

Mounting instructions for axial rings

Machine the mounting shaft according to the dimensions given in the table below:

Axial ring	OD (mm)		ID (mm)		Ds (mm)	
MR026C	26	+0.1	16	+0.1	15.9	-0.1
		-0.1		-0.1		
MR049N	49	+0.1	25H7	+0.021	25f7	-0.02
		-0.1		0		-0.041
MR050C	50	+0.1	40	+0.02	39.9	+0.05
		-0.1		-0.02		0
MR061C	61.3	+0.1	51.3	+0.1	51.2	-0.1
		-0.1		-0.1		-0.1
MR080N	80H7	+0.03	55H7	+0.03	55f7	-0.03
		0		0		-0.06

OD ... Outer ring diameter in mm

ID ... Inner ring diameter in mm

Ds ... Installation (shaft) diameter in mm

Installation with adhesive tape

Axial rings are standardly equipped with VHB back adhesive tape. Most substrates are best prepared by cleaning with a 50 : 50 mixture of isopropyl alcohol and water prior to applying magnetic ring.

Exceptions to the general procedure that may require additional surface preparation include:

- **Heavy Oils:** A degreaser or solvent-based cleaner may be required to remove heavy oil or grease from a surface and should be followed by cleaning with IPA/water.
- **Abrasion:** Abrading a surface, followed by cleaning with IPA/ water, can remove heavy dirt or oxidation and can increase surface area to improve adhesion.
- **Adhesion Promoters:** Priming a surface can significantly improve initial and ultimate adhesion to many materials such as plastics and paints.
- **Porous surfaces:** Most porous and fibered materials such as wood, particleboard, concrete, etc. need to be sealed to provide a unified surface.
- **Unique Materials:** Special surface preparation may be needed for glass and glass-like materials, copper and copper containing metals, and plastics or rubber that contain components that migrate (e.g. plasticizers).

Refer to 3M Technical Bulletin "Surface Preparation for 3M™ VHB™ Tape Applications" for additional information.

Application

Good surface contact can be attained by applying enough pressure to insure that the tape experiences approximately 100 kPa pressure.

At room temperature approximately 50 % of ultimate bond strength will be achieved after 20 minutes, 90 % after 24 hours and 100% after 72 hours.

Dynamic overlap shear (Peak force to separate is measured after 72 hours dwelling): 830 kPa

Installation by gluing

Recommended glue: UHU plus schnellfest (two-component adhesive)

Application

The surfaces to be stuck together must be cleaned very thoroughly before the adhesive is applied. It is worth first using abrasive cloth (abrasive rating 150-200) then degreasing using cellulose moistened with a grease solvent.

The adhesive should be applied to the parts to be stuck together as soon as possible after mixing, to ensure the best possible bond. The parts to be assembled usually need to be fixed under pressure. It is not necessary to apply extreme pressure.

At temperatures below room temperature, the hardening process takes somewhat longer. After the parts to be stuck together have been prepared, the adhesive is dosed. The adhesive should be very thoroughly mixed.

At room temperature UHU plus schnellfest hardens so that the join is firm within 25 to 30 minutes at the most; after 60 minutes approximately half the final bond strength is reached, and after 72 hours the final bond strength is reached. The application of heat speeds up the hardening process.

For more information see adhesive manufacturer's datasheet.

Installation with fasteners

Installation with fasteners is possible for rings MR049N and MR080N.

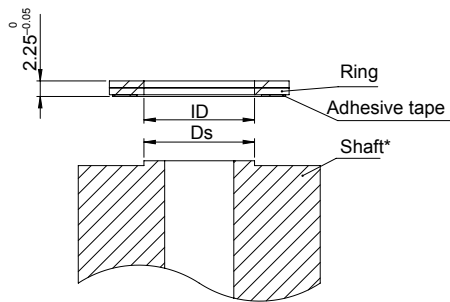
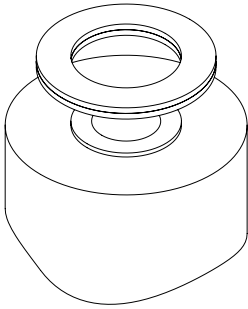
Make sure the installation surface is clean and free of debris. Rings need to be attached with fasteners as per the installation drawings (see appropriate ring page).

Recommended attachment torque:

- fasteners M2.5: 0.5 Nm

Mounting instructions for axial rings continued

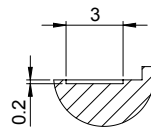
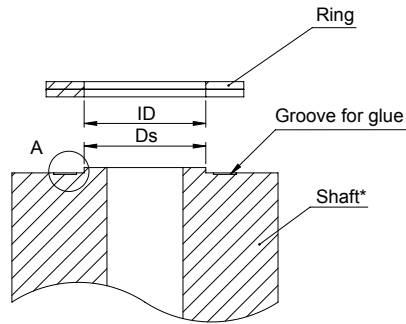
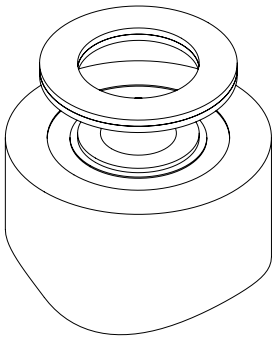
Method 1: Installation with adhesive tape



Tape: VHB 4914 (Thickness 0.25 mm)

* Not provided.

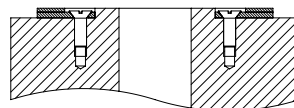
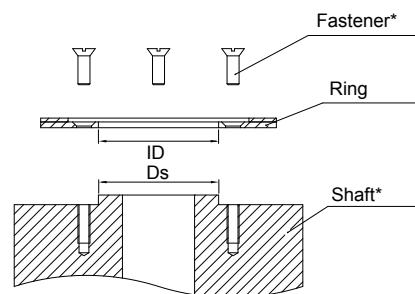
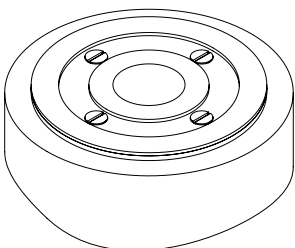
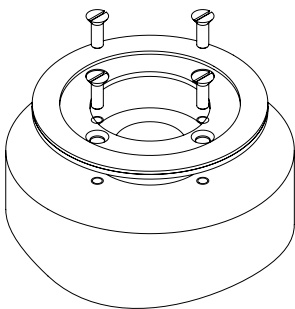
Method 2: Installation by gluing



Recommended dimensions.
A (5 : 1)

* Not provided.

Method 3: Installation with fasteners (for rings MR049N and MR080N)



* Not provided.