

Accessories

Commissioning box:

TRG. Made of galvanised sheet steel. Contains a removable damper, mounting frame with air distribution plate, fixed measurement tapping and sound absorbent insulation covered by a reinforced surface layer, rated to Fire Resistance Class B-s1,d0 conforming to EN ISO 11925-2.

Mounting frame with damper:

FHA. Made of galvanised sheet steel. With a slide damper in the rear. Can be used instead of the TRG as a simpler alternative. NOTE! No flow measurement function.

Mounting frame:

FHB. Made of galvanised sheet steel. Used if no commissioning box is installed.

Installation

Press the circular grille directly into the duct; if required secure the grille with screws through the edge of the frame.

The rectangular grilles require the fitter to cut an opening according to the nominal width and height dimensions specified. Press the mounting frame (FHA/FHB) into the duct and secure it in position with blind rivets. Then press the grille into the mounting frame to secure it firmly. If a TRG commissioning box is used, pull the telescopic mounting frame out of the box. Push the box from the rear into the opening and secure the box to the building structure with mounting brackets or hangers. Push the telescopic mounting frame into the box from the room side, and secure it to the sides with blind rivets. See Figure 2.

Then press the grille into the mounting frame. If the sum of the width and height of the grille exceeds 700 mm, the grille will have to be secured with screws to the wall using the countersunk screw holes.

To commission the TRG

Commissioning must be carried out with the grille mounted. Pull the measuring tubes and damper adjustment cords out through the vanes of the grille. Connect the pressure gauge to both measuring tubes (transparent + blue). The rated coefficient of performance of the air register can be used in a calculation to determine the required commissioning pressure. Conclude commissioning by adjusting the damper to the correct blade position, tie a commissioning knot in the damper cords to indicate the damper position. See Figure 1.

The K-factor (COP) is specified on the product's identification label. K-factors can also be found in the relevant commissioning instructions at www.swegon.com.

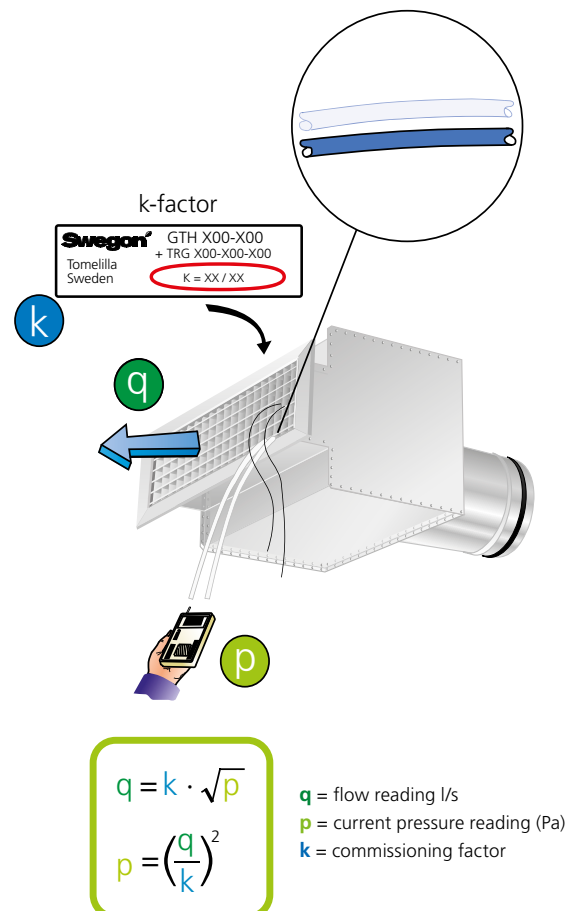


Figure 1. Commissioning.

Free area

To obtain the free area, multiply the inner area of the grille by a factor of $f = 0.71$.

Example, grille: GTH 400-200

The inner area of the grille = $(0.4-0.02) \times (0.2-0.02) = 0.0684 \text{ m}^2$

The free area of the grille = $(0.4-0.02) \times (0.2-0.02) = 0.0684 \text{ m}^2$

Maintenance

The air diffuser can be cleaned, if necessary, using luke-warm water with dishwashing detergent added or by vacuum cleaning using a brush nozzle. If a TRG commissioning box is used and if necessary the TRG inner surfaces should be vacuum cleaned. The duct system can be reached for cleaning after the grille has been drawn out of its mounting frame. Remove the flow-measuring plate out of the mounting frame and the damper unit is removed by turning the damper out its bayonet fastener.

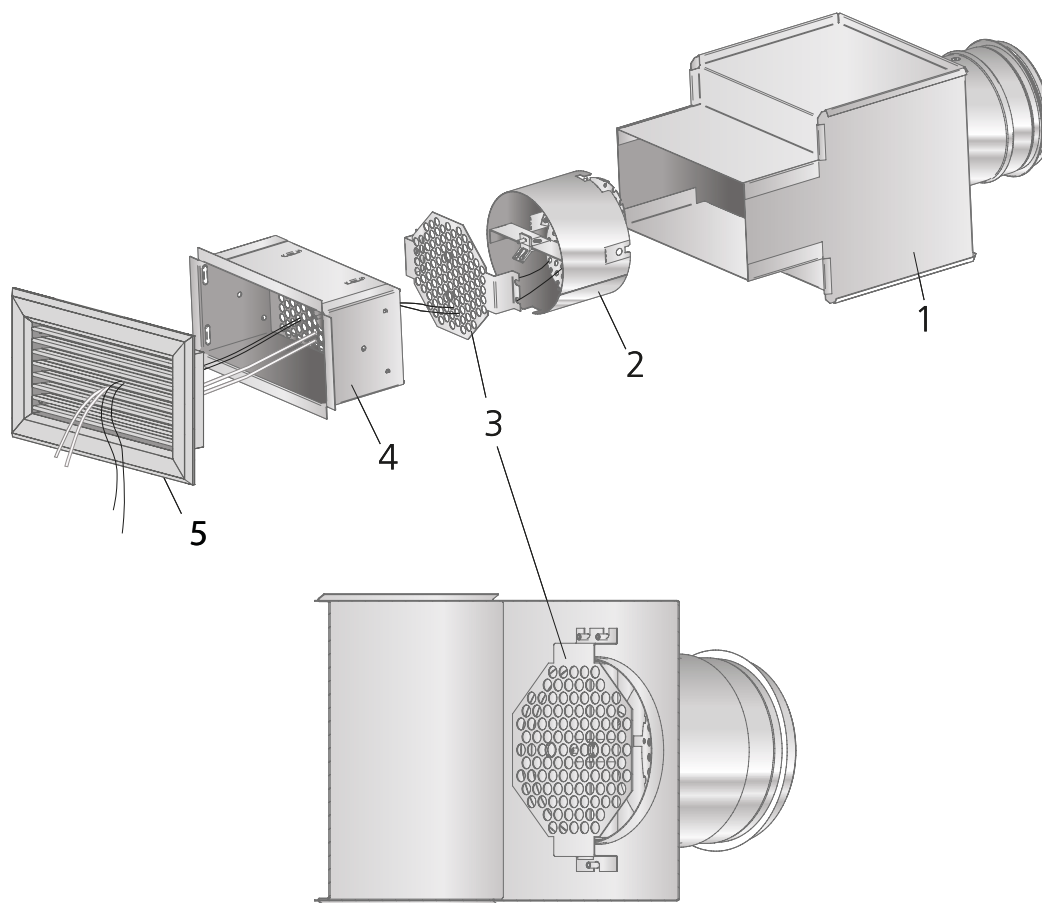


Figure 2. Installation. Commissioning.

To secure the damper action (2) in the duct connection and to secure the octagonal perforated face plate (3) against the duct connection.

1. Commissioning box
2. Damper action
3. Octagonal air distribution plate
4. Mounting frame
5. Grille

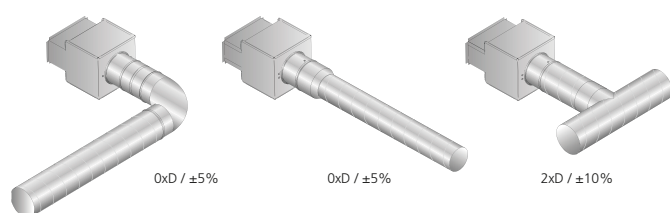


Figure 3. Installation alternatives, applies for all connections (B, K, L).

Dimensions and Weights

TRG

| Size | A | B | C | ØD | F | F2 | I | G | H | I | J | K | Weight (kg) |
|---------|-----|-----|-----|-----|-----|--------|-----|-----|------|----|----|----|-------------|
| 200-100 | 203 | 100 | 80 | 124 | 175 | 85-160 | 98 | 195 | 38,5 | 25 | 13 | 50 | 2.7 |
| 300-100 | 303 | 100 | 100 | 159 | 210 | 85-160 | 115 | 230 | 38,5 | 25 | 13 | 50 | 3.9 |
| 400-100 | 403 | 100 | 100 | 159 | 210 | 85-160 | 115 | 230 | 38,5 | 25 | 13 | 50 | 4.7 |
| 500-100 | 503 | 100 | 120 | 199 | 245 | 85-160 | 135 | 270 | 38,5 | 25 | 13 | 50 | 7.5 |
| 300-150 | 303 | 150 | 120 | 199 | 270 | 85-160 | 135 | 270 | 38,5 | 25 | 13 | 50 | 5.3 |
| 400-150 | 403 | 150 | 145 | 249 | 305 | 85-160 | 160 | 320 | 38,5 | 25 | 13 | 50 | 6.8 |
| 500-150 | 503 | 150 | 145 | 249 | 305 | 85-160 | 160 | 320 | 38,5 | 25 | 13 | 50 | 7.8 |
| 400-200 | 403 | 200 | 145 | 249 | 330 | 85-160 | 160 | 320 | 38,5 | 25 | 13 | 50 | 8.5 |
| 500-200 | 503 | 200 | 180 | 314 | 360 | 85-160 | 194 | 387 | 38,5 | 25 | 13 | 50 | 9.8 |
| 600-200 | 603 | 200 | 180 | 314 | 360 | 85-160 | 194 | 387 | 38,5 | 25 | 13 | 50 | 11.0 |

GTH

| Size | Weight (kg) |
|---------|-------------|
| 200-100 | 0.4 |
| 300-100 | 0.5 |
| 400-100 | 0.6 |
| 500-100 | 0.7 |
| 300-150 | 0.7 |
| 400-150 | 0.8 |
| 500-150 | 1.0 |
| 400-200 | 1.1 |
| 500-200 | 1.3 |
| 600-200 | 1.5 |

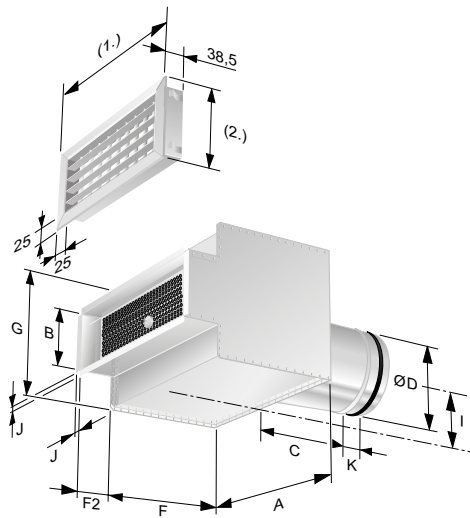


Figure 4. GTH/TRG.

(1.) = Nom. width +30 mm

(2.) = Nom. Height +30 mm.

To obtain the exact dimensions of the grille, add the values given in GTH figure to its nominal dimensions.

Hole making size, fixing frame FHB = nominal dimensions. (Grille size designation.)

Size of the opening, TRG= nominal dimensions + 5 mm (Size designation of the grille + 5mm).

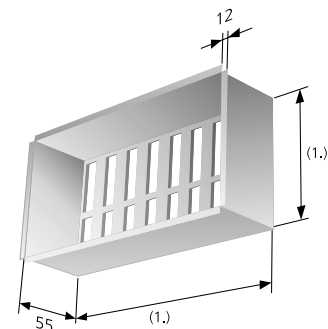


Figure 5. FHA mounting frame with slide damper.
(1.) = Nom. -3mm

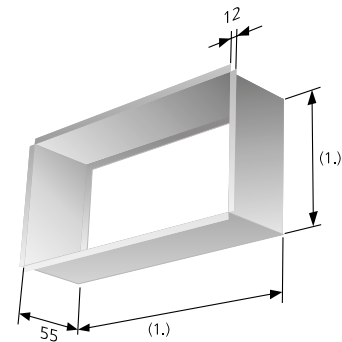


Figure 6. FHB mounting frame.
(1.) = Nom. -3mm

K-factor (COP)

| TRG Size | GTH – Supply air, vanes 45° | | | GTH – supply air, straight vanes | | |
|-------------|-----------------------------|---------|---------|----------------------------------|---------|---------|
| | Conn. B | Conn. K | Conn. L | Conn. B | Conn. K | Conn. L |
| 200-100-125 | 7.2 | 7.0 | 7.1 | 7.5 | 7.2 | 7.3 |
| 300-100-160 | 11.3 | 11.9 | 12.1 | 12.1 | 12.1 | 12.3 |
| 400-100-160 | 15.0 | 16.1 | 15.0 | 16.2 | 16.6 | 15.4 |
| 500-100-200 | 20.1 | 20.4 | 21.1 | 21.1 | 20.7 | 22.1 |
| 300-150-200 | 19.4 | 18.8 | 19.2 | 19.3 | 19.2 | 19.7 |
| 400-150-250 | 25.4 | 25.8 | 26.6 | 26.5 | 26.1 | 27.9 |
| 500-150-250 | 33.8 | 33.4 | 30.9 | 34.8 | 33.5 | 32.9 |
| 400-200-250 | 37.4 | 38.1 | 41.1 | 38.1 | 39.2 | 41.2 |
| 500-200-315 | 48.0 | 48.2 | 46.4 | 50.5 | 48.4 | 48.3 |
| 600-200-315 | 57.6 | 57.8 | 54.4 | 60.3 | 58.7 | 56.6 |

Number of measuring tubes: 2.

Connection alternatives: B = Rear, K = Short side, L = Long side.

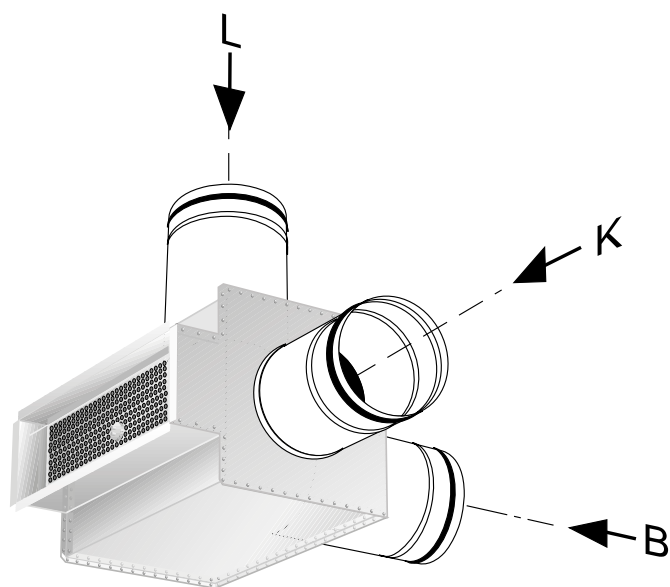


Figure 7. Connection options for the TRG.

B = rear connection

K = connection on short side

L = connection on long side