

IMP 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 ¹	$\leq \pm 0.5 \% \text{ FSO}$		
Permissible load	2-wire: $R_{max} = [(V_S - V_{S min}) / 0.02 A] \Omega$	3-wire: $R_{min} = 10 \text{ k}\Omega$	
Influence effects	supply: 0.05 % FSO / 10 V	load: 0.05 % FSO / k Ω	
Response time	2-wire: $\leq 10 \text{ msec}$	3-wire: $\leq 3 \text{ msec}$	
Long term stability	$\leq \pm 0.3 \% \text{ FSO} / \text{year}$ at reference conditions		
Measuring rate	1 kHz		

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

Thermal effects (offset and span) / Permissible temperatures			
Thermal error	$\leq \pm 0.3 \% \text{ FSO} / 10 \text{ K}$	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	

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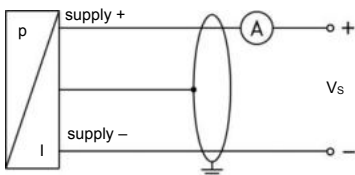
Technical Data

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) ²

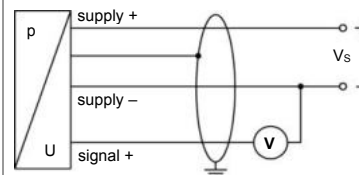
² This directive is only valid for devices with maximum permissible overpressure > 200 bar

Wiring diagrams

2-wire-system (current)



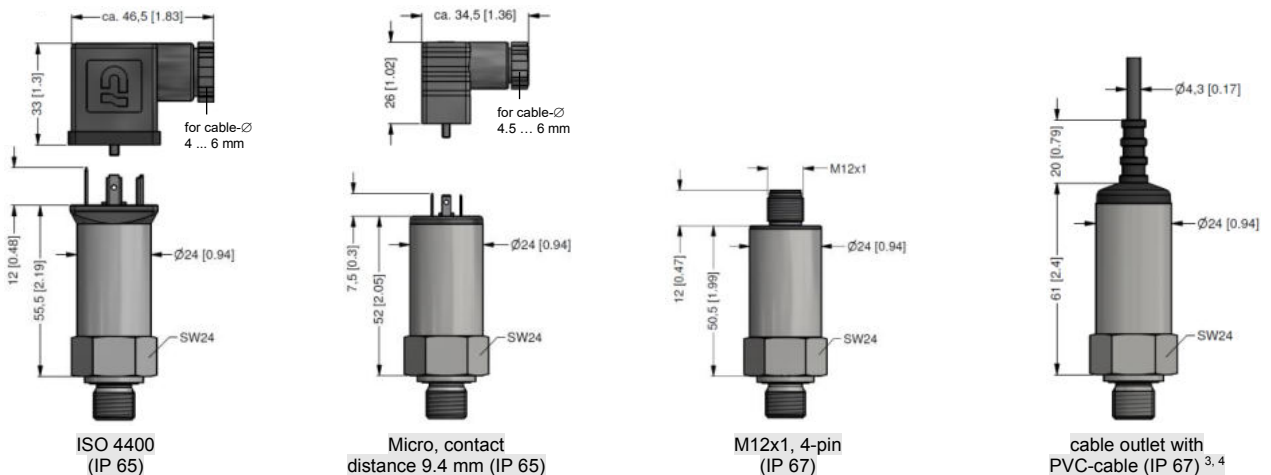
3-wire-system (voltage)



Pin configuration

Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), metal	
				cable colours (IEC 60757)
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	GNYE (green-yellow)

Electrical connections (dimensions mm / in)



³ standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)

⁴ different cable types and lengths available, permissible temperature depends on kind of cable

Mechanical connection (dimensions mm / in)



