

CCE-18.601 G



- pressure transmitter
- for low pressure
- nominal pressure: from 0...100 mbar up to 0...6 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 \geq	[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		/	$V_S = 8 \dots 32 V_{DC}$						
Options 3-wire		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		$P_N > 160 \text{ mbar: } \leq \pm 0.5 \% \text{ span}$ $P_N \leq 160 \text{ mbar: } \leq \pm 1 \% \text{ span}$											
Permissible load		2-wire: $R_{max} = [(V_S - V_{S \text{ min}}) / 0.02 A] \Omega$ 3-wire: $R_{min} = 10 \text{ k}\Omega$											
Influence effects		supply: 0.05 % span / 10 V load: 0.05 % span / $k\Omega$											
Response time		2-wire: $\leq 10 \text{ msec}$					3-wire: $\leq 3 \text{ msec}$						
Long term stability		$\leq \pm 0.2 \% \text{ span / year at reference conditions}$											
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		$\leq \pm 0.3 \% \text{ span / } 10 \text{ K}$				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											
Diaphragm		stainless steel 1.4435 (316 L)											
Media wetted parts		pressure port, seals, diaphragm											

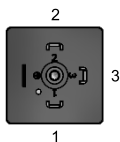
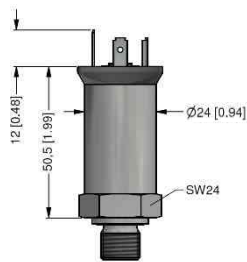
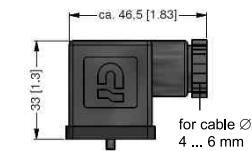


Pressure transmitters

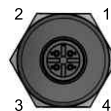
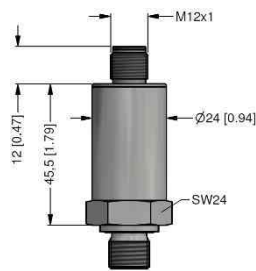
Miscellaneous	
Weight	approx. 120 g
Current consumption	2-wire: max. 25 mA 3-wire ratiometric: typ. 1.5 mA 3-wire voltage: max. 7 mA (short circuit current: max. 20 mA)
Operational life	100 million load cycles
CE-conformity	EMC Directive: 2014/30/EU

ELECTRICAL CONNECTION

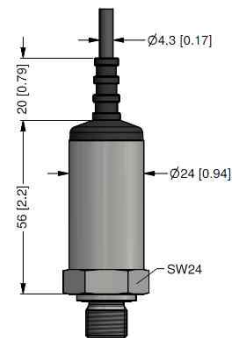
Wiring diagrams			
2-wire-system (current)		3-wire-system (voltage)	
Pin configuration			
Electrical connection	ISO 4400	M12x1 (4-pin), metal	cable colour (IEC 60757)
Supply +	1	1	WH (white)
Supply -	2	2	BN (brown)
Signal + (for 3-wire)	3	3	GN (green)
Shield	ground pin	4	GNYE (green-yellow)



ISO 4400 (IP 65)



M12x1, 4-pin (IP 67)

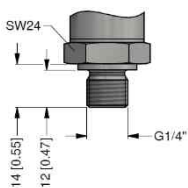


cable outlet with PVC-cable (IP 67)^{3,4}

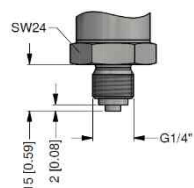
³ standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C)

⁴ different cable types and lengths available, permissible temperature depends on kind of cable

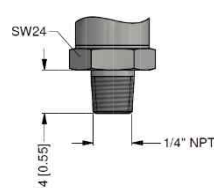
MECHANICAL CONNECTION



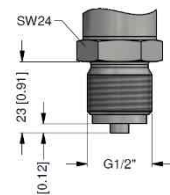
G1/4" DIN 3852



G1/4" EN 837



1/4" NPT



G1/2" EN 837

Pressure transmitters

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																
Customer	9	9	9	9																
Customer underpressure	X	X	X	X																
Pressure																				
Gauge										R										
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 DIN 43650 (ISO 4400) (IP 65)										1	0	0								
Connector M12 x 1, 4-pin (IP 67)										M	0	0								
Connector M12 x 1, 4-pin (IP 67) - metal										M	1	0								
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
G 1/2" EN 837																				0
G 1/4" DIN 3852																				0
G 1/4" EN 837																				0
G 1/4" internal																				J
1/4" NPT																				N
Customer																				4
																				0
																				9
																				9
																				9
Seals																				
Viton (FKM)																				1
Customer																				9
Special version																				
Standard																				0
Customer																				0
																				0
																				9
																				9
																				9

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

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

