

## 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	15	15	25	70	70	150	150	250	500	500
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: $V_{Sig} = 0.5 \dots 4.5 V$ / $V_S = 5 \pm 0.5 V_{DC}$

Performance	
Accuracy <sup>1</sup>	$\leq \pm 1 \% \text{ FSO}$
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: $\leq 10 \text{ msec}$ 3-wire: $\leq 3 \text{ msec}$
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	$\leq \pm 0.5 \% \text{ FSO} / 10 K \text{ (typ.)}$	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

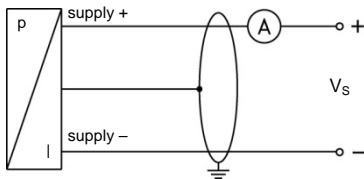
Mechanical stability	
Vibration	10 g, 25 Hz ... 2 kHz according to DIN EN 60068-2-6
Shock	500 g / 1 msec according to DIN EN 60068-2-27

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)
Long term stability	≤ ± 0.3 % FSO / year at reference conditions
Operational life	> 100 x 10 <sup>6</sup> cycles
CE-conformity	EMC Directive: 2004/108/EC      Pressure Equipment Directive: 97/23/EC (module A) <sup>2</sup>

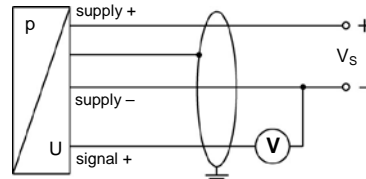
<sup>2</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar

### Wiring diagrams

2-wire-system (current)



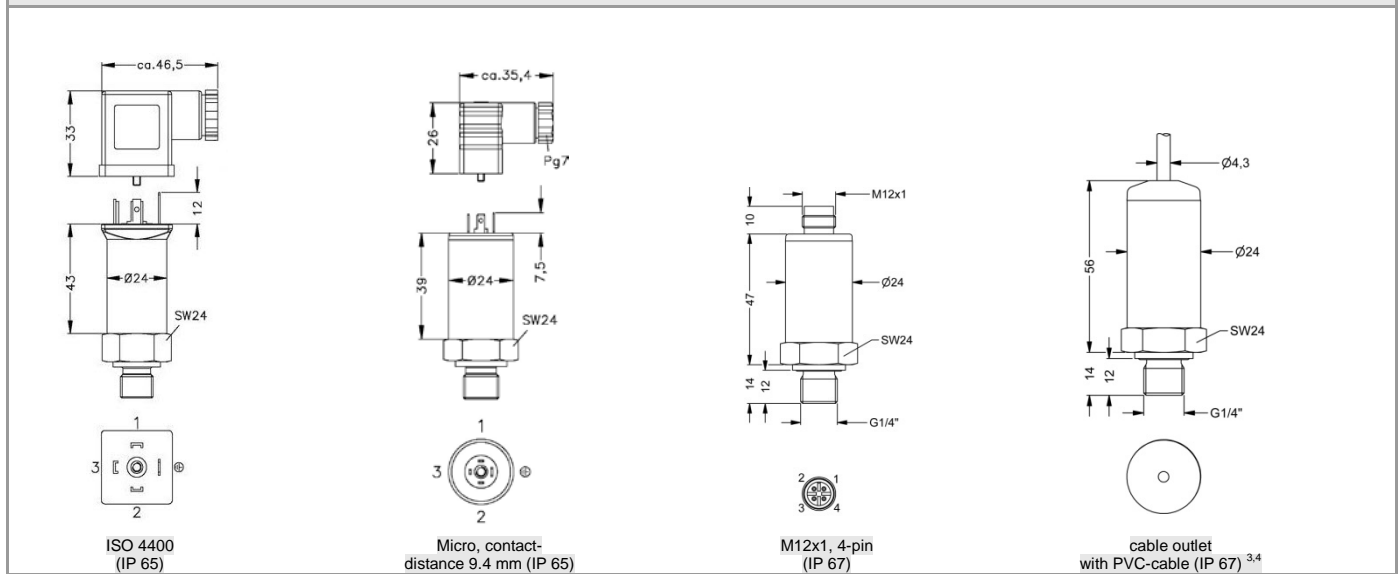
3-wire-system (voltage)



### Pin configuration

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

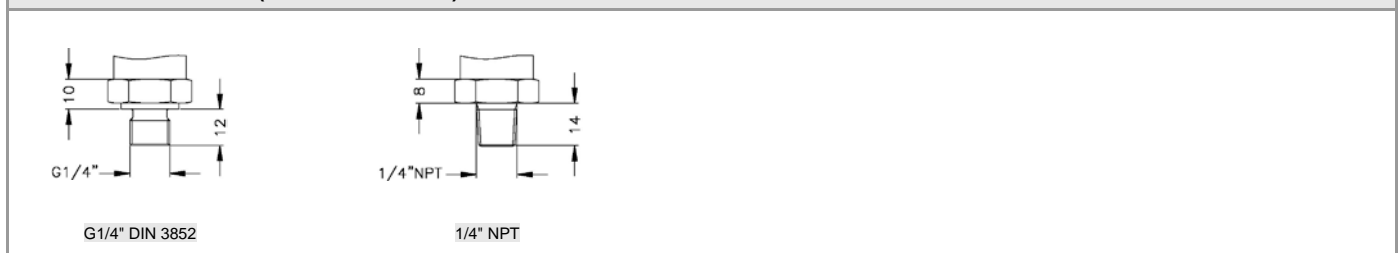
### Electrical connections (dimensions in mm)



<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)



This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.

## Ordering code 30.600 G

30.600 G - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

<b>Input</b>		[bar]													
	1.6	1	6	0	1										
	2.5	2	5	0	1										
	4.0	4	0	0	1										
	6.0	6	0	0	1										
	10	1	0	0	2										
	16	1	6	0	2										
	25	2	5	0	2										
	40	4	0	0	2										
	60	6	0	0	2										
	100	1	0	0	3										
	160	1	6	0	3										
	250	2	5	0	3										
	customer	9	9	9	9									consult	
<b>Pressure</b>		gauge				R									
<b>Output</b>		4 ... 20 mA / 2-wire				1									
	0 ... 10 V / 3-wire					3									
	0.5 ... 4.5 V / 3-wire ratiometric					R									
	customer					9								consult	
<b>Accuracy</b>		1.0 % FSO				8									
	customer					9								consult	
<b>Electrical connection</b>		Male and female plug ISO 4400				1	0	0							
	Male and female plug Micro					C	1	0							
	Male plug M12x1 (4-pin), plastic					M	0	0							
	Cable outlet with PVC cable <sup>1</sup>					T	A	0							
	customer					9	9	9						consult	
<b>Mechanical connection</b>		G1/4" DIN 3852					3	0	0						
	1/4" NPT						N	4	0						
	customer						9	9	9					consult	
<b>Seal</b>		FKM											1		
	customer												9	consult	
<b>Special version</b>		standard											0	0	0
	customer												9	9	9
															consult

<sup>1</sup> standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)