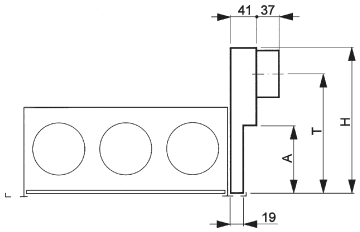
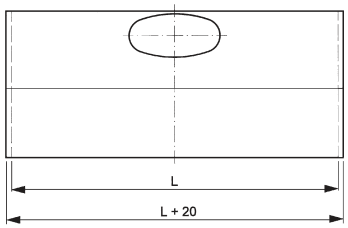
SLOT DIFFUSER FOR LUMINAIRS

TYPE: QA • QT

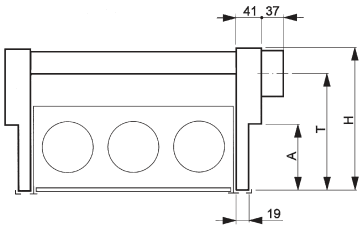
Installation dimensions

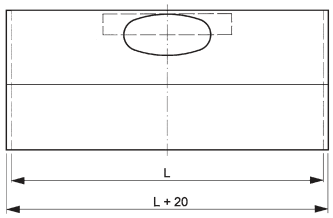
Q....B



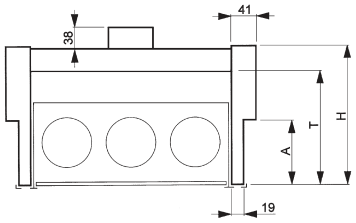


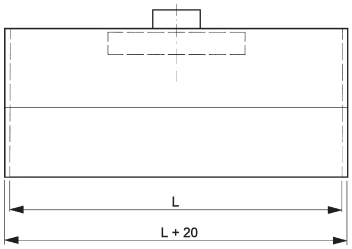
Q....G





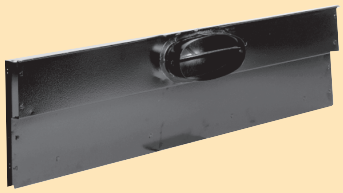
Q....E





Height	A	H	T
15	63	154	111
20	111	203	168

All dimensions in mm



Application

The slot diffuser QA/QT, is designed for mounting with light fixtures. The air is diffused through the slots which are mounted on the sides of the light fixtures. The air supply pattern is vertically or horizontally adjustable by means of a deflector which can be operated through a slot opening. The diffuser has a very high induction level and an extremely low noise level.
The diffuser is especially equipped for fast, efficient and economical mounting in system-ceilings demanding a high aesthetic standard.

Technical information

Characteristics

- adjustable air diffusion pattern: horizontal-vertica deflection
- adjustable air flow: either by means of a damper in the inlet spigot (side entry), a damper in each plenum (top entry), or a combination of both.
  The dampers can be adjusted through the slot of the diffuser with the supplied key.
- Standard dimensions for oval connections (Ø 100, 125, 150 and 160 mm), round connection only possible for Ø 80 mm.
- delivered according to customer specifications
- exhaust diffuser also available: without deflector (QA)

SLOT DIFFUSER FOR LUMINAIRS

TYPE: QA • QT

Construction

- Galvanised steel sheet, deflector in extruded aluminium;
- painted black (RAL 9005)

Specifications description

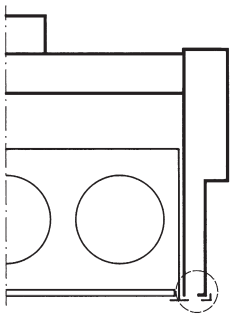
Example:

Slot diffuser for light fixtures in galvanised steel sheet in double construction with top inlet. The diffuser is supplied with an adjustable deflector and damper. Painted black (RAL 9005).

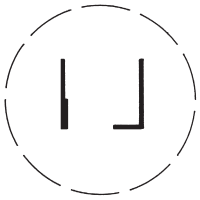
Type: **QT115E**
L = … mm/ Inlet dia. = … mm.

Options

- basic constructions:
  - QA…B/QT...B: single plenum with side inlet
  - QA…E/QT...E: double plenum (two plenums with connection) with top inlet
  - QA…G/QT...G: double plenum with side inlet
- Following the construction of the light fixtures, 9 different slot openings are available



QA/QT100



QA/QT200

QA/QT300

QA/QT400

QA/QT500

QA/QT600

QA/QT700

QA/QT800

QA/QT900

How to order

QT200, single plenum, height 150, slot length 1000 and inlet spigot 125 mm.

Q	T	2	1	5	B	-	1	0	0	0	0	1	2	5
							slot length				inlet spigot			

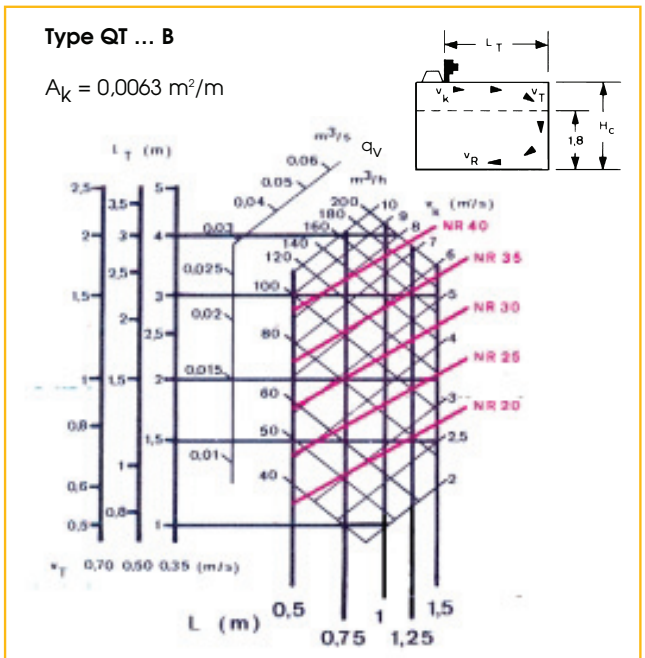
- B: single plenum, side inlet
- E: double plenum, top inlet
- G: double plenum, side inlet

- 15 / 20 } height (cm)
- 1 à 9: deflection
- A: exhaust without deflectors
- T: supply with deflectors

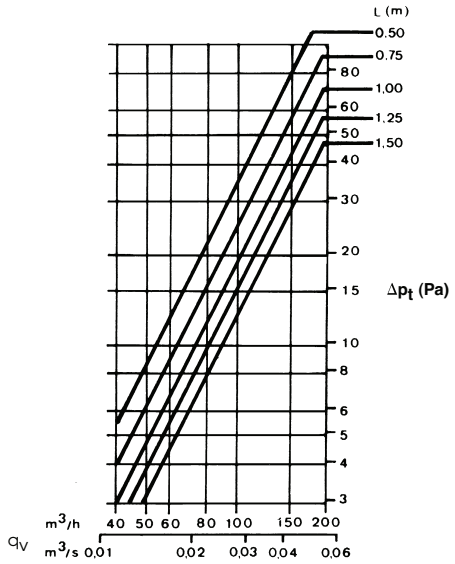
SLOT DIFFUSER FOR LUMINAIRES WITH SINGLE PLENUM

PERFORMANCE DATA **TYPE:** QT...B

Selection diagram - supply



Pressure loss

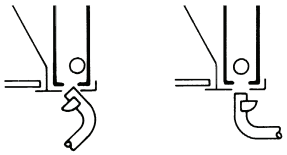


Correction factors

The Δp_t- and NR-values, shown on diagrams are valid only for inlet collars 150 mm. For smaller diameters those values have to be corrected by the factors stated below.

Ø 150	Ø 125	Ø 100	Ø 80
p_t x 1	p_t x 1,16	p_t x 1,44	p_t x 1,55
NR + 0	NR + 2	NR + 5	NR + 6

Air flow rate measurement - supply



Velometer met sonde 2220 A of 6070

Example

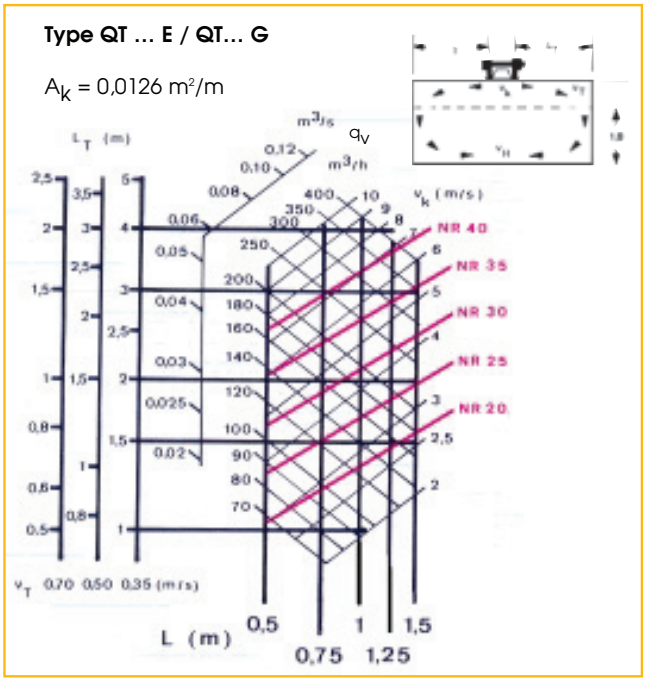
Selection data :
- Airflow rate q_V = 90 m³/h
- slot length : L = 1 m
- inlet spigot = 100 mm

Solution :
- Supply air velocity v_k = 4 m/s
- Throw L_T = 1,4 m at v_T = 0,5 m/s
- Noise level NR 27
- Correction factor for inlet spigot 100 mm : NR 27+5 = NR 32
- Total pressure loss Δp_t = 15 Pa
- Correction factor for inlet spigot 100 mm : 15 Pa x 1,44 = 21,6 Pa

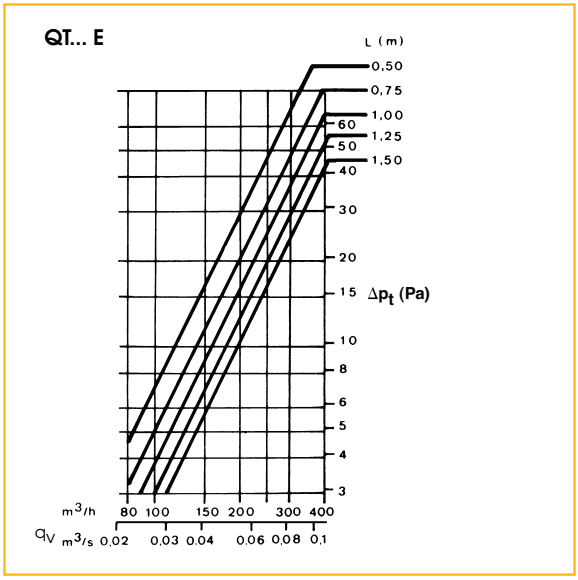
SLOT DIFFUSER FOR LUMINAIRES WITH DOUBLE PLENUM

TYPE: QT...E • Q...G

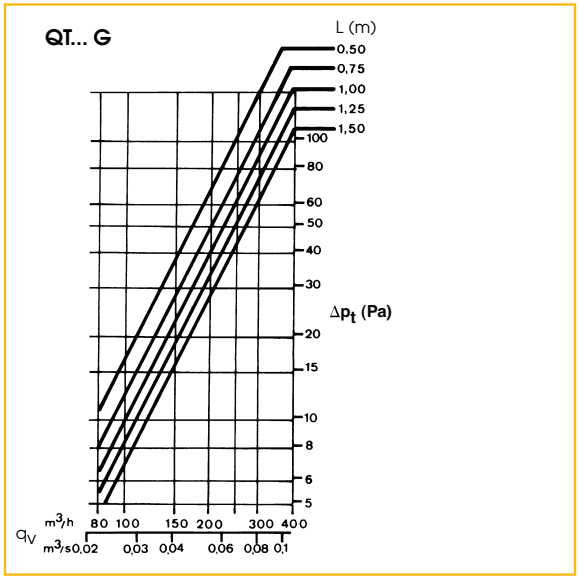
Selection diagram - supply



Pressure loss



Pressure loss



Correction factors

The Δp_t- and NR-values, shown on diagrams are valid only for inlet collars 200 mm. For smaller diameters those values have to be corrected by the factors stated below.

Ø 200	Ø 150	Ø 125	Ø 100	Ø 80
p_t x 1 NR + 0	p_t x 2 NR + 2	p_t x 2,5 NR + 4	p_t x 3,5 NR + 8	p_t x 5 NR + 11

Ø 150	Ø 125	Ø 100	Ø 80
p_t x 1 NR + 5	p_t x 1,3 NR + 7	p_t x 2 NR + 11	p_t x 2,3 NR + 12