Design and products for safety problem solving in medium and high voltage electrical installations

ELECTRONSYSTEM MID

Gas/Oil absolute pressure transmitter



Type A transmitters are based on bridge resistance variation principle and the primary element is directly deposed on reaction mechanics by a silk screen-thick film process .

In this way the primary element can be very stable and offer the maximum protection because of monolithic ceramic block.

The innovative pressure sensor combines electronic precision with mechanical resistance for your complete safety in any conditions.

Low cost allows to use this sensor in many situation, above all in automation systems or as a supervisor for mechanical monitoring and process control.

For compatibility with most systems has ¼ gas male output fitting and is suitable for alimentary control because of the choice of material in contact with the fluid in accord with UL sanitation.

4-20mA analog output allows to get quite long distance link between sensor and remote control.

Temperature output allows to record temperature variation of device under control.

FIELD APPLICATIONS

- MV & HV oil level of transformers
- SF6 pressure inside tanks
- Gas control of automatic machinery
- Fluid controls of distribution and transmission pipes

FEATURES

- ANALOG ABSOLUTE PRESSURE
- Electronic pressure sensor
- Electronic temperature sensor (optional)
- High accuracy
- IP 65 protection with cable gland
- Wide compensated temperature range
- Compatibility with corrosive fluids
- Primary element deposed on ceramic monolithic block

HIGHLIGHTS

Technical Data

Pressure FSO range (Bar)...0 – 2; 0- 5; 0- 10; 0-20; 0-50*

Overpressure.....2X rated

Response time (10% to 90%).....5ms

Operating fluid temperature range... - 20° + 85°C Mechanical protection of active components...IP65

Compatibility with corrosive fluids

*Versions with customized features can be provided

Performance Data

Standard pressure accuracy: <0,5% FSS Compensated error: <0,4 % fss/10°C Temperature accuracy: +/- 1,5°C* Linearity error: +/- 0,2% FSS Repeatability error: <0,1% FSS

Compensated temperature range: -20° + 85°C

Resolution: infinite

Electrical insulation: 50 Hz 1min 1,5kV

Electrical Data

Output: 4-20mA , 1-5 Vcc Excitation: 10-35 VCC Load: R<750ohm

Plug: DIN 43650 MPM 4 poles connector Cable LX=1mt optional (STANDARD)

Physical descriptions

Material external: stainless steel AISI316

Material in contact with fluid: ceramic, stainless steel

and EPDM

Pressure fittings: 1/4" gas male/female

Dimensions: Ø30x 40mm

Weight: 150 g

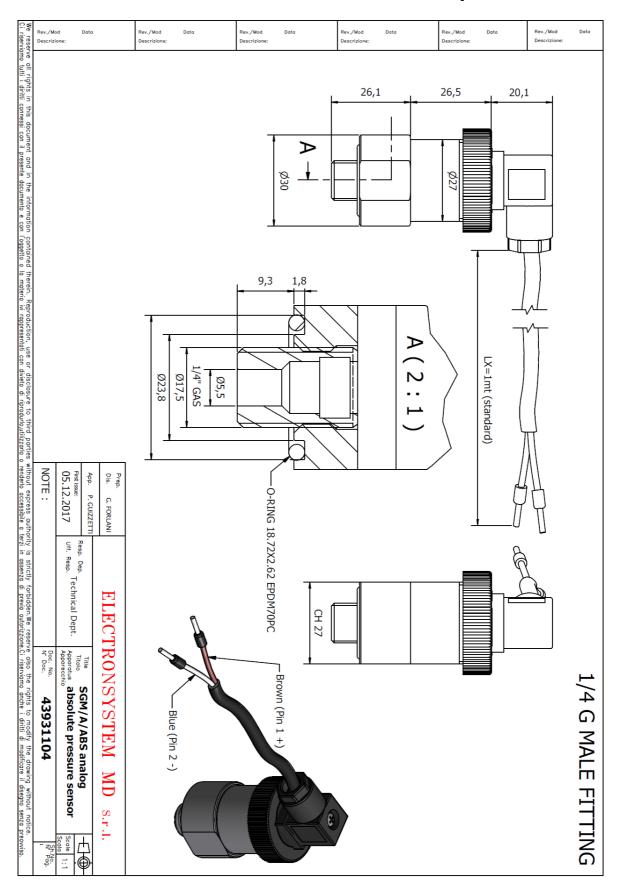
*optional



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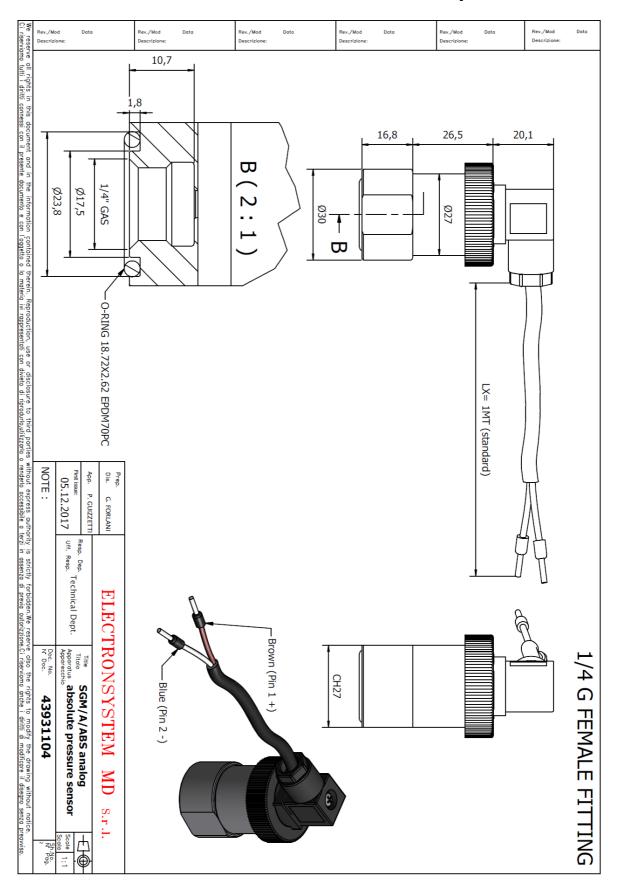




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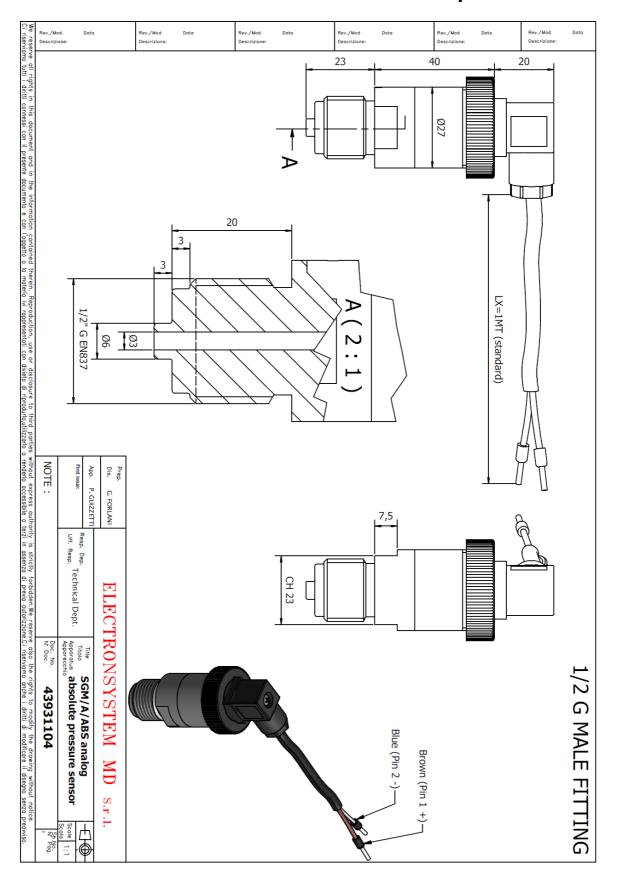




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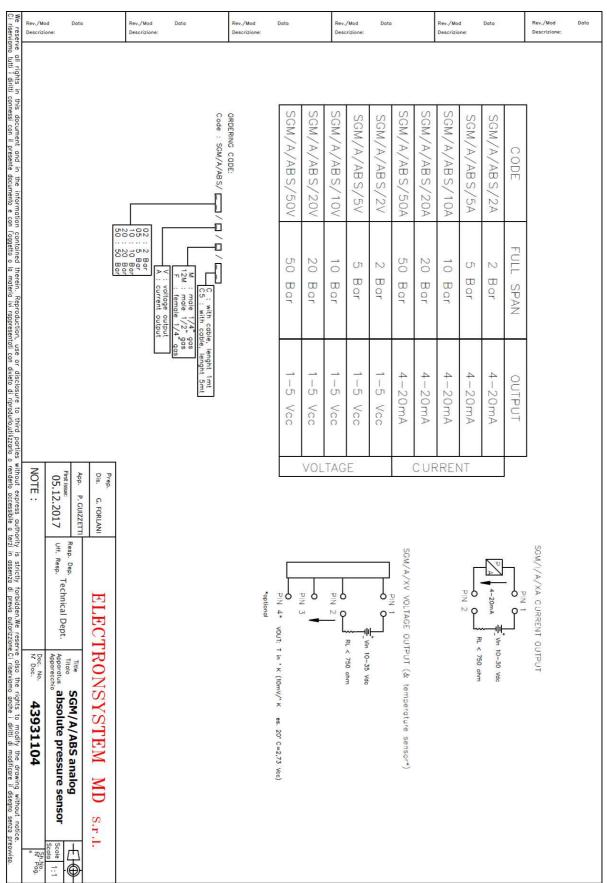




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STORAGE

If the complex must be storage before use, please keep dry and repaired.

Do not leave outdoor.

Device is strongly sensitive to humidity hence avoid to store where relative humidity is more than 90%

STORAGE TEMPERATURE: -30°C ÷ +70°C RELATIVE HUMIDITY: max 90% @ +40°C

MAINTENANCE

Maintenance of transmitter must be done compulsory in factory. We recommend every 5 years to send back transmitter for calibration check and inspection.

<u>WARRANTY</u>

Device is covered by 24 months after installation or max 36 months after delivery. In case of service the transmitter must be sent back to factory for inspection.



Gas/Oil absolute pressure transmitter

WARNINGS

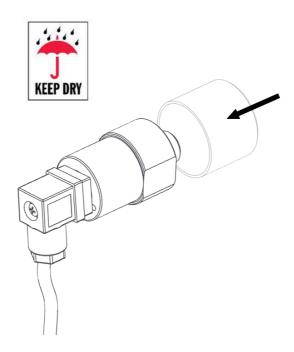
CAUTION

Do not drop or hit the transmitter. The sensor is fragile and may break from sudden shock. When transporting the transmitter, use the original shipping box from Electronsystem MD.

NOTE

Keep the transmitter dry and clean.

Do not remove the transparent transport protection caps before you are ready to install the transmitter.



NOTE

Connect the transmitter directly to the main gas volume, not behind a sampling line because this is the area where high humidity tends to accumulate and where the temperature of gas is not the imagine of gas near breaker.

The use of original cable wiring is advised to have the better protection performances.

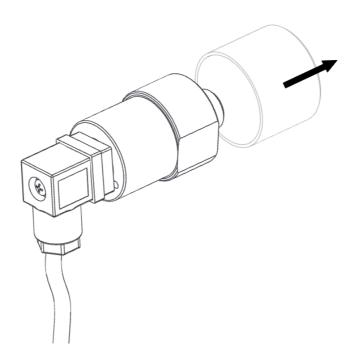


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INSTALLATION

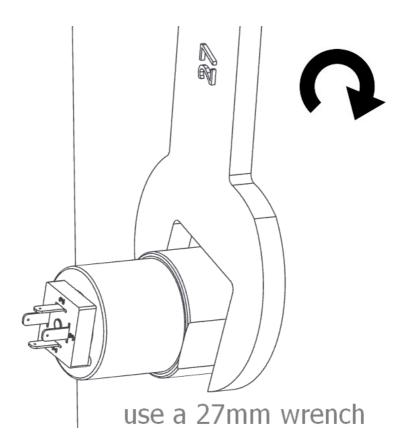
1. Remove the transparent transport cap when you are ready to install the transmitter. Check o-ring is clean without dust and properly assembled.



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2. Install the transmitter to the mechanical coupling and tighten gently by hand. Then use a 27mm wrench to tighten the connection. Use a sufficient force to achieve a tight installation (recommended 10-15Nm). The system must be leak-free for accurate measurement.

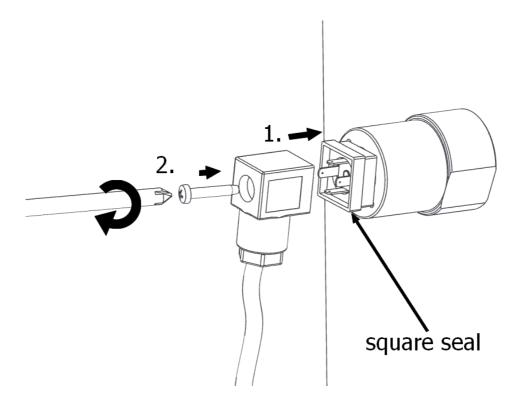


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3. Connect proper wiring into the output port checking the correct polarization of the connector and checking the presence of the squared seal.

Then insert the screw supplied and tight the screw with a screwdriver



STATIC GAS MONITOR

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DISCLAIMER NOTE:

While we provide application assistance it is up to the customer to determine the suitability for its use.

Specification may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However we assume no responsibility for its use.

The quality of ElectronsystemMD products is guaranteed by a Quality, Safety and Environmental management system certified by DNV according to ISO 9001, ISO 18001 and ISO 14001. Electronsystem MD works in partnership with its customers in designing customized executions in order to meet specific requirements, please contact us.