

# 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 / $V_S = 8 \dots 32 V_{DC}$
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: $R_{max} = [(V_S - V_{S min}) / 0.02 A] \Omega$ 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 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	
Supply -	2	2	2	WH (white)
Signal + (for 3-wire)	3	3	3	BN (brown)
Shield	ground pin	ground pin	4	GN (green)
				GYE (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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