

## 17.600 G

### OEM Pressure Transmitter Heavy Duty

#### Applications:

- ▶ mobile hydraulic
- ▶ presses
- ▶ general mechanical engineering
- ▶ oxygen application

#### Characteristics:

- ▶ stainless steel sensor, welded
- ▶ accuracy 0.5 % FSO according to IEC 60770
- ▶ nominal pressure ranges from 0 ... 6 bar up to 0 ... 600 bar



#### Technical Data



Input pressure range		6	10	16	25	40	60	100	160	250	400	600
Nominal pressure gauge	[bar]	6	10	16	25	40	60	100	160	250	400	600
Overpressure (static)	[bar]	12	20	32	50	80	120	200	320	500	800	1 200
Burst pressure $\geq$	[bar]	30	50	80	125	200	300	500	800	1 400	2 000	3 000
Vacuum resistance		unlimited										

Output signal / Supply					
Standard	2-wire:	4 ... 20 mA	/	$V_S =$	8 ... 32 V <sub>DC</sub>
Options	3-wire:	0 ... 10 V	/	$V_S =$	14 ... 30 V <sub>DC</sub>
	3-wire ratiometric:	10 ... 90 % of $V_S$	/	$V_S =$	2.7 ... 5 V <sub>DC</sub>

Performance			
Accuracy <sup>1</sup>		$\leq \pm 0.5 \% \text{ FSO}$	
Permissible load	2-wire:	$R_{\max} = [(V_S - V_{S \min}) / 0.02 \text{ A}] \Omega$	3-wire: $R_{\min} = 10 \text{ k}\Omega$
Influence effects	supply:	0.05 % FSO / 10 V	load: 0.05 % FSO / k $\Omega$
Response time	2-wire:	$\leq 10 \text{ msec}$	3-wire: $\leq 3 \text{ msec}$
Long term stability		$\leq \pm 0.3 \% \text{ FSO} / \text{ year at reference conditions}$	
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		$\leq \pm 0.3 \% \text{ FSO} / 10 \text{ K}$	in compensated range 0 ... 70 °C
Permissible temperatures	medium:	-40 ... 125 °C	electronics / environment: -40 ... 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		

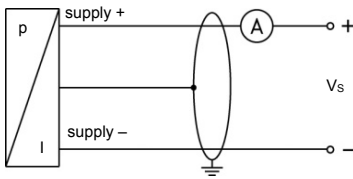
Mechanical stability			
Vibration	20 g, 25 Hz ... 2 kHz	according to DIN EN 60068-2-6	
Shock	500 g / 1 msec	according to DIN EN 60068-2-27	

Materials	
Pressure port	stainless steel 1.4571 (316Ti)
Housing	stainless steel 1.4301 (304)
Seal of pressure port	FKM for G 1/4" DIN 3852      others on request
Seal of sensor	none (welded)
Diaphragm	stainless steel 1.4542 (630)
Media wetted parts	pressure port, seal of pressure port, diaphragm
Miscellaneous	
Weight	approx. 120 g
Current consumption	2-wire: max. 25 mA      3-wire ratiometric: typ. 3 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>

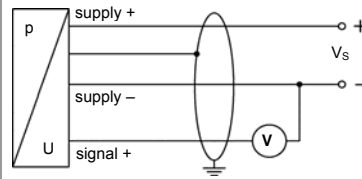
<sup>2</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar

### Wiring diagrams

#### 2-wire-system (current)



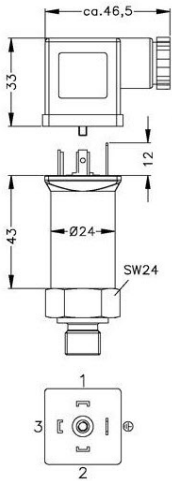
#### 3-wire-system (voltage)



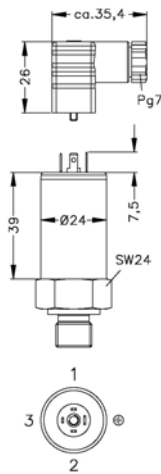
### Pin configuration

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)

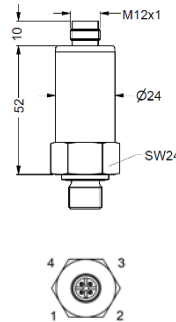
### Electrical connections (dimensions in mm)



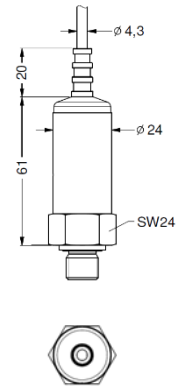
ISO 4400  
(IP 65)



Micro, contact  
distance 9.4 mm (IP 65)



M12x1, 4-pin  
(IP 67)

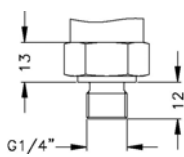


cable outlet with  
PVC-cable (IP 67) <sup>3,4</sup>

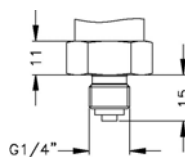
<sup>3</sup> standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)

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

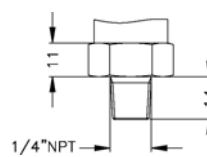
### Mechanical connection (dimensions in mm)



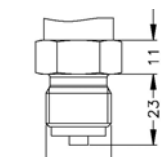
G1/4" DIN 3852  
(not for oxygen)



G1/4" EN 837



1/4" NPT



G1/2" EN 837

## Ordering code 17.600 G

17.600 G - -------

Input	[bar]														
	6	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										
	400	4	0	0	3										
	600	6	0	0	3										
	customer	9	9	9											consult
Pressure															
	gauge					R									
Output															
	4 ... 20 mA / 2-wire						1								
	0 ... 10 V / 3-wire						3								
	10 ...90% of Vs / 3-wire ratiometric						R								
Accuracy															
	0.5 % FSO							5							
	customer							9							consult
Electrical connection															
	male and female plug ISO 4400							1	0	0					
	male and female plug Micro							C	1	0					
	male plug M12x1 (4-pin), metal							M	2	0					
	cable outlet with PVC-cable <sup>1</sup>							T	M	0					
	customer							9	9	9					consult
Mechanical connection / Seal															
	G1/4" DIN 3852 / on pressure port: FKM								3	0	0	P			
	G1/4" EN 837 / without								4	0	0	2			
	1/4" NPT / without								N	4	0	2			
	G1/2" EN 837 / without								2	0	0	2			
	customer								9	9	9	9			consult
Special version															
	standard												0	0	0
	oxygen application <sup>2</sup>												0	0	7
	oil and grease free												0	0	8
	customer												9	9	9

<sup>1</sup> standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)  
<sup>2</sup> not possible with G1/4" DIN 3852

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