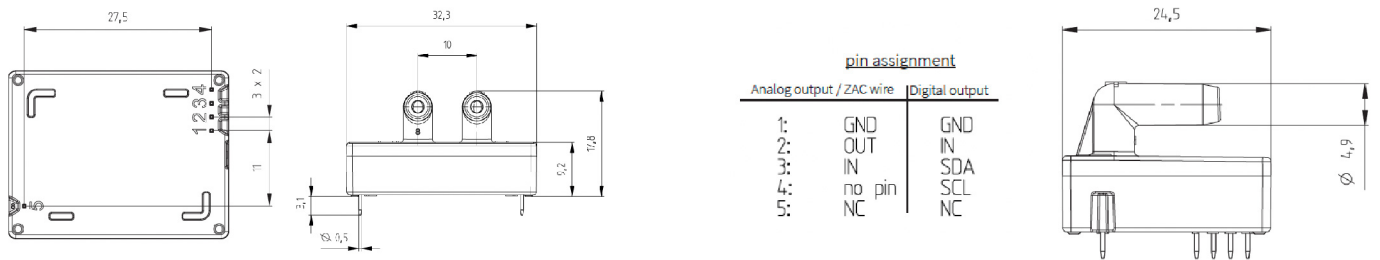
Pressure range			
Relative and differential		-1.5 ... 1.5 mbar / 0 ... 3 – 100 mbar	
Operating conditions			
Medium		Air and neutral gases	
Rupture pressure		< 50 mbar	100 mbar
		≥ 50 mbar	3 x FS
Temperature		Medium and ambient	-20 ... +85 °C
		Compensated	-10 ... +80 °C
		Storage	-40 ... +100 °C
Materials in contact with the medium			
Case		Polyamid (PA)	
Sensor		Ceramic Al2O3 (96%)	
Sealing		TPE	
Membrane		Silicone	
Electrical overview			
3 wire	Output	Power supply	Current consumption
	0.5 ... 4.5	7 ... 33 VDC	< 5 mA
	ration. 10 ... 90%	2.7 ... 5.5 VDC	< 5 mA
	Digital ZACWire™ 10 ... 90% of 2 ¹⁴ digits	2.7 ... 5.5 VDC	< 5 mA
4 wire	Digital I ² C 10 ... 90% of 2 ¹⁴ digits	2.7 ... 5.5 VDC	< 5 mA
Polarity reversal protection			mechanically protected

Note:

PC Specification	
Clock- and Dataline Pull-up-Resistor ≥> 1 kΩ to VDD, Capacity ≤ < 200 pF (user specification)	
Clock frequency < 100 kHz (Standard 100 kbit/s)	

Mounting instruction	
Mounting	PCB mounting
Soldering process	suitable for wave soldering (process time < 3 minutes, temperature peak top side PCB < 145°C)
	suitable for manual soldering
	not suitable for reflow soldering

DIMENSIONS IN MM / ELECTRICAL CONNECTIONS



ORDERING INFORMATION

Order code selection table		450.	1	2	3	4	5	6	7	8
Pressure range	-1.5 ... 1.5 mbar		X	X	X	X	X	X	X	X
	0 ... 3 mbar		9	0						
	0 ... 5 mbar		9	1						
	0 ... 10 mbar		9	2						
	0 ... 30 mbar		9	3						
	0 ... 50 mbar		9	4						
	0 ... 100 mbar		9	5						
Adjusting position	Pressure connections lateral				0					
	Pressure connections on top				1					
	Pressure connections below				2					
Diaphragm	Silicone				0					
Output / power supply	0.5 ... 4.5 V	7 ... 33 VDC					0			
	ration. 10 ... 90%	2.7 ... 5.5 VDC					1			
	Digital ZAC wire™ 10 ... 90% of 2 ¹⁴ digits	2.7 ... 5.5 VDC					3			
	Digital I ² C 10 ... 90% of 2 ¹⁴ digits	2.7 ... 5.5 VDC					4			
Electrical connection	PCB							1		
Pressure connection	Tube connector								1	
Pressure range variation (optional)	Indicate W and state range on order (e.g.: W0... + 9mbar/OUT0.5...4.5V)									W