

30.600 G

OEM Pressure Transmitter Low Cost

Applications

- ▶ mechanical and plant engineering
- ▶ general industrial applications

Characteristics

- ▶ ceramic sensor
- ▶ accuracy 1 % FSO according to IEC 61298-2
- ▶ nominal pressure ranges from 0 ... 1.6 bar up to 0 ... 250 bar



Technical Data



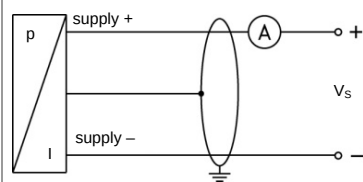
Input pressure range													
Nominal pressure gauge	[bar]	1.6	2.5	4	6	10	16	25	40	60	100	160	250
Overpressure	[bar]	5	5	12	12	20	50	50	120	120	200	400	400
Burst pressure ≥	[bar]	7	7.5	15	18	30	70	75	150	180	300	500	750
Vacuum resistance		unlimited											
Output signal / Supply													
Standard	2-wire:		4 ... 20 mA				/		V _S = 8 ... 32 V _{DC}				
Options	3-wire:		0 ... 10 V				/		V _S = 14 ... 30 V _{DC}				
	3-wire ratiometric:		10 ... 90 % of V _S				/		V _S = 2.7 ... 5 V _{DC}				
Performance													
Accuracy ¹	≤ ± 1 % FSO												
Permissible load	2-wire:		R _{max} = [(V _S – V _{S min}) / 0.02 A] Ω						3-wire:		R _{min} = 10 kΩ		
Influence effects	supply:		0.05 % FSO / 10 V						load:		0.05 % FSO / kΩ		
Response time	2-wire:		≤ 10 msec						3-wire:		≤ 3 msec		
Long term stability	≤ ± 0.3 % FSO / year at reference conditions												
Measuring rate	1 kHz												
¹ accuracy according to IEC 61298-2 – limit point adjustment (non-linearity, hysteresis, repeatability)													
Thermal effects (offset and span) / Permissible temperatures													
Thermal error	≤ ± 0.5 % FSO / 10 K (typ.)				in compensated range				0 ... 85 °C				
Permissible temperatures	medium: -25 ... 125 °C				electronics / environment: -25 ... 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 RMS / 10 ... 2000 Hz				according to DIN EN 60068-2-6								
Shock	500 g / 1 msec half sine				according to DIN EN 60068-2-27								

Materials	
Pressure port / housing	stainless steel 1.4301 (304)
Seals (media wetted)	FKM others on request
Diaphragm	ceramics Al ₂ O ₃ 96 %
Media wetted parts	pressure port, seals, diaphragm
Miscellaneous	
Weight	approx. 120 g
Current consumption	2-wire: max. 25 mA 3-wire voltage: max. 7 mA (short circuit current: max. 20 mA) 3-wire ratiometric: typ. 1.5 mA
Operational life	100 million load cycles
CE-conformity	EMC Directive: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (module A) ²

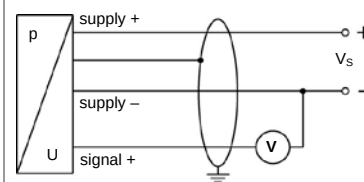
² This directive is only valid for devices with maximum permissible overpressure > 200 bar

Wiring diagrams

2-wire-system (current)



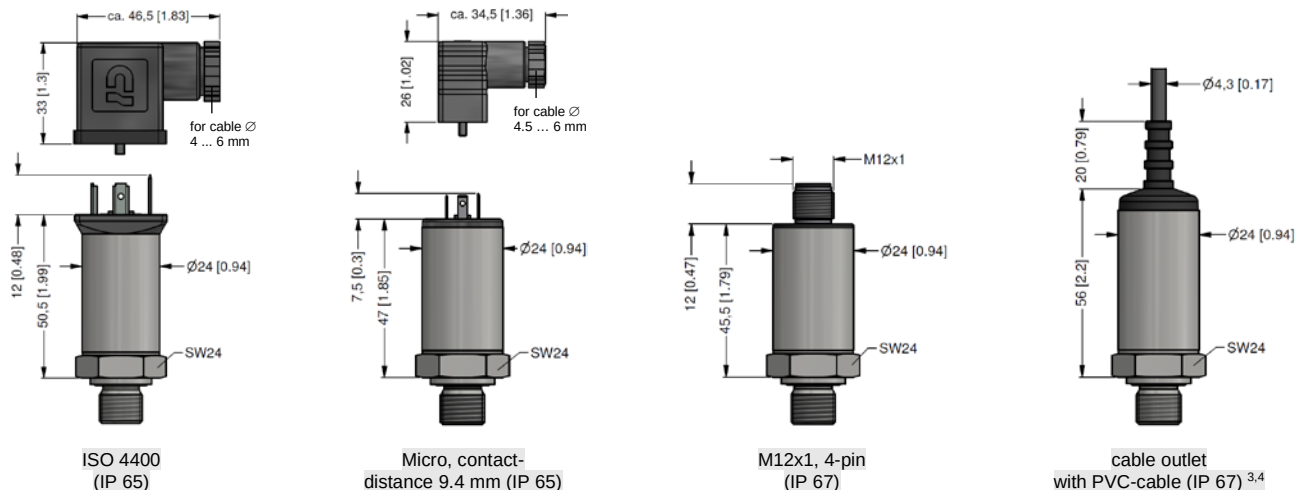
3-wire-system (voltage)



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	GYNE (green-yellow)

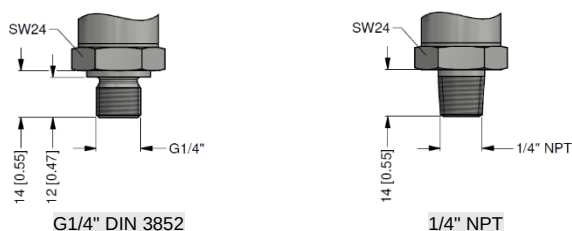
Electrical connections (dimensions mm / in)



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)



Ordering code 30.600 G

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Input	[bar]																		
	1.6	1	6	0	1														
	2.5	2	5	0	1														
	4.0	4	0	0	1														
	6.0	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														
	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 V _S / 3-wire ratiometric				R														
	customer				9														consult
Accuracy																			
	1.0 % FSO				8														
	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), metal							M	2	0									
	cable outlet with PVC cable ¹							T	M	0									
	customer							9	9	9									consult
Mechanical connection																			
	G1/4" DIN 3852								3	0	0								
	1/4" NPT								N	4	0								
	customer								9	9	9								consult
Seal																			
	FKM											1							
	customer											9							consult
Special version																			
	standard												0	0	0				
	customer												9	9	9				consult

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