

Temperature sensor TSP341-N

Mounting instructions on piping diameter less than DN40

EN
English

Supplement / changes to the operating and commissioning instruction for TSP341-N (OI/TSP341-N or CI/TSP341-N) and to the standard mounting instructions (IN/TSP341-N/INSTALLATION_INSTRUCTION-XA)

Introduction

The TSP341-N Temperature sensor is a high precision measuring device, using newest technologies and algorithms. To ensure best quality measuring results and to avoid damage, careful and exact installation is required. The illustrated instructions in this document supplement the standard mounting instructions (IN/TSP341-N/INSTALLATION_INSTRUCTION-XA).

Mounting instructions

1. Follow the mounting steps 1 to 4 in (IN/TSP341-N/INSTALLATION_INSTRUCTION-XA).
2. Prepare the straps accompanying this device and place the sensor on the pipe as shown step 12 in (IN/TSP341-N/INSTALLATION_INSTRUCTION-XA).
3. Place and secure the four worm gear pipe clamps as shown in **Figure 1**. The worm gears should be located diametrically opposite to the TSP341-N mounting base. The torque required on the bands is **5 Nm**.
4. Complete installation steps 16, 19 to 21 from (IN/TSP341-N/INSTALLATION_INSTRUCTION-XA).

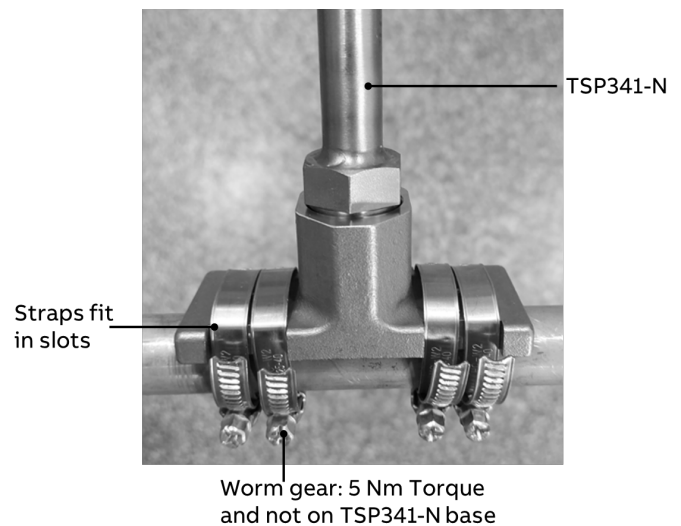


Figure 1: Installation of clamps and positioning of worm gear on DN25 example

Clamp material:

1.4016 Stainless steel, 12 mm wide,
built according DIN 3017-1.

According to the measuring principle, the outside of the pipeline takes on the temperature of the measuring medium. If the thermal expansion coefficient (α) of the piping significantly differs from the corresponding value of that of the clamp bands used, a secure hold of the sensor on the piping can no longer be guaranteed at larger temperature changes of the measuring medium. In such a case, use clamp bands which feature a thermal expansion coefficient corresponding to that of the piping material.

NOTICE

Inappropriate thermal expansion coefficients α of clamp bands and raw materials can lead to a loss of secure hold of the sensor with larger or regular temperature changes of the measuring medium, with the effect that the sensor will start to move due to vibration, for example.

This can cause damage to the sensor and in its vicinity.
Precise temperature measurement can no longer be guaranteed.