

Mounting, Service and Operation Manual

HaNu2009 v2.0



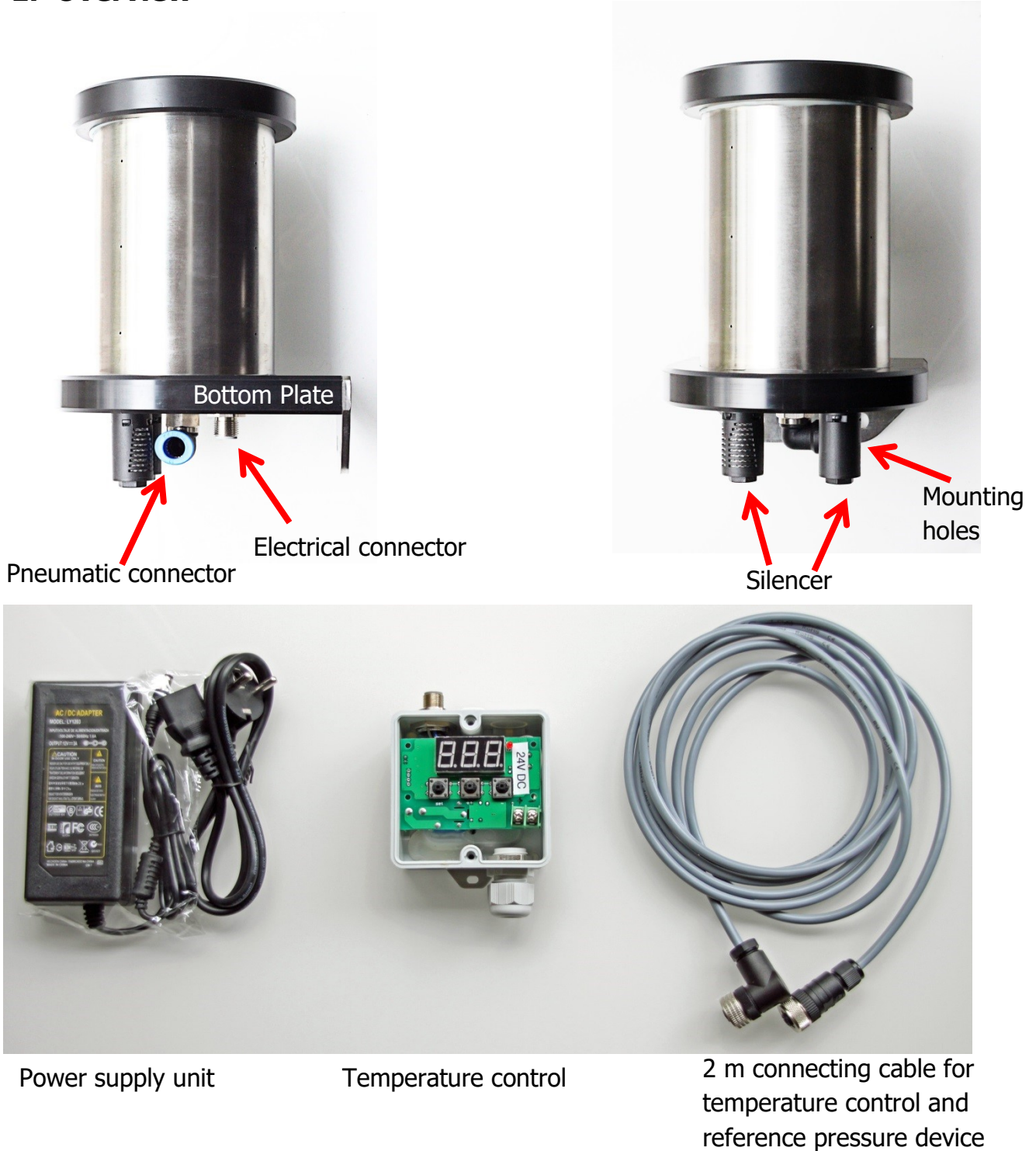
- 1. Overview**
- 2. Placement layout**
- 3. Mounting manual**
- 4. Service and operation manual**
- 5. Important instructions for your pressure transmitter and the room pressure control**
- 6. Care instructions**

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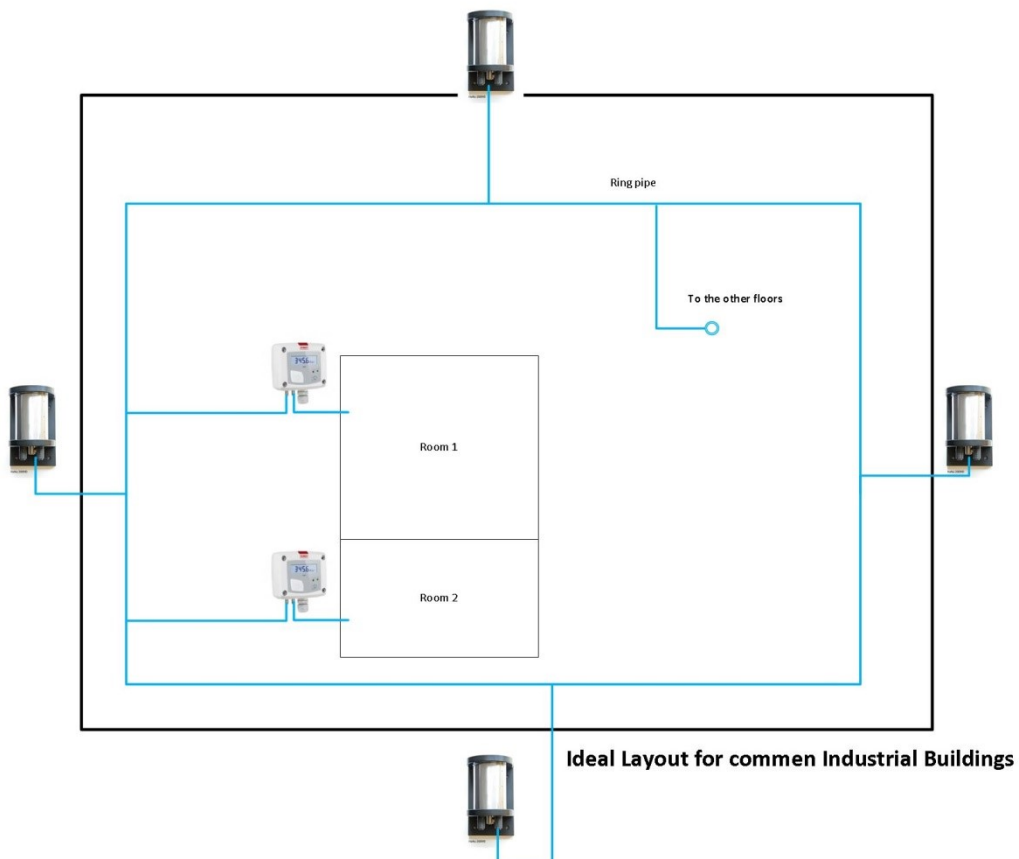
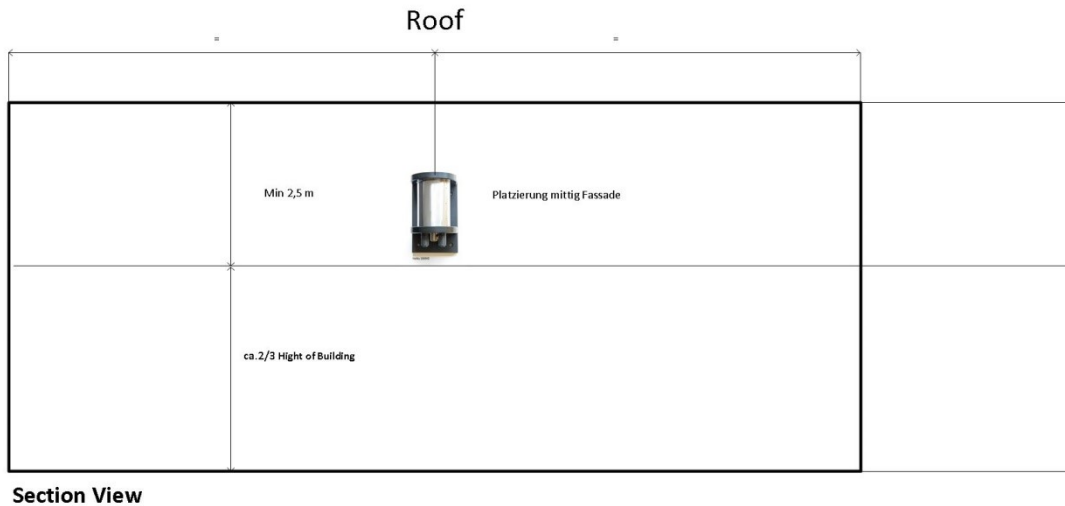
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Mounting, service and operation manual

1. Overview



2. Placement layout



3. Mounting manual

1. Decide where to place HaNu2009 with help of the placement layout instruction.

Mark the mounting holes on the wall.

Mount HaNu2009 with screws what fits the structure of the wall.

Pin 1= brown

Pin 2 = grey

Pin 3 = black

Pin 4 = blue

1. Drill one-hole 22Ø mm through the outside wall approx. 10 cm away from pneumatic connector.
2. Alternative you can disassemble the plug to reduce the hole size to 16mm.
3. Make sure you reassemble the plug the way it was delivered.
4. Push prefabricated cable and pneumatic hose 10mm through drilled hole.

Pay Attention!! plug and connection box are numbered

5. Connect pneumatic hose with pneumatic connector.

6. Connect plug of prefabricated cable with connection box.

Pay attention to positioning marks!!

Screw Lid shut with nut silver nut.

Chose a position at the inside of the building and mount Connector Box with the temperature control.

Connect plug of the included cable with Connector Box and HaNu 2009 outside devise.

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Pay attention to marking oder description on Connector Box and HaNu 2009 and outside devise.

1. The 10mm pneumatic hose is the reference point for your differential pressure measurement. Connect this pneumatic hose with a T-connector to your pressure transmitters with help of the instructions of your supplier manual.

If needed you can reduce the size of the hose to 6mm from T-Connector to pressure transmitters.

Use in this case a T-Connector 10-6-10.

Make sure the Pneumatic hose has no leaks. Seal air tight the end of the Pneumatic hose.

Connect power supply unit with Temperatur Unit (Connector Box).

Pay attention to marking.

1 = Plug for outside unit

2 = Plug for power supply

Depending on the order the power supply of the temperature control 24 V DC could result out of a different voltage source.

Pay attention to polarity Plus + and Minus – Max input is 24 Watt.

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Recommended pneumatic hose

Fabrikat:	Festo
Typ:	PUM, PUN-DUO, PUN-CM, PUN-VO, PEN
outer diameter:	10 mm, standard OD
connection:	Festo Quick Star

Recomentded pneumatic hose

Supplier	Festo
Typ:	
Outside diameter:	
Conector:	

4. Service and operation manual

Preinstalled switch temperature for heating of HaNu2009

+3,0 °C Heating on

+4,5 °C Heating of

If needed it is able to change the preinstalled switch temperatures settings.

For that open Connector Box and make changes with the following instruction:

- Set Taste 1 x Push = Temperature setting
- PO= Switch Heating / Cooling, H for Heating, C for Cooling
- P1 = Hysteresis, adjustable von 1 K bis 15 K
- P2 = Alarm for overheating, is not needed
- P3 = Alarm for under temperatures is not needed
- P4 = Offset -7 K bis + 7K

For the setting of P0 to P8 you need to push and hold 5 sec. the Set button. With the buttons +/- you can chose between the programs P0 to P8 and change settings.

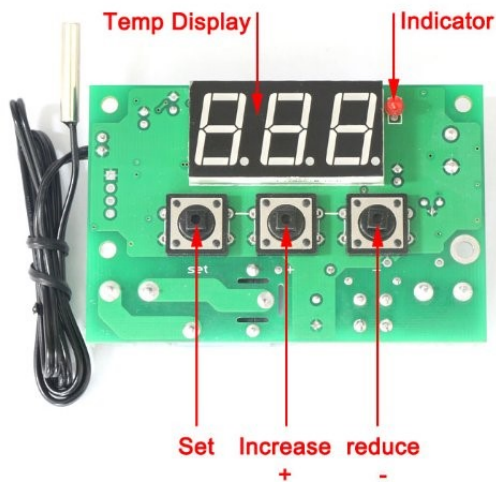


Abbildung: Temperaturregler

Verification of heating

With the above instruction You should verify the proper function of heating. Change switch temperature above outside temperature and verify that stainless steel cylinder is heating up.

You should be able to feel it after approx. 2 min.

After verifying, change switch temperatures bag to preinstalled setting or desired setting.

5. Important instructions for your pressure transmitter and the room pressure control

In heavy wind conditions, it is possible that the static pressure on the outside difference to the inside. Than can cause short-term pressure fluctuations. You have to compromise for those with your Druckmessaufnehmer and/or on the

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Automatisierungsstation. Depending on the supplier of the Druckmessumformer and the DDC for room pressure regulation, there are different Tiefpassfilter- settings.

It is very important to crosscheck with the supplier. We recommend to set the Tiefpass-Filterung not under 30s, if applicable the settings for Umformer/DDC-Messeingänge needs to be adjusted.

Take in to account that in a laboratory area there are short term pressure fluctuations because of opening and closing doors and gates. Also for these disturbances it is useful and necessary to do a screening.

6. Care instructions

The HaNu2009 is basically a maintenance free device, the only care function is to make sure the holes in the stainless-steel cylinder are open and free of any kind of dirt.

Use a hole punch max 1.5mm or a tooth pick to clean the holes.