

Pressure Transmitter 981

for measuring low pressures of different media



Application

Pressure transmitter for monitoring overpressure and negative pressure, for liquid and gaseous, as well as aggressive media. The pressure measurement is relative to the atmospheric pressure.

Permissible Environmental Conditions

Storage and operating temperature -20°C to $+85^{\circ}\text{C}$
Media temperature 0 to 85°C
Humidity max. 95% rH., non-condensing

Membrane Material

NBR, Silicone, FKM, EPDM

Pressure Range

Please see order matrix
Other pressure ranges upon request

Maximum Operating Pressure

Depending on the pressure range,
please see order matrix

Linearity

Depending on the pressure range,
please see order matrix

Response Time

500 ms

Supply Voltage

10 ... 30 VDC	2-wire
18 ... 30 VDC	3-wire

Supply Current

$\leq 21\text{ mA}$	2-wire
$\leq 50\text{ mA}$	3-wire

Output Signal

4 - 20 mA	2-wire
0 - 10 VDC	3-wire

Load

Max. 500 Ω at 24 VDC	2-wire
Min. 1 k Ω	3-wire

Electrical Connection

M12 socket, 4 poles, A-coded

Protection Class

IP65 according to EN 60529

Conformity

RoHS Directive, EMC Directive

Accuracy Specifications

According to EN 60770, reference temperature: 23°C

Mounting Position

Mounting in any position

Weight

Approx. 100 gr

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Type	Pressure range	Max. positive working pressure	Max. negative working pressure	Accuracy FS
981.01	+/- 100 mbar	900 mbar	-1 bar	≤ 2 %
981.02	+/- 50 mbar	900 mbar	-1 bar	≤ 2 %
981.03	0 - 25 mbar	900 mbar	-1 bar	≤ 3 %
981.04	0 - 50 mbar	900 mbar	-1 bar	≤ 2 %
981.05	0 - 100 mbar	900 mbar	-1 bar	≤ 1 %
981.06	0 - 150 mbar	900 mbar	-1 bar	≤ 1 %
981.07	0 - 300 mbar	900 mbar	-1 bar	≤ 1 %
981.08	0 - 600 mbar	900 mbar	-1 bar	≤ 1 %

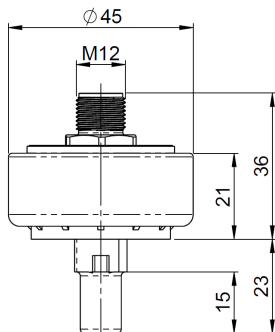
				Pressure range	-----	-----	Membrane	Pressure connection	Output signal	Display	Electr. connection
Order Matrix				981.0	X	0	0	X	X	X	X
Pressure range	+/- 100 mbar			1	0	0					
	+/- 50 mbar			2	0	0					
	0 - 25 mbar			3	0	0					
	0 - 50 mbar			4	0	0					
	0 - 100 mbar			5	0	0					
	0 - 150 mbar			6	0	0					
	0 - 300 mbar			7	0	0					
	0 - 600 mbar			8	0	0					
Membrane material	NBR						1				
	EPDM						2				
	Silicone						3				
	FKM / FPM						4				
Pressure connection	PA6	Hose nipple	5.0 mm					W			
	PA6	Hose nipple	6.0 mm					A			
	PA6	Hose nipple	6.5 mm					B			
	PA6	Hose nipple	10 mm					C			
	PA6	Thread	G 1/8					D			
	PA6	Thread	M10x1					E			
	PPS	Hose nipple	6.5 mm					F			
	PPS	Hose nipple	10 mm					G			
	PVDF	Thread	G 1/8					J			
	PVDF	Thread	M10x1					H			
	Brass	Thread	G 1/2					S			
	Brass	Thread	G 1/4					L			
	Brass (nickel plated)	Thread	G 1/4					V			
	Brass	Thread	G 1/8					M			
	Brass	Thread	G 3/8					O			
	Brass	Thread	M10x1					N			
	V2A	Thread	M10x1					P			
	V2A	Thread	G 1/8					Q			
	V2A	Thread	G 1/4					R			
Output signal	4 ... 20 mA, 2-wire, linear								2		
	0 ... 10 V, 3-wire, linear								7		
Display	no									0	
Electr. connection	M12 plug, 4 poles, A-Coded										8

PA = polyamide, PVDF = polyvinyl difluoride, PPS = polyphenylene sulfide, brass = CW617N, V2A = stainless steel

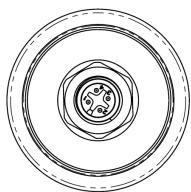
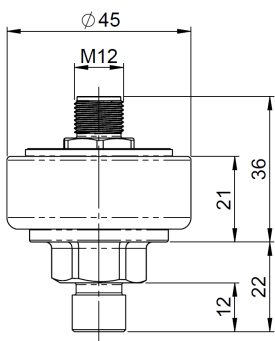
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981 with hose connection

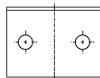
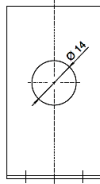


981 with threaded connection

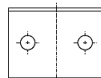
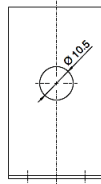


Mounting brackets

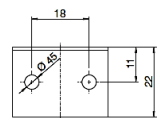
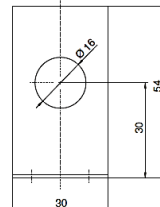
6403



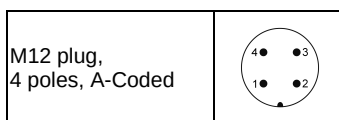
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Pin assignment



2-wire

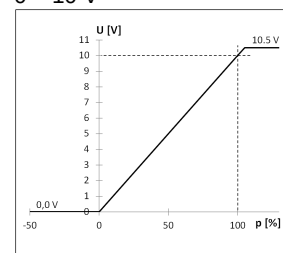
1	Supply voltage (10...30 VDC)
2	Not connected
3	Output signal (4...20 mA)
4	Not connected

3-wire

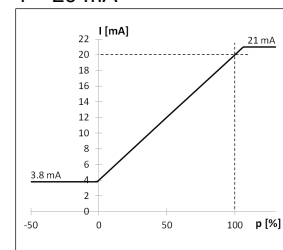
1	Supply voltage (18...30 VDC)
2	Output signal (0...10 V)
3	Ground (GND)
4	Not connected

Analog output signal

0 – 10 V



4 – 20 mA



Accessories

Article No

Mounting bracket L-shape for pressure connection G1/4	6403
Mounting bracket L-shape for pressure connection G1/8 and M10x1	6404
Mounting bracket L-shape for pressure connections with hose connection	6405
Clamping spring for mounting with hose connections	6333
Connecting cable 2 meters with M12 socket, straight, 4 poles, open end	9976



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