



XMP ci

Process Pressure Transmitter with HART®-communication

Ceramic Sensor

accuracy according to IEC 60770:
0.1 % FSO

Nominal pressure

from 0 ... 160 mbar up to 0... 20 bar

Output signals

2-wire: 4 ... 20 mA
others on request

Special characteristics

- ▶ turn-down 1:5
- ▶ two chamber aluminium die cast case or stainless field housing
- ▶ internal or flush mounted capacitive ceramic sensor
- ▶ HART®-communication
- ▶ explosion protection intrinsic safety (ia)
- ▶ diaphragm Al₂O₃ 99.9 %

Optional versions

- ▶ explosion protection flameproof equipment (d)
- ▶ with integrated display and operating module
- ▶ several process connections (thread, flange, DRD etc.)

The process pressure transmitter XMP ci measures the pressure of gases, steam and fluids. The special-developed capacitive ceramic sensor for this transmitter has a high overpressure capability and excellent media stability.

Several process connections e.g. thread or flange are available. The transmitter is as a standard equipped with HART®-communication, the customer can choose between a two chamber aluminium die cast case or a stainless field housing.

Preferred areas of use are



Oil and gas industry



Chemical and petrochemical industry

Preferred using in



Fuel and oil

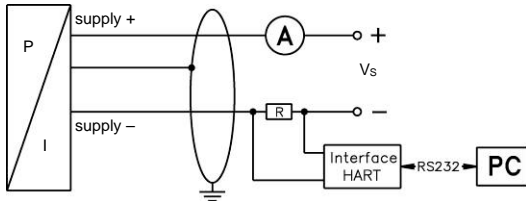


Aggressive media



| Miscellaneous | |
|-----------------------|--|
| Display (optionally) | LC-display, visible range 32.5 x 22.5 mm; 5-digit 7-segment main display, digit height 8 mm, range of indication ± 9999 ; 8-digit 14-segment additional display, digit height 5 mm; 52-segment bargraph; accuracy 0.1 % ± 1 digit |
| Ingress protection | IP 67 |
| Installation position | any |
| Weight | min. 400 g (depending on housing and mechanical connection) |
| Operational life | 100 million load cycles |
| CE-conformity | EMC Directive: 2014/30/EU |
| ATEX Directive | 2014/34/EU |

Wiring diagram

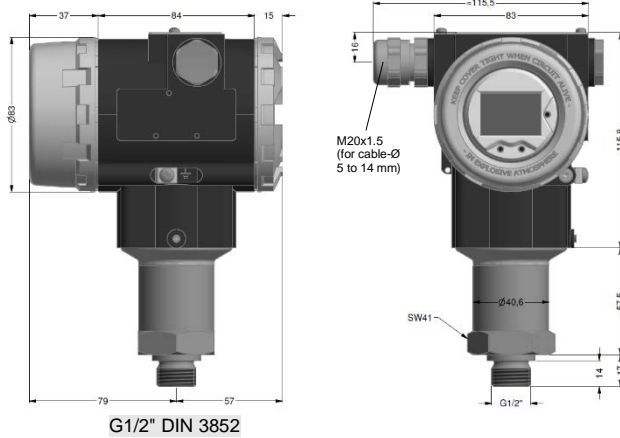


Pin configuration

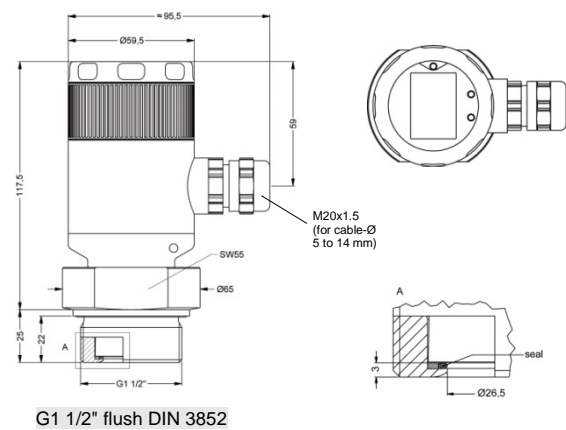
| Electrical connections | aluminium die cast case: terminal clamps (clamp section: 2.5 mm ²) | stainless steel field housing: terminal clamps (clamp section: 1.5 mm ²) |
|------------------------|--|--|
| Supply + | IN+ | IN+ |
| Supply - | IN- | IN- |
| Test | Test | - |
| Shield | ⊕ | ⊕ |

Housing designs ⁶ (dimensions in mm)

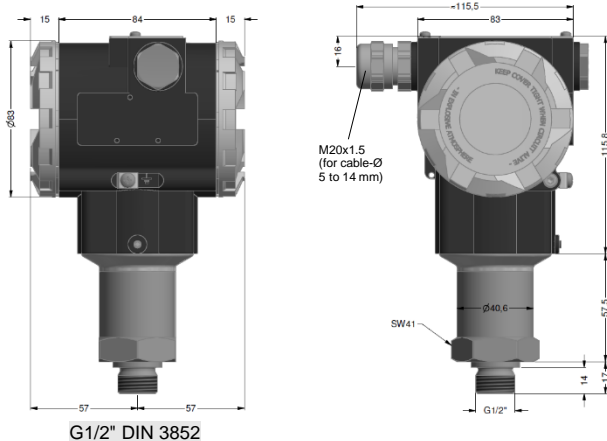
aluminium die cast case with display



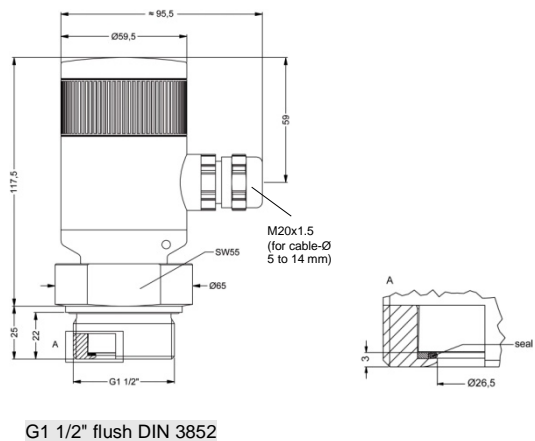
stainless steel field housing with display



aluminium die cast case without display

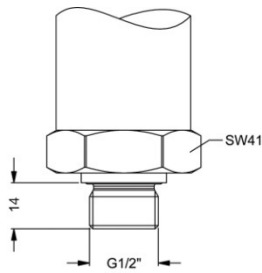


stainless steel field housing without display

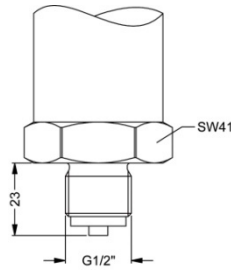


⁶ aluminium die cast case is horizontally rotatable as standard

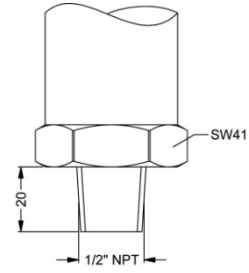
Standard pressure ports (dimensions in mm)



G1/2" DIN 3852



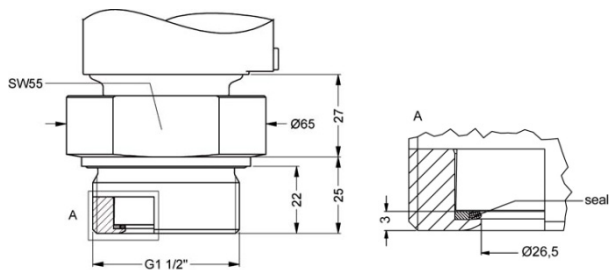
G1/2" EN 837



1/2" NPT

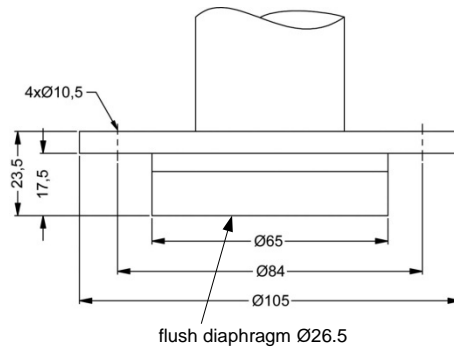
Process connections (dimensions in mm)

Inch thread



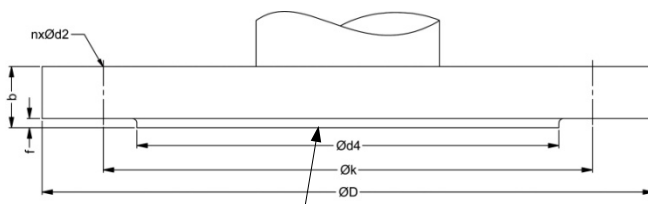
G1 1/2" flush DIN 3852

DRD⁷



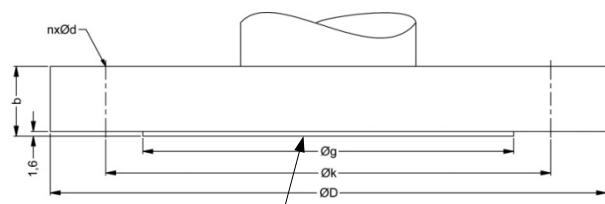
flush diaphragm Ø26.5

Flange (DIN 2501)



flush diaphragm Ø26.5

Flange (ANSI)



flush diaphragm Ø26.5

| | dimensions in mm | | |
|------|------------------|----------|----------|
| size | DN25 | DN50 | DN80 |
| D | 115 | 165 | 200 |
| k | 85 | 125 | 160 |
| d4 | 68 | 102 | 138 |
| b | 18 | 20 | 20 |
| f | 2 | 3 | 3 |
| n | 4 | 4 | 8 |
| d2 | 14 | 18 | 18 |
| pN | ≤ 40 bar | ≤ 40 bar | ≤ 16 bar |

| | dimensions in mm | |
|------|------------------|------------|
| size | 2"/150 lbs | 3"/150 lbs |
| D | 152.4 | 190.5 |
| g | 91.9 | 127 |
| k | 120.7 | 152.4 |
| b | 19.1 | 23.9 |
| n | 4 | 4 |
| d | 19.1 | 19.1 |
| pN | ≤ 10 bar | ≤ 10 bar |

⁷ mounting flange is included in the delivery (already pre-assembled)
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Ordering code XMP ci

XMP ci

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|--|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|---------|
| Pressure | | | | | | | | | | | | | | | | | | | | |
| | gauge | 5 | 1 | E | | | | | | | | | | | | | | | | |
| Input | [bar] [△] | | | | | | | | | | | | | | | | | | | |
| | 0.16 | 1 | 6 | 0 | 0 | | | | | | | | | | | | | | | |
| | 0.40 | 4 | 0 | 0 | 0 | | | | | | | | | | | | | | | |
| | 1 | 1 | 0 | 0 | 1 | | | | | | | | | | | | | | | |
| | 2 | 2 | 0 | 0 | 1 | | | | | | | | | | | | | | | |
| | 5 | 5 | 0 | 0 | 1 | | | | | | | | | | | | | | | |
| | 10 | 1 | 0 | 0 | 2 | | | | | | | | | | | | | | | |
| | 20 | 2 | 0 | 0 | 2 | | | | | | | | | | | | | | | |
| | customer | 9 | 9 | 9 | 9 | | | | | | | | | | | | | | | consult |
| Design | | | | | | | | | | | | | | | | | | | | |
| Aluminium die cast case | | | | | | | | | | | | | | | | | | | | |
| | with display | | | | | A | 0 | | | | | | | | | | | | | |
| | without display | | | | | A | N | | | | | | | | | | | | | |
| Stainless steel field housing | | | | | | | | | | | | | | | | | | | | |
| | with display | | | | | F | V | | | | | | | | | | | | | |
| | without display | | | | | F | N | | | | | | | | | | | | | |
| | customer | | | | | 9 | 9 | | | | | | | | | | | | | consult |
| Output | | | | | | | | | | | | | | | | | | | | |
| | intrinsic safety (ia) | | | | | | | | | | | | | | | | | | | |
| | 4 ... 20 mA / 2-wire | | | | | I | | | | | | | | | | | | | | |
| | with HART [®] -communication | | | | | | | | | | | | | | | | | | | |
| | flameproof equipment (d) | | | | | | | | | | | | | | | | | | | |
| | 4 ... 20 mA / 2-wire | | | | | G | | | | | | | | | | | | | | |
| | with HART [®] -communication ¹ | | | | | | | | | | | | | | | | | | | |
| | customer | | | | | 9 | | | | | | | | | | | | | | consult |
| Accuracy | | | | | | | | | | | | | | | | | | | | |
| $p_N < 1 \text{ bar}$: | 0.2 % FSO | | | | | B | | | | | | | | | | | | | | |
| $p_N \geq 1 \text{ bar}$: | 0.1 % FSO | | | | | 1 | | | | | | | | | | | | | | |
| | customer | | | | | 9 | | | | | | | | | | | | | | consult |
| Electrical connection | | | | | | | | | | | | | | | | | | | | |
| | terminal clamp alu housing | | | | | A | K | 0 | | | | | | | | | | | | |
| | terminal clamp field housing | | | | | 8 | 8 | 0 | | | | | | | | | | | | |
| | customer | | | | | 9 | 9 | 9 | | | | | | | | | | | | consult |
| Mechanical connection | | | | | | | | | | | | | | | | | | | | |
| <i>standard pressure connections:</i> | | | | | | | | | | | | | | | | | | | | |
| | G1/2" DIN 3852 | | | | | 1 | 0 | 0 | | | | | | | | | | | | |
| | G1/2" EN 837 | | | | | 2 | 0 | 0 | | | | | | | | | | | | |
| | 1/2" NPT | | | | | N | 0 | 0 | | | | | | | | | | | | |
| <i>process connections:</i> | | | | | | | | | | | | | | | | | | | | |
| | G 1 1/2" DIN flush (DIN 3852) | | | | | M | 0 | 0 | | | | | | | | | | | | |
| | flange DN 25 / PN 40 (DIN 2501) | | | | | F | 2 | 0 | | | | | | | | | | | | |
| | flange DN 50 / PN 40 (DIN 2501) | | | | | F | 2 | 3 | | | | | | | | | | | | |
| | flange DN 80 / PN 16 (DIN 2501) | | | | | F | 1 | 4 | | | | | | | | | | | | |
| | flange DN 2" / 150 lbs (ANSI B16.5) ² | | | | | F | 3 | 2 | | | | | | | | | | | | |
| | flange DN 3" / 150 lbs (ANSI B16.5) ² | | | | | F | 3 | 3 | | | | | | | | | | | | |
| | DRD Ø 65 mm ³ | | | | | D | R | D | | | | | | | | | | | | |
| | customer | | | | | 9 | 9 | 9 | | | | | | | | | | | | consult |
| Diaphragm | | | | | | | | | | | | | | | | | | | | |
| | ceramics Al ₂ O ₃ 99,9 % | | | | | | | | | | | | | | | | | | | |
| | customer | | | | | | | | | | | | | | | | | | | consult |
| Seals | | | | | | | | | | | | | | | | | | | | |
| | FKM | | | | | | | | | | | | | | | | | | | 1 |
| | EPDM | | | | | | | | | | | | | | | | | | | 3 |
| | customer | | | | | | | | | | | | | | | | | | | 9 |
| Pressure port | | | | | | | | | | | | | | | | | | | | |
| <i>standard:</i> | | | | | | | | | | | | | | | | | | | | |
| | stainless steel 1.4404 (316L) | | | | | | | | | | | | | | | | | | | 1 |
| <i>option for G 1 1/2" flush:</i> | | | | | | | | | | | | | | | | | | | | |
| | PVDF ⁴ | | | | | | | | | | | | | | | | | | | B |
| | customer | | | | | | | | | | | | | | | | | | | 9 |
| Special version | | | | | | | | | | | | | | | | | | | | |
| | standard | | | | | | | | | | | | | | | | | | | 0 0 0 |
| | customer | | | | | | | | | | | | | | | | | | | 9 9 9 |

[△] if setting range shall be different from nominal range please specify in your order

¹ only possible in combination with aluminium die cast case

² 2"/150 lbs and 3"/150 lbs only possible for nominal pressure ranges $p_N \leq 10 \text{ bar}$

³ mounting flange is included in the delivery (already pre-assembled)

⁴ for pressure port in PVDF the operation medium temperature is -25 ... 60 °C

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