

Technical overview

Pressure range

Relative	-1 ... 0 – 60 bar
Absolute	0 ... 2.5 – 16 bar

Operating conditions

Medium		Liquids and gases
Temperature	Medium / ambient	-15 ... +80 °C
	Storage	-40 ... +80 °C
Tolerable overload		2 x fs (max. 80 bar)
Rupture pressure		3 x fs (max. 90 bar)

Materials

Case		PA6
	Sensor	Ceramic Al ₂ O ₃ (96%)
Materials in contact with the medium	Pressure connection	Stainless steel 1.4305 / AISI 303
	Sealing material	FPM, EPDM, NBR, MVQ

Electrical overview

	Output	Power supply	Load	Current consumption ¹⁾
2 wire	4 ... 20 mA	8.0 ... 33 VDC	< $\frac{\text{Supply voltage} - 8\text{ V}}{0.02\text{ A}}$ [Ohm]	< 20 mA
	4 ... 20 mA	10.0 ... 33 VDC	< $\frac{\text{Supply voltage} - 10\text{ V}}{0.02\text{ A}}$ [Ohm]	< 20 mA
3 wire	0 ... 5 V	9.0 ... 33 VDC	> 10 kOhm / < 100 nF	< 5 mA
	1 ... 6 V	10.4 ... 33 VDC	> 10 kOhm / < 100 nF	< 5 mA
	0 ... 10 V	16.2 ... 33 VDC	> 10 kOhm / < 100 nF	< 6 mA
	ration. 10 ... 90%	5 VDC ±5%	> 10 kOhm / < 100 nF	< 3 mA

Polarity reversal protection Short circuit proof and protected against polarity reversal. Each connection is protected against crossover up to max. supply voltage.

Dynamic response

Response time	< 5 ms
Load cycle	< 50 Hz

Protection standard

IP 65

Electrical connection

Cable 1.5 m	IP 65
Connector DIN EN 175301-803-A	IP 65
Connector DIN EN 175301-803-C (industrial standard 9.4 mm)	IP 65
Connector M12x1	IP 65

Pressure connection

Inside thread	G ¼ with O-Ring sealing
	¼ -18 NPT
	G ¼, sealed at back, DIN 3852-E
Outside thread	R ¼ EN 10226
	G ¼, sealed at back and manometer (combi)
	G ½, sealed at back and manometer (combi)

Installation arrangement

Recommended: Pressure connection downwards
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Tests / Admissions

Electromagnetic compatibility	CE conformity acc. EN 61326-2-3
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Weight

With inside thread	~ 95 g
With outside thread	~ 110 g
With cable 1.5 m additional	~ 40 g

Packaging (Please state on order)

Single packaging in cardboard
Multiple packaging in cardboard per 25 pcs.

Accuracy

Parameter		Unite	
Tolerance zero point	max.	% fs	± 1.0
Tolerance full scale	max.	% fs	± 1.0
Resolution		% fs	0.1
Total of linearity, hysteresis and repeatability	max.	% fs	± 0.5
Long term stability acc. to DIN EN 60770		% fs	± 1.0
TC zero point ²⁾	max.	% fs/10K	± 0.4
TC sensitivity ²⁾	typ.	% fs/10K	- 0.15
TC sensitivity ²⁾	max.	% fs/10K	- 0.3

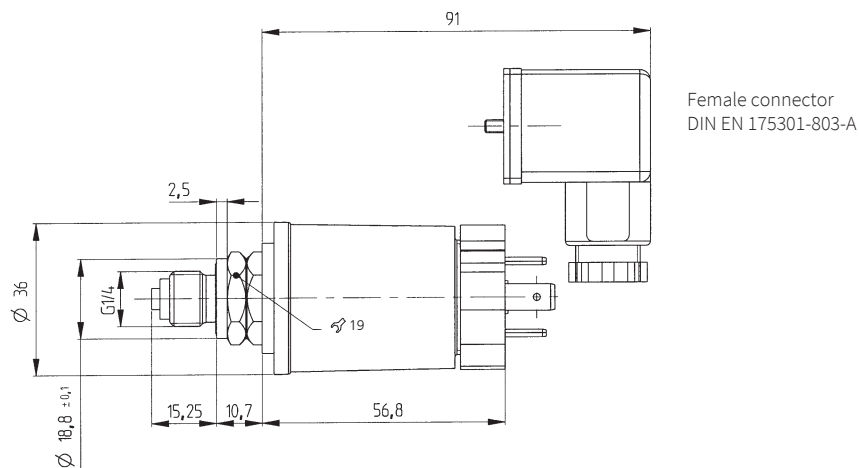
Test conditions: 25 °C, 45% RH, power supply 24 VDC
 TC z.p. / TC s. -40 ... +80 °C

¹⁾ At nominal pressure

²⁾ TC = Temperature coefficient

		1	2	3	4	5	6	7	8	9	10
Order code selection table		501.	X	X	X	X	X	X	X	X	X
Pressure mode	Relative	9									
	Absolute	8									
Pressure range	-1 ... 0 bar	9	0	0							
	0 ... 1 bar	9	1	1							
	0 ... 1.6 bar	9	1	2							
	0 ... 2.5 bar		1	4							
	0 ... 4 bar		1	5							
	0 ... 6 bar		1	7							
	0 ... 10 bar		3	0							
	0 ... 16 bar		3	1							
	0 ... 25 bar	9	3	2							
	0 ... 40 bar	9	3	3							
	0 ... 60 bar	9	4	0							
▲ Full scale signal at these pressures											
Sealing material ¹⁾	FPM Fluoro elastomer				0						
	EPDM Ethylene propylene				1						
	NBR Butadiene Acrylonitrile				2						
	MVQ Silicone polymer				3						
Adjustment	Factory					0					
	0 ... 5 V 9.0 ... 33 VDC						1				
Output / power supply	1 ... 6 V 10.4 ... 33 VDC						6				
	0 ... 10 V 16.2 ... 33 VDC						2				
	4 ... 20 mA 10.0 ... 33 VDC						3				
	8.0 ... 33 VDC						8				
	ratiom. 10 ... 90% 5 VDC ±5%						4				
Electrical connection	Cable 1.5 m							0			
	Connector ²⁾ DIN EN 175301-803-A								1		
	DIN EN 175301-803-C (industrial standard 9.4 mm)								2		
	M12x1 plastic thread								3		
Pressure connection	Inside thread G 1/4 with O-Ring seal									1	
	1/4 - 18 NPT									3	
	G 1/4, sealed at back, DIN 3852-E									4	
	R 1/4 EN 10226									7	
	G 1/4, sealed at back and manometer (combi)									5	
	G 1/2, sealed at back and manometer (combi)									8	
Pressure tip orifice	Without										1
	With										2
Pressure range variation (optional)	Indicate W and state range on order (e.g.: W0... + 9bar/OUT1...9V)										W

Storage versions		Order number	
Output	4 ... 20 mA	Pressure range	
Power supply	10 ... 33 VDC	-1 ... 0 bar	501.914023151W - 1...0 bar (high overload protection)
Electrical connection ²⁾	Connector DIN EN 175301-803-A, IP 65	0 ... 10 bar	501.930023151
Pressure connection	G 1/4 sealed at back and manometer	0 ... 25 bar	501.932023151
Sealing material	FPM - Fluoro elastomer		
Colour of cover	black		



Accessories (supplied loose)		Order number
Female connector DIN EN 175301-803-A	with seal (IP 65, when installed and latched)	103510
Female connector DIN EN 175301-803-C	with seal (IP 65, when installed and latched)	104244
Female connector M12x1		106975
Calibration certificate		104551

¹⁾ According to ISO standard R 1629, other sealing materials on request

²⁾ Without female connector

