

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	$\leq \pm 0.5$ % 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 / $k\Omega$
Response time	2-wire: ≤ 10 msec 3-wire: ≤ 3 msec
Long term stability	$\leq \pm 0.3$ % FSO / 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	$\leq \pm 0.3$ % 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

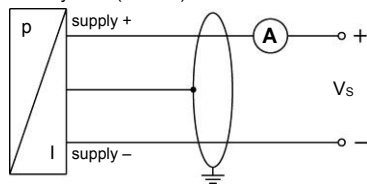


Materials	
Pressure port	stainless steel 1.4571 (316Ti)
Housing	stainless steel 1.4301 (304)
Seal of pressure port	FKM: G 1/4" DIN 3852 others on request
Seal of sensor	none (welded)
Diaphragm	stainless steel 1.4542 (630)
Media wetted parts	pressure port, seal of pressure port, diaphragm
Miscellaneous	
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 x 10 ⁶ pressure cycles
CE-conformity	EMC Directive: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (module A) ²

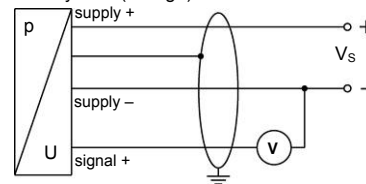
² This directive is only valid for devices with maximum permissible overpressure > 200 bar

Wiring diagrams

2-wire-system (current)



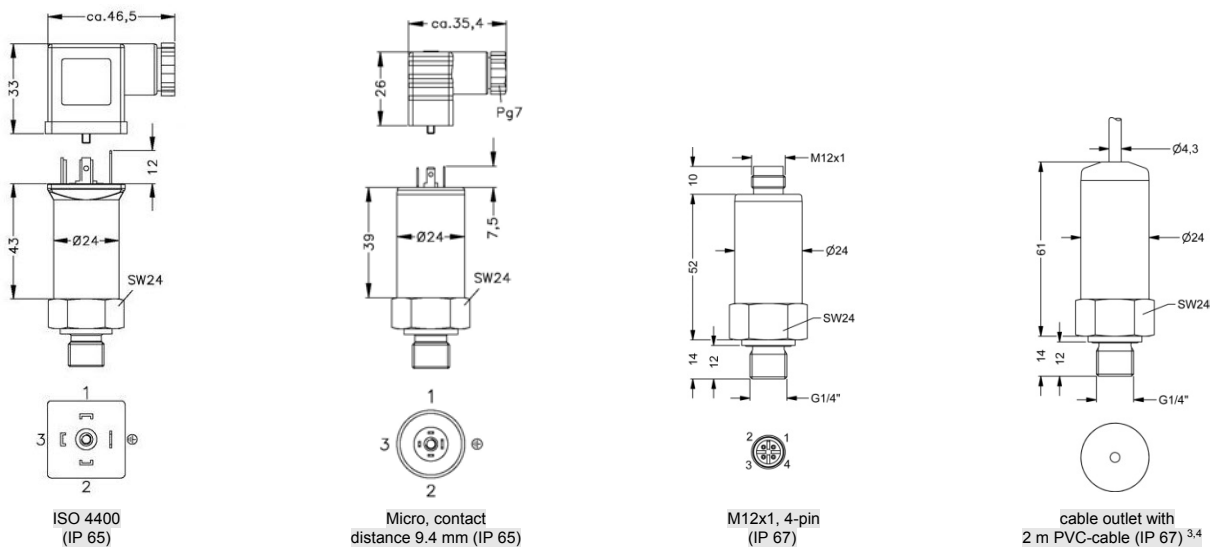
3-wire-system (voltage)



Pin configuration

Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), plastic	cable colour (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)

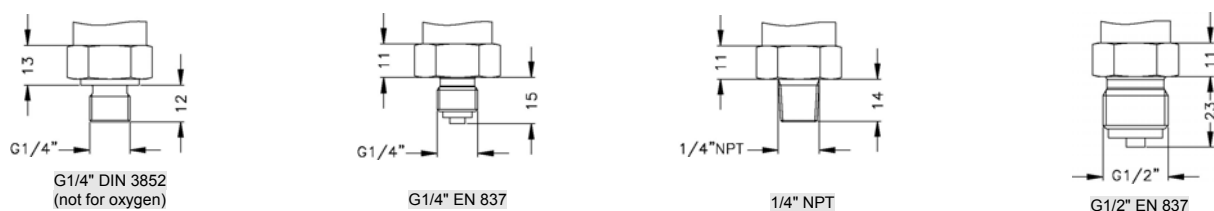
Electrical connections (dimensions in mm)



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 in mm)



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Ordering code 17.600 G

17.600 G - - - - - - - - - - - - - - -

Input	[bar]														
	6	6	0	0	1										
	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	9										consult
Pressure															
	gauge					R									
Output															
	4 ... 20 mA / 2-wire					1									
	0 ... 10 V / 3-wire					3									
	10 ... 90% of Vs / 3-wire ratiometric					R									
Accuracy															
	0.5 % FSO					5									
	customer					9									consult
Electrical connection															
	Male and female plug ISO 4400					1	0	0							
	Male and female plug Micro					C	1	0							
	Male plug M12x1 (4-pin), plastic					M	0	0							
	Cable outlet with PVC-cable ¹					T	M	0							
	customer					9	9	9							consult
Mechanical connection / Seal															
	G1/4" DIN 3852 / on pressure port: FKM						3	0	0				P		
	G1/4" EN 837 / without						4	0	0	2					
	1/4" NPT / without						N	4	0	2					
	G1/2" EN 837 / without						2	0	0	2					
	customer						9	9	9	9				consult	
Special version															
	standard										0	0	0		
	oxygen application ²										0	0	7		
	oil and grease free										0	0	8		
	customer										9	9	9	consult	

¹ standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)

² not possible with G1/4" DIN 3852

