

CCE-18.601 G



- pressure transmitter
- for low pressure
- nominal pressure: from 0...100 mbar up to 0...10 bar
- output signals: 2-wire: 4...20 mA; 3-wire: 0...10 V
- piezoresistive stainless steel sensor
- accuracy 0.5 % span



PREFERRED AREAS OF USE ARE



Plant and Machine Engineering



HVAC



Laboratory

TECHNICAL DATA

Input pressure range											
Nominal pressure gauge	[bar]	0.1	0.16	0.25	0.4	0.6	1	1.6	2.5	4	6
Overpressure	[bar]	1	1	1	1	3	3	6	10	10	21
Burst pressure ≥	[bar]	1.5	1.5	1.5	1.5	5	5	10	17.5	17.5	35
Vacuum resistance		unlimited									
Output signal / Supply											
Standard		2-wire:		4 ... 20 mA		/		V _S = 8 ... 32 V _{DC}			
Options 3-wire		3-wire:		0 ... 10 V		/		V _S = 14 ... 30 V _{DC}			
Performance											
Accuracy ¹		P _N > 160 mbar: ≤ ± 0.5 % span P _N ≤ 160 mbar: ≤ ± 1 % span									
Permissible load		2-wire: R _{max} = [(V _S – V _{S min}) / 0.02 A] W 3-wire: R _{min} = 10 kW									
Influence effects		supply: 0.05 % span / 10 V load: 0.05 % span / kW									
Response time		2-wire: ≤ 10 msec				3-wire: ≤ 3 msec					
Long term stability		≤ ± 0,2 % span / year at reference conditions									
Measuring rate		1 kHz									
¹ accuracy according to EN IEC 62828-2– limit point adjustment (non-linearity, hysteresis, repeatability)											
Thermal effects (offset and span) / Permissible temperatures											
Thermal error		≤ ± 0.3 % span / 10 K				in compensated range 0 ... 70 °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 compatibility		emission and immunity according to EN 61326									
Mechanical stability											
Vibration		10 g, 25 Hz ... 2 kHz				according to DIN EN 60068-2-6					
Shock		100 g / 1 msec				according to DIN EN 60068-2-27					
Materials											
Pressure port / housing		stainless steel 1.4301 (304)									
Seals		FKM, EPDM									
Diaphragm		stainless steel 1.4435 (316 L)									
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

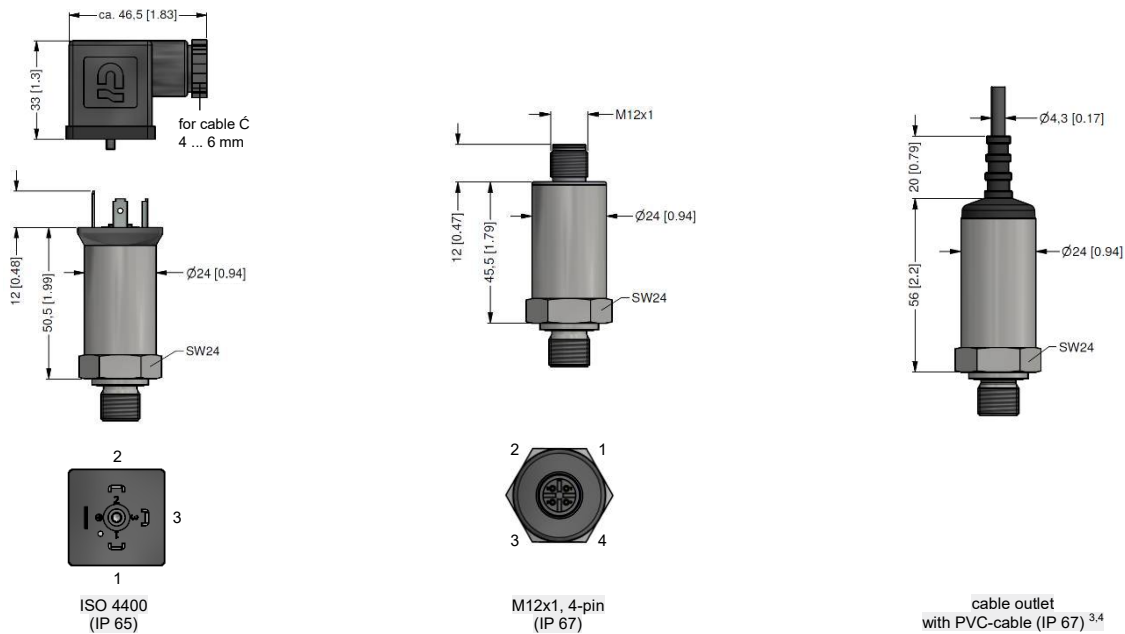
ELECTRICAL CONNECTION

Wiring diagrams

2-wire-system (current)

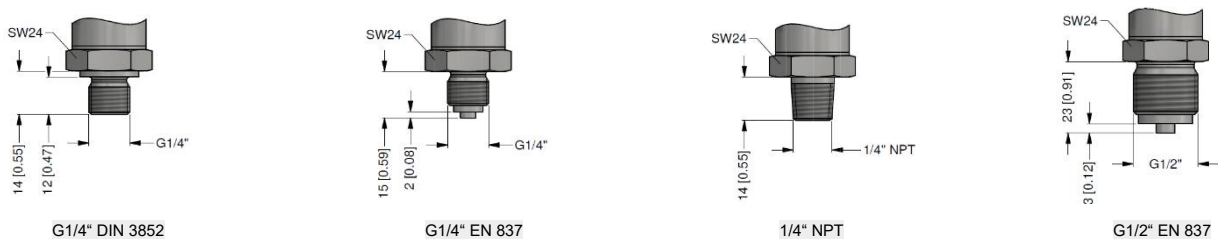
3-wire-system (voltage)

Pin configuration			
Electrical connection	ISO 4400	M12x1 (4-pin), metal	cable colour (IEC 60757)
Supply +	1	1	WH (white)
Supply -	2	2	BN (brown)
Signal + (for 3-wire)	3	3	GN (green)
Shield	ground pin	4	GYNE (green-yellow)



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



ORDER CODE

CCE-18.601G--R-

Input [bar]																	
0 ... 0,1	1	0	0	0													
0 ... 0,16	1	6	0	0													
0 ... 0,25	2	5	0	0													
0 ... 0,4	4	0	0	0													
0 ... 0,6	6	0	0	0													
0 ... 1	1	0	0	1													
0 ... 1,6	1	6	0	1													
0 ... 2,5	2	5	0	1													
0 ... 4	4	0	0	1													
0 ... 6	6	0	0	1													
0 ... 10	1	0	0	2													
Customer	9	9	9	9													
Customer underpressure	X	X	X	X													
Output																	
4 ... 20 mA / 2-wire										1							
0 ... 10 V / 3-wire										3							
Customer										9							
Accuracy																	
0.5 % (P _N > 160 mbar)										5							
1 % (P _N ≤ 160 mbar)										8							
Customer										9							
Electrical connection																	
Connector ISO 4400 (IP 65) - plug included										1	0	0					
Connector ISO 4400 (IP 65) - without plug										1	0	3					
Connector M12 x 1, 4-pin (IP 67) - plug included										M	0	0					
Connector M12 x 1, 4-pin (IP 67) - without plug										M	B	S					
Connector M12 x 1, 4-pin (IP 67) - metal - plug included										M	1	0					
Connector M12 x 1, 4-pin (IP 67) - metal - without plug										M	1	H					
Cable outlet / cable length specify (IP 67) ¹										T	A	0					
+ PVC cable / 1 m																	
Customer										9	9	9					
Mechanical connection																	
G 1/2" DIN 3852											1	0	0				
G 1/2" EN 837											2	0	0				
G 1/4" DIN 3852											3	0	0				
G 1/4" EN 837											4	0	0				
G 1/4" internal											J	0	0				
1/4" NPT											N	4	0				
Customer											9	9	9				
Seals																	
Viton (FKM)														1			
EPDM														3			
Customer														9			
Special version																	
Standard															0	0	0
Customer															9	9	9

1 - cable without through capillary (permissible temperature -5 ... +70°C)

Manufacturer reserves the right to change sensor specifications without further notice.

