

EC Declaration of Conformity

in accordance with EC directives 98/37/EC

We declare under our sole responsibility that the product

Make: LANCIER Monitoring
Type: PTxA 210-PM

to which this declaration refers, meets the relevant health and safety requirements of the EC directive 98/37/EC, as well as the requirements of other relevant EC directives.

73/23/EEC Low voltage directive
89/336/EEC Electromagnetic compatibility

For proper implementation of the health and safety requirements named in the EC directives the following standard(s) and/or technical specification(s) have been consulted:

EN 61000-6-3/4 Emitted interference
EN 61000-6-1/2 Interference resistance (fault-free operation)

Münster, 08 November 2006

[Signature]
Research and Development

[Signature]
Managing Director

Operating Instruction

PTxA 210-PM

Addressable Pressure Sensor



BA 062462.020/09.07

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This operating instruction must not be reproduced or made available, either complete or in extracts, before the specific consent of LANCIER Monitoring GmbH.

- Keep the operating instructions ready to hand!

Important!!
Read and observe safety instructions
prior to initial operation!

Safety Instructions

The pressure sensor PTxA is designed to monitor the pressure in pressurized cables.
Any non-compliant use excludes the manufacturer from liability for any damages. The operator carries the risk!

Designated Use

In addition to the operating instructions and the mandatory regulations for the prevention of accidents, applicable in the operator's country and at the place of use, the recognized technical regulations for safe and professional operation shall also be observed.

These operating instructions shall be read and adopted by anyone assigned to work with/on the equipment, e.g. during operation to include setting-up, maintenance trouble-shooting.

These operating instructions should make it easier for you to become acquainted with the product. They contain important information to ensure safe, appropriate and cost-effective use of the equipment. The operating instructions endorse the directives of national regulations for the prevention of accidents and the protection of the environment.

General Information

Important!!
It is imperative to read and observe all safety instructions
prior to initial operation!

Ordering Data

Pressure Sensor PTxA 210-PM
Order-no. 054471.000

Technical Data

Measuring range	700 .. 2100 mbar
Resolution	1 mbar
Max. error	± 6 mbar
Transverse impulse stability at Tx-bus	1500 V DC at 10/700 µs
Time windows (addresses)	1
Operating cycle / address	2 s
Transmission time	1.5 s
Deviation from transmission time	≤ 100 ms
Reset time	≤ 200 ms
Supply voltage	20 .. 120 V DC
Quiescent current typ.	50 µA
Rated DC current typ.	3.5 mA
Modulation current typ.	3.6 mA _{pp}
Operating temperature	-20 .. +70 °C
Storage temperature	-40 .. +90 °C
Dimensions	88 x 30 x 16 mm (L x W x H)



Accident prevention!

All circuit lines must be dead before mounting or dismantling of the sensor or the opening of the sensor housing!

- The sensor should only be operated in technically-sound condition, for its designated use, with safety and risk awareness in mind, taking into account the operating instructions. In particular, operational faults, which can compromise safety, should be rectified immediately!
- Do not make any modifications to the sensor!
- Mounting, maintenance and repair work should only be performed by trained personnel!
- Only use original LANCIER Monitoring replacement parts!

Function

The addressable pressure sensor PTxA monitors the absolute cable pressure over a range of 700 to 2100 mbar and transduces them into output frequencies between 700 and 2100 Hz. The sensor is integrated into the monitoring system by the LANCIER Tx-bus.

The LANCIER Tx-bus

A maximum of 127 addressable sensors can be connected to one Tx-bus pair.

The measured values of all sensors connected to the LANCIER monitoring system are transmitted in time intervals. Therefore all sensors must be coded before installation.

Coding



Accident prevention!

All circuit lines must be dead before mounting or dismantling of the sensor or the opening of the sensor housing!

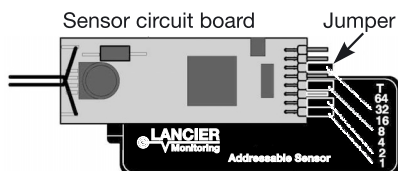
- Open the housing.
- Lift side clamping straps with a screw driver.



Important!

Obey handling instructions.
Electrostatic discharge (ESD) damage.

- Take sensor circuit board out carefully.
- Place the jumpers with needle-nose pliers according to the required address and the coding table next page.
- Place the jumpers only on one pin if contact should stay open.



Example: Address 43

- The test bridge (T) must stay open.
- Mark the adjusted code onto the sensor label with a water-proof pen.
- Close housing:
Put sensor circuit board into housing. Place cables into cable bushing and close housing. Take care that clamping straps snap in properly.



Important!

Do not clamp the wires while closing the housing!

Coding table

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☒ Coding bridge closed

☐ Coding bridge open

Function Test

Each sensor has to be checked with the LANCIER Testbox (Order-no. 050833.000) for accurate function and coding. The necessary steps are described in the manual of the Testbox.

Mounting

- Check sensor for correct address code (visually / Testbox).
- Open sleeve.
- Fix sensor to a rod of the sleeve.
- Identify supervision pair and check it with the Testbox.
- Connect sensor:
Connect supervision pair with the sensor's two green wires.
- Check sensor function on pair with Testbox.
- Close sleeve.



Risk of damage to property!

If the sleeve is heated beyond the maximum allowed sensor storage temperature (90 °C) (e. g. for soldering the lead sleeve), the sensor must be wrapped with heat resistant material (paper tape i. a.) and placed in the sleeve's centre.



Important!

Check all sensors before use, in order to avoid later malfunction!