



30.600 G

OEM Pressure Transmitter Low Cost

Applications

- ▶ mechanical and plant engineering
- ▶ general industrial applications

Characteristic

- ▶ ceramic sensor
- ▶ accuracy:
0.5 % FSO BFSL
(1 % FSO IEC 60770)
- ▶ nominal pressure ranges from
0 ... 1.6 bar up to 0 ... 250 bar

Technical Data



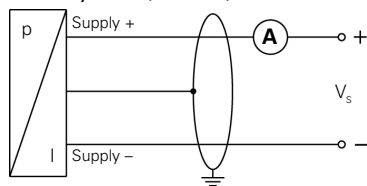
Input pressure range														
Nominal pressure gauge [bar]	1.6	2.5	4	6	10	16	25	40	60	100	160 ¹	250 ¹		
Overpressure [bar]	4	4	10	10	20	40	40	100	100	200	400	400		
Burst pressure [bar]	7	7	15	15	35	70	70	150	150	250	450	450		
Vacuum resistance	unlimited													
¹ for this pressure range accuracy is ≤ 2 % FSO IEC 60770 (≤ 1 % FSO BFSL)														
Output signal / Supply														
Standard	2-wire:		4 ... 20 mA		/		V _S = 8 ... 32 V _{DC}							
Options	3-wire:		0 ... 10 V		/		V _S = 14 ... 30 V _{DC}							
	3-wire ratiometric:		V _{sig} = 0.5 ... 4.5 V _S		/		V _S = 5 ± 0.5 V _{DC}							
Performance														
Accuracy	IEC 60770 ² : ≤ ± 1 % FSO							BFSL: ≤ ± 0.5 % FSO						
Permissible load	2-wire:		R _{max} = [(V _S - V _{S min}) / 0.02] Ω											
	3-wire:		R _{min} = 10 kΩ											
Influence effects	supply:		0.05 % FSO / 10 V											
	load:		0.05 % FSO / kΩ											
Response time	2-wire:		≤ 10 msec											
	3-wire:		≤ 3 msec											
Measuring rate	1 kHz													
² accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)														
Thermal effects (Offset and Span) / Permissible temperatures														
Thermal error	≤ ± 0.5 % FSO / 10 K (typ.)			permissible temperatures: -25 ... 85 °C										
Permissible temperatures	medium: -25 ... 125 °C			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 protection	emission and immunity according to EN 61326													
Mechanical stability														
Vibration	10 g, 25 Hz ... 2 kHz					according to IEC 68-2-6								
Shock	500 g / 1 msec					according to IEC 68-2-27								

Materials	
Pressure port / housing	stainless steel 1.4301 (304)
Seals (media wetted)	FKM others on request
Diaphragm	ceramics Al ₂ O ₃ 96 %
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)
Long term stability	≤ ± 0.3 % FSO / year
Operational life	> 100 x 10 ⁶ cycles
CE-conformity	EMC Directive: 2004/108/EC Pressure Equipment Directive: 97/23/EC (module A)³

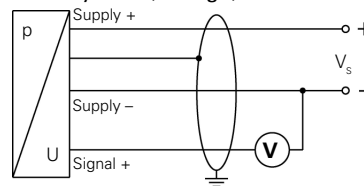
³ This directive is only valid for devices with maximum permissible overpressure > 200 bar

Wiring diagrams

2-wire-system (current)



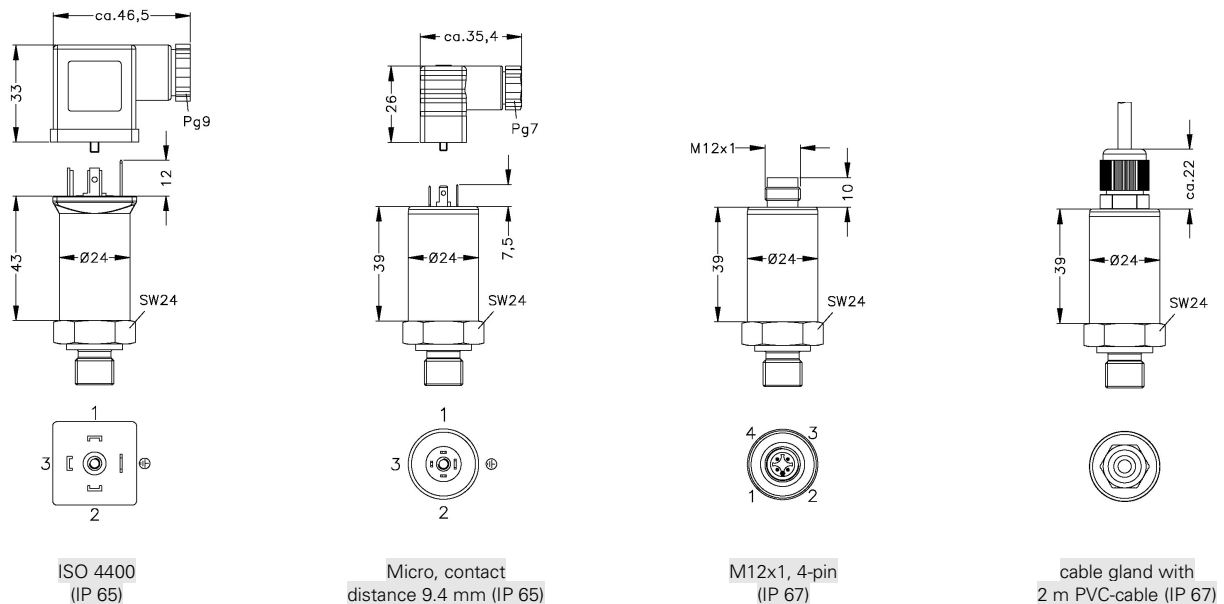
3-wire-system (voltage)



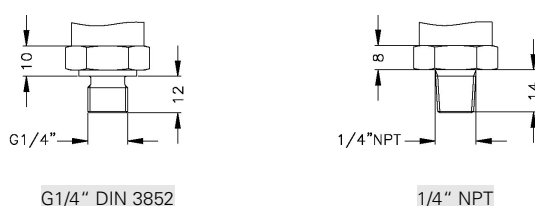
Pin configuration

Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), plastic	cable colour (DIN 47100)
Supply +	1	1	1	white
Supply -	2	2	2	brown
Signal + (for 3-wire)	3	3	3	green
Shield	ground pin	ground pin	4	yellow / green

Electrical connections (dimensions in mm)



Mechanical connection (dimensions in mm)



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

