

## 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												
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]	28	70	70	140	280	280	700	700	1 400	1 500	1 800	
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>	$\leq \pm 0.5 \%$ FSO
Permissible load	2-wire: $R_{max} = [(V_S - V_S \text{ min}) / 0.02 A] \Omega$ 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	$\leq \pm 0.3 \%$ FSO / 10 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: 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 x 10 <sup>6</sup> pressure 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 colour (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)				

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## Ordering code 17.600 G

17.600 G -  -  -  -  -  -  -  -  -

<b>Input</b>										
	[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	9					consult
<b>Pressure</b>										
	gauge			R						
<b>Output</b>										
	4 ... 20 mA / 2-wire				1					
	0 ... 10 V / 3-wire				3					
	10 ...90% of Vs / 3-wire ratiometric				R					
<b>Accuracy</b>										
	0.5 % FSO				5					
	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 / Seal</b>										
	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
<b>Special version</b>										
	standard							0	0	0
	oxygen application <sup>2</sup>							0	0	7
	oil and grease free							0	0	8
	customer							9	9	9

This document contains product specification; properties are not guaranteed. Detailed information about options are defined in the datasheet. Subject to change without notice.

<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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