Inline resistance thermometer

Type series GA22xx

Operating Instructions

1 General Information

This document contains necessary information for the proper installation and use of this device. In addition to this instruction, be sure to observe all statutory requirements, applicable standards, the additional technical specifications on the accompanying data sheet (see www.labom.com) as well as the specifications indicated on the type plate.

1.1 General Safety Notes

The installation, set up, service or disassembly of this device must only be done by trained, qualified personnel using suitable equipment and authorized to do so.

Warning

Media can escape if unsuitable devices are used or if the installation is not correct.

Danger of severe injury or damage

- ➢ Ensure that the device is suitable for the process and undamaged.

1.2 Intended Use

The device is intended to measure temperature in technical processes as specified in the data sheet.

1.3 Conformity with EU Regulations

The CE-marking on the device certifies its compliance with the applicable EU Directives for placing products on the market within the European Union.

You find the complete EU Declaration of Conformity (document no. KE_002 for GA220x or KE_005 for GA221x) at www.labom.com.

1.4 EX Approval

Devices of the type GA2201 and GA2211 are certified for use in explosive environments.

If you purchased a device with EX approval, please refer to the accompanying document XA_004 for GA2201 or XA_002 for GA2211 for EX-relevant information and hints.

2 Transportation and Storage

Store and transport the device only under clean and dry conditions preferably in the original packaging. Avoid exposure to shocks and excessive vibrations.

Permissible storage temperature: -40…100 °C

When supplied with a transmitter the max. permissible storage temperature is reduced to 85 °C.

3 Installation and Commissioning

Ensure that the device is suitable for the intended application with respect to temperature range, pressure range, medium compatibility and process connection.

After the mechanical installation and electrical connection is completed, the device is ready for operation as soon as the power supply is switched on.

3.1 Mechanical Installation

Use gaskets, if required, that are suitable for the process connection and resistant to the media.

The process connection determines the permissible process pressure. Operating the device beyond its nominal pressure limit, e.g. clamp-connections, requires specially designed and approved mounting elements.

Before starting operation, check the process connection carefully for leaks under pressure.

3.2 Electrical Connection

Complete the mechanical installation before you connect the device electrically.

Set up all electrical connections while the voltage supply is switched off.

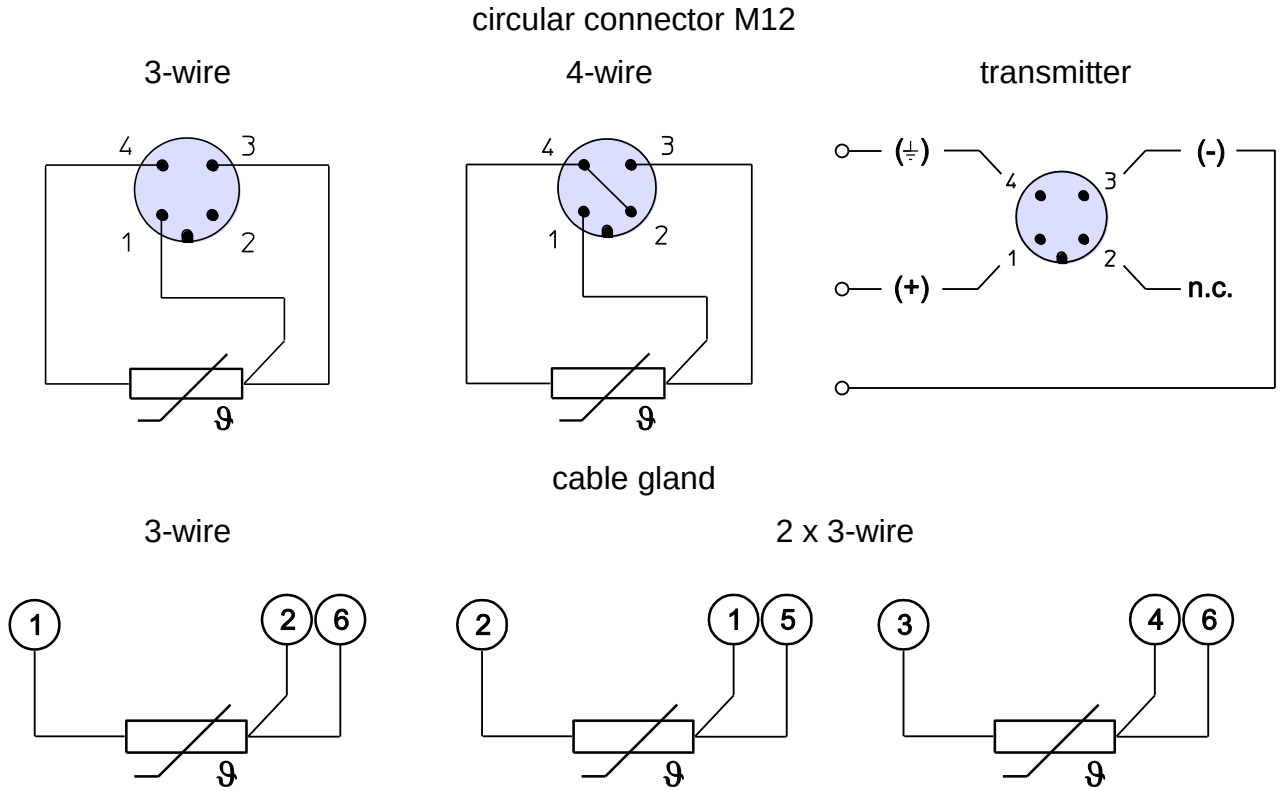

Figure 1: Options of the pin assignment

4 Operation

During operation, take care that the device remains within its intended pressure and temperature ranges. No other monitoring is necessary.

Permissible media temperature:	-20…200 °C
Permissible ambient temperature:	-40…100 °C

When supplied with a transmitter, the permissible ambient temperature is reduced to 85°C.

Restricted ambient conditions may apply in explosion protected environments (see XA_004 for GA2201 or XA_002 for GA2211).

4.1 Maintenance / Service

When properly installed in accordance with applicable specifications, this device is maintenance-free. However, we recommend an annual recalibration of the device.

In the event of a device malfunction, you can only replace the measuring insert respectively the head transmitter.

5 Disassembly

When measuring hot media, make sure that the device has cooled down prior to any dismounting or wear appropriate protective clothing to avoid burns.

Switch off the power supply to the device before disconnecting the electrical connections. Once this is done, the device may be mechanically removed.

Warning

Opening pressurized lines might cause severe injuries.

Danger of severe injuries or damage

- Relieve the process pressure before attempting to remove the device. Shut off the pressure supply for all feed lines to the device and relieve the pressure in them.

Warning

Hazardous deposits and residues might remain on opened process connections and removed devices.

Danger of injury

- After the device has been removed, seal off the measuring point and mark the open process connection accordingly. Consider a possible danger due to residues when handling the removed device.