

FOR FINE PRESSURE AND FLOW MEASUREMENT

Relative and differential pressure transmitter type 692

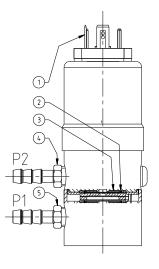
Pressure range 0 ... 0.1 – 25 bar



Type 692 pressure transmitters have a unique, well proven ceramic technolgy. There are variety of pressure and electrical connections available, together with several stanadardised output signals. The wide variety of options makes these transmitters ideal for applications across a broad spectrum of industries.

- Very low temperature sensitivity
- High resistance to extreme temperatures
- No mechanical creepage
- Modular system and choice of materials to suit individual applications

| + 1 · 1 · 1 | | | | |
|---------------------------------|-----------------|--------------|-------------------------------|--|
| Technical overview | | | | |
| Pressure range | | | | |
| Relative and differential | | | | 0 0.1 – 25 bar |
| Operating conditions | | | | |
| Medium | | | | Liquids and neutral gases |
| Temperature | | | Medium / ambient | -15 +85 °C |
| Tolerable overload on one side | | | Storage | -40 +85 °C See order code selection table |
| | | | <u>≤</u> 6 bar | 25 bar |
| System pressure | | | ≥ 10 bar | 50 bar |
| Rupture pressure | | | | 1.5x fs |
| Materials | | | | |
| Case | | | | Stainless steel 1.4305 / AISI 303 |
| | | | Pressure connection | Stainless steel 1.4305 / AISI 303, |
| Materials in contact with the m | iedium | | | PVDF, CuZn nickel plated |
| | | | Sensor Sealing material | ceramic Al ₂ O ₃ (96%) FPM, EPDM, NBR, MVQ |
| | | | Sealing material | TTIVI, LI DIVI, NDIX, IVIVQ |
| Electrical overview | | | | |
| | Output | Power supply | Load | Current consumption (at nominal pressure) |
| 2 wire | 4 20 mA | 11 33 VDC | < supply voltage - 11 V [Ohm] | < 20 mA |
| 3 wire | 0 5 V 0 10 V | 11 33 VDC | >10 kOhm >10 kOhm | < 5 mA < 5 mA |
| Polarity reversal protection | | | | d against crossover up to max. supply voltage. |
| | | | | |
| Dynamic response Response time | | | | < 5 ms |
| Load cycle | | | | < 50 Hz |
| Load Cycle | | | | V 30 112 |
| Protection standard | | | | |
| IP 65 | | | | |
| Electrical connection | | | | |
| Connector DIN EN 175301-803 | 3-A | | | |
| Connector DIN EN 60130-9 | | | | |
| Cable 1.5 m | | | | PG7 |
| | | | | |
| Pressure connection | | | | Ø 4 mm |
| Pressure tube tip | | | | Ø 6 mm |
| Course fitting | | | | Ø 6 mm |
| Screw fitting | | | | Ø 8 mm |
| Outside thread | | | | 7/ ₁₆ -20 UNF |
| | | | | G 1/8 |
| Inside thread | | | | ⅓ -27 NPT G ⅓ |
| - | | | | 5 / 8 |
| Mounting instruction | | | | |
| Installation arrangement | | | | Unrestricted |
| Mounting | | | | Mounting bracket |
| Tests / Admissions | | | | |
| Electromagnetic compatibility | | | | CE conformity acc. EN 61326-2-3 |
| | | | | • |
| Weight | | | | |
| ~ 430 g | | | | |
| | | | | |



Legend to cross-section drawing

accessories included

- Electrical connection
 Seals
 Ceramic element
 P2 Pressure connection (lower pressure)
 P1 Pressure connection (higher pressure)

Packaging Single packaging in cardboard

Accuracy

| Parameter | | Unit | Versions with overload on one side ≤ 2x nominal pressure | Versions with overload on one side ≤ 3x nominal pressure | Versions with overload on one side ≤ 7.5x nominal pressure |
|------------------------------------|---------|----------|--|--|--|
| Tolerance zero point | max. | % fs | ± 0.4 | ± 0.75 | ± 1.25 |
| Tolerance full scale | max. | % fs | ± 0.4 | ± 0.75 | ± 1.25 |
| Resolution | | % fs | 0.1 | 0.15 | 0.25 |
| Total of linearity, | | | | | |
| hysteresis and repeatability | max. | % fs | ± 0.5 | ± 0.75 | ± 1.25 |
| Long term stability acc. to DIN EI | V 60770 | % fs | ± 0.5 | ± 0.5 | ± 0.5 |
| TC zero point 1) | max. | % fs/10K | See order code selection table | See order code selection table | See order code selection table |
| TC sensitivity 1) | max. | % fs/10K | ± 0.15 | ± 0.23 | ± 0.38 |

Test conditions: 25 °C, 45% RH, Power supply 24 VDC TC z.p. / TC s. -15 ... +80 °C

| Order code selecti | on table | | | 692.9 | Χ | X | Χ | X | X | Χ | Χ | Χ | Χ |
|------------------------------|--|---|------------------|--------------------|---|---|---|---|---|---|---|---------------|-----|
| Pressure range ²⁾ | | Tolerable overload on one side | | TC z.p. (fs/10K) | | | | | | | | | |
| | | P1 | P2 | | | | | | | | | | |
| | 0 + 0.1 bar | max. 0.6 bar (6 x Nominal pressure) | 0.6 bar | ± 1.2 % | 0 | 0 | | | | | | | |
| | 0 + 0.2 bar | max. 1.2 bar (6 x Nominal pressure) | 1.2 bar | ± 1.2 % | 0 | 2 | | | | | | | |
| | 0 + 0.2 bar | max. 0.6 bar (3 x Nominal pressure) | 0.6 bar | ± 0.6 % | 4 | 0 | | | | | | | |
| | 0 +0.25 bar | max. 1.2 bar (4.8 x Nominal pressure) | 1.2 bar | ± 1.0 % | 0 | 3 | | | | | | | |
| | 0 +0.25 bar | max. 0.6 bar (2.4 x Nominal pressure) | 0.6 bar | ± 0.5 % | 4 | 1 | | | | | | | |
| | 0 + 0.3 bar | max. 0.6 bar (2 x Nominal pressure) | 0.6 bar | ± 0.4 % | 0 | 1 | | | | | | \rightarrow | |
| | 0 + 0.4 bar 0 + 0.4 bar | max. 1.2 bar (3 x Nominal pressure) max. 2 bar (5 x Nominal pressure) | 1.2 bar 2 bar | ± 0.6 % ± 1.0 % | 0 | 5 | | | | | | \rightarrow | |
| | 0 + 0.4 bar 0 + 0.5 bar | max. 1.2 bar (2.4 x Nominal pressure) | 1.2 bar | ± 1.0 % ± 0.5 % | 0 | 6 | | | | | | - | |
| | 0 + 0.5 bar | max. 3 bar (6 x Nominal pressure) | 3 bar | ± 0.5 % | 0 | 7 | | | | | | _ | |
| | 0 + 0.5 bar | max. 1.2 bar (2 x Nominal pressure) | 1.2 bar | ± 0.8 % ± 0.4 % | 0 | 8 | | | | | | \rightarrow | |
| | 0 + 0.6 bar | max. 3 bar (5 x Nominal pressure) | 3 bar | ± 0.4 % | 0 | 9 | | | | | | \rightarrow | |
| | 0 + 0.0 bar | max. 2 bar (2 x Nominal pressure) | 2 bar | ± 0.7 % | 1 | 1 | | | | | | \rightarrow | |
| | 0 + 1 bar | max. 5 bar (5 x Nominal pressure) | 5 bar | ± 1.0 % | 1 | 2 | | | | | | \rightarrow | |
| | 0 + 1.6 bar | max. 3.2 bar (2 x Nominal pressure) | 3.2 bar | ± 0.4 % | 1 | 3 | | | | | | \rightarrow | |
| | 0 + 1.6 bar | max. 12 bar (7.5 x Nominal pressure) | 12 bar | ± 1.0 % | 1 | 4 | | | | | | \rightarrow | |
| | 0 + 1.6 bar | max. 5 bar (2 x Nominal pressure) | 5 bar | ± 0.4 % | 1 | 5 | | | | | | \rightarrow | |
| | 0 + 2.5 bar | max. 12 bar (4.8 x Nominal pressure) | 12 bar | ± 0.4 % | 1 | 6 | | | | | | \rightarrow | |
| | 0 + 2.3 bar | max. 8 bar (2 x Nominal pressure) | 8 bar | ± 0.6 % ± 0.4 % | 1 | 7 | | | | | | \rightarrow | |
| | 0 + 4 bar | max. 12 bar (3 x Nominal pressure) | 12 bar | ± 0.4 % ± 0.5 % | 1 | 8 | | | | | | \rightarrow | |
| | 0 + 6 bar | max. 12 bar (2 x Nominal pressure) | 12 bar | ± 0.4 % | 1 | 9 | | | | | | - | |
| | 0 + 10 bar | max. 20 bar (2 x Nominal pressure) | 20 bar | ± 0.4 % | 3 | 0 | | | | | | \rightarrow | |
| | 0 + 16 bar | max. 32 bar (2 x Nominal pressure) | 32 bar | ± 0.4 % | 3 | 1 | | | | | | - | |
| | 0 + 25 bar | max. 50 bar (2 x Nominal pressure) | 50 bar | ± 0.4 % | 3 | 2 | | | | | | \rightarrow | |
| | | signal at these pressures | JU Dai | ± 0.4 % | 3 | | | | | | | - | _ |
| Sealing material | FPM | Fluoro elastomer | | | | | 0 | | | | | \rightarrow | |
| Sealing material | EPDM | Ethylene propylene | | | | | 1 | | | | | | |
| | NBR | Butadiene Acrylonitrile | | | | | 2 | | | | | $\overline{}$ | |
| | MVQ | Silicone polymer | | | | | 3 | | | | | _ | |
| Adjustment | Factory | Silicone polymer | | | | | 5 | 0 | | | | | |
| Output / power supply | 0 5 V | 11 33 VDC | | | | | | U | 0 | | | | |
| Catpat / power supply | 0 10 V | 18 33 VDC | | | | | | | 1 | | | \rightarrow | |
| | 4 20 mA | 11 33 VDC | | | | | | | 7 | | | - | |
| Electrical connection | Cable 1.5 m, PG7 | 11 33 VDC | | | | | | | | 0 | | | |
| Licetifed Connection | Connector 3) | DIN EN 175301-803-A | | | | | | | | 1 | | | |
| | Connector 3) | DIN EN 60130-9 | | | | | | | | 3 | | | |
| Pressure connection | Inside thread | Stainless steel ½ -27 NPT or PVDF G ½ | | | | | | | | | 0 | | |
| r ressar e commection | Hose connection | CuZn nickel plated | for tube ins | ide Ø 4 mm | | | | | | | 1 | | |
| | Hose connection | Stainless steel 1.4571 / AISI 316Ti | | ide Ø 4 mm | | | | | | | Ē | | |
| | Hose connection | CuZn nickel plated | | ide Ø 6 mm | | | | | | | 2 | | _ |
| | Hose connection | PVDF | | ide Ø 6 mm | | | | | | | 3 | 2 | _ |
| | Hose connection | Stainless steel 1.4571 / AISI 316Ti | | ide Ø 6 mm | | | | | | | D | | _ |
| | Screw fitting | CuZn nickel plated | | tside Ø 6 mm | | | | | | | 4 | | |
| | Screw fitting | Stainless steel 1.4305 / AISI 303 | | tside Ø 6 mm | | | | | | | 5 | | |
| | Screw fitting | PVDF | | tside Ø 6 mm | | | | | | | 8 | 2 | _ |
| | Screw fitting | CuZn nickel plated | | tside Ø 8 mm | | | | | | | 6 | | |
| | Screw fitting | Stainless steel 1.4305 / AISI 303 | | tside Ø 8 mm | | | | | | | 7 | \neg | _ |
| | Screw fitting | PVDF | | tside Ø 8 mm | | | | | | | 9 | 2 | |
| | Outside thread | ⁷ / ₁₆ -20 UNF CuZn nickel plated | 1,1.22 | | | | | | | | Α | | |
| | Adapter inside | G 1/8 Stainless steel 1.4305 / AISI 303 | | | | | | | | | В | | |
| | Adapter outside | G 1/8 CuZn nickel plated | with union | nut | | | | | | | C | \neg | |
| Case | Stainless steel | 1.4305 / AISI 303 | | | | | | | | | | 1 | |
| - | | 6 bar max., overload on one side and system pr | essure max. 12 | bar | | | | | | | | 2 | |
| | Stainless steel with pr | | | | | | | | | | | 4 | |
| | Stainless steel, free of oil and grease (only seal FPM, not compound-filled) | | | | | | | | | | | 5 | |
| | | ssure tip orifice, free of oil and grease (only sea | | pound-filled) | | | | | | | | 6 | |
| Pressure range variation | | range on order (e.g.: W0 + 8bar/OUT16V) | , | | | | | | | | | \neg | W |
| Tressure runge variation | maicate vv and state | ange on order (e.g., vvo + obai/oo 110v) | | | l | 1 | | | | | | | v v |

| Α | | $\overline{}$ | Δ | cc | \cap | rı | Δ |
|----------|---|---------------|---|----|--------|----|------------|
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| | | Order number | |
|--|-----------------------------------|--------------|---|
| Female connector DIN EN 175301-803-A with seal | IP 65, when installed and screwed | 103510 | |
| Female connector DIN EN 60130-9 | IP 65, when installed and screwed | 103524 | _ |
| Mounting bracket incl. screws | | 101999 | |
| Calibration certificate | | 104551 | |

| 1) TC = Temperature coefficient | 1) Other pressure range on request | 2) Delivery without female connector |
|---------------------------------|------------------------------------|--------------------------------------|

