

TECSIS - EXTERNAL FLUSH DIAPHRAGM PRESSURE TRANSDUCER

P3251B013001

Pressure sensor -0.25/0bar 4-20mA DIN A



- Accuracy 0.5 %
- For relative/absolute pressure
- Pressure range from -1...0 bar to 0...600 bar
- Zero point and span adjustment



PRODUCT DESCRIPTION

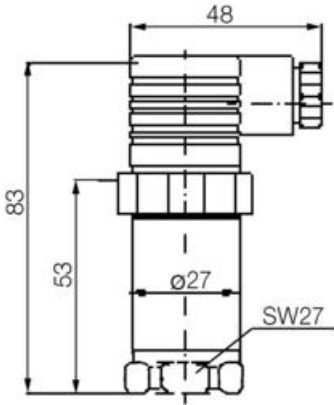
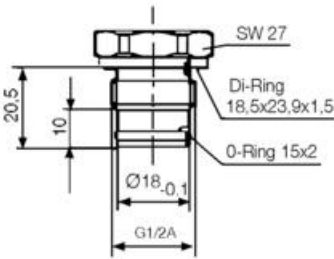
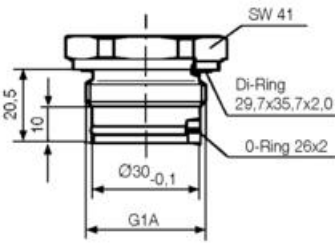
Pressure transducer with flush diaphragm for applications with viscous or crystallising media. Robust sensor with very good accuracy and a large number of measuring ranges. Possible to adjust zero point through potentiometers in the housing.

TECHNICAL SPECIFICATION

Measuring principle	Pressure range ≤16 bar Piezo resistive sensor Pressure range ≥25 bar Thinfilm sensor
Accuracy	≤0.5 % of end value according to DIN16086 (≤0.25 % BFSL)
Linearity and hysteresis	Included in the above
Repeatability	≤±0.05 % of end value
Long term stability	≤±0.2 % of end value per year
Overpressure protection	≤16 bar 3.5x; ≤600 bar 2x;
Protected against vacuum	Insensitive to vacuum
Response time	≤1 ms for 10-90 % of the range
Pressure connection	Up to 0-1.6 bar: 1" external thread From 0-2.5 bar: 1/2" external thread
Sensor body	Stainless steel SIS 2350 (316)
Wetted parts	Stainless steel SIS 2350 (316) Nitrile (external o-ring)
Media temperature	-30 °C to +100 °C

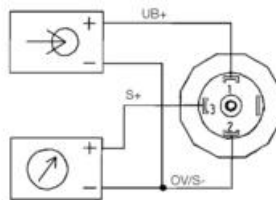
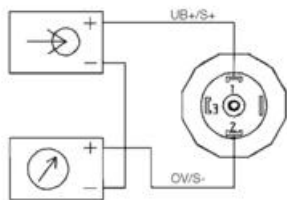
Ambient temperature	-20 °C to +80 °C	
Temperature deviation	±0.2 % of measuring range/10K for zero point and measuring span (≤0.4 % of measuring range/10K for pressure ranges ≤0...0.16 bar)	
Temp. compensation range	0 °C to +80 °C	
Signal options	4-20 mA, 0-10 V	
Supply voltage	Signal 4-20 mA	10-30 V DC
	Signal 0-10 V	14-30 V DC
Max. permitted load for signal 4-20 mA	$R_L [Ω] = \frac{U_L [V] - 10V}{0,02A}$	
Min. permitted load for signal 0-10V	$R_L > 10kΩ$	
Energy consumption	Output signal 4-20 mA: signal current Output signal 0-10 V: 14-30 V DC	
Electrical connection	Connector according to DIN43650/EN175301-803A	
Adjustability	±10 % for zero point and measuring span	
IP-class	IP65 according to	EN60529/IEC529
EMC data	Emission	EN61326
	Immunity	EN61326
Weight	0.2 kg	

DIMENSIONS

	
	
Connection from 2.5 bar	Connection up to 1.6 bar

CIRCUITS

2 wire, 4-20mA	3 wire, 0-10V
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	2 wire	3 wire
	mA	V DC
Supply voltage UB+	1	1
Supply voltage OV-	2	2
Signal S+		3
Signal S-		2

ORDER NUMBER

		Relative pressure	Relative pressure	Absolute pressure	Absolute pressure
Pressure range bar		4-20 mA	0-10 V	4-20 mA	0-10 V
-0.25...	0	P3251B013001	P3251B013101	-	-
-0.4...	0	P3251B014001	P3251B014101	-	-
-0.6...	0	P3251B015001	P3251B015101	-	-
-1...	0	P3251B016001	P3251B016101	-	-
-1...	0...+1.5	P3251B043001	P3251B043101	-	-
-1...	0...+5	P3251B045001	P3251B045101	-	-
0...	0.1	P3251B063001	P3251B063101	-	-
0...	0.16	P3251B064001	P3251B064101	-	-
0...	0.25	P3251B065001	P3251B065101	P3251S065401	P3251S065411
0...	0.4	P3251B066001	P3251B066101	P3251S066401	P3251S066411
0...	0.6	P3251B067001	P3251B067101	P3251S067401	P3251S067411
0...	1	P3251B069001	P3251B069101	P3251S069401	P3251S069411
0...	1.6	P3251B070001	P3251B070101	P3251S070401	P3251S070411
0...	2.5	P3251B072001	P3251B072101	P3251S072401	P3251S072411
0...	4	P3251B073001	P3251B073101	P3251S073401	P3251S073411
0...	6	P3251B074001	P3251B074101	P3251S074401	P3251S074411
0...	10	P3251B075001	P3251B075101	P3251S075401	P3251S075411
0...	16	P3251B076001	P3251B076101	P3251S076401	P3251S076411
0...	25	P3251B078001	P3251B078611	-	-
0...	40	P3251B079601	P3251B079611	-	-

0...	60	P3251B080601	P3251B080611	-	-
0...	100	P3251B081601	P3251B081611	-	-
0...	160	P3251B082601	P3251B082611	-	-
0...	250	P3251B084601	P3251B084611	-	-
0...	400	P3251B086601	P3251B086611	-	-
0...	600	P3251B087601	P3251B087611	-	-

SPECIAL VERSIONS

- Sensor with overmoulded cable or M12 connector. IP67
- Accuracy ≤ 0.25 % for pressure range ≥ 0.25 bar
- Alternative working ranges and output signals
- Media temperature -40 °C to $+125$ °C
- Integrated cooling coil for media temperatures up to $+150$ °C
- Wetted parts in Hastelloy C4 or PFA
- O-ring in Viton

ACCESSORIES

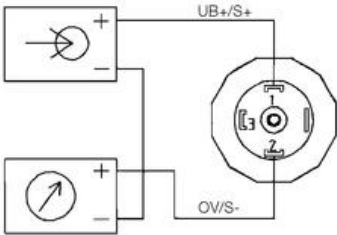
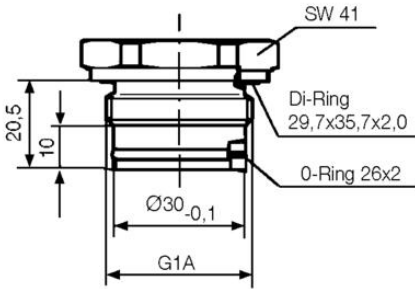


Order no.	Description
AZM23X031006	Welding sleeve for sensor connection 1/2"
AZM23X031004	Welding sleeve for sensor connection 1"

SPECIFICATIONS

Connection	Male thread
Connection Thread	G1
EMC	EN61326
IP Class	IP65
Material of sensor housing	Stainless steel SIS2350 (316)
Materials Wetted Parts	Stainless steel SIS2350 (316)
Pressure Range Max	0 bar
Pressure Range Min	-0,25 bar
Response Time	1 ms
Supply Voltage DC Max	30 V DC
Supply Voltage DC Min	10 V DC

Temperature ambient from	-20 °C
Temperature ambient to	80 °C
Temperature compensated range from	0 °C
Temperature compensated range to	80 °C
Temperature range of media from	-30 °C
Temperature range of media to	100 °C



	2-tråd
	mA
Matningsspänning UB+	1
Matningsspänning 0V-	2
Signal S+	
Signal S-	

