

## 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



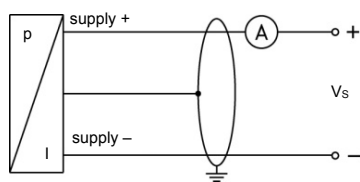
Input pressure range															
Nominal pressure gauge	[bar]	1.6	2.5	4	6	10	16	25	40	60	100	160	250		
Overpressure	[bar]	5	5	12	12	20	50	50	120	120	200	400	400		
Burst pressure $\geq$	[bar]	7	7.5	15	18	30	70	75	150	180	300	500	750		
Vacuum resistance		unlimited													
Output signal / Supply															
Standard	2-wire:	4 ... 20 mA					/	$V_S = 8 \dots 32 V_{DC}$							
Options	3-wire:	0 ... 10 V					/	$V_S = 14 \dots 30 V_{DC}$							
	3-wire ratiometric:	10 ... 90 % of $V_S$					/	$V_S = 2.7 \dots 5 V_{DC}$							
Performance															
Accuracy <sup>1</sup>		$\leq \pm 1 \%$ FSO													
Permissible load	2-wire:	$R_{max} = [(V_S - V_{Smin}) / 0.02 A] \Omega$						3-wire: $R_{min} = 10 k\Omega$							
Influence effects	supply:	0.05 % FSO / 10 V						load: 0.05 % FSO / $k\Omega$							
Response time	2-wire:	$\leq 10$ msec						3-wire: $\leq 3$ msec							
Long term stability		$\leq \pm 0.3 \%$ 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		$\leq \pm 0.5 \%$ 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>

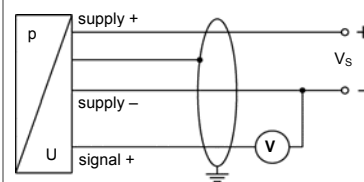
<sup>2</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar

### Wiring diagrams

2-wire-system (current)



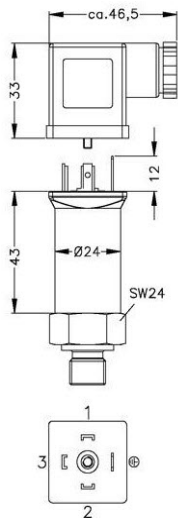
3-wire-system (voltage)



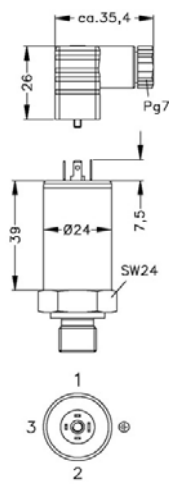
### Pin configuration

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

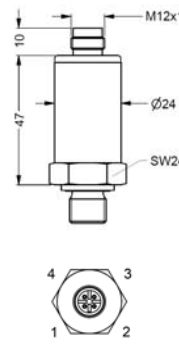
### Electrical connections (dimensions in mm)



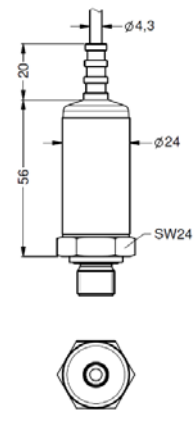
ISO 4400  
(IP 65)



Micro, contact-  
distance 9.4 mm (IP 65)



M12x1, 4-pin  
(IP 67)

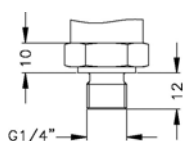


cable outlet  
with PVC-cable (IP 67) <sup>3,4</sup>

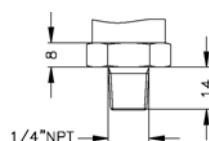
<sup>3</sup> standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)

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

### Mechanical connection (dimensions in mm)



G1/4" DIN 3852



1/4" NPT

