

# Mounting instructions for radial rings

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

| Radial ring | OD (mm)      | ID (mm)      |
|-------------|--------------|--------------|
| MR031E      | 31.85 ± 0.10 | 20 H7        |
| MR031G      | 31.85 ± 0.10 | 20 H7        |
| MR040E      | 40.8 ± 0.1   | 30 H7        |
| MR040G      | 40.8 ± 0.1   | 30 H7        |
| MR047B      | 47.5 ± 0.1   | 40 ± 0.1     |
| MR050E      | 50.1 ± 0.1   | 40 H7        |
| MR057E      | 57.3 ± 0.1   | 45 H7        |
| MR075E      | 75.4 ± 0.1   | 60 H7        |
| MR100F      | 100.5 ± 0.1  | 84.77 ± 0.05 |
| MR122E      | 122 ± 0.1    | 90 H7        |
| MR324E      | 324.8 ± 0.2  | 240 ± 0.1    |
| MR406E      | 406.2 ± 0.1  | 360 H7       |

**OD** ... Outer ring diameter (mm)

**ID** ... Inner ring diameter (mm)

Use clearance fit for installation by gluing and installation with fasteners.

## Installation by press-fit

Slip the ring onto the mating shaft applying equal or uniform force along the whole ring circumference. Shaft dimension and tolerances need to be calculated for each ring. Calculation should consider CTE of the shaft and the ring according to best engineering practice.

## Installation by shrink-fit

1) Heat the ring to 160 °C for 30 minutes.

2) Slip the ring onto the mating shaft.

Shaft dimension and tolerances need to be calculated for each ring. Calculation should consider CTE of the shaft and the ring according to best engineering practice.

## 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 joint 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 MR122E, MR324E and MR406E.

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 M3: 1 Nm

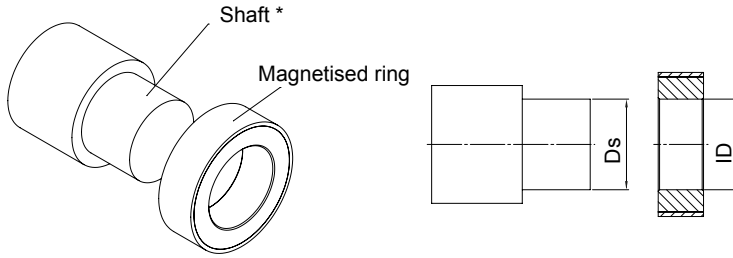
- fasteners M6: 8 Nm

Secure the fasteners with Loctite 222.

# Mounting instructions for radial rings continued

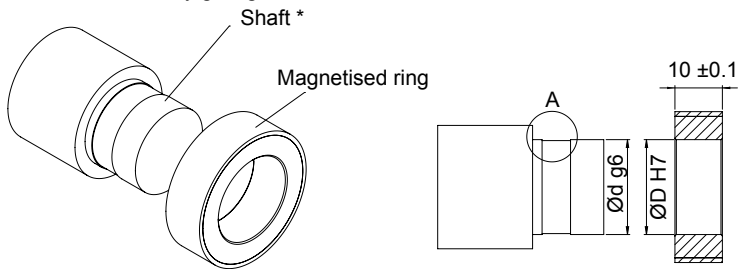
For all radial rings (except MR047B and MR100F)

## Method 1: Installation by press-fit

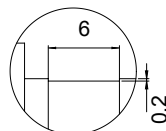


\* Not provided.

## Method 2: Installation by gluing

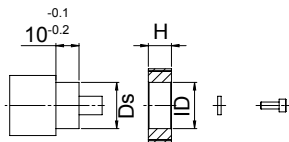
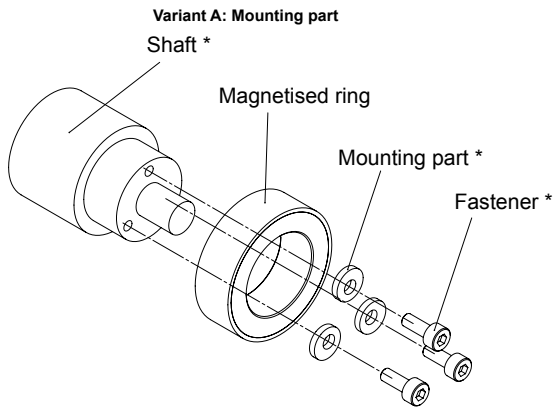


\* Not provided.

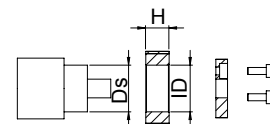
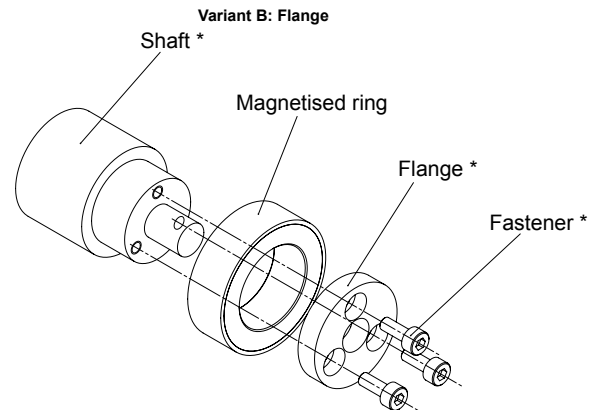


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## Method 3: Installation with fasteners



\* Not provided.

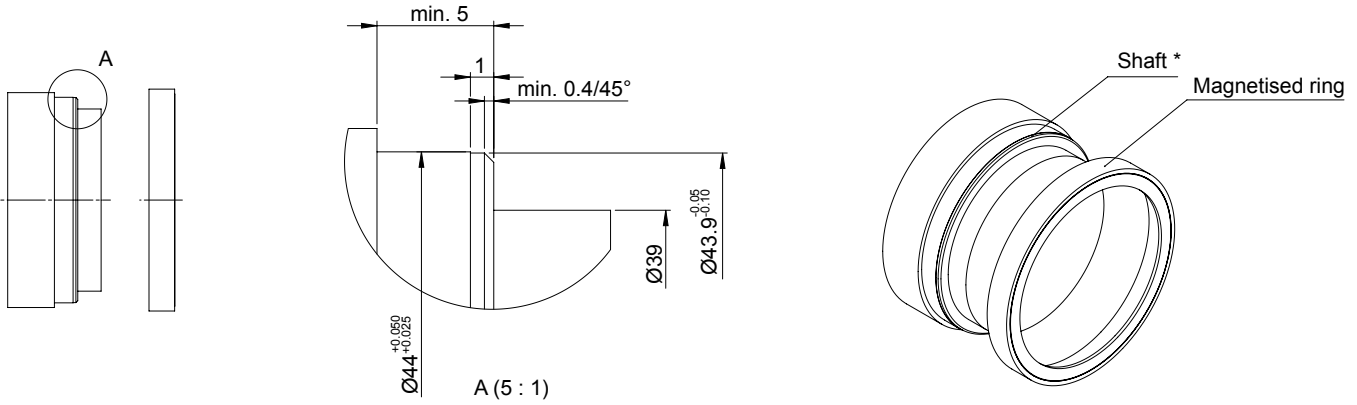


\* Not provided.

## For MR047B ring

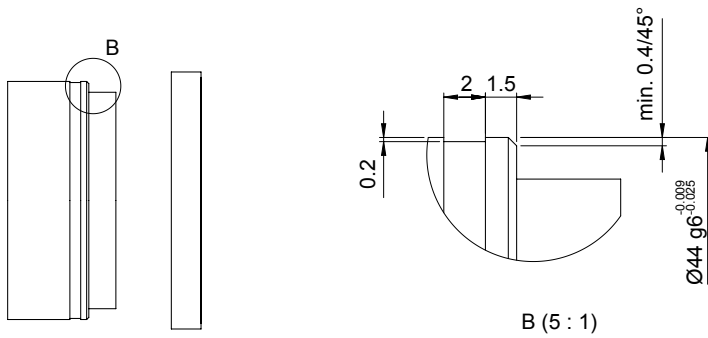
### Method 1: Installation by press-fit

1. Slip the ring onto the mating shaft applying equal or uniform force along the whole ring circumference.



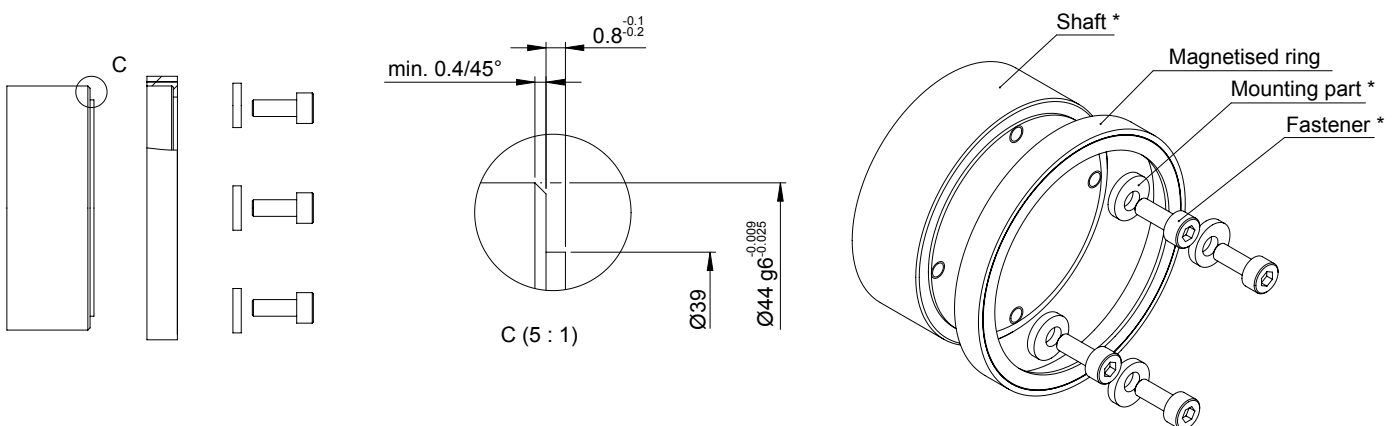
\* Not provided.

### Method 2: Installation by gluing



### Method 3: Installation with fasteners

1. Slip the ring onto the mating shaft.
2. Attach the ring with appropriate fasteners.

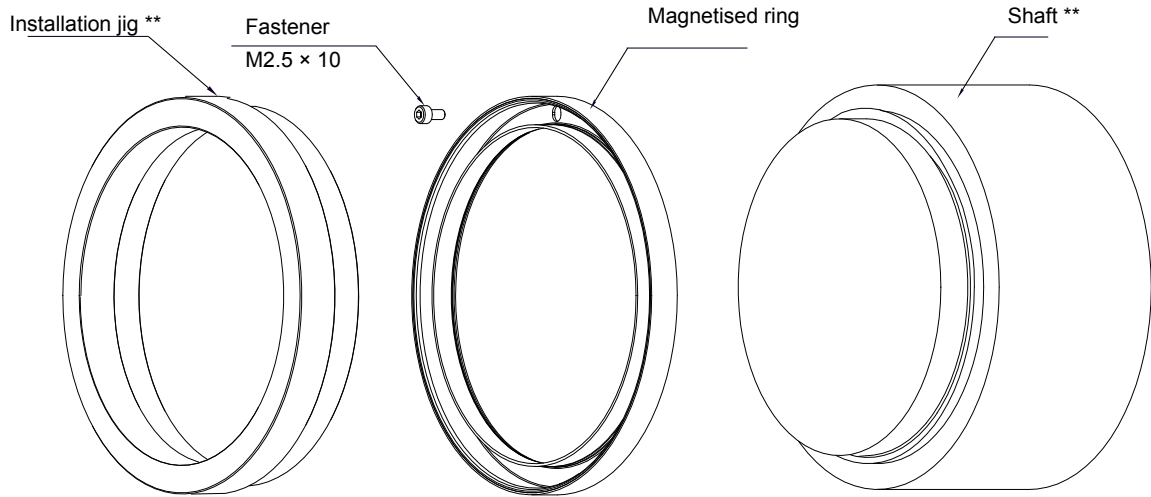


\* Not provided.

## For MR100F ring

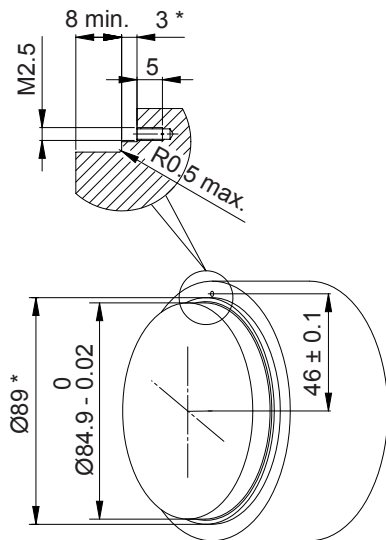
### Method 1: Installation by press-fit

1. The inner diameter of the ring is slightly conical. Make sure that the ring is press fitted with the wider diameter first. Insert the M2.5 × 10 screw.
2. Attach the ring by press fitting.
3. During press fitting equal pressure must be applied round the whole circumference. (Use the installation jig. \*\*)
4. Secure the ring by M2.5 × 10 screw. Tightening torque 0.5 Nm should be applied.



\*\* Not provided.

### Shaft dimensions



\* Recommended for replacement purpose.

### Recommendation for the installation jig \*\*

