# Pressure Transmitter TP-692

**INSTRUCTION MANUAL V1.0x C**

NOVUS
We Measure, We Control, We Record

**Product sold by NOVUS Automation Ltda.**

## 1. PRESENTATION

The model **692 Pressure Transmitter** features a unique and proven ceramic sensor, created with cutting-edge technology. The equipment works with a wide range of pressure measurements and features various types of electrical connections and several standard signal outputs. The wide variety of options makes this transmitter ideal for applications across a broad spectrum of the industry.

This model has:

- Very low temperature sensibility;
- High resistance to extreme temperatures.

## 2. IDENTIFICATION

Attached to the equipment is the identification tag. Check if the characteristics described on this label match with were requested.

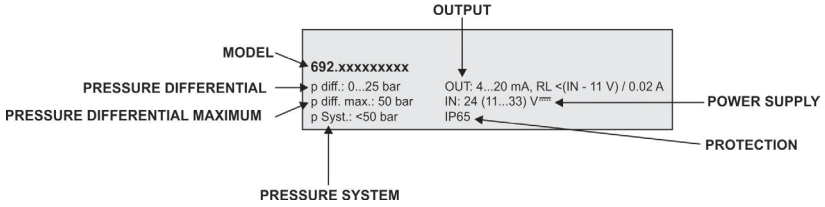


**Fig. 01** – Identification Tag

## 3. ELECTRICAL CONNECTION

### 3.1 WIRING DIAGRAM

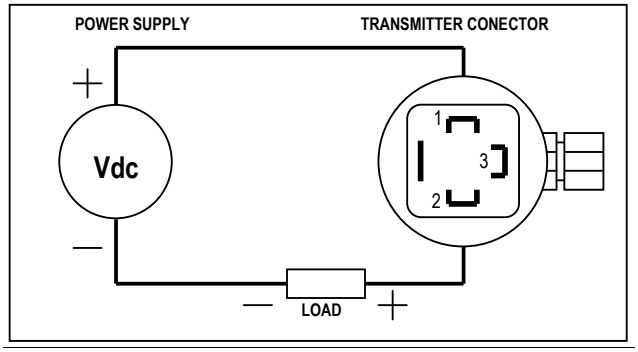


**Fig. 02** – Wiring Diagram

The LOAD element in this circuit corresponds to the device indicating the pressure measured by the transmitter, which can be an indicator, a recorder, etc. Its maximum impedance is defined as a function of the voltage value of the POWER SUPPLY.

### 3.2 CONNECTIONS

The equipment has the following wiring diagram:

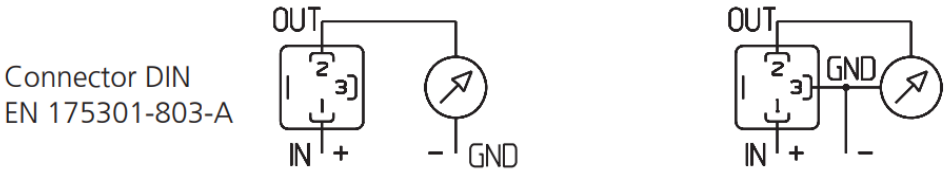


**Fig. 03** – Connections

## 4. MECHANICAL CONNECTION

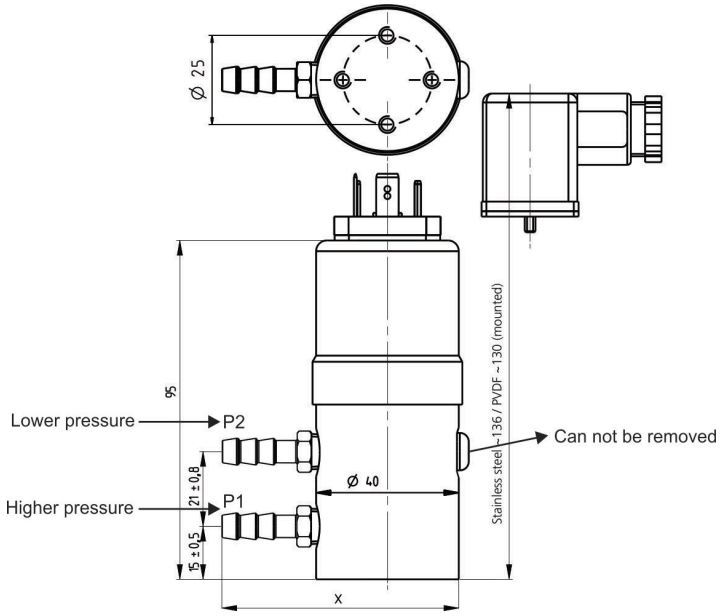


**Fig. 04** – Dimensional

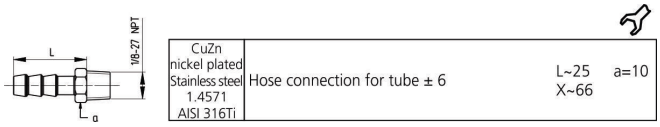


**Fig. 05** – Pressure Connector

To attach the tubes to the transmitter, firmly grasp the screw so that it does not rotate.

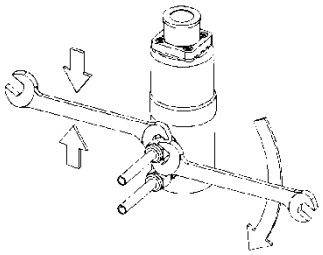

**Fig. 06** – Hose Attachment

## 5. ACCURACY

To calculate the maximum error values, the following sum must be performed:

Maximum Error = Tolerance Full Scale Value + Linearity and Repeatability Error + Long-Term Stability Error

| 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 (DIN EM 60770)** | % FS | ± 0.5 | ± 0.5 | ± 0.5 |

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

**Table 01** – Accuracy

## 6. TECHNICAL DATA

| | | |
|---|---|---|
| **Power Supply** | 11 to 33 Vdc | |
| **Output** | 4-20 Ma (2 wire) | |
| **Max. Impedance Load** | RLmax = (Power Supply - 11 V) / 20 mA | |
| **System Pressure** | 0…0.1 to 25 bar | |
| **Rupture Pressure** | 1.5x system pressure | |
| **Operating temperature medium and ambient** | -15 to +80 ºC | |
| **Dynamic Response** | < 5 ms | |
| **Materials in contact with the medium** | Sensor: Ceramic $Al_2O_3$ (96 %) | |
| | Pressure connection: Stainless steel 1.4305 / AISI 303; PVDF, CuZn niquelado | |
| | Sealing material: FPM, EPDM, NBR, MVQ | |
| **Pressure Connection** | CuZn nickel plated for pipe outside ± 6 mm | |
| **Electrical Connection** | Connector DIN 175301-803-A | |
| **Protection Standard** | IP65 | |
| **Case** | Stainless steel 1.4305 / AISI 303 | |
| **Electromagnetic compatibility** | CE conformity acc. EN 61326-2-3 | |
| **Weight** | 430 g. | |
| **Accessories** | Female connector DIN EN 175301-803-A with seal IP65, when installed and screwed | **Order Number** |
| | | 8832040010 |

**Table 02** – Technical Data

## 7. WARRANTY

Warranty conditions are available on our website