

17.610 G

OEM Pressure Transmitter Heavy Duty

Applications:

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

Characteristics:

- ▶ stainless steel sensor, welded
- ▶ accuracy according to IEC 60770:
1 % FSO
- ▶ nominal pressure ranges from
0 ... 10 bar up to 0 ... 600 bar



Technical Data



Input pressure range											
Nominal pressure gauge	[bar]	10	16	25	40	60	100	160	250	400	600
Overpressure (static)	[bar]	30	48	60	80	120	200	320	500	800	1200
Burst pressure \geq	[bar]	70	70	140	280	280	700	700	1400	1500	1800

Output signal / Supply			
Standard	2-wire:	4 ... 20 mA	/ $V_S = 8 \dots 24 V_{DC}$
Options	3-wire:	0 ... 10 V	/ $V_S = 12 \dots 30 V_{DC}$
	3-wire ratiometric:	10 ... 90% of V_S	/ $V_S = 5 V_{DC} \pm 10\%$

Performance			
Accuracy ¹	$\leq \pm 1\%$ FSO		
Permissible load	2-wire:	$R_{max} = [(V_S - V_S \text{ min}) / 0.02 A] \Omega$	
	3-wire:	$R_{min} = 10 \text{ k}\Omega$	
Influence effects	supply:	0.05 % FSO / 10 V	
	load:	0.05 % FSO / $\text{k}\Omega$	
Response time	2-wire:	$\leq 10 \text{ msec}$	3-wire: $\leq 3 \text{ msec}$
Long term stability	$\leq \pm 0.2\%$ FSO / year at reference conditions		

¹ accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)

Thermal effects (Offset and Span) / Permissible temperatures			
Thermal error	$\leq \pm 0.2\%$ FSO / 10 K	in compensated range	-40 ... 85 °C
Permissible temperatures	medium: -40 ... 120 °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 1.4542 (630)	
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. 100 g	
Current consumption	2-wire: max. 25 mA 3-wire ratiometric: typ. 4,5 mA	
Operational life	> 100 x 10 ⁶ pressure cycles	
CE-conformity	EMC Directive: 2004/108/EC Pressure Equipment Directive: 97/23/EC (module A) ²	
² This directive is only valid for devices with maximum permissible overpressure > 200 bar		
Wiring diagrams		
<p>2-wire-system (current)</p>	<p>3-wire-system (voltage)</p>	
Pin configuration		
Electrical connection	M12x1 (4-pin), metal	Micro (contact distance 9.4 mm)
Supply +	1	1
Supply -	3	2
Signal + (for 3-wire)	2	3
Shield	housing	ground pin
Electrical connections (dimensions in mm)		
<p>M12x1, 4-pin (IP 67)</p>	<p>Micro, contact-distance 9.4 mm (IP 65)</p>	
Mechanical connection (dimensions in mm)		
<p>G1/4" DIN 3852</p>	<p>1/4" NPT</p>	

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