

## 30.600 G

### OEM Pressure Transmitter Low Cost

#### Applications

- ▶ mechanical and plant engineering
- ▶ general industrial applications

#### Characteristics

- ▶ ceramic sensor
- ▶ accuracy 1 % FSO according to IEC 60770
- ▶ nominal pressure ranges from 0 ... 1.6 bar up to 0 ... 250 bar



#### Technical Data

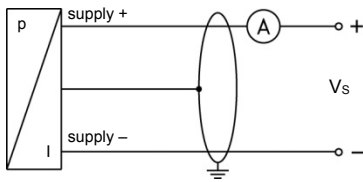
Input pressure range													
Nominal pressure gauge	[bar]	1.6	2.5	4	6	10	16	25	40	60	100	160	250
Overpressure	[bar]	5	5	12	12	20	50	50	120	120	200	400	400
Burst pressure ≥	[bar]	7	7.5	15	18	30	70	75	150	180	300	500	750
Vacuum resistance		unlimited											
Output signal / Supply													
Standard		2-wire:		4 ... 20 mA				/ V <sub>S</sub> = 8 ... 32 V <sub>DC</sub>					
Options		3-wire:		0 ... 10 V				/ V <sub>S</sub> = 14 ... 30 V <sub>DC</sub>					
		3-wire ratiometric:		10 ... 90% of V <sub>S</sub>				/ V <sub>S</sub> = 2.7 ... 5 V <sub>DC</sub>					
Performance													
Accuracy <sup>1</sup>		≤ ± 1 % FSO											
Permissible load		2-wire:		R <sub>max</sub> = [(V <sub>S</sub> - V <sub>Smin</sub> ) / 0.02 A] Ω									
		3-wire:		R <sub>min</sub> = 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											
<sup>1</sup> 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.)				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 <sub>2</sub> O <sub>3</sub> 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: max. 7 mA (short circuit current: max. 20 mA)
Operational life	100 million load cycles
CE-conformity	EMC Directive: 2014/30/EU      Pressure Equipment Directive: 2014/68/EU (module A) <sup>2</sup>

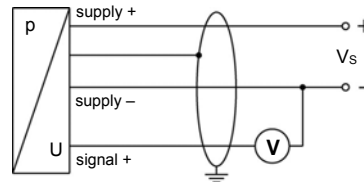
<sup>2</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar

### Wiring diagrams

2-wire-system (current)



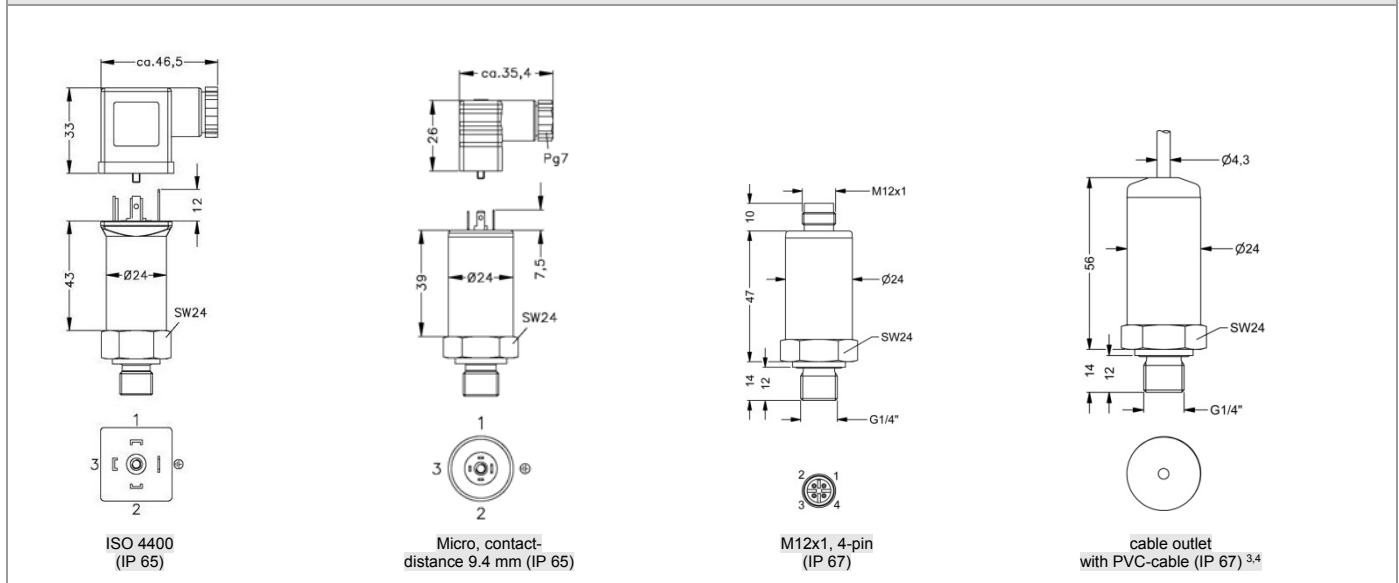
3-wire-system (voltage)



### Pin configuration

Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), metal	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)



<sup>3</sup> standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)

<sup>4</sup> different cable types and lengths available, permissible temperature depends on kind of cable

### Mechanical connection (dimensions in mm)



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