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# TP-510

## PRESSURE RELATIVE TRANSMITTER – INSTRUCTION MANUAL

### PRESENTATION

The pressure transmitter type 510 have been developed for applications in the industrial refrigeration technology. This means that the 510 can be used for all gases and media in refrigeration, including ammonia.

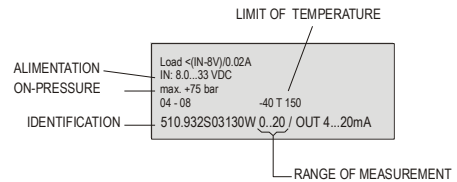
### PRECAUTIONARY

Before working with the transmitter, read carefully its specifications and operating instructions. In case of damaging the device (or anything else as a consequence) because of incorrect or mistaken using, warranty becomes inactive.

Installation must be done only by specialized professionals.

### SPECIFICATIONS

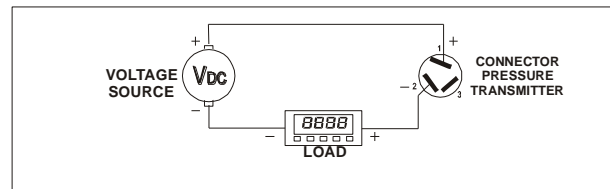
- Range of measurement: . See recording in the body of the transmitter.
- Signal output:.....4-20 mA
- Power supply (V): ..... 8 to 33 Vdc
- Load (Ω):.....  $RL_{max} = (V - 8 V) / 20 \text{ mA}$
- Accuracy:..... < 0,5% the fund's scale (FE)  
 (total of linearity, hysteresis and repeatability)
- Over load: .....3 x full scale
- Rupture pressure: ..... 6 x ful scale
- Electrical connection:..... Quickon Cabo screwing
- Protection of connector:..... IP67
- Weight: ..... 98 g
- Ambient Temperature:..... -40 to 85 °C
- Process fluid temperature:..... -40 to 150 °C
- TC zero point: ..... < 0,03% of FS/°C
- TC sensitivity: ..... < 0,015% of FS/°C
- Response time:..... < 2ms
- Outside thread: ..... External screw 1/4 - 18 NPT (basic model)
- Materials in contact with the medium: .....stainless steel 1.4305
- Compatibility: all gases and liquids used in cooling, including ammonia, compatible with 1.4305 (AISI 303) stainless steel.
- Electromagnetic compatibility (conformity EC 89/336 (EMC)):
- Electrostatic discharge (IEC 1000-4-2): 8 kV air, 4 kV contact, no effect.
- Hight-frequency electromagnetic radiation: EN 61000-4-3 10 V/m de 80 a 1 GHz, no effect.
- Fast transient (burst): EN 61000-4-4, 4 kV, no effect.
- Magnetic fields: EN 61000-4-8, 50 Hz 30 A/m, no effect.



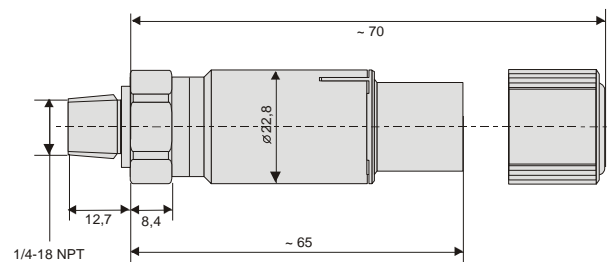
### INSTALLATION RECOMMENDATIONS

- Conductors of small electrical signals must be distant from activation or high-tension/current conductors, preferably passing through grounded conduits.
- A specific electrical power supply network should be provided for instruments use only
- In controlling and monitoring applications, possible consequences of any system failure must be considered in advance.
- RC filters (47 R and 100 nF, serial) in inductor charges (contactors, solenoids, etc.) are recommended.

### ELECTRICAL CONNECTIONS



### DIMENSIONS



### IDENTIFICATION

Figure below shows the disposition of the information on the identification tag of the transmitter.

## WARRANTY

NOVUS Automation provides the original purchaser of this instrument a one (1) year warranty against defects in material and workmanship under the following terms:

- The one year warranty begins on the day of shipment as stated on the sales bill.
- During the warranty period all costs of material and labor will be free of charge provided that the instrument does not show any evidence of misuse.
- For maintenance, return the instrument with a copy of the sales bill to our factory. All transportation and insurance costs should be covered by the owner of the equipment.
- Should any sign of electrical or mechanical shock, abuse, bad handling or misuse be evident the warranty voids and maintenance costs will be charged.

**Product sold by Novus Automation Inc.**