



IMP 18.605 G

Submersible **OEM-Pressure Transmitter**

Applications

▶ level measurement in water and fuel oil tanks

Characteristics

- piezoresistive stainless steel sensor
- ▶ accuracy 0.5 % FSO according to IEC 60770
- nominal pressure ranges from $0 \dots 1 \text{ mH}_2\text{O} \text{ up to } 0 \dots 10 \text{ mH}_2\text{O}$







Technical Data

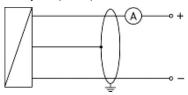
Input pressure range						
Nominal pressure gauge	[bar]	0.1	0.25	0.4	0.6	1
Level	[mH ₂ O]	1	2.5	4	6	10
Overpressure	[bar]	1	1	1	3	3
Burst pressure ≥	[bar]	1.5	1.5	1.5	5	5
Vacuum resistance		unlimited				

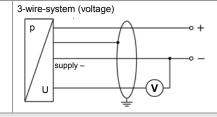
Output signal / Supply					
Standard	2-wire: 4 20 mA / V _S = 8 32 V _{DC}				
Option 3-wire	3-wire: $0 10 \text{ V}$ / $V_s = 14 30 \text{ V}_{DC}$				
	3-wire ratiometric: 10 90 % of V_s / V_s = 2.7 5 V_{DC}				
Performance					
Accuracy 1	$P_N > 160 \text{ mbar: } \le \pm 0.5 \% \text{ FSO}$ $P_N \le 160 \text{ mbar: } \le \pm 1 \% \text{ FSO}$				
Permissible load	2-wire: $R_{\text{max}} = [(V_S - V_{S \text{ min}}) / 0.02 \text{ A}] \Omega$				
	3-wire: $R_{min} = 10 \text{ k}\Omega$				
Influence effects	supply: 0.05 % FSO / 10 V				
	load: 0.05% FSO / k Ω				
Response time	2-wire: ≤ 10 msec				
	3-wire: ≤ 3 msec				
Long term stability	≤ ± 0.2 % FSO / year at reference conditions				
Measuring range	1 kHz				
¹ accuracy according to IEC 60770 – lin	mit point adjustment (non-linearity, hysteresis, repeatability)				
Thermal effects (Offset and Spa	n) / Permissible temperatures				
Thermal error	≤± 0.3 % FSO / 10 K in compensated range 0 70 °C				
Permissible temperatures	medium / electronics / environment / storage: -10 70 °C				
Electrical protection					
Short circuit protection	permanent 3-wire ratiometric: none				
Reverse polarity protection	no damage, but also no function				
Electromagnetic compatibility	emission and immunity according to EN 61326				

OEM-Pressure Transmitter

Mechanical stability				
Vibration	10 g, 25 Hz 2 kHz	according to DIN EN 60068-2-6		
Shock	100 g / 1 msec	according to DIN EN 60068-2-27		
Materials (media wetted)				
Housing	stainless steel 1.4301 (304)			
Seals	FKM			
Diaphragm	stainless steel 1.4435 (316 L			
Cable sheath	PVC (oil resistant)			
Miscellaneous				
Weight	approx. 120 g (without cable) cable: 25 g / m		
Cable length	3 m, 6 m, 9 m or 12 m; other	3 m, 6 m, 9 m or 12 m; others on request		
Suitable for following media	water, fuel oil			
Current consumption	2-wire: max. 25 mA	3-wire ratiometric: typ. 1.5 mA		
-	3-wire voltage: typ. 5 mA (short circuit current: max. 20 mA)			
Ingress protection	IP 68			
CE-conformity	EMC Directive: 2014/30/EU			
Wiring diagrams				

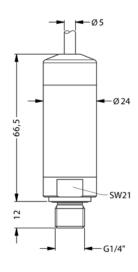






Pin configuration				
Electrical connections	cable colours (IEC 60757)			
Supply +	wh (white)			
Supply –	bn (brown)			
Signal + (only for 3-wire)	gn (green)			
Shield	gnye (green-yellow)			

Dimensions (in mm)



G1/4" DIN 3852 with PVC cable (with air tube)

Ordering code IMP 18.605 G IMP 18.605 G [mH₂O] 1.0 Input 1 0 0 0 2 5 0 0 4 0 0 0 6 0 0 0 1 0 0 1 9 9 9 9 0.1 2.5 0.25 0.4 4 0.6 6 10 1.0 customer consult Pressure bar В mH₂O Μ customer 9 consult Output 4 ... 20 mA / 2-wire 0 ... 10 V / 3-wire 10 ... 90% of $V_{\rm S}$ / 3-wire ratiometric R consult P_N > 160 mbar: ≤ ± 0.5 % FSO 5 8 $P_N \le 160 \text{ mbar}$: ≤ ± 1 % FSO customer 9 consult Electrical connection PVC-cable 1 customer consult Cable length 0 0 3 0 0 6 0 0 9 0 1 2 9 9 9 3 m 6 m 9 m 12 m customer Mechanical connection G1/4" DIN 3852 3 0 0 9 9 9 customer consult Seals FKM customer 9 consult Special version 0 0 0 9 9 9 standard customer consult

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