

CCE-17.609 G



- pressure transmitter
- nominal pressure: from 0...6 bar up to 0...60 bar / -1...6 bar up to -1...60 bar
- output signals: 2-wire: 4...20 mA; 3-wire: 0...10 V/ratiometric
- stainless steel sensor, welded
- accuracy 0.5 % span



PREFERRED AREAS OF USE ARE



Plant and Machine Engineering



Refrigeration engineering

TECHNICAL DATA

Pressure ranges							
Nominal pressure gauge	[bar]	6	10	16	25	40	60
Overpressure	[bar]	12	20	32	50	80	120
Burst pressure ≥	[bar]	30	50	80	125	200	300
Vacuum resistance		unlimited					

Vacuum ranges							
Nominal pressure gauge	[bar]	-1 ... 6	-1 ... 10	-1 ... 16	-1 ... 25	-1 ... 40	-1 ... 60
Overpressure	[bar]	12	20	32	50	80	120
Burst pressure	[bar]	30	50	80	125	200	300

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}
	3-wire ratiometric:	10...90 % of V _S	/ V _S = 2.7...5 V _{DC}

Performance	
Accuracy ¹	≤ ± 0.5 % span
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 % span / 10 V load: 0.05 % span / kΩ
Response time	2-wire: ≤ 10 msec 3-wire: ≤ 3 msec
Long term stability	≤ ± 0.3 % 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: -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 sensor	none (welded)
Diaphragm	stainless steel 1.4542 (630)
Media wetted parts	pressure port, diaphragm



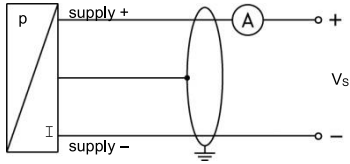
Pressure transmitters

Miscellaneous	
Mechanical connection	7/16"-20 UNF
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

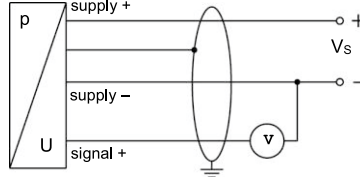
ELECTRICAL CONNECTION

Wiring diagrams

2-wire-system (current)

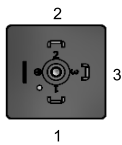
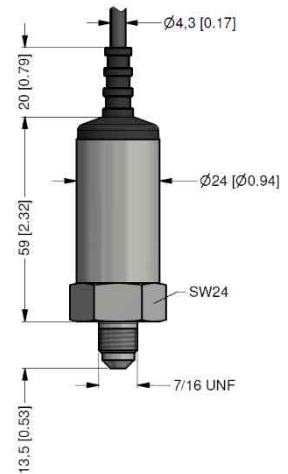
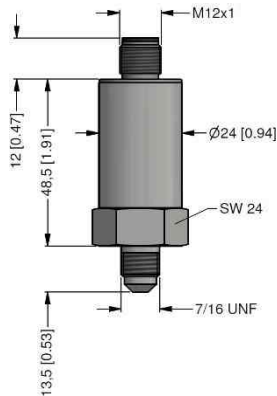
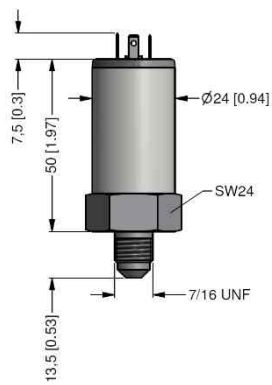
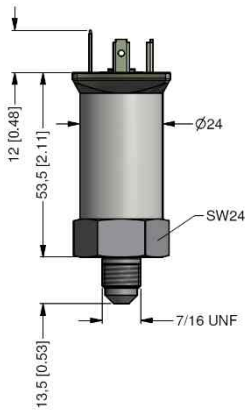
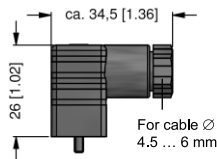
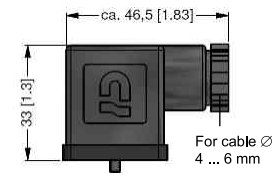


3-wire-system (voltage)

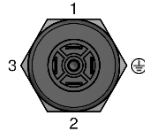


Pin configuration

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



ISO 4400 (IP 65)



Micro, contact distance 9.4 mm (IP 65)



M12x1, 4-pin (IP 67)

cable outlet with PVC-cable (IP 67)^{2,3}

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

³ different cable types and lengths available, permissible temperature depends on kind of cable



ORDER CODE

CCE-17.609G- - 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										
-1 ... 6	V	6	0	2										
-1 ... 10	V	1	0	3										
-1 ... 16	V	1	6	3										
-1 ... 25	V	2	5	3										
-1 ... 40	V	4	0	3										
-1 ... 60	V	6	0	3										
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									
10 ... 90% Vs / 3-wire ratiometric (Vs = 2,7 ... 5 V DC)					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 DIN 43650 (ISO 4400), IP 65						1	0	0						
Cable outlet (cable length needed, IP68) ¹						T	A	0						
PVC cable/ + 1m														
Customer						9	9	9						
Mechanical connection														
7/16" - 20 UNF									U	0	0			
Customer									9	9	9			
Seals														
Without- welded												2		
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.

