



18.601 G

OEM Pressure Transmitter Low Pressure

Applications:

- ▶ general industrial applications

Characteristics:

- ▶ piezoresistive stainless steel sensor
- ▶ accuracy 0.5 % FSO according to IEC 60770
- ▶ nominal pressure ranges from 0 ... 100 mbar up to 0 ... 6 bar

Technical Data



Input pressure range											
Nominal pressure gauge	[bar]	0.1	0.16	0.25	0.4	0.6	1	1.6	2.5	4	6
Overpressure	[bar]	1	1	1	1	3	3	6	10	10	21
Burst pressure \geq	[bar]	1.5	1.5	1.5	1.5	5	5	10	17.5	17.5	35
Vacuum resistance		unlimited									

Output signal / Supply	
Standard	2-wire: 4 ... 20 mA / $V_S = 8 \dots 32 V_{DC}$
Options 3-wire	3-wire: 0 ... 10 V / $V_S = 14 \dots 30 V_{DC}$
	3-wire ratiometric: $V_{Sig} = 0.5 \dots 4.5 V$ / $V_S = 5 \pm 0.5 V_{DC}$

Performance	
Accuracy ^{1,2}	$\leq \pm 0.5 \% FSO$
Permissible load	2-wire: $R_{max} = [(V_S - V_{S min}) / 0.02] \Omega$ 3-wire: $R_{min} = 10 k\Omega$
Influence effects	supply: 0.05 % FSO / 10 V load: 0.05 % FSO / k Ω
Response time	2-wire: ≤ 10 msec 3-wire: ≤ 3 msec
Measuring rate	1 kHz

¹ accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)

² for pressure ranges ≤ 160 mbar accuracy is $\leq \pm 1\% FSO$

Thermal effects (Offset and Span) / Permissible temperatures	
Thermal error	$\leq \pm 0.3 \% FSO / 10 K$ in compensated range 0 ... 70 °C
Permissible temperatures	medium / electronics / environment: -25 ... 85 °C storage: -40 ... 85 °C

Electrical protection	
Short-circuit protection	permanent 3-wire ratiometric: none
Reverse polarity protection	no damage, but also no function
Electromagnetic compatibility	emission and immunity according to EN 61326

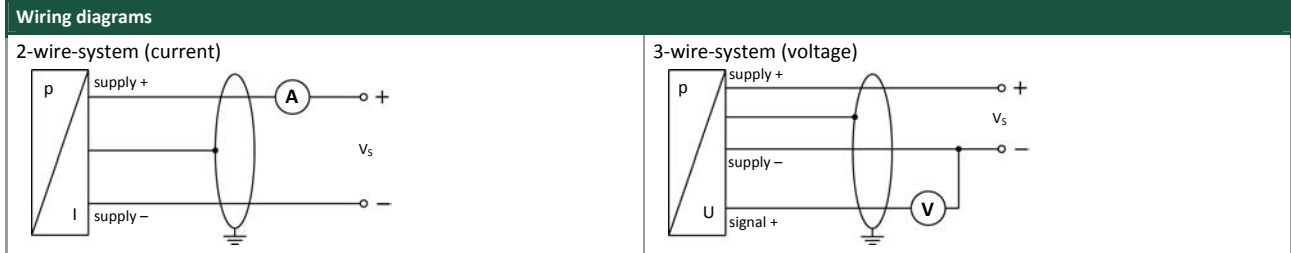
Mechanical stability	
Vibration	10 g, 25 Hz ... 2 kHz according to DIN EN 60068-2-6
Shock	100 g / 1 msec according to DIN EN 60068-2-27

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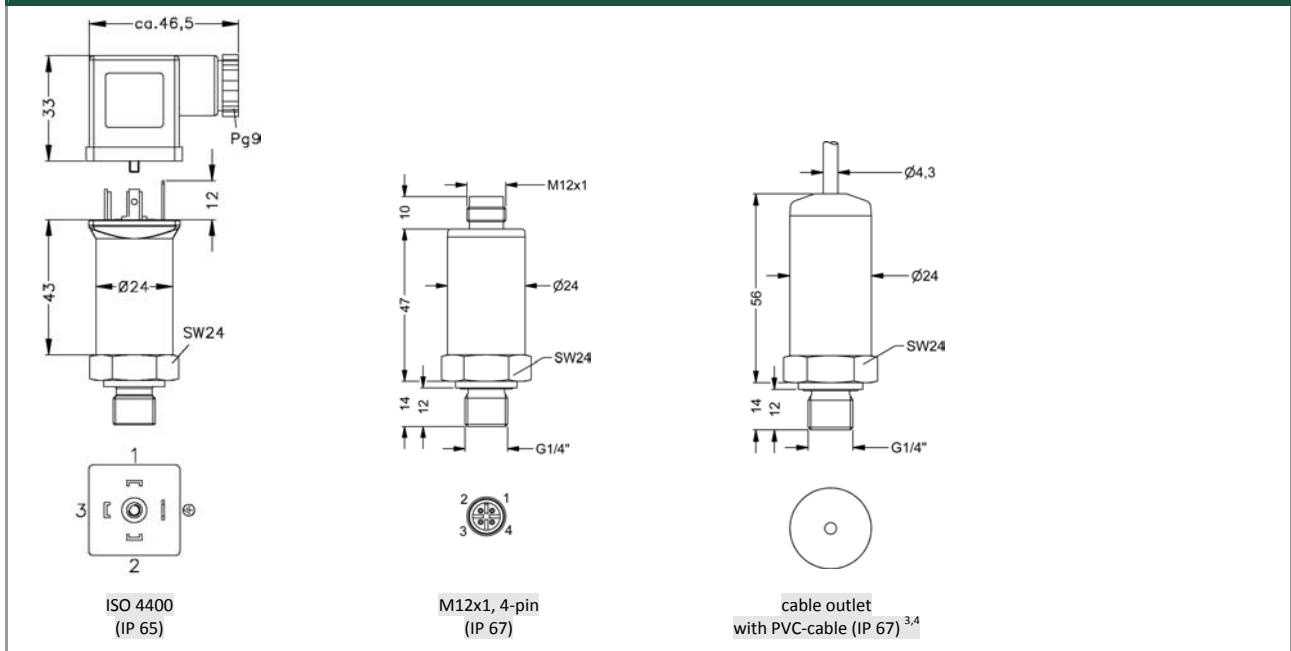
Materials	
Pressure port / housing	stainless steel 1.4301
Seals	FKM
Diaphragm	stainless steel 1.4435
Media wetted parts	Pressure port, seals, diaphragm
Miscellaneous	
Weight	approx. 120 g
Current consumption	2-wire: max. 25 mA 3-wire ratiometric: typ. 1.5 mA 3-wire voltage: typ. 5 mA (short circuit current: max. 20 mA)
CE-conformity	EMC Directive: 2004/108/EC



Pin configuration

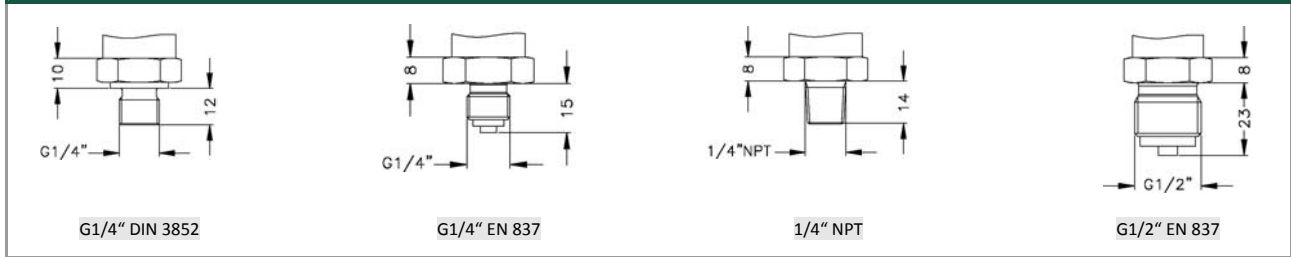
Electrical connection	ISO 4400	M12x1 (4-pin)	cable colours (DIN 47100)
Supply +	1	1	wh (white)
Supply -	2	2	bn (brown)
Signal + (for 3-wire)	3	3	gn (green)
Shield	ground pin	4	gn/ye (yellow / green)

Electrical connections (dimensions in mm)



³ standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)
⁴ different cable types and lengths available, permissible temperature depends on kind of cable

Mechanical connection (dimensions in mm)



This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.

