

26.600 G

OEM Pressure Transmitter Standard

Applications

- ▶ mechanical and plant engineering
- ▶ general industrial applications

Characteristics

- ▶ ceramic sensor
- ▶ accuracy 0.5 % FSO according to IEC 60770
- ▶ nominal pressure ranges from 0 ... 1 bar up to 0 ... 400 bar
- ▶ option: oil and grease free version



Technical Data



Input pressure range																	
Nominal pressure gauge	[bar]	-1...0 ¹	1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400	
Nominal pressure abs.	[bar]	-	1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400	
Overpressure	[bar]	3	3	5	5	12	12	20	50	50	120	120	200	400	400	650	
Burst pressure ≥	[bar]	4	4	7	7,5	15	18	30	70	75	150	180	300	500	750	1000	
Vacuum resistance		unlimited															

¹ for this pressure range accuracy is ≤ 1 % FSO IEC 60770

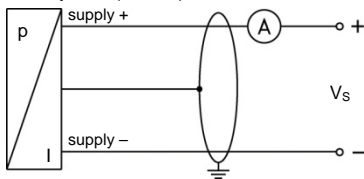
Output signal / Supply			
Standard	2-wire:	4 ... 20 mA	/ V _S = 8 ... 32 V _{DC}
Options	3-wire:	0 ... 10 V	/ V _S = 14 ... 30 V _{DC}
	3-wire ratiometric:	10 ... 90% of V _S	/ V _S = 2.7 ... 5 V _{DC}
Performance			
Accuracy ²	≤ ± 0.5 % FSO		
Permissible load	2-wire:	R _{max} = [(V _S - V _{S min}) / 0.02 A] 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
Long term stability	≤ ± 0.3 % FSO / year at reference conditions		
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	≤ ± 0.3 % FSO / 10 K		in compensated range: -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 DIN EN 60068-2-6	
Shock	500 g / 1 msec	according to DIN EN 60068-2-27	

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	
Option oxygen application	for P _N ≤ 15 bar: O-ring in 70 EPDM 281 (with BAM-approval); permissible maximum values are 15 bar / 60° C and 10 bar / 90° C for P _N ≤ 25 bar: O-ring in FKM Vi 567 (with BAM-approval); permissible maximum values are 25 bar / 150° C
Weight	approx. 120 g
Current consumption	2-wire: max. 25 mA 3-wire ratiometric: typ. 1.5 mA 3-wire voltage: max. 7 mA (short circuit current: max. 20 mA)
Operational life	> 100 x 10 ⁶ cycles
CE-conformity	EMC Directive: 2004/108/EC Pressure Equipment Directive: 97/23/EC (module A) ³

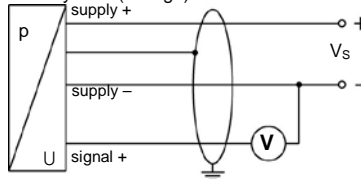
³ This directive is only valid for devices with maximum permissible overpressure > 200 bar

Wiring diagrams

2-wire-system (current)



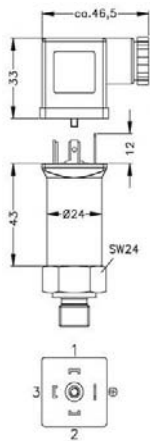
3-wire-system (voltage)



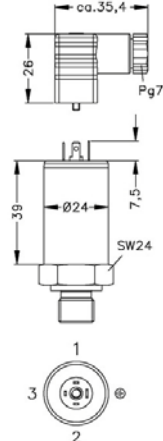
Pin configuration

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

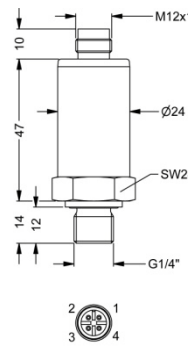
Electrical connections (dimensions in mm)



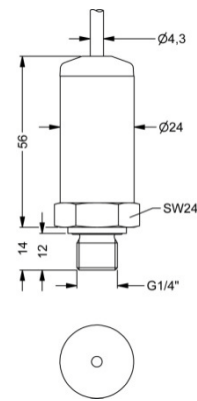
ISO 4400 (IP 65)



Micro, contact distance 9.4 mm (IP 65)



M12x1, 4-pin (IP 67)



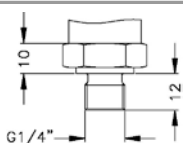
cable outlet with PVC-cable (IP 67)^{4,5}

* pressure range P_N = 400 bar: total length increases by 12 mm.

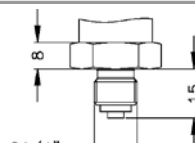
⁴ standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)

⁵ different cable types and lengths available, permissible temperature depends on kind of cable

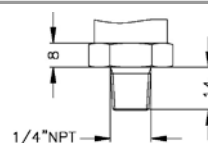
Mechanical connection (dimensions in mm)



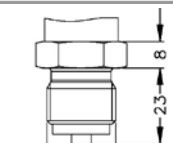
G1/4" DIN 3852



G1/4" EN 837



1/4" NPT



G1/2" EN 837

