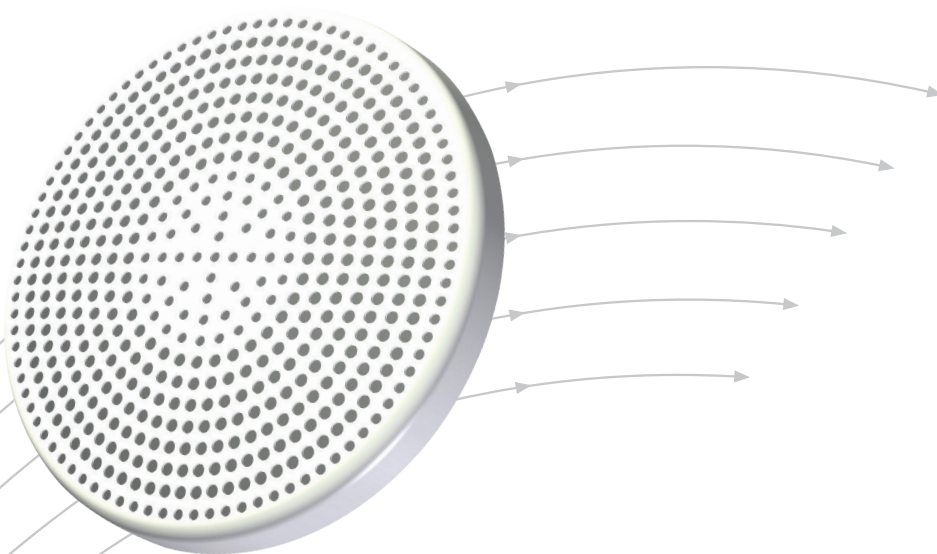


TLH

Supply diffuser



- Excellent induction
- Versatile positioning
- Suitable as a ceiling, wall and riser diffuser
- Installed directly in ductwork or groove
– no tools required

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APPLICATION

TLH is a basic supply diffuser for wall, ceiling or riser installation.

DESIGN

TLH features a perforated front and a connection collar fitted with a wide rubber gasket for installation directly in duct or groove without additional fastening devices.

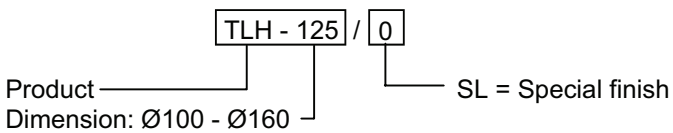
MATERIALS AND SURFACE COATING

TLH is made of steel, and comes in a RAL 9003 - gloss 30 finish with EPDM rubber gasket fitted as standard.

QUICK SELECTION

TLH	[m ³ /h]		
Dim.	25 dB(A)	30 dB(A)	35 dB(A)
100	58	72	86
125	108	130	155
160	194	230	274

Table 1: The table shows the air volume at 3 sound levels. The sound level is L_w(A).



Example:
 TLH-125 / 0
 Explanation:
 TLH supply diffuser dim. Ø125.

DIMENSIONS AND WEIGHT, TLH

Dim.	D	DA	B	Weight [kg]
100	99	171	72	0,6
125	124	211	74	0,6
160	159	211	74	0,8

Table 2

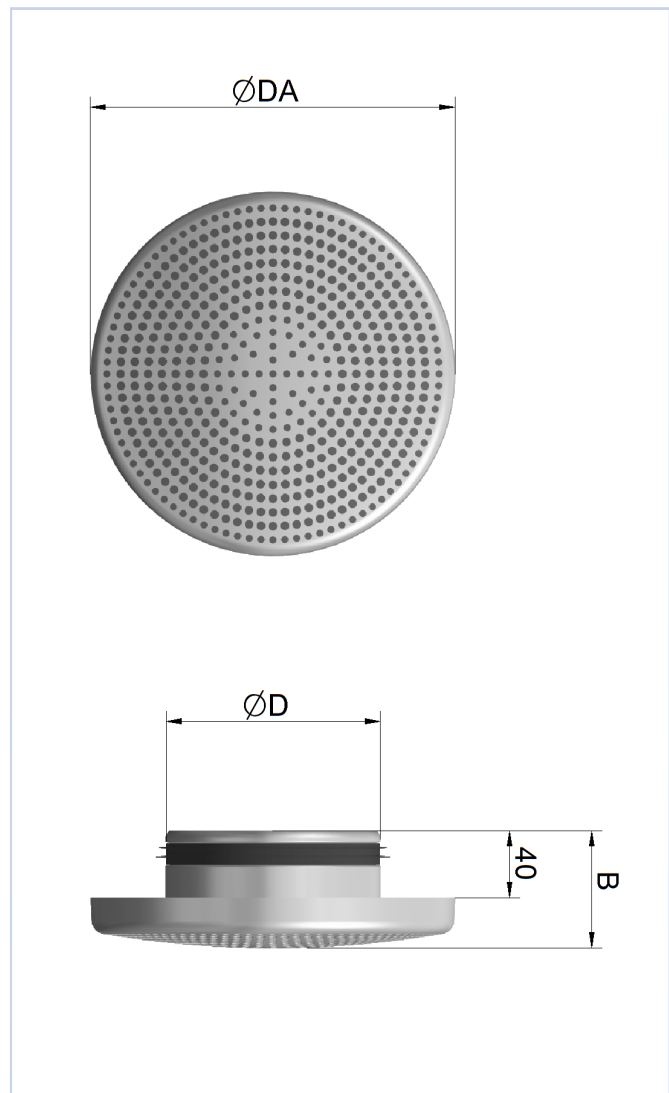
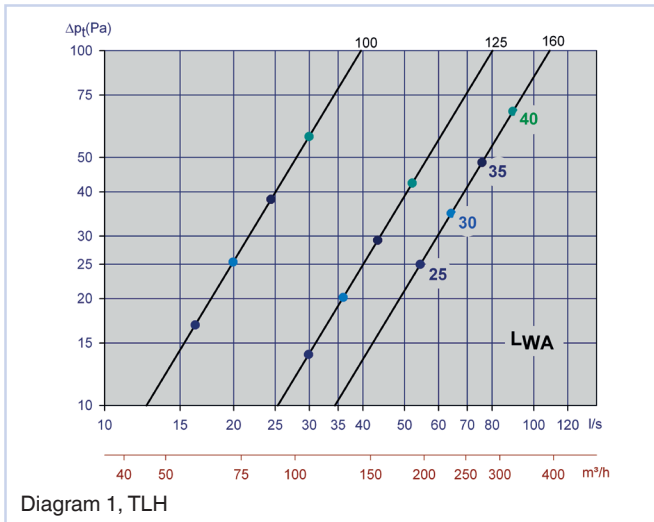


Fig. 1

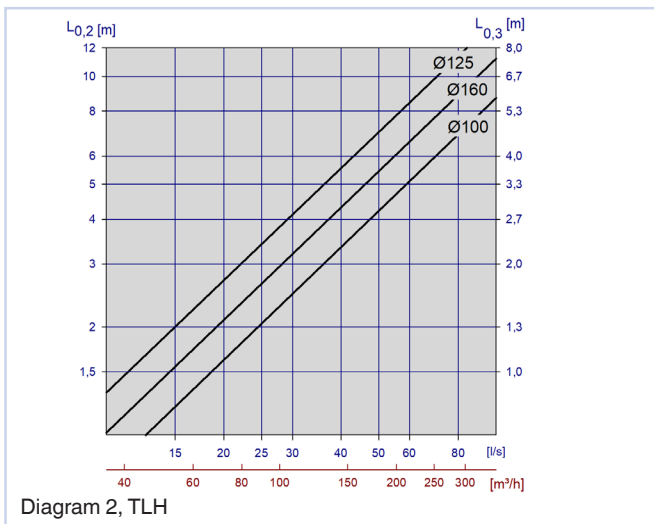
ACOUSTIC DATA

The diagrams show the total A-weighted sound power level for the valve, L_{WA}. The correction factors in the table are used to compute the emitted frequency-distributed sound power level, L_w = L_{WA} + KO. The sound pressure level in a room with absorption corresponding to 10m² Sabine will be 4 dB lower than the emitted sound power level.

CALCULATION DIAGRAM



THROW LENGTH



Example:

A location has 35 l/s of inlet air (126m³/h) injected. A TLH 125 is selected. From the diagram, we find that L_{WA} = 30dB(A) at 20 Pa total pressure loss. The room attenuation is set to 4dB.

We wish to determine:

- Emitted sound power level from the valve at 250 Hz.
 - A-weighted sound pressure level in the room.
- a) Table 1 shows that the correction factor for 250 Hz is -4 dB. L_w at 250 Hz then becomes: L_{WA} + KO = 30 + (-4) = 26 dB
- b) With 4 dB room attenuation, the sound pressure level in the room becomes: 30 - 4 = 26 dB(A)

Static sound attenuation incl. end reflection for TLH

TLH	Attenuation[dB]							
Dim.	63	125	250	500	1k	2k	4k	8k
100	27	19	12	7	4	1	2	4
125	22	17	12	6	2	0	0	3
160	19	13	10	5	2	0	1	2

Table 3

KO for calculation of frequency-distributed sound power levels

TLH	KO [dB]							
Dim.	63	125	250	500	1k	2k	4k	8k
100	7	-8	-7	-6	-4	-7	-12	-19
125	5	-6	-5	-4	-4	-8	-12	-17
160	6	-7	-4	-4	-4	-7	-13	-17

Table 4

FLOW PATTERN

Typical flow pattern for TLH

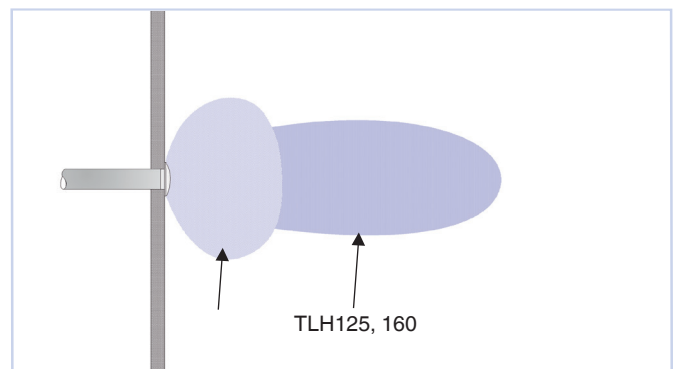


Fig. 2: TLH 100 has a flow pattern which provides a limited throw length. It is thus suitable for risers where displacement ventilation is used and for properties with balanced ventilation systems.

TLH

INSTALLATION

TLH is installed directly in to duct as shown in fig. 3 or in groove with an equivalent inside diameter, and is secured by using a press-and-twist method. The diffuser is removed by reversing the action, i.e. twist and pull.

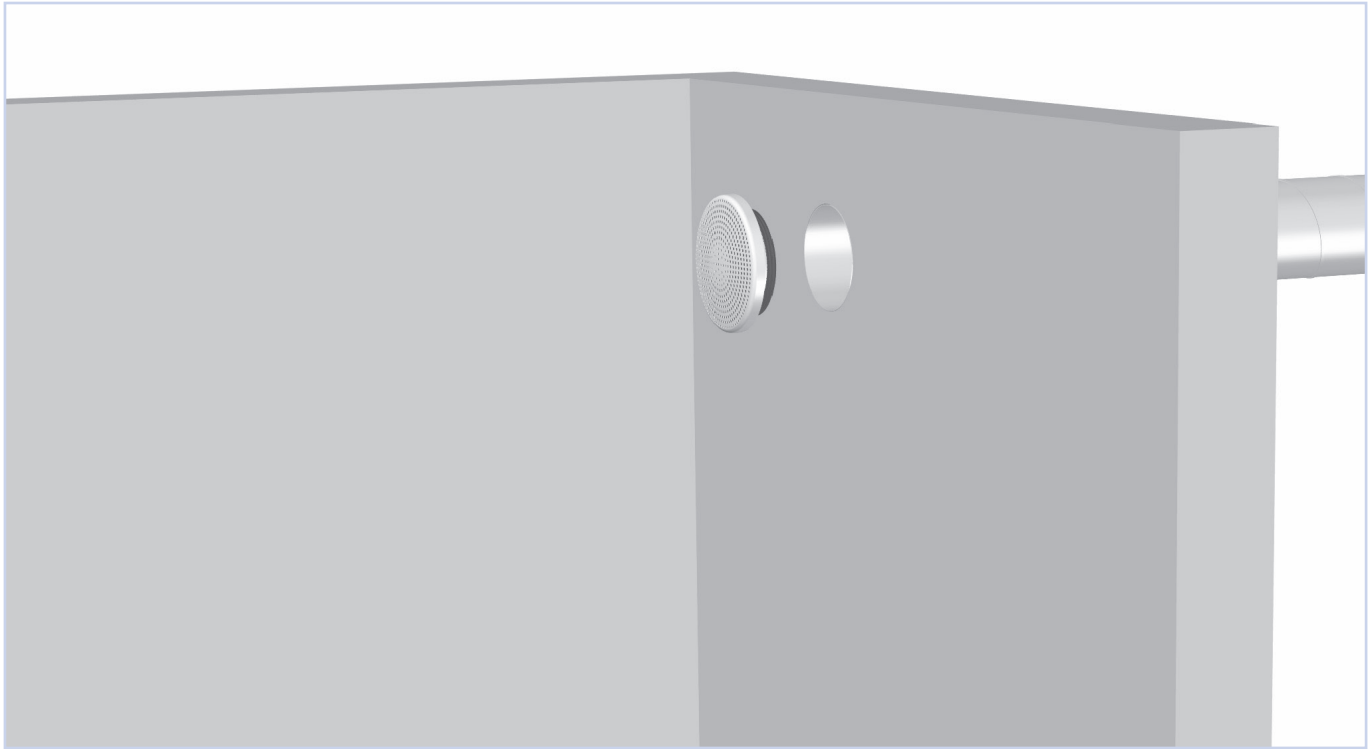


Fig. 3: Installation

ADJUSTMENTS

For adjustments, the air volume can be measured with the nipple in the centre hole on the front, see separate data sheet for adjustments at our Web site: www.trox.no

MAINTENANCE

The valve should 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 our website: www.trox.no

TLH is developed and manufactured by:

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

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