Assembly instructions:

PLANE DESIGN rose / Flush rose EZ180 - round

The installation is easy, fast and precise by using the KARCHER DESIGN milling template article no. Z600 GB.
For mounting you may need a metal drilling template Z502 D, 2 Mounting Clamps, a router with a fix guide ring Ø 24 mm and a groove cutter of Ø 20 mm. To countersink the PLANE DESIGN rose, door need have a remaining wood thickness on both sides of at least 7 mm. Rebated and flush doors with a door thickness of 40 – 50 mm are suitable. Unsuitable are plastic-coated doors packed under vacuum. Do a small trial milling in the area of the lever hole or keyhole to verify that the surface is suitable for milling. The countersink holes need have a diameter of 55,3 mm and a depth of 2,7 – 2,9 mm. Should PLANE DESIGN roses milled into doors which have already been equipped with lever rose sets, firstly horizontal mounting holes have to be drilled to 8 mm. In this area the door leaf can be deformed by the old door handles. Please verify by placing upright the milling template (1) as straight-edge. In case a gap is visible on the surface of the door leaf, the PLANE DESIGN roses have to be milled deeper accordingly. Height differences can be balanced out with supplied discs.

1.) Set your door leaf on a stable horizontal surface.
2.) In advance drill the holes of the connecting bolts with the help of the metal drilling template Z502 D with a diameter of 7 mm from both sides each through to the middle of the lock. After that drill to 8 mm (without metal drilling template). **Image A**
3.) Place the milling template Z600 GB **image B** with the corresponding circular cut-out (1) over the lock case pin (2). Screw the 8 mm spindle (3) in the centering aid to mill the deepening of the lever rose. If both milling holes are required for lever rose and euro profile PZ72 or keyhole BB72, the corresponding guiding spindle 17mm or 7mm (4) will be screwed in. Screw in the 8 mm lever rose spindle (5) and 8mm spindle for bathroom 78 mm (3). Turn the template by 180 degrees, then screw in guiding-spindle (6) for PZ92 the 10mm lever rose spindle and the 17mm spindle for PZ. The respective distances are indicated on the centering aid. Before starting to mill, one or more trial millings should be done on a plane wooden board to adjust the correct depth and to control the correct diameter.
4.) Insert the centering aid (7) with the guiding pins through the milling template in the lock case. Verify parallelism to the door edge. Fix the milling template with clamps at the edges and make sure that these do not move. **Make sure that the surface between the door leaf and the milling template is clean to avoid scratches.**
5.) Remove the centering aid (7). Now the fixed milling template(1) is on the door leaf. The lock case pin (2) has to be exactly in the centre of the milling radius.

<u>Karcher GmbH accepts no liability for improper milling or damages resulting therefrom. Please note the security advices and operating instructions of the electrical devices!</u>

image A

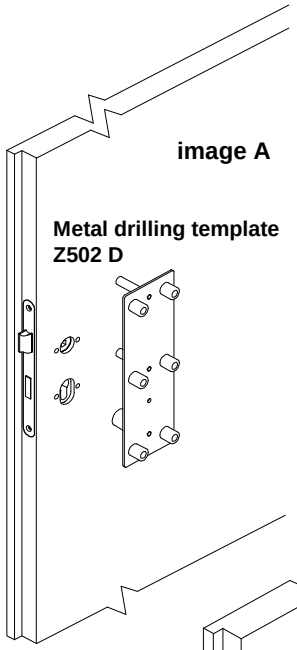
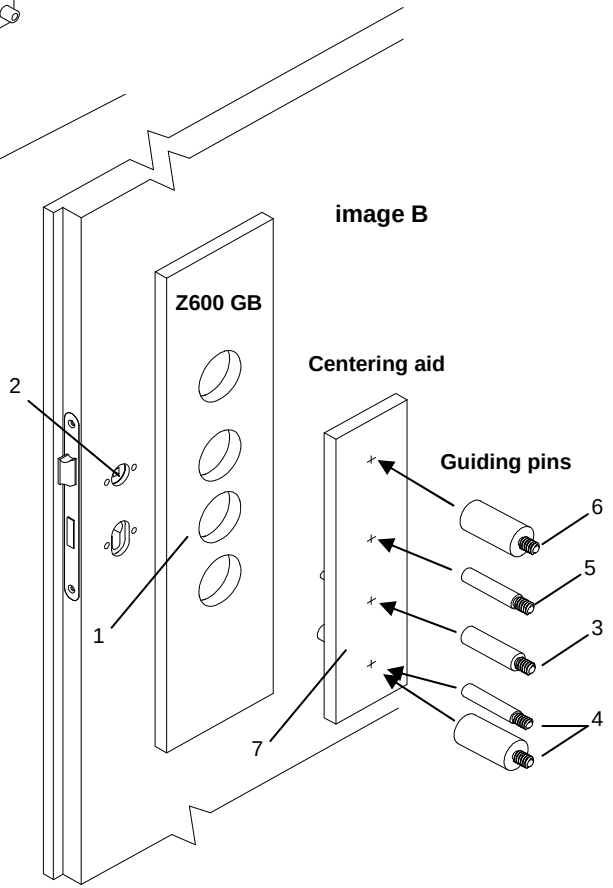


image B



6.) Make sure that the milling template is tight and can not move. Mill from the middle to the outside 2,7- 2,9 mm deep to the edge of the template. Afterwards mill slowly circularly clockwise with the guide ring along the inner edge until the complete circle with a diameter of Ø 55,3 mm is completed **Image C** (8). To correct any inaccuracies of the guide ring, turn your router with the handle several times in another direction during the milling process. We recommend a rose projection of 0,1 – 0,3 mm over the door leaf that the milled edges are not noticeable. The depth of the milling can be settled later with the help of the enclosed cardboards.
7.) Proceed for the lever roses (9) in the same way as mentioned in point 6.
8.) Repeat the milling process for the lever roses and key roses on the opposite door leaf.
9.) **Assembly of the roses: Image D** Use outside of lever rose (10) furnished with lugs. Screw and tighten one of the two guiding rings (11) for the lever guidance with the help of the metal disc (12). Insert the complete rose in the countersink **Image E.** Make sure that the notch (13) is upside down. Screw the sub-construction (14) with the guiding bushes (15) and the M5 screws (16) together with the outside rose (10). Pay attention to the bolt length! There are two different bolt lengths per rose set (2 pieces M5x35 for door thickness: 32mm – 45mm and 2 pieces M5x40 for door thickness: 37mm – 50mm each) Tighten the screws only slightly that the leftover wood (minimum 4 mm on both sides) of the door leaf does not break into the lock recess and that the covering cap does not snap-in the sub-construction.

10.) Proceed with the lever roses or the bathroom turns in the same way as mentioned in point 9. Insert the bathroom locking (22) in the lower lock nut and fix the turning knob (23) with grub screw (21) in closed condition **Image F.** Should the door leaf have a thickness of 40 mm then cut the turning knob if necessary.
11.) Put on the lever or key cap downward with the notch (13). Press on the top and on the bottom that it snaps-in audibly. Screw the guiding ring (11) in the lever rose and tighten. **Image D** Insert the plastic lever guidance (18) on both sides.
12.) Insert spindle (19) in the lock nut and adjust it. Depending on lever model (20) the grub screw (21) can be placed below the lever or laterally.

Attention: Insert the spindle in the way, that the top of the grub screw bolts through the thinnest part. Image G

13.) Insert the lever handle (20) from one side through the plastic guidance (18) in the lever rose (13). Make sure that the spindle is adjusted and tighten the grub screw (21) slightly.
14.) Insert the other lever through the plastic guidance. Screw in the grub screws during pressing together both levers slightly.
15.) Tighten the grub screws on both lever handles **that the top of the grub screw breaks into the spindle at its thinnest point.**
16.) Functional test.

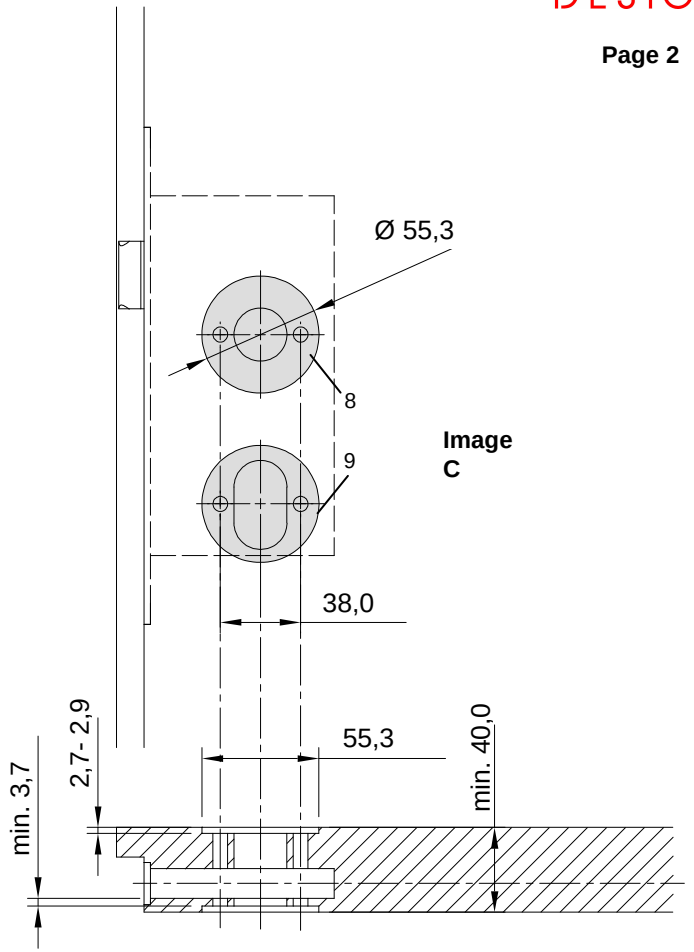


Image C

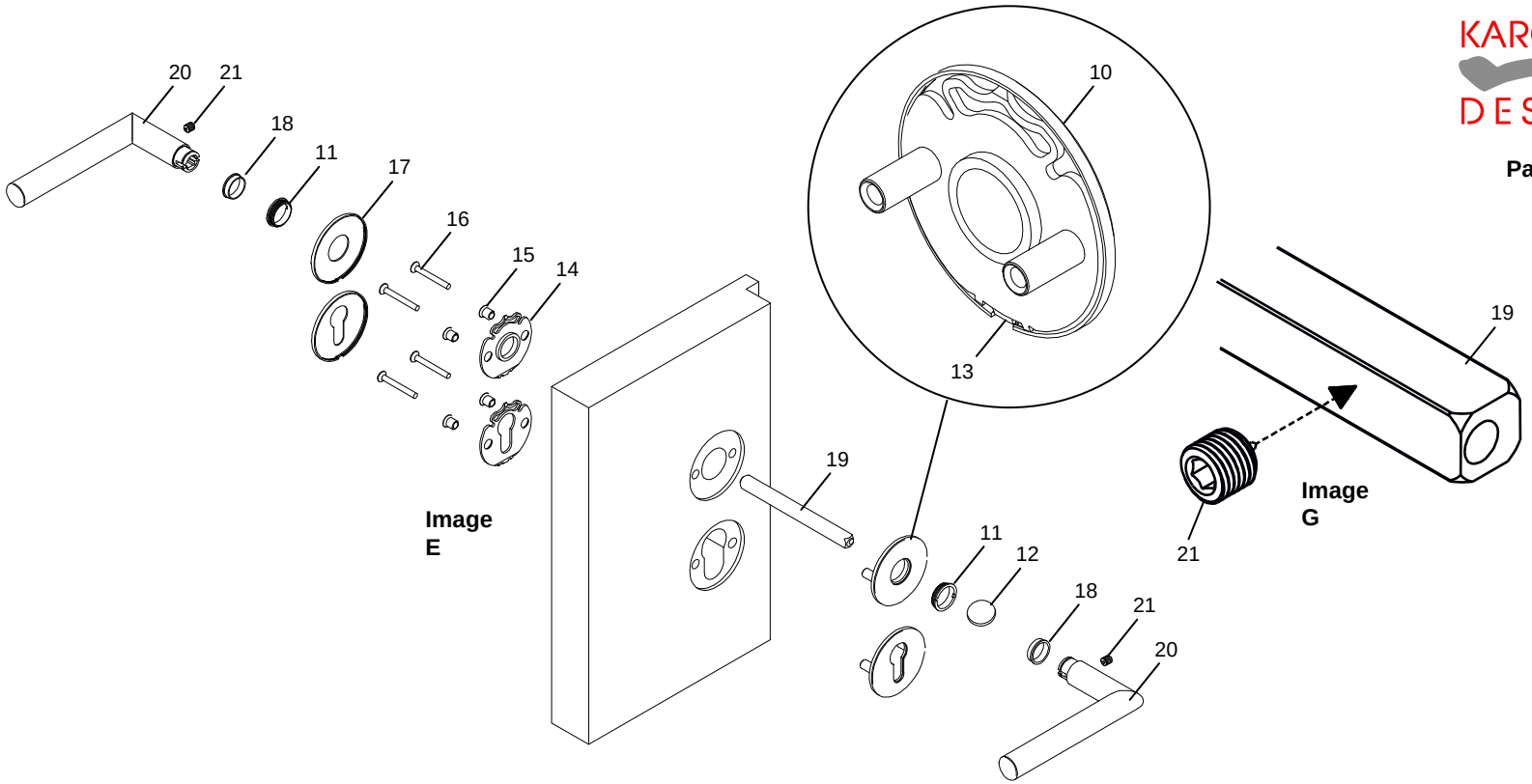


Image E

Image G

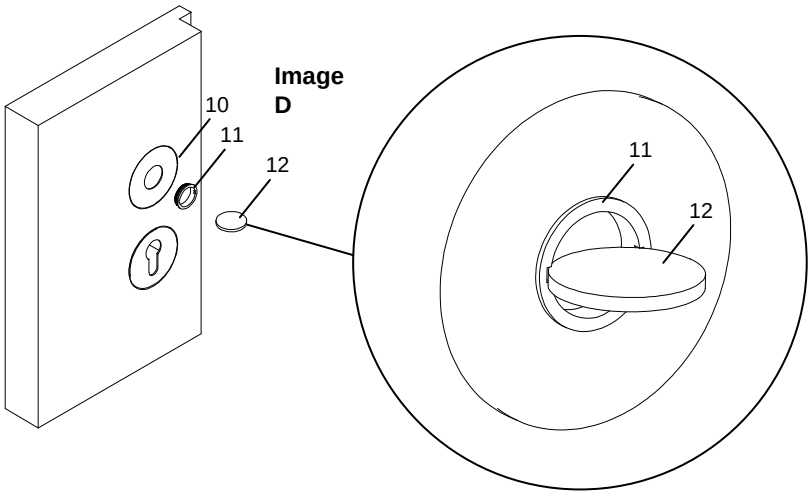


Image D

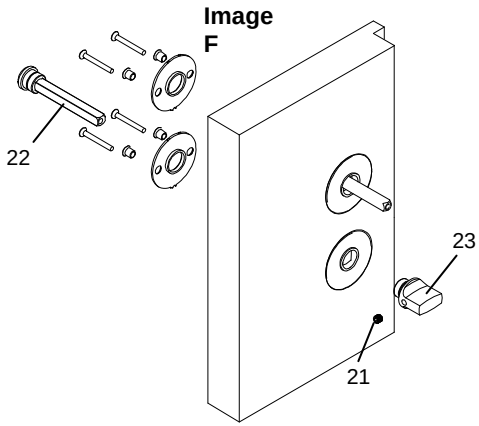


Image F