

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 for P _N -1...0 bar: ≤ 1 % 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_2O_3 96 %
Media wetted parts	pressure port, seals, diaphragm
Miscellaneous	
Option oxygen application	for $P_N \leq 15$ bar: O-ring in 70 EPDM 281 (with BAM-approval); permissible maximum values are 15 bar / 60° C and 10 bar / 90° C for $P_N \leq 25$ 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: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (module A) ³

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

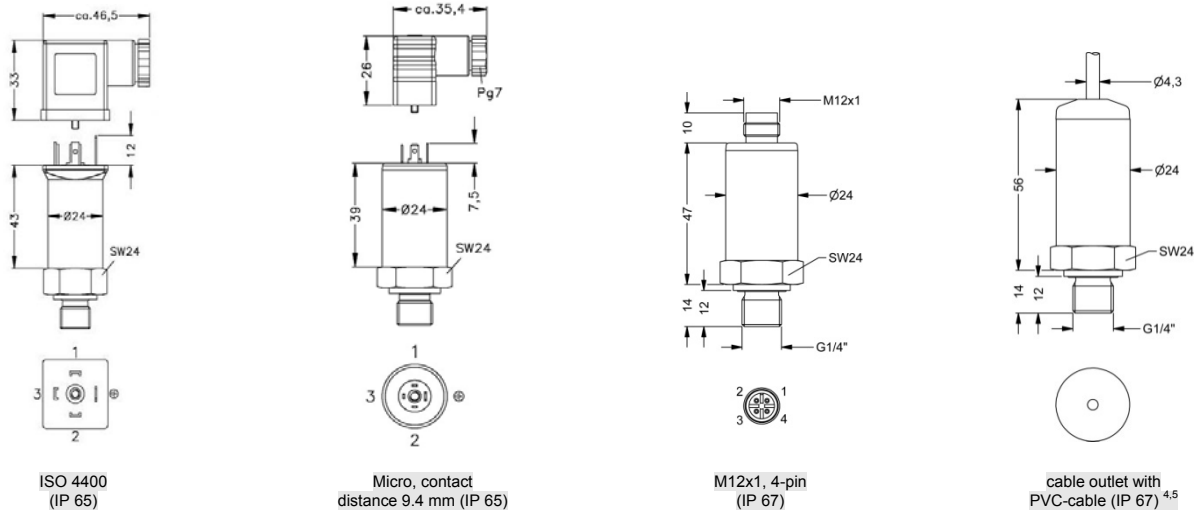
Wiring diagrams



Pin configuration

Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), plastic	cable colour (IEC 60757)
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	gnye (green-yellow)

Electrical connections (dimensions in mm)



* 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)

