

CCE-17.600G



- pressure transmitter
- heavy duty
- nominal pressure: from 0...6 bar up to 0...600 bar
- output signals: 2-wire: 4...20 mA; 3-wire: 0...10V / ratiometric
- stainless steel sensor, welded
- accuracy 0.5 % span
- optionally: oxygen application



PREFERRED AREAS OF USE ARE



Plant and Machine Engineering



Commercial vehicles and mobile hydraulics



Medical technology



Refrigeration engineering

TECHNICAL DATA

Input pressure range													
Nominal pressure gauge	[bar]	6	10	16	25	40	60	100	160	250	400	600	
Overpressure (static)	[bar]	12	20	32	50	80	120	200	320	500	800	1 200	
Burst pressure	[bar]	30	50	80	125	200	300	500	800	1 400	2 000	3 000	
Vacuum resistance		unlimited											
Output signal / Supply													
Standard		2-wire:		4 ... 20 mA		/ $V_S = 8 \dots 32 V_{DC}$							
Options		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		$\pm 0.5 \% \text{ span}$											
Permissible load		2-wire:		$R_{max} = [(V_S - V_S \text{ min}) / 0.02 A] W$									
		3-wire:		$R_{min} = 10 \text{ kW}$									
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		$\pm 0.3 \% \text{ span / year}$ 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		$\pm 0.3 \% \text{ span / 10 K}$			in compensated range:				0 ... 70 °C				
Permissible temperatures		medium: -40 ... 125 °C				electronics / environment:				-40 ... 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, 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		stainless steel 1.4571 (316Ti)											
Housing		stainless steel 1.4301 (304)											
Seal of pressure port		FKM: G 1/4" DIN 3852					others on request						
Seal of sensor		none (welded)											
Diaphragm		stainless steel 1.4542 (630)											
Media wetted parts		pressure port, seal of pressure port, diaphragm											



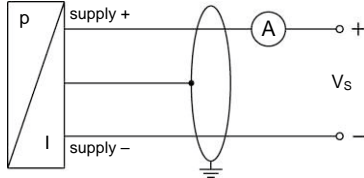
Miscellaneous	
Weight	approx. 120 g
Current consumption	2-wire: max. 25 mA 3-wire ratiometric: typ. 3 mA 3-wire voltage: max. 7 mA (short circuit current: max. 20 mA)
Operational life	100 million load cycles
CE-conformity	EMC Directive: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (module A) ²

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

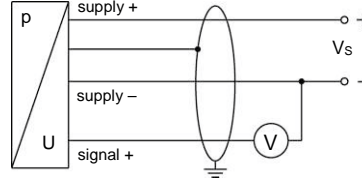
ELECTRICAL CONNECTION

Wiring diagrams

2-wire-system (current)

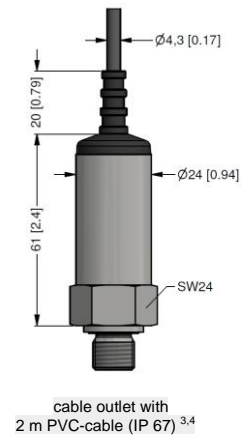
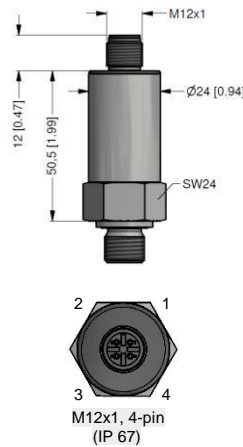
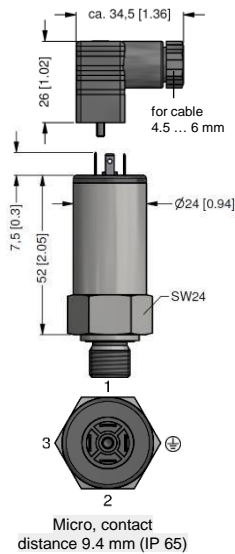
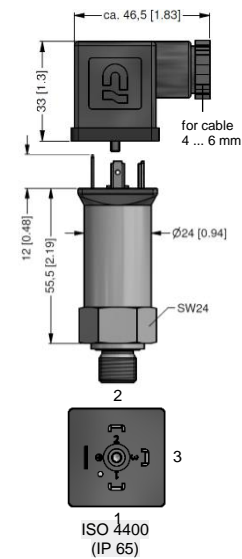


3-wire-system (voltage)



Pin configuration

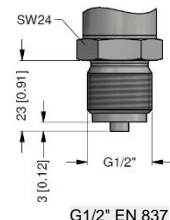
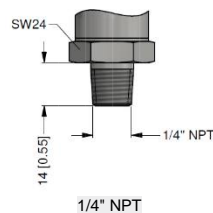
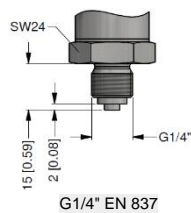
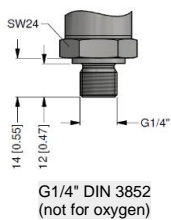
Electrical connection	ISO 4400	Micro (contact distance 9.4 mm)	M12x1 (4-pin), metal	cable colour (DIN 47100)
Supply +	1	1	1	wh (white)
Supply -	2	2	2	bn (brown)
Signal + (for 3-wire)	3	3	3	gn (green)
Shield	ground pin	ground pin	4	gn/ye (green / yellow)



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-17.600G- -R-

Input [bar]																				
0 ... 6	6	0	0	1																
0 ... 10	1	0	0	2																
0 ... 16	1	6	0	2																
0 ... 25	2	5	0	2																
0 ... 40	4	0	0	2																
0 ... 60	6	0	0	2																
0 ... 100	1	0	0	3																
0 ... 160	1	6	0	3																
0 ... 250	2	5	0	3																
0 ... 400	4	0	0	3																
0 ... 600	6	0	0	3																
Customer	9	9	9																	
Customer underpressure	X	X	X	X																
Output																				
4 ... 20 mA / 2-wire																				1
0 ... 10 V / 3-wire																				3
10 ... 90% of Vs / 3-wire ratiometric (Vs = 2,7 ... 5 V)																				R
Customer																				9
Accuracy																				
0,5 %																				5
0,5 % including Calibration Certificate																				T
Table of measured values for acc. 0,5 %																				N
Customer																				9
Electrical connection																				
Connector ISO 4400 (IP 65) - plug included																				1 0 0
Connector ISO 4400 (IP 65) - without plug																				1 0 3
Cable gland PG7 / cable length specify (IP 67)																				4 0 0
+ PVC cable / 1 m																				
Connector ISO 4400 - potting compound inside (IP 67) - plug included																				E 0 0
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" EN 837																				2 0 0
G 1/4" DIN 3852 (only with seals "P")																				3 0 0
G 1/4" EN 837																				4 0 0
1/4" NPT																				N 4 0
1/2" NPT																				N 0 0
G 1/4" internal																				J 0 0
M 20 x 1,5 EN 837																				8 0 0
Customer																				9 9 9
Seals																				
Without - welded + Viton (FKM) (only for G 1/4" DIN 3852 connection)																				P
Without - welded																				2
Customer																				9
Special version																				
Standard																				0 0 0
Oxygen application (DIN 3852 possible only up to 25 bar)																				0 0 7
Oil and grease free																				0 0 8
With throttle screw M4																				0 7 0
Customer																				9 9 9

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

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

