

Adjustment Instructions EA-NHT

Holder for proximity switch: NHT

- with depth stop
- holders already mounted: pre-adjusted and ready for use

1 Function

The proximity switches send signals to the machine control unit reporting the switching state of the clamping head:

- **signal 1:** “load secured” or “rod clamped”
 - **signal 2:** “clamping released”
- Motion in both directions is only permitted if signal 2 is present. Exception: release process for self-reinforcing clamping heads (Safety Catchers, Safety Brakes, Safety Locks).

Signal 1 and signal 2 must never be present at the same time, except during the switching process.

2 Proximity switch specification

Use non-contact, inductive proximity switches (NOC) with the following properties:

Proximity switch holder with size	Proximity switch
M 12	External thread M 12 x 1 Nominal switching distance: 2 mm Flush mountable
M 8	External thread M 8 x 1 Nominal switching distance: 1.5 mm Flush mountable

3 Design

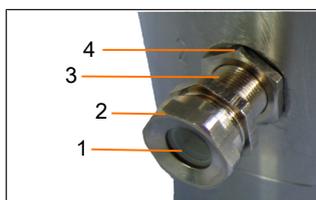


Fig. 1: Mounted NHT holder



Fig. 2: NHT holder with proximity switch

4 Mounting and adjustment

4.1 State as supplied: Holders are mounted



The holders are preset to the correct depth. **Do not change the depth setting.**

The proximity switch holders are located on the clamping head at the points identified by steel punch numbers **1** and **2**.

Follow this procedure:

1. Undo the union nut (2) *Fig. 1* [▶ 1].
2. Remove the protective cap (1) *Fig. 2* [▶ 1].
3. Push the proximity switch (5) as far as it will go into the adjustment sleeve (3).
4. Tighten the union nut (2). To ensure that the adjustment sleeve (3) is not twisted as you do this, hold it in place with an adjustable wrench.
5. Make the electrical connection as described in the manufacturer's documentation.
6. Test the function of the proximity switch as described in the clamping head instructions.
7. If the proximity switch is switching correctly, you have successfully completed the mounting and adjustment. If the switches are not switching correctly, readjust the depth setting as described in *Chapter 4.3 Readjusting the depth setting* [▶ 2].

4.2 State as supplied: Holders are enclosed



If the holders are enclosed as separate items, mount the holders first and then the proximity switches.



CAUTION

Risk of injury by moving parts in the interior of the housing!

- ➔ Do not reach through the openings in the housing.



NOTICE

Danger of malfunction if holders are inserted too deep!

If the holders are screwed in too deep, they can damage the clamping system, resulting in malfunctions. If Safety Catchers are mounted, there is also a danger of the holder at connection 2 being cut off.

- ➔ Move the clamping head into the correct switching state before mounting the corresponding holder.

4.2.1 Mounting the holders

First mount the holders at the connections identified by steel punch numbers 1 and 2.

Before mounting the holder at **connection 1**:

- ▶ Move the clamping head (with rod inserted) into the "load secured" or "rod clamped" state (see clamping head instructions).

Before mounting the holder at **connection 2**:

- ▶ Move the clamping head (with rod inserted) into the "clamping released" state (see clamping head instructions).

Follow this procedure:

1. Carefully screw in the adjustment sleeve (3) *Fig. 1* [▶ 1] as far as it will go.
2. Then carefully turn the adjustment sleeve back about ½ revolution.
3. Tighten the locknut (4) to secure the adjustment sleeve. Make certain the adjustment sleeve is not twisted as you do this.

4.2.2 Mounting the proximity switches

Now mount the proximity switches in the holders as described in *Chapter 4.1 State as supplied: Holders are mounted* [▶ 1].

4.3 Readjusting the depth setting



Depending on the product and tolerance, the proximity switch may have to be readjusted. If the holder is accidentally moved out of adjustment, the depth setting must also be readjusted!

Check the preconditions:

- Holders are mounted
- Proximity switches are mounted in the holders

Before adjusting the holder at **connection 1**:

- ▶ Move the clamping head (with rod inserted) into the "load secured" or "rod clamped" state (see clamping head instructions).

Before adjusting the holder at **connection 2**:

- ▶ Move the clamping head (with rod inserted) into the "clamping released" state (see clamping head instructions).

Follow this procedure:

1. Loosen the locknut.
2. Screw in the adjustment sleeve with the proximity switch *Fig. 1* [▶ 1] as far as it will go.
3. Then carefully turn the adjustment sleeve for the depth setting back about ½ revolution.
4. Secure the depth setting with the locknut. To ensure that the adjustment sleeve is not twisted as you do this, hold it in place with an adjustable wrench.
5. Check whether the proximity switches are switching properly for the respective functions.

If proper functionality cannot be achieved, consider the tips in *Chapter 6 Troubleshooting* [▶ 2].

5 Performance test

Conduct a performance test as described in the clamping head instructions.

Check whether the signals switch correctly when the clamping head is activated. Signals 1 and 2 should never have identical values (on / off) except during the switching process.

If malfunctions occur, contact SITEMA.

6 Troubleshooting

If the proximity switches are not switching properly, there are a number of different possible causes. Following are some tips for troubleshooting. If you cannot rectify the error yourself, please contact SITEMA. We will be glad to help.

Checking the proximity switch

1. Check whether the proximity switch meets the required specification. Pay special attention to the nominal switching distance (see *Chapter 2 Proximity switch specification* [▶ 1]).
2. Test whether the proximity switch functions outside of the clamping head. To do this unscrew the switch from the holder, if possible without changing the depth setting.

Checking the switching distance

Proximity switch 1:

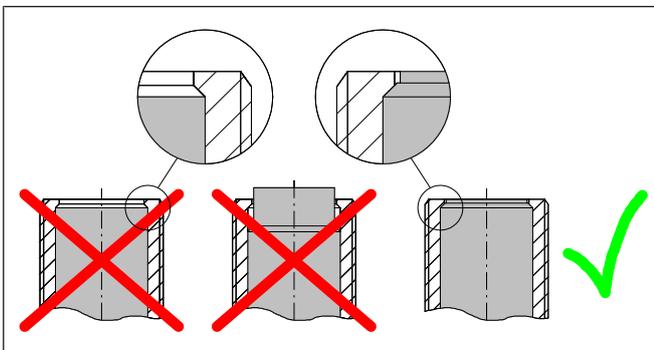
- ▶ Check whether the clamping head reliably clamps the rod or load. For further information see the clamping head instructions.

Proximity switch 2:

- ▶ Check whether the clamping is released and the rod is freely movable. For further information see the clamping head instructions.

Checking the position of the proximity switch in the holder

- ▶ Check whether the proximity switch is inserted level in the holder. The proximity switch must be beveled to allow this.



Checking the clamping rod

- ▶ Check whether the clamping rod meets the required specification. Pay careful attention to the diameter tolerance. See the clamping head instructions.