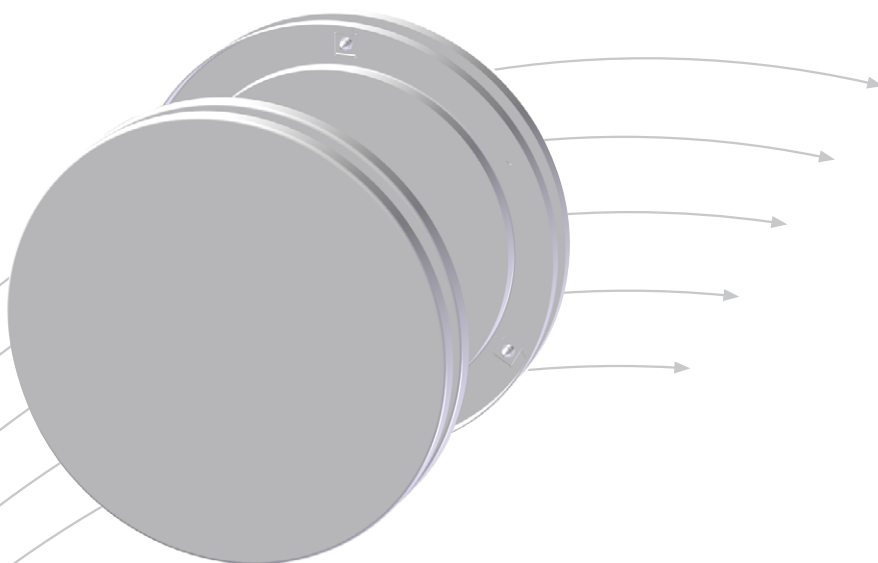


TOG-R

Circular sound attenuating transfer unit



- Installation friendly
- Easy cleaning

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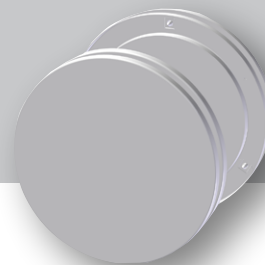
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TOG-R



APPLICATION

TOG-R is a circular transfer unit for wall mounting, and is used for inter-room air transfer, such as from living room to corridor, using a central outlet.

DESIGN

TOG-R comprises two mounting rings and two sound attenuating diffuser fronts which are installed on each side of the wall. The mounting rings feature a clip-on system for easy fitting of the front units.

MATERIALS AND SURFACE COATING

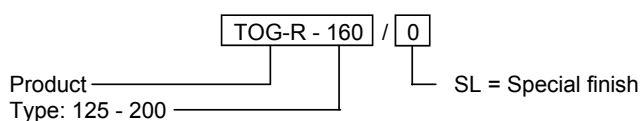
Both the diffuser front and the mounting ring are made in steel, with a RAL 9003 - gloss 30 finish. Other colours available on request.

QUICK SELECTION

| TOG-R Type | [m ³ /h] | | | Sound level difference D _{n,e,w} |
|---------------|---------------------|------|------|---|
| | 10Pa | 15Pa | 20Pa | |
| 125 | 100 | 130 | 151 | 34 |
| 160 | 151 | 184 | 209 | 33 |
| 200 | 190 | 230 | 266 | 32 |

Table 1: The table shows air flow rates at max slot height, $L_{WA} \leq 3 \text{ dB(A)}$.

ORDER CODE, TOG-R



Example:
TOG-R-160 / 0
Explanation:
TOG-R transfer unit, type 160.

DIMENSIONS AND WEIGHT, TOG-R

| Type | A | C | Weight [kg] |
|------|-----|----------|-------------|
| 125 | 240 | 13-17-24 | 0,6 |
| 160 | 280 | 13-17-24 | 0,8 |
| 200 | 333 | 13-17-24 | 1,2 |

Table 2

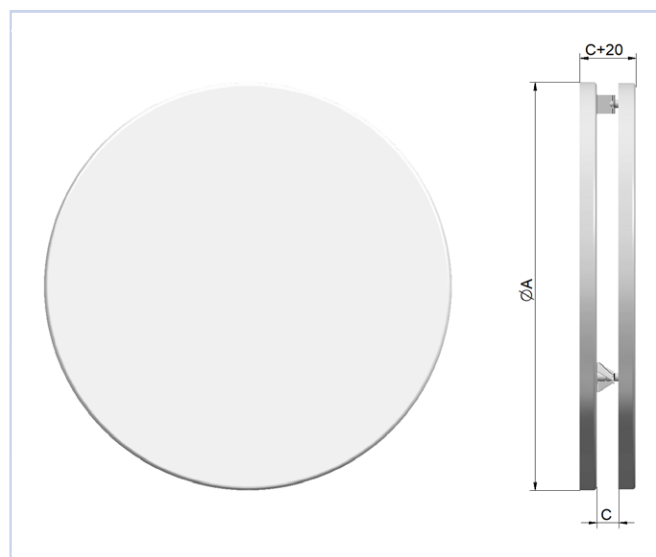


Fig. 1

TOG-R

ACOUSTIC DATA

Sound attenuation

Sound reduction is stated as weighted, normalised sound level difference ($D_{n,e,w}$) for transfer units.
Table 3 states $D_{i,w}$ and R_w for different reference areas. To the far right in table 3, the normalised sound level difference for each individual frequency band is provided.

Example

In order to calculate the reduction number for wall weakening when a transfer unit is installed, diagram 2 is used.

Example:
Wall: 20 m², $R_w = 45$
Transfer unit: TOG-R 160, $D_{n,e,w} = 33$
 $R_w - D_{n,e,w} = 12$ dB
According to the diagram, the wall weakening is approx. 9 dB

| TOG-R Type | $D_{n,e,w}$ | $D_{i,w}$ | R_w at various reference areas | | | | $D_{n,e}$ -values | | | | |
|---------------|-------------|-----------|----------------------------------|------------------|------------------|-------------------|-------------------|-----|-----|------|------|
| | | | S_{ventil} | 1 m ² | 2 m ² | 10 m ² | 125 | 250 | 500 | 1000 | 2000 |
| 125 | 34 | 24 | 5 | 24 | 27 | 34 | 32 | 36 | 31 | 32 | 36 |
| 160 | 33 | 23 | 6 | 23 | 26 | 33 | 30 | 34 | 31 | 32 | 34 |
| 200 | 32 | 22 | 7 | 22 | 25 | 32 | 29 | 32 | 29 | 30 | 33 |

Table 3

Correction factor [KO], TOG-R

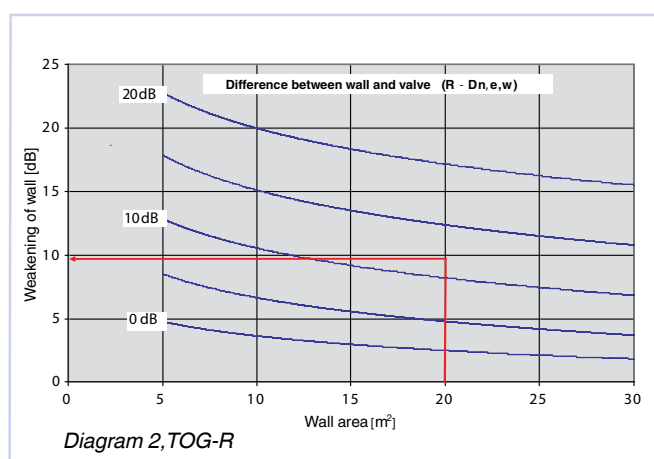
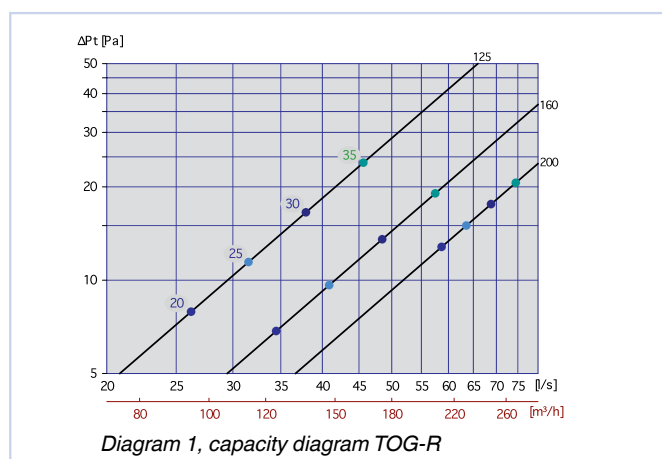
| TOG-R Type | KO [dB] | | | | | | | |
|---------------|---------|-----|-----|-----|----|-----|-----|-----|
| | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 125 | 12 | 8 | 2 | -6 | -5 | -11 | -19 | -21 |
| 160 | 10 | 7 | 4 | -3 | -7 | -12 | -21 | -22 |
| 200 | 11 | 11 | 0 | -4 | -9 | -13 | -22 | -21 |

Table 4

CALCULATION DIAGRAM

Acoustic properties have been measured for noise and total pressure loss generated. The diagram provides a summary of the A-weighted sound power level from diffuser, L_{WA} .
Correction factors in table 4 are used to calculate emitted sound power level at the respective frequencies, $L_w = L_{WA} + KO$.

A room with absorption equivalent to 10m² Sabine will have a sound pressure level which is 4 dB below the sound power level emitted.



TOG-R

INSTALLATION

Installation principle shown in fig. 2.

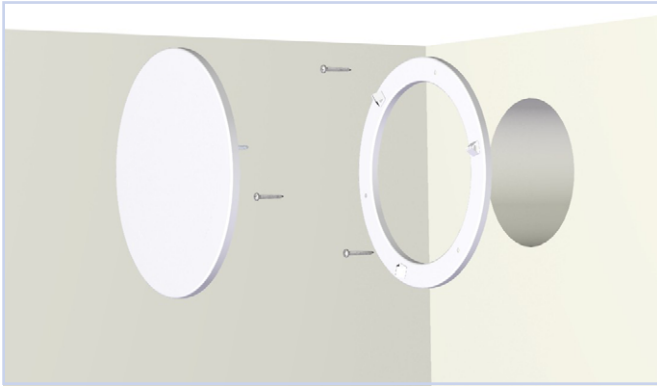


Fig. 2: Installation

MAINTENANCE

The transfer unit can be cleaned by using a damp cloth..

ENVIRONMENT

Enquiries regarding product declaration can be directed to our sales team, or information can be found at www.trox.no

TOG-R is developed and manufactured by:

TROX[®] TECHNIK
 **Auranor**

The company reserves the right to make amendments without prior notice.

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