

User manual

MTxx

MTAxx

1 - Magnetic tape

Total length of the incremental magnetic tape MTxx should exceed measuring length at least 10 mm (0.4") each side. Total length of the absolute magnetic tape MTAxx should exceed measuring length at least 35 mm (1.4") each side.

The magnetic tape has been delivered in a roll and can be cut to the desired length with any sheet metal cutting tool.

ATTENTION: The active side of magnetic tape (black side), however installed, has to face the active part of magnetic sensor ("scale side").

1.1 Mounting with the double-sided adhesive tape

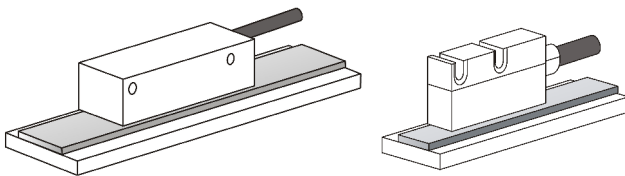


figure 1

Use this installation for applications in clean environments with little contamination. For mounting in highly contaminated places and under the effects of spray water, use of liquid glue is recommended.

Step by step procedure:

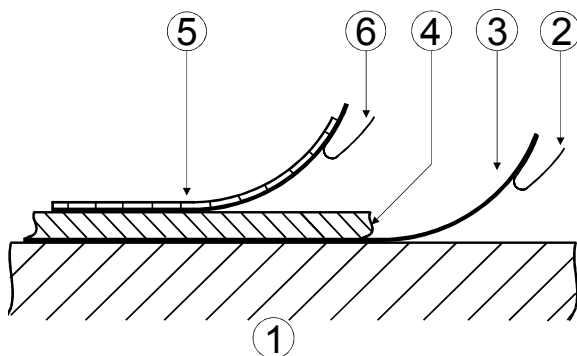


figure 2

- Mounting surface (1) must be dry and clean in order to achieve secure bonding.
- Remove a short part of the protection film (2) from the adhesive part of the tape (3) and adhere by pressing the tape firmly on the mounting surface.
- Carefully clean the tape (4).
- Remove a short part of the protection film (6) from the stainless steel protection tape (5) and adhere by pressing firmly.

ATTENTION: For secure bonding, oil, grease, moisture and dust must be removed without leaving residues. Gluing should be carried out in dry environment and at temperatures between 20°C (60°F) and 30°C (85°F).

When mounting the magnetic tape, the bending radius should not less than 350 mm (13").

1.2 Mounting with double backed adhesive tape and screws

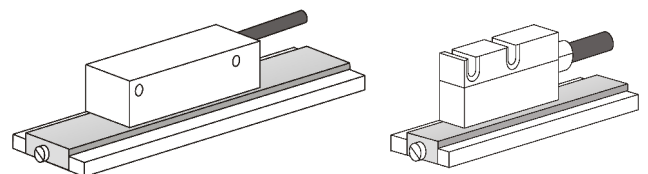


figure 3

Carry out the mounting procedure as previous chapter and additionally attach the tape on both ends only outside the measuring length with screws or rivets. This is recommended only in contaminated environments where the tape may peel.

1.3 Mounting in a groove

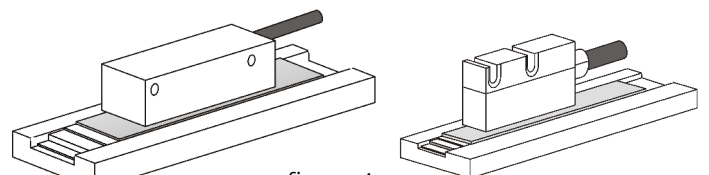


figure 4

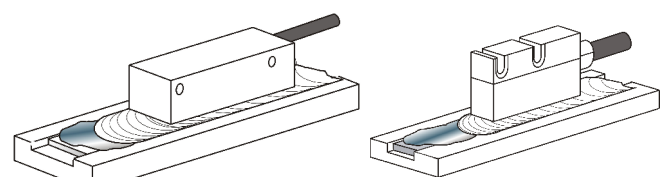


figure 5

Provide a groove on the mounting surface. The tape can be installed in the groove (fig. 4) and simply fixed as described in chap. 1.1 or completely covered (fig. 5) with nonmagnetic liquids (e.g. Loctite liquid aluminum). In this case installation of the protection tape is not necessary.

1.4 Mounting with PS1 profile (accessory)

Only for MTxx

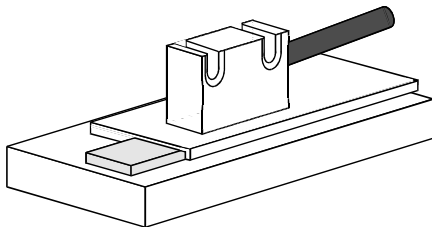


figure 6

Step by step procedure:

- Place the tape on the mounting surface and attach according to chap. 1.1. The protection tape should not be mounted in this case.
- Cover the tape with PS1 profile (fig. 6) and make attachment holes along the profile's groove without damaging the tape.
- Fix the profile with screws or rivets.

Remember that the maximum allowed gap is between sensor and tape and NOT between sensor and profile surface.

1.5 Mounting on circular surfaces

Only for MTxx

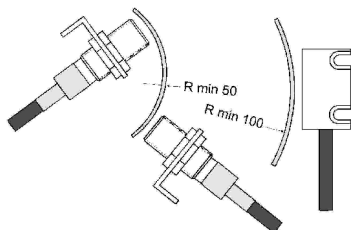


figure 7

Mounting procedure for circular/angular applications is same as for linear applications (see chap. 1.1). The resolution of the system depends on the diameter of the tape.

See fig. 7 for minimum radius of circular applications.