

## 30.600 G

### OEM Pressure Transmitter Low Cost

#### Applications

- ▶ mechanical and plant engineering
- ▶ general industrial applications

#### Characteristics

- ▶ ceramic sensor
- ▶ accuracy 0.5 % FSO according to IEC 60770
- ▶ nominal pressure ranges from 0 ... 1.6 bar up to 0 ... 250 bar



#### Technical Data



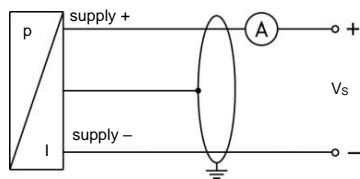
Input pressure range													
Nominal pressure gauge [bar]	1.6	2.5	4	6	10	16	25	40	60	100	160	250	
Overpressure [bar]	5	5	12	12	20	50	50	120	120	200	400	400	
Burst pressure ≥ [bar]	7	7.5	15	18	30	70	75	150	180	300	500	750	
Vacuum resistance	unlimited												
Output signal / Supply													
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>	≤ ± 0.5 % FSO												
Permissible load	2-wire:		R <sub>max</sub> = [(V <sub>S</sub> - V <sub>S,min</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				0 ... 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>

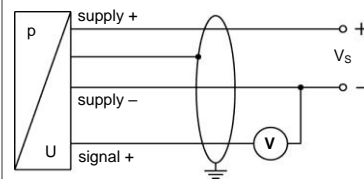
<sup>2</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar

### Wiring diagrams

2-wire-system (current)



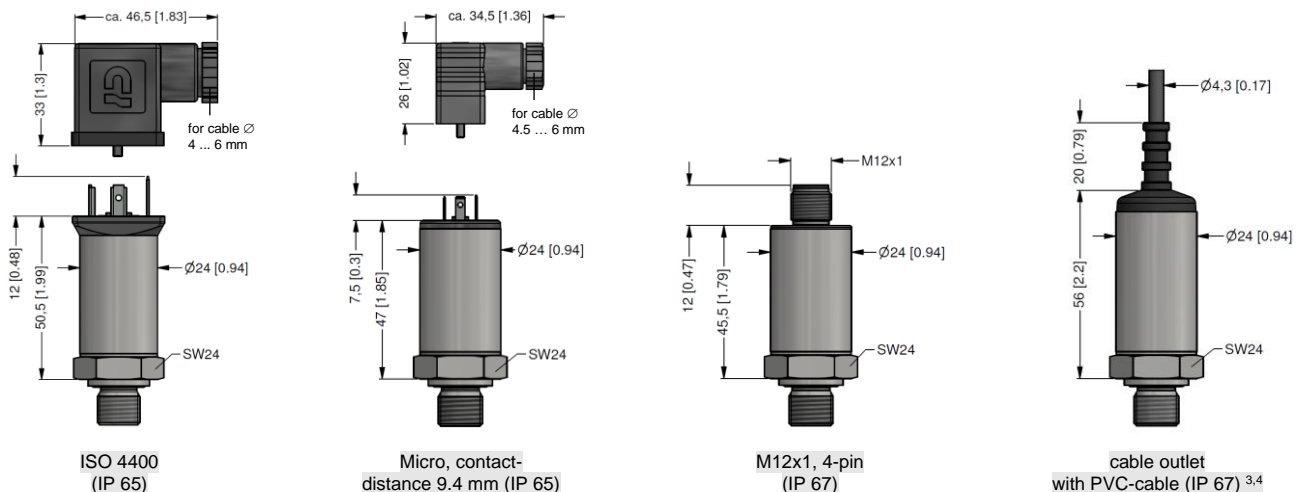
3-wire-system (voltage)



### Pin configuration

Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), metal	cable colours (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	GYNE (green-yellow)

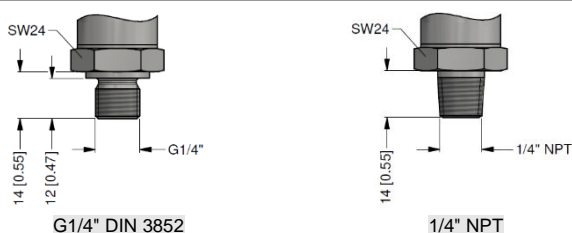
### Electrical connections (dimensions mm / in)



<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 mm / in)



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