

30.600 G

OEM Pressure Transmitter Low Cost

Applications

- ▶ mechanical and plant engineering
- ▶ general industrial applications

Characteristics

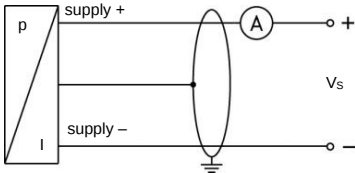
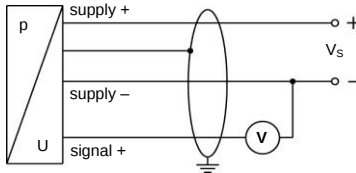
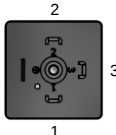
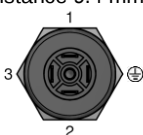
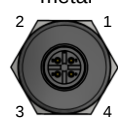
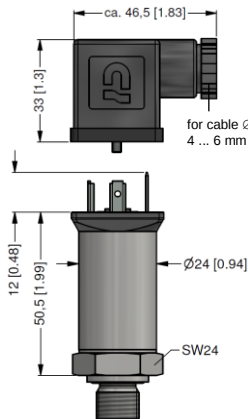
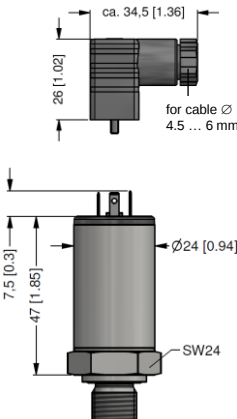
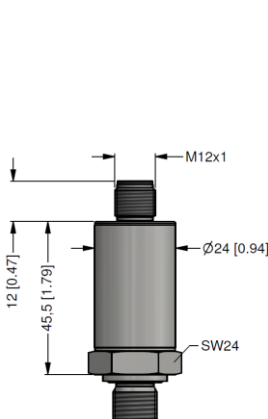
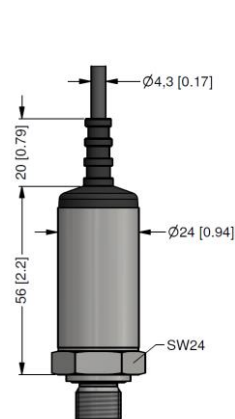
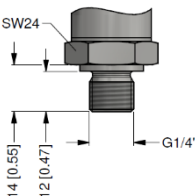
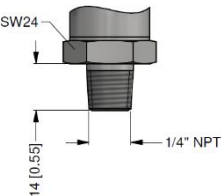
- ▶ ceramic sensor
- ▶ accuracy 1 % FSO according to IEC 60770
- ▶ nominal pressure ranges from 0 ... 1.6 bar up to 0 ... 250 bar



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 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			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		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 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 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 colours (IEC 60757)
				
	1 2 3	1 2 3	1 2 3	
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)				
				
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 mm / in)				
				
G1/4" DIN 3852				
				
1/4" NPT				

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)