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 60770
- nominal pressure ranges from 0 … 1.6 bar up to 0 … 250 bar

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											

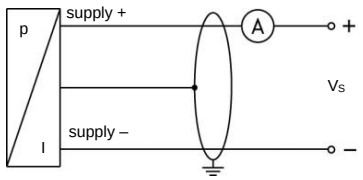
Output signal / Supply			
Standard	2-wire:	4 ... 20 mA	/ V_S = 8 ... 32 V_{DC}
Options	3-wire:	0 ... 10 V	/ V_S = 14 ... 30 V_{DC}
	3-wire ratiometric:	10 … 90% of V_S	/ V_S = 2.7 … 5 V_{DC}
Performance			
Accuracy [1]	≤ ± 1 % FSO		
Permissible load	2-wire:	$R_{max} = [(V_S - V_{S\,min}) / 0.02\ A]\ \Omega$	
	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 60770 – 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	-25 ... 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	10 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 / housing	stainless steel 1.4301 (304)
Seals (media wetted)	FKM others on request
Diaphragm	ceramics Al_2O_3 96 %
Media wetted parts	pressure port, seals, diaphragm
Miscellaneous	
Weight	approx. 120 g
Current consumption	2-wire: max. 25 mA 3-wire ratiometric: typ. 1.5 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]

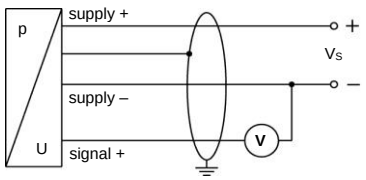
[2] This directive is only valid for devices with maximum permissible overpressure > 200 bar

Wiring diagrams

2-wire-system (current)



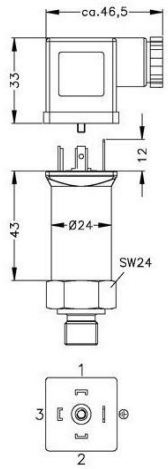
3-wire-system (voltage)



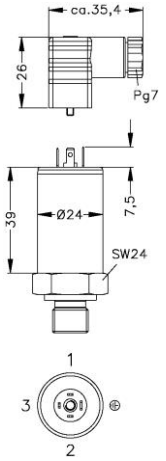
Pin configuration

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

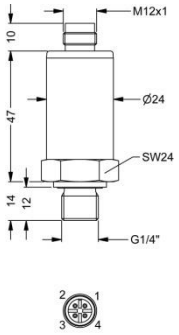
Electrical connections (dimensions in mm)



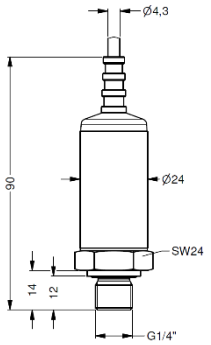
ISO 4400
(IP 65)



Micro, contact-
distance 9.4 mm (IP 65)



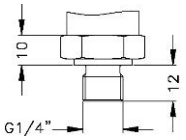
M12x1, 4-pin
(IP 67)



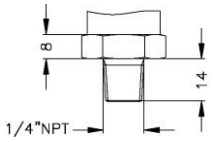
cable outlet
with PVC-cable (IP 67) [3,4]

[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)



G1/4" DIN 3852



1/4" NPT

Ordering code 30.600 G

30.600 G - □□□□ - □ - □ - □ - □□□ - □□□ - 2 - □ - □□□

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)

01.09.2019