

CCE-18.600 G



- pressure transmitter
- without media isolation
- nominal pressure: from 0...100 mbar up to 0...6 bar
- output signals: 2-wire: 4...20 mA; 3-wire: 0...10 V
- stainless steel / silicon sensor
- accuracy 0.5 % span



PREFERRED AREAS OF USE ARE



Plant and Machine Engineering



Compressed air network
General mechanical engineering

TECHNICAL DATA

| Input pressure range | | | | | | | | | | | |
|------------------------|-------|----------|-----|------|-----|-----|-----|-----|-----|----|----|
| Nominal pressure gauge | [bar] | -1 ... 0 | 0.1 | 0.25 | 0.4 | 0.6 | 1 | 1.6 | 2.5 | 4 | 6 |
| Overpressure | [bar] | 3 | 0.5 | 1 | 1 | 3 | 3 | 6 | 10 | 10 | 20 |
| Burst pressure | [bar] | 5 | 1,5 | 3 | 3 | 3 | 7,5 | 7,5 | 15 | 25 | 25 |

| Output signal / Supply | |
|------------------------|---|
| Standard | 2-wire: 4 ... 20 mA / $V_S = 8 \dots 32 V_{DC}$ |
| Option | 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 | $\leq \pm 0.5 \%$ span |
| Permissible load | 2-wire: $R_{max} = [(V_S - V_{Smin}) / 0.02 A] \Omega$ 3-wire: $R_{min} = 10 k\Omega$ |
| Influence effects | supply: 0.05 % span / 10 V load: 0.05 % span / k Ω |
| Response time | 2-wire: ≤ 10 msec 3-wire: ≤ 3 msec |
| Long term stability | $\leq \pm 0,2 \%$ 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) | | | |
|-----------------------------------|----------|--------------|--------------|
| Nominal pressure P_N | [bar] | -1 ... 0 | ≤ 0.4 |
| Tolerance band | [% span] | $\leq \pm 1$ | $\leq \pm 1$ |
| in compensated range | [°C] | 0 ... 70 | -20 ... 85 |

| Permissible temperatures | | | |
|--------------------------|------------------------|--|------------------------|
| Permissible temperatures | medium: -25 ... 125 °C | electronics / environment: -25 ... 85 °C | storage: -40 ... 85 °C |

| Electrical protection | |
|-------------------------------|---|
| Short-circuit protection | permanent |
| 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 / 11 msec according to DIN EN 60068-2-27 |

| Materials | |
|-------------------------|---|
| Pressure port / housing | stainless steel 1.4301 (304) |
| Seals | FKM |
| Sensor | stainless steel 1.4404 (316L), silicon, glass, epoxy or RTV |
| Media wetted parts | pressure port, seals, sensor |



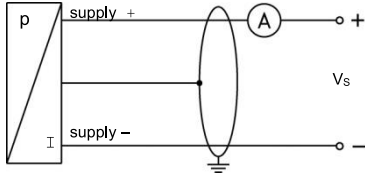
Pressure transmitters

| Miscellaneous | |
|---------------------|---|
| Weight | approx. 120 g |
| Permissible media | pressurized air, non-aggressive gases |
| Current consumption | 2-wire: max. 25 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 |

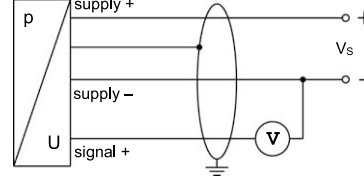
ELECTRICAL CONNECTION

Wiring diagrams

2-wire-system (current)

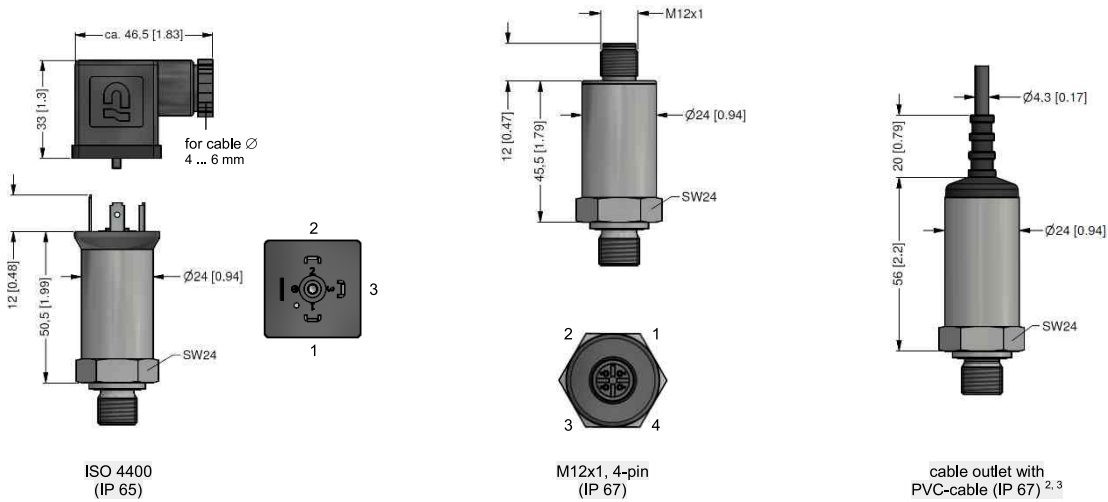


3-wire-system (voltage)



Pin configuration

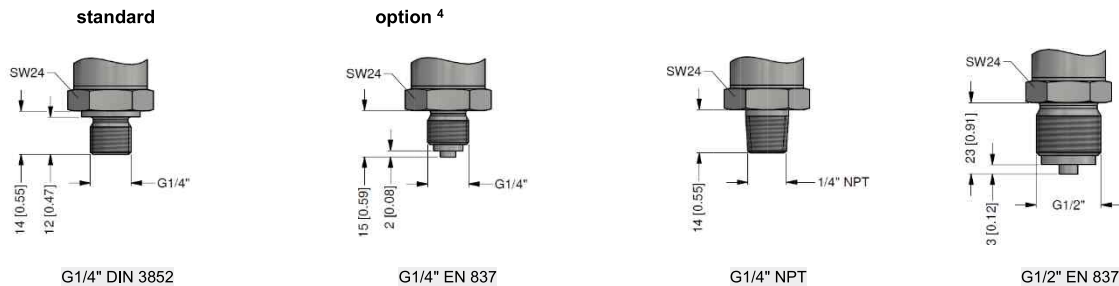
| Electrical connections | ISO 4400 | M12x1 (4-pin), metal | cable colour (DIN 47100) |
|------------------------|---------------------|----------------------|--------------------------|
| Supply + | 1 | 1 | wh (white) |
| Supply - | 2 | 2 | bn (brown) |
| Signal + (for 3-wire) | 3 | 3 | gn (green) |
| Shield | ground pin \oplus | 4 | ye/gn (yellow / green) |



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

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

MECHANICAL CONNECTION



⁴ other mechanical connections on request



ORDER CODE

CCE-18.600G--R-----

| | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|--|---|---|---|---|
| Input [bar] | | | | | | | | | | | | | |
| 0 ... 0,1 | 1 | 0 | 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 | | | | | | | | | |
| -1...0 | X | 1 | 0 | 2 | | | | | | | | | |
| 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 | | | | | | | | | | | | | |
| 0,50% | | | | | 5 | | | | | | | | |
| 0,5 % including Calibration Certificate | | | | | T | | | | | | | | |
| 1 % (underpressure ranges) | | | | | 8 | | | | | | | | |
| Table of measured values for accuracy 0,5 % | | | | | N | | | | | | | | |
| Customer | | | | | 9 | | | | | | | | |
| Electrical connection | | | | | | | | | | | | | |
| Connector DIN 43650 (ISO 4400) (IP 65) | | | | | 1 | 0 | 0 | | | | | | |
| Cable gland PG7 / cable length specify (IP 67) | | | | | 4 | 0 | 0 | | | | | | |
| + PVC cable / 1 m | | | | | | | | | | | | | |
| 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 1/4" DIN 3852 | | | | | | 3 | 0 | 0 | | | | | |
| G 1/4" EN 837 | | | | | | 4 | 0 | 0 | | | | | |
| 1/4" NPT | | | | | | N | 4 | 0 | | | | | |
| Customer | | | | | | 9 | 9 | 9 | | | | | |
| Seals | | | | | | | | | | | | | |
| Viton (FKM) | | | | | | | | | | 1 | | | |
| 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.

