

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: $R_{max} = [(V_S - V_S \text{ min}) / 0.02 \text{ A}] \Omega$ 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 voltage: max. 4,5 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		
2-wire-system (current)	3-wire-system (voltage)	
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)		
M12x1, 4-pin (IP 67)	Micro, contact- distance 9.4 mm (IP 65)	
Mechanical connection (dimensions in mm)		
G1/4" DIN 3852	1/4" NPT	

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Ordering code 17.610 G

17.610 G - [] - [] - [] - [] - [] - [] - [] - [] - [] - []

Input	[bar]													
	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										auf Anfrage
Pressure	gauge				R									
Output														
	4 ... 20 mA / 2-wire				1									
	0 ... 10 V / 3-wire				3									
	10 ... 90% of Vs / 3-wire ratiometric				R									
	customer				9									auf Anfrage
Accuracy														
	1.0 % FSO				8									
	customer				9									auf Anfrage
Electrical connection														
	Male plug M12x1 (4-pin), metal					M	1	1						
	Male Micro					C	1	0						
	customer					9	9	9						auf Anfrage
Mechanical connection / Seal														
	G1/4" DIN 3852 / on pressure port: FKM						3	0	0	P				
	1/4" NPT / without						N	4	0	2				
	7/16" - 20 UNF / without						U	0	0	2				
	customer						9	9	9	9				auf Anfrage
Special version														
	standard									0	0	0		
	customer									9	9	9		auf Anfrage

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