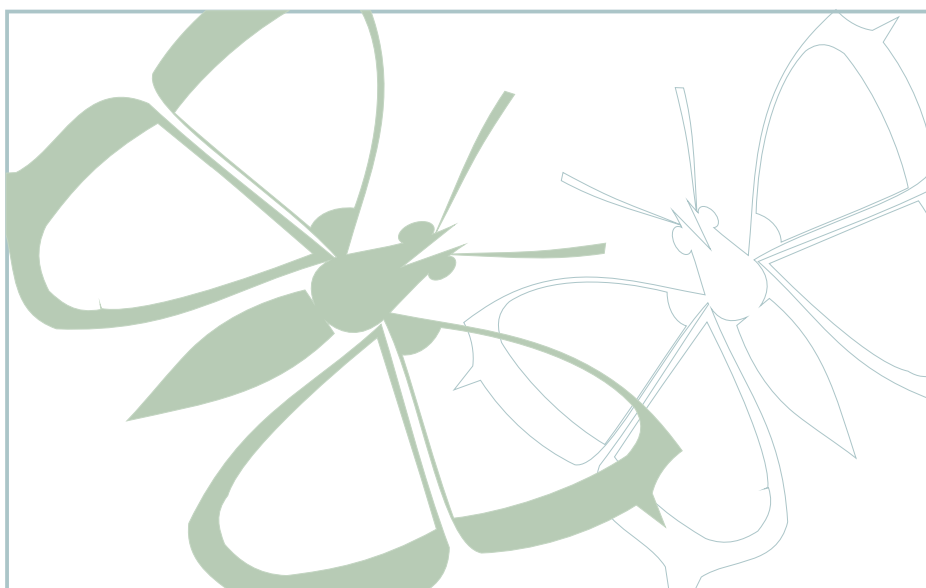


TEXTILE AIR DIFFUSERS

TECHNICAL DATA



4/2007

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I. SPECIFICATION

Only simple diffusers can be described by a specification thoroughly. A technical drawing or a detailed characterization are usually necessary. A specification is used as an approximate definition. It is not sufficient to place an order for a diffuser.

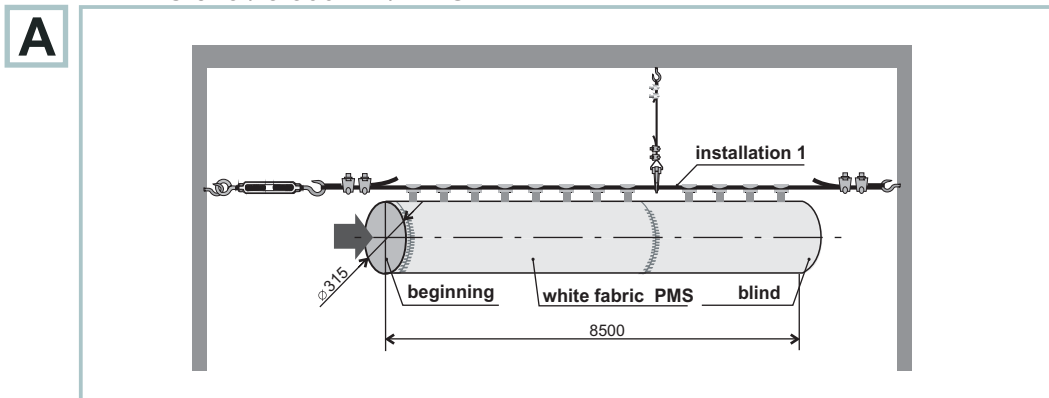
PTD = **SECTION** / **SIZE** / **LENGTH** / **TYPE OF ENDING** / **MATERIAL** = **INSTALLATION** / **COLOUR**

see par. IV. see par. V. see par. VI. see par. VII. see par. XVIII. see par. X. see supplement

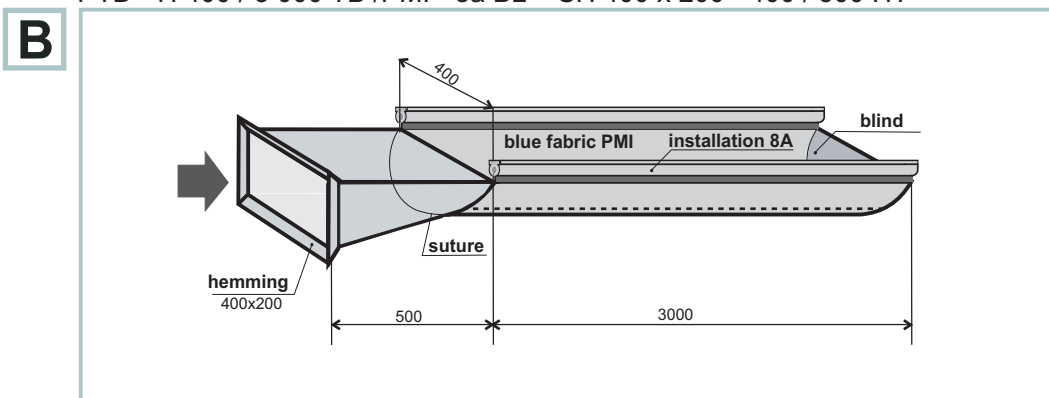
PTD = Pihoda Textile air Diffuser

EXAMPLES:

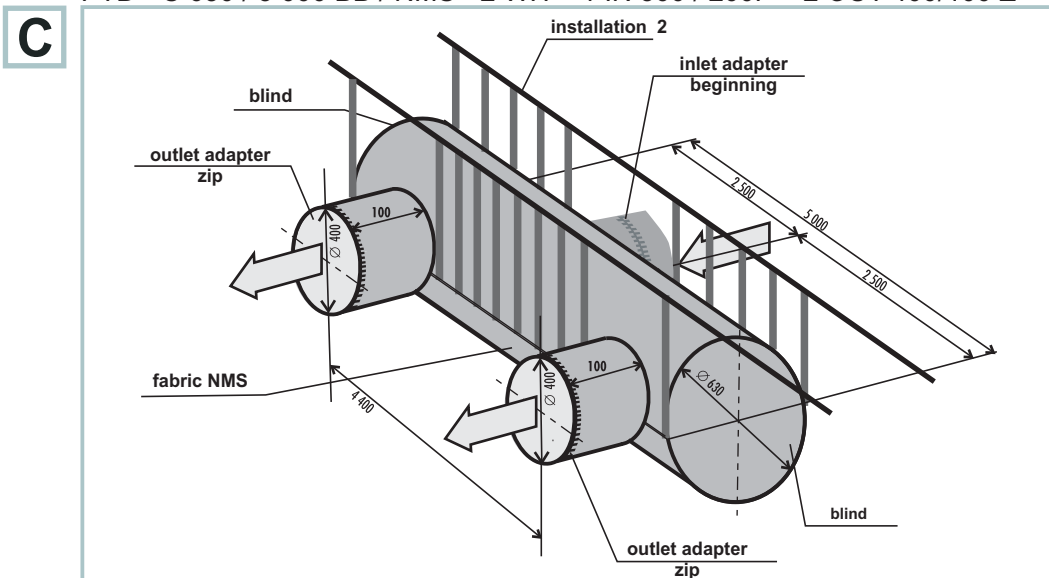
PTD - C 315 / 8 500 FB / PMS - 1WH



PTD - H 400 / 3 000 TB / PMI - 8a BL + SH 400 x 200 - 400 / 500 HT



PTD - C 630 / 5 000 BB / NMS - 2 WH + 1 IN 500 / 200F + 2 OUT 400/100 Z

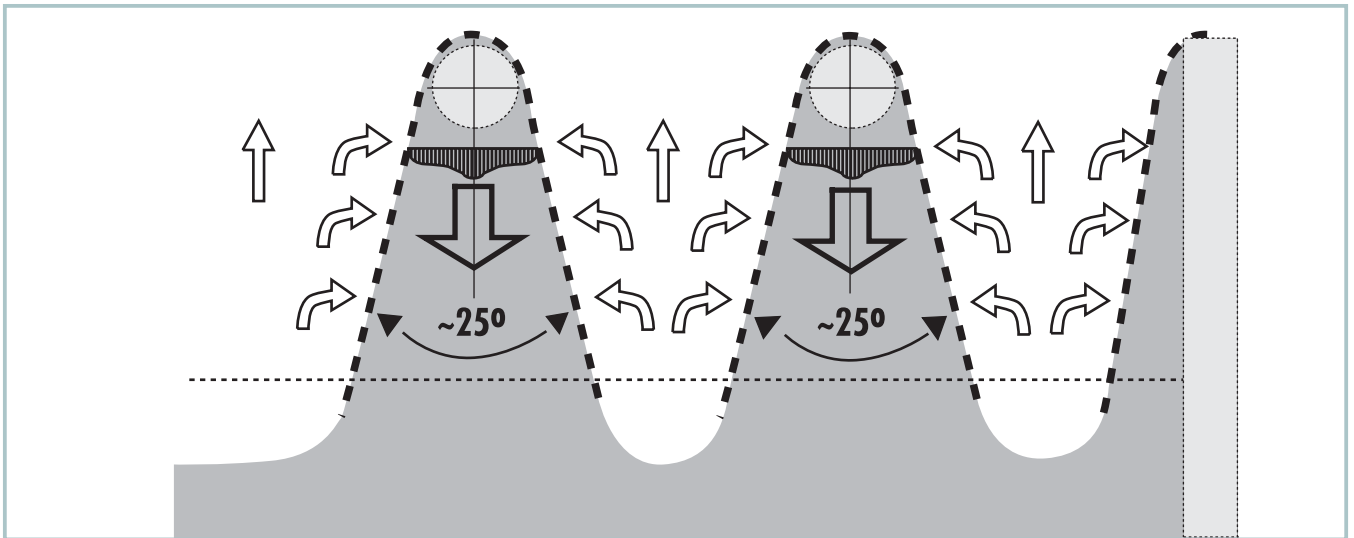


II. METHODS OF INFLOW OF AIR

We distinguish between diffused and rectified inflow of air.

D DIFFUSED

The diffuser is made of permeable fabric. The air is diffusing either through the whole surface of the diffuser or through a part of it at minimum speed and is spreading into the space. There arise different temperature areas. The exit velocity is from 0.01 to 0.5 m/s. Required number of microopenings (diameter cca 0.4 mms) is perforated in the fabric to reach required air flow.

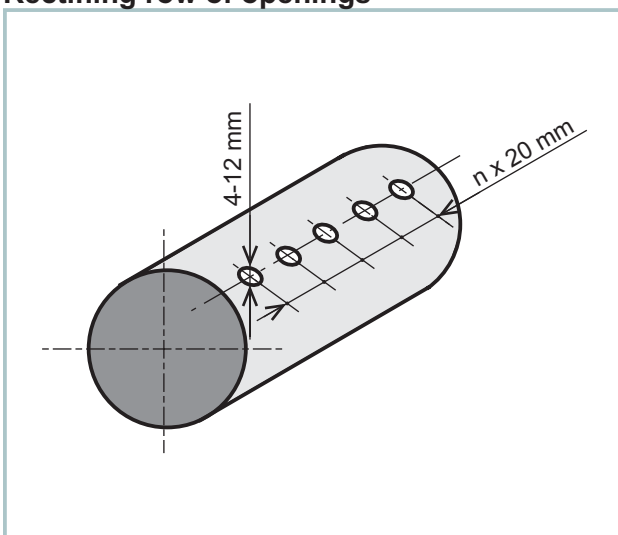


Only the thermic flow causes the extension of the output air. The warm air rises, the cool air sinks. A typical case of draughtless air-cooling by means of a diffuser which distribute air through its whole surface is depicted in the picture above.

R RECTIFIED

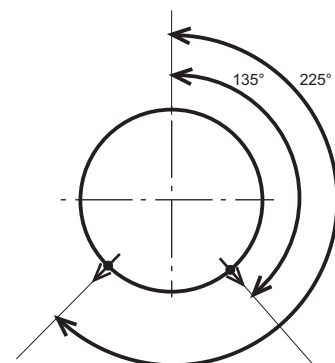
Rows of openings (diameter from 4 to 12 mm) are perforated in the fabric to rectify the air flow. The number and the diameter of the openings correspond to the required air flow. The direction of the current is chosen according to the conditions of a particular place.

Rectifying row of openings



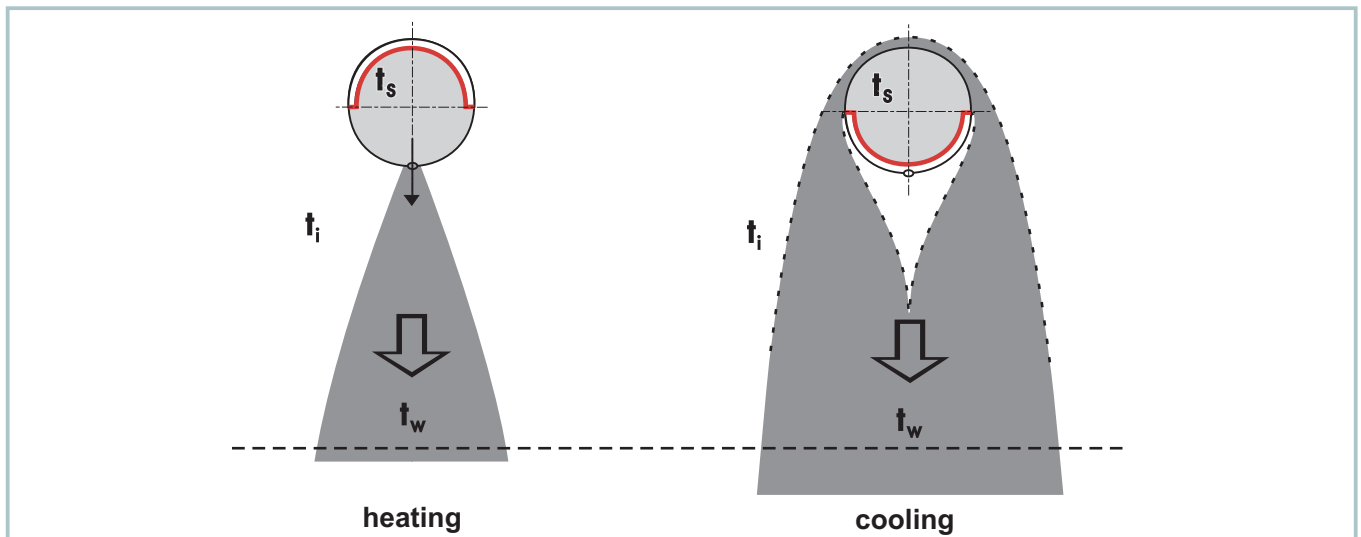
The description of the direction

The size of an angle between the vertical axis and the axis of the holes, clockwise, in the direction of the current

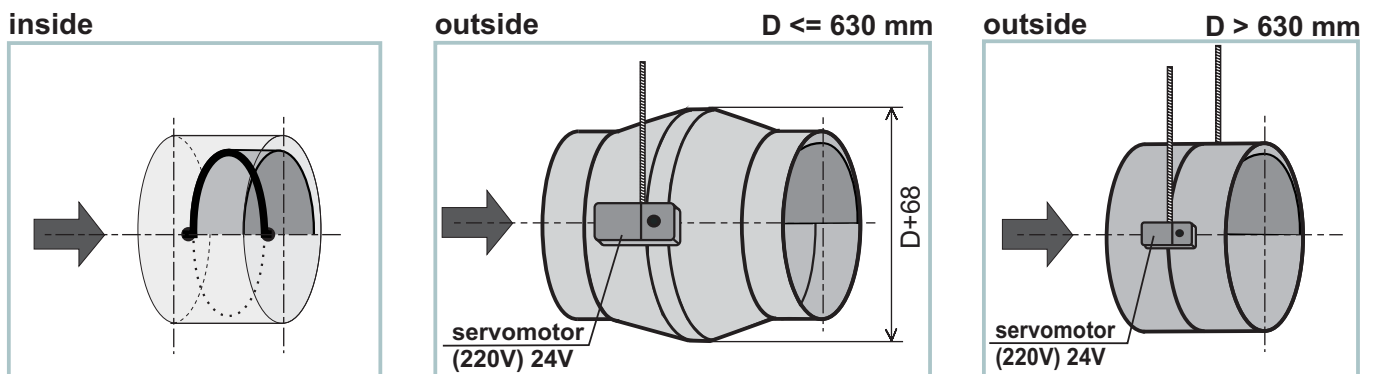


III. MEMBRANE DIFFUSER

M Two kinds of diffuser are combined in one product. A membrane, which is made of flimsy impermeable fabric, is sewed horizontally in the centre of a diffuser. The beginning of the membrane is attached to a flap controlled by a servomotor. It covers either the top or the bottom half of the diffuser. While heating, the membrane covers the top half of the diffuser and the air is diffusing through the row of openings downwards. The membrane covers the bottom half of the diffuser and the air is diffusing upwardly through permeable fabric / fabric modified by means of microperforation while air-cooling.



THE FLAP: Is used to switch over between the two modes. The flap is made of PMS or PMI fabric (according to fire resistance), inner construction is made of galvanized steel. The length is 400 mms always.

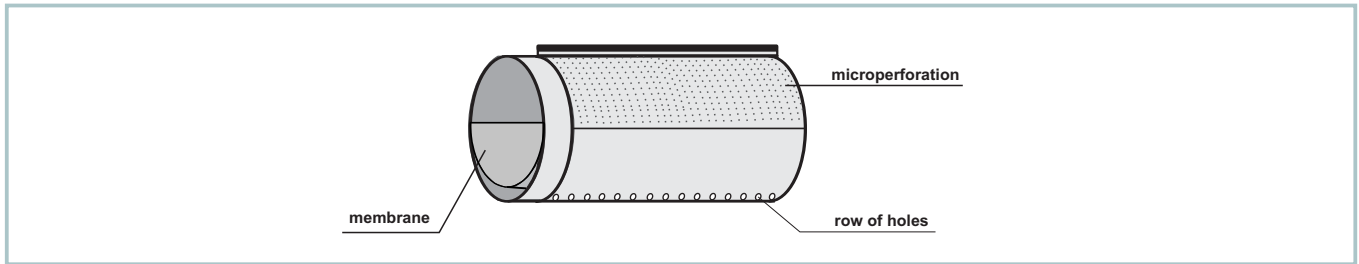


The flap $D \leq 630$ mm is hung in 1 point (see detail O, page 32) ,The flap $D > 630$ mm is hung in 2 points (see detail P, page 32).

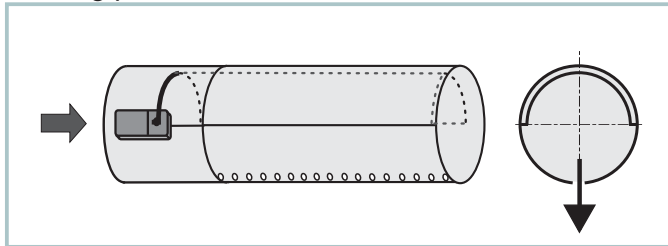
The weight of the flap

size (mm)	160	200	250	315	400	500	630	710	800	900	1000	1120	1250	1400	1600
weight (kg)	1,1	1,1	1,2	1,2	1,3	1,4	1,6	2,1	2,2	2,3	2,4	2,5	2,7	2,8	3,0

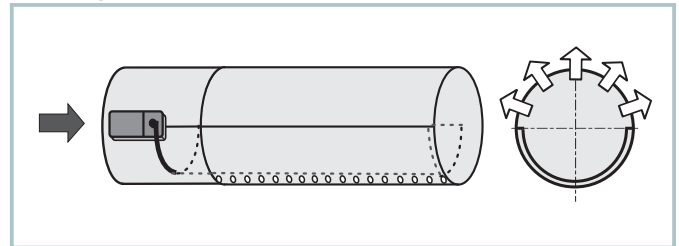
THE DIFFUSER: The membrane covers one half of the diffuser and uncovers the other one.



Heating position



Cooling position



Servo motor 24V or 230V.

IV. SECTION

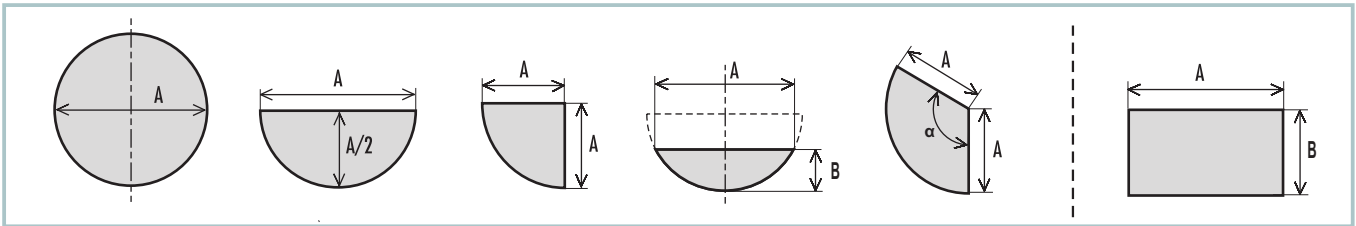
We distinguish among six different diffuser sections:

C	CIRCULAR		The basic version, easy maintenance, preferentially recommended.
H	HALF - ROUND		Use where there is not enough space for circular diffuser and in exacting interiors.
Q	QUARTER - ROUND		Use where there is not enough space for circular diffuser, in exacting interiors and if the diffuser is to be installed in a corner of a room.
SG	SEGMENT		Use where there is not enough space even for a half-round diffuser.
SC	SECTOR		Use where a quarter-round section cannot be used because of a nonstandard construction of a ceiling.
<hr style="border-top: 1px dashed black;"/>			
S	SQUARE		The shape can be retained only by means of a special structure holding at least all the corners of the diffuser. The fabric bulges aside the structure. The structure is used to attach the diffuser to a four-cornered pipe mainly. In the case of a four-cornered pipe the diffuser is attached by means of a flange.

We produce also transitional parts among these sections.

V. SIZE

The number is the diameter of a round and a half-round diffuser, the chord of a segment diffuser, the radius of a quarter-round and sector diffuser, the edge lengths of a square connection.



Any size (100 mms at least) can be produced, according to a concrete demand always with the tolerance max. 3%.

It does not apply to a connecting part, which is always by 10-15 mm bigger than the given value.

The basic list of the sizes A and B:

100, 125, 160, 200, 250, 315, 400, 500, 630, 710, 800, 900, 1 000, 1 120, 1 250, 1 400, 1 600.

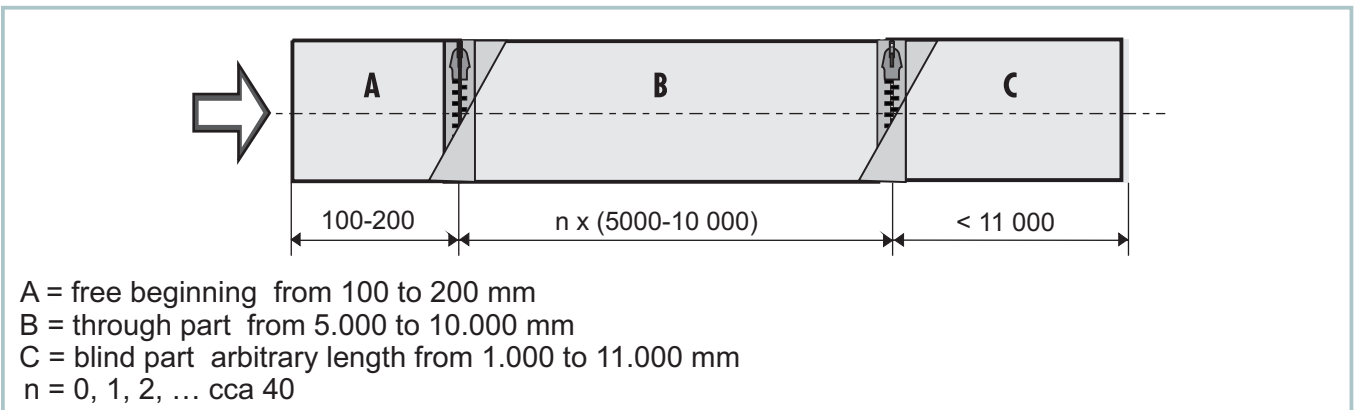
Appropriate dimensions are derived from air-flow at the diffuser inlet, static pressure, speed profile, and the fabric used. Vibration or even oscillation of the fabric is a result of inappropriate dimensions. Such an undesirable effect is classified on a scale from 0 to 5 degrees, 0 indicates absolutely calm surface and 5 indicates absolute oscillation. In practice, degree 2 should be the maximum for luxury installations, and 3 for industrial installations. Average speed of air-flow relevant to that particular dimensions, compared to the classifications in graphs (pgs. 8, 9) shows the suitability of the dimensions. For quick and exact calculation use our software or demand it from our authorized partners.

High speed of air-flow inside a diffuser affects air distribution in the room, because it makes the diffused air-flow deflected from the perpendicular direction. The maximum speed limit should be 8 m/s for luxury installations and 10 m/s for industrial installations. The limit is valid only if the oscillation reaches the appropriate degree concurrently.

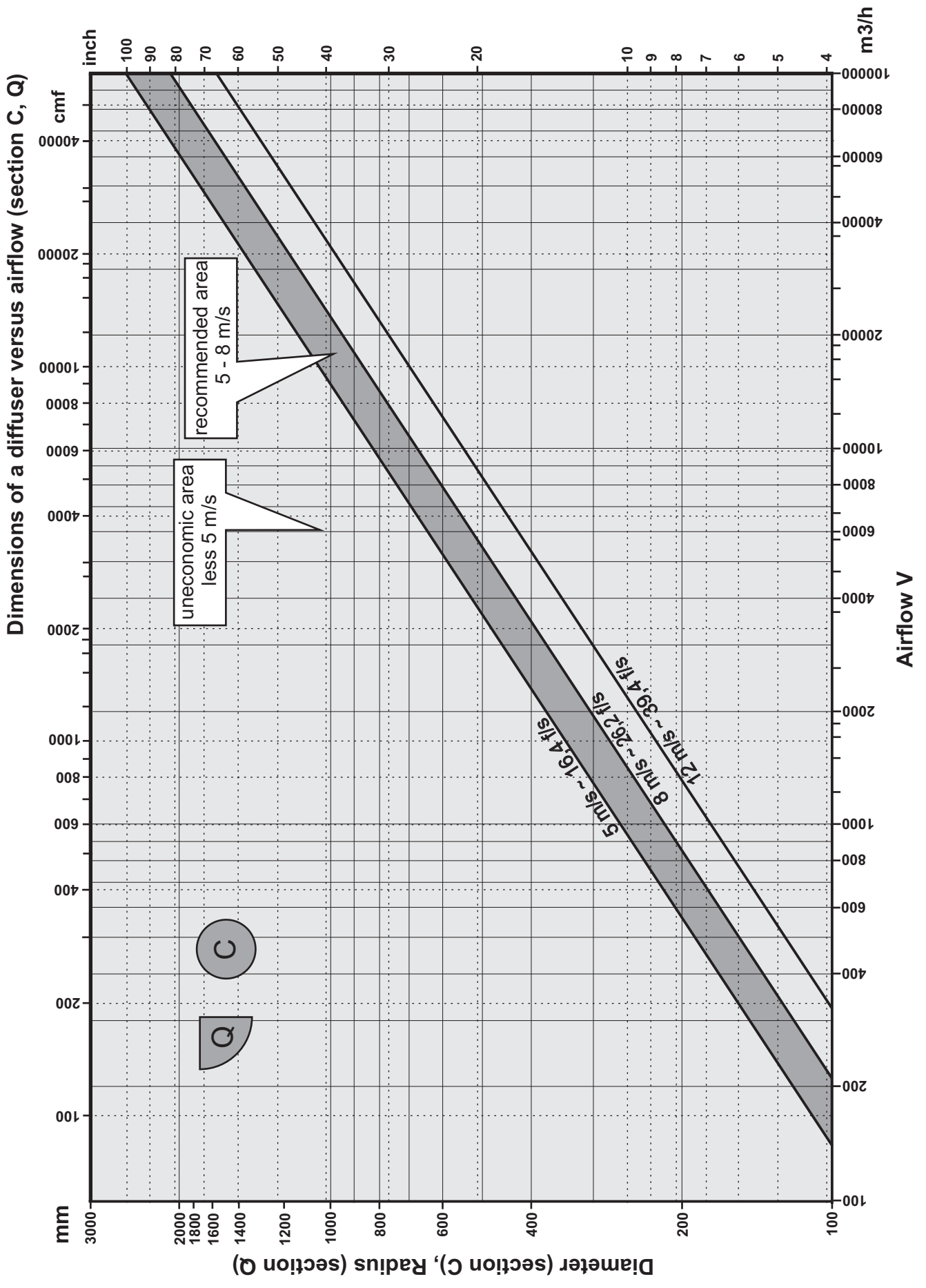
VI. LENGTH

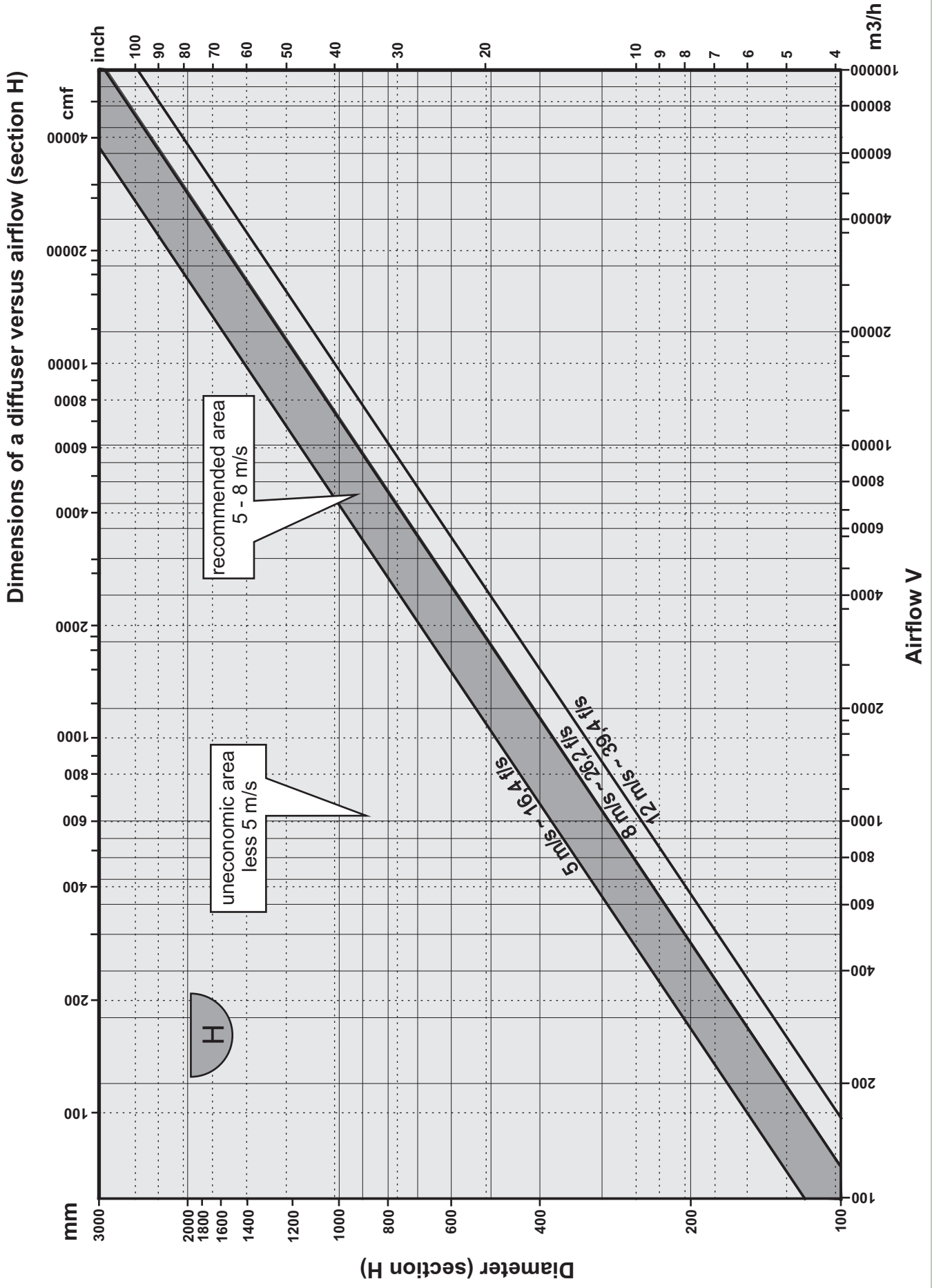
The length of a diffuser depends mainly on the disposal of that particular place. Generally, constant air flow can be diffused by a diffuser from 1 to 200 meters long. The used material, its modification and the delivery pressure of the ventilator are the major factors.

THE MOST COMMON OCCURRENCE:

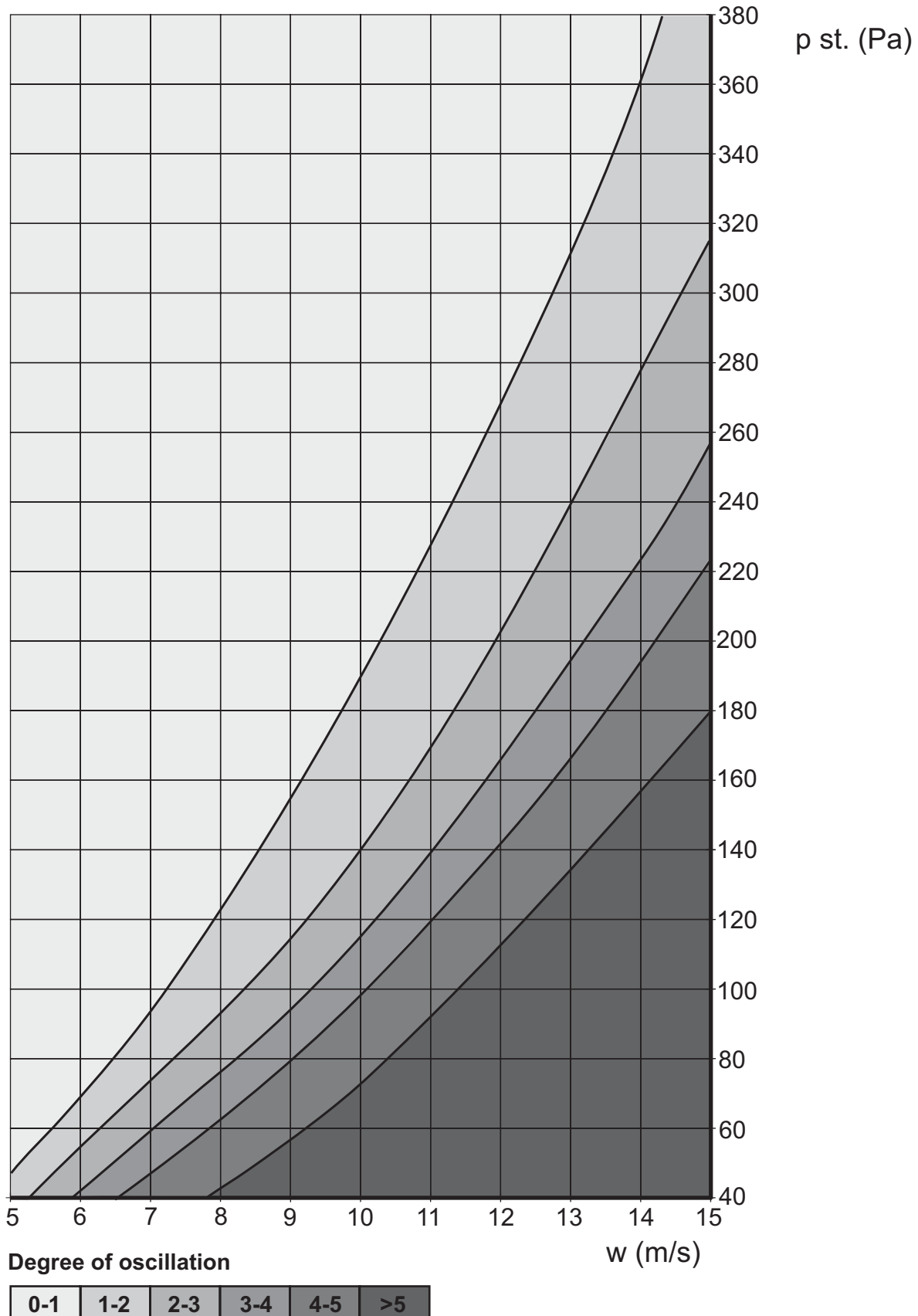


The parts are linked up by zips the number of the zippers can be adjusted acc. to the customers' demand. The total length of a diffuser (A + B + C) is to be indicated in a specification. The diffuser is divided into parts during manufacturing. The allowance in length is + 1% when the diffusers are being produced.



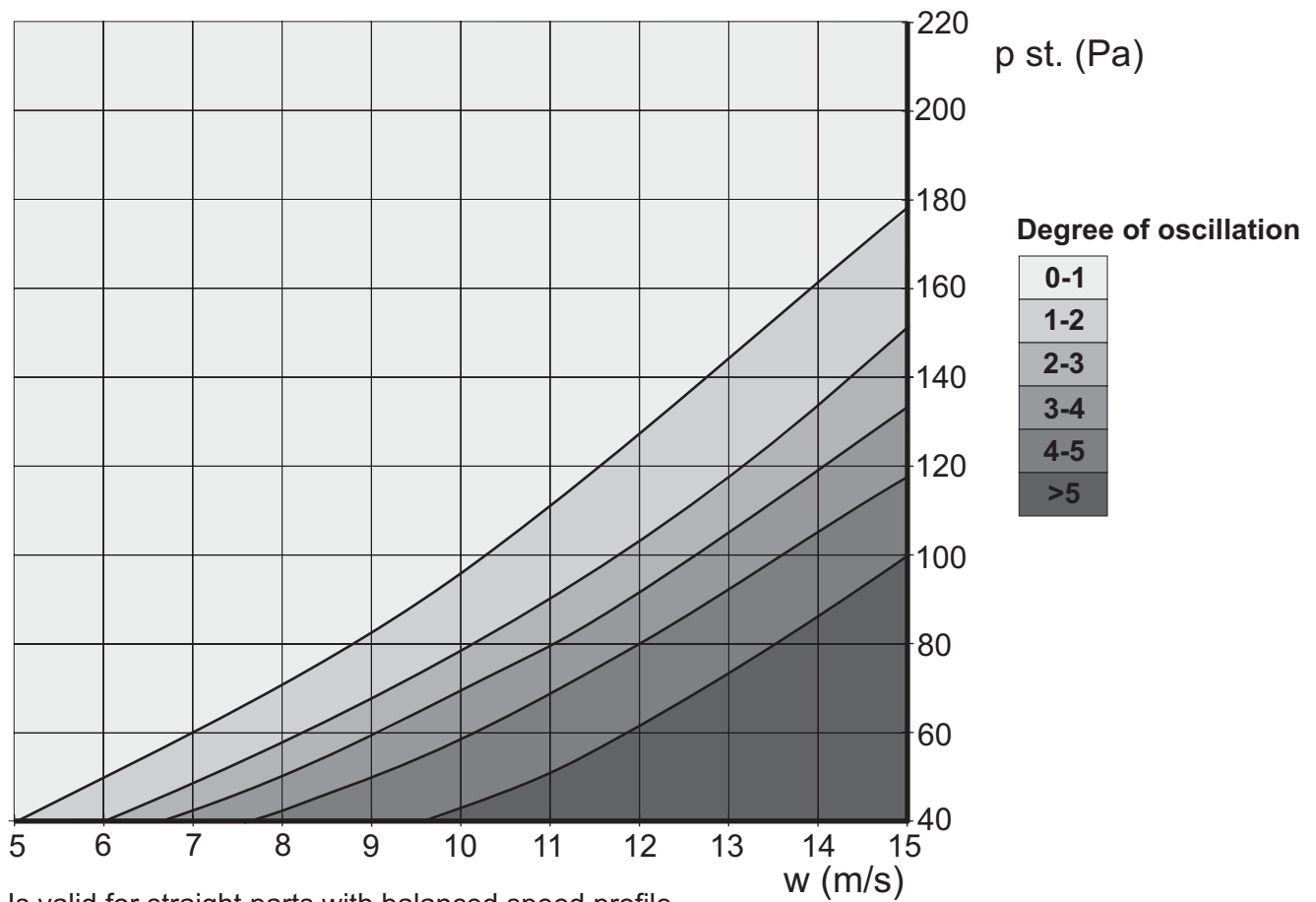


Classification of oscillation for lightweight fabrics



Is valid for straight parts with balanced speed profile

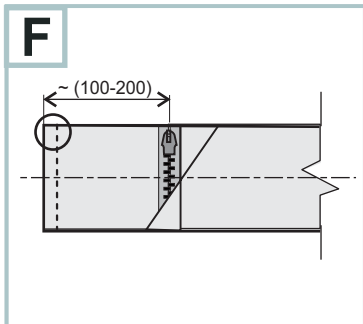
Classification of oscillation for medium-weight fabrics



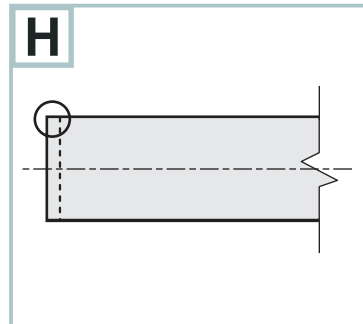
Is valid for straight parts with balanced speed profile.

VII. TYPE OF ENDING

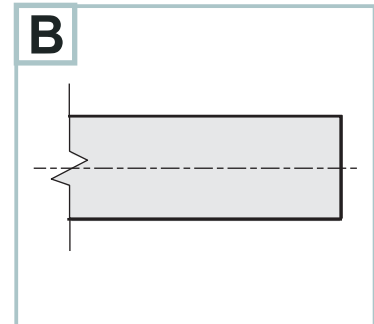
BEGINNING



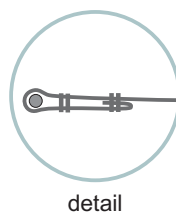
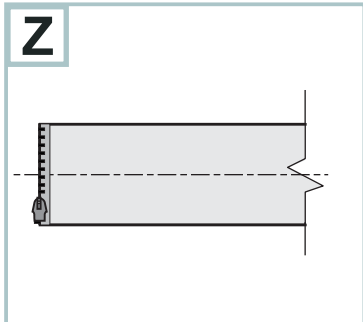
HEMMING



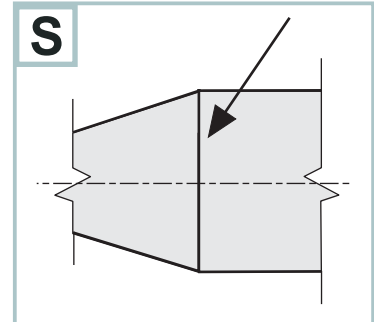
BLANKING



ZIP



SUTURE



VIII. AIR OUTLET

Looking through the graphs on the following pages you can form an idea on what conditions (flow, pressure) the diffusers can be used. Flow V supplied into a diffuser through an end or through an inlet adapter is blowing off the diffuser in the following ways:

A - Through permeable fabric:

low is established by the formula $A = S \times P$,

S - area of the diffuser, P - permeability of the diffuser owing to topical excess pressure.

if the fabric is not permeable the flow is zero.

B - Through microperforation fabric:

flow is established by the formula $B = S \times M$.

S - area of the microperforated fabric, M - the flow determined by the number of the openings perforated in the unit of area according to the graph on page 14. Any amount of microopenings the range according to the graph on page 14 can be chosen to achieve the demanded air flow. Minimum excess pressure for medium weight fabric is 50 Pa. If this excess pressure is not available the proper shape of the diffuser can be achieved by using an additional tensioning tyre. Minimum excess pressure is only 20 Pa in this case. The minimum excess pressure is 30 Pa, 10 Pa - if an additional tesioning tyre is used - in the case of lightweight fabric.

C- Through rows of openings:

The air amount for rectified flow is chosen according to the demanded air flow range. Assign the computation to our authorized representative. If the air flow per a unit of length in one row of openings is known a diameter of the openings can be determined according to the graph on page 13. It is valid or 20 mm distance of the holes. Several parallel rows can be made to increase rectified air flow.

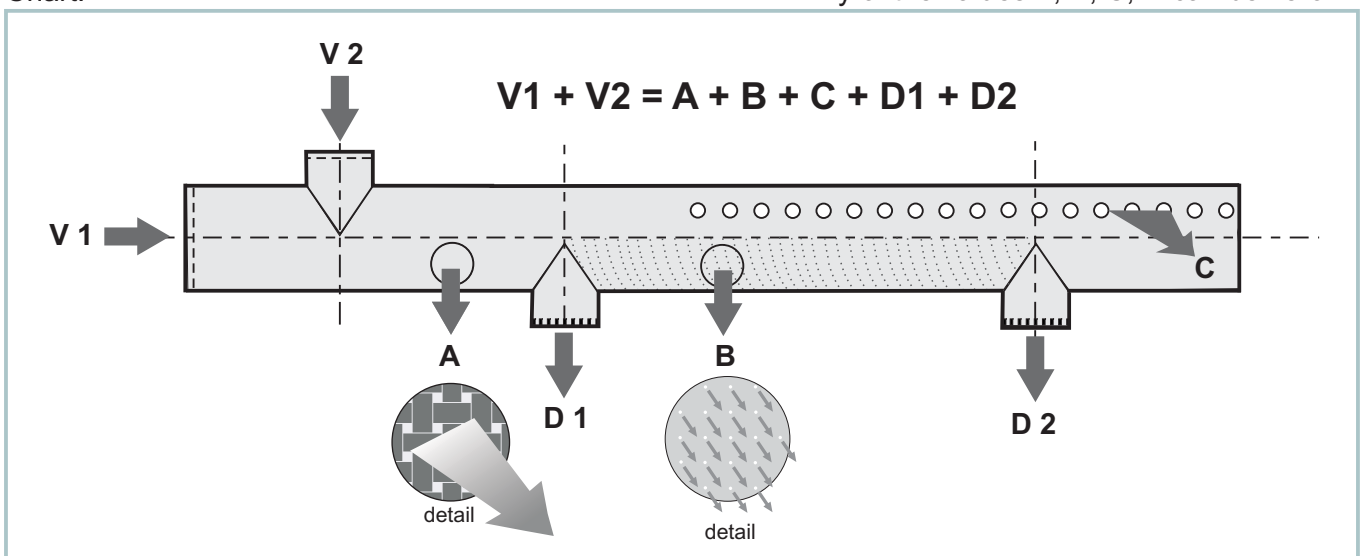
D - Through an end of a diffuser or through an outlet adapter:

The air flow is conducted to other diffusers, it is not destined for distribution through a computed diffuser.

$$\text{Always } V = A + B + C + D.$$

Chart:

Any of the values A, B, C, D can be zero

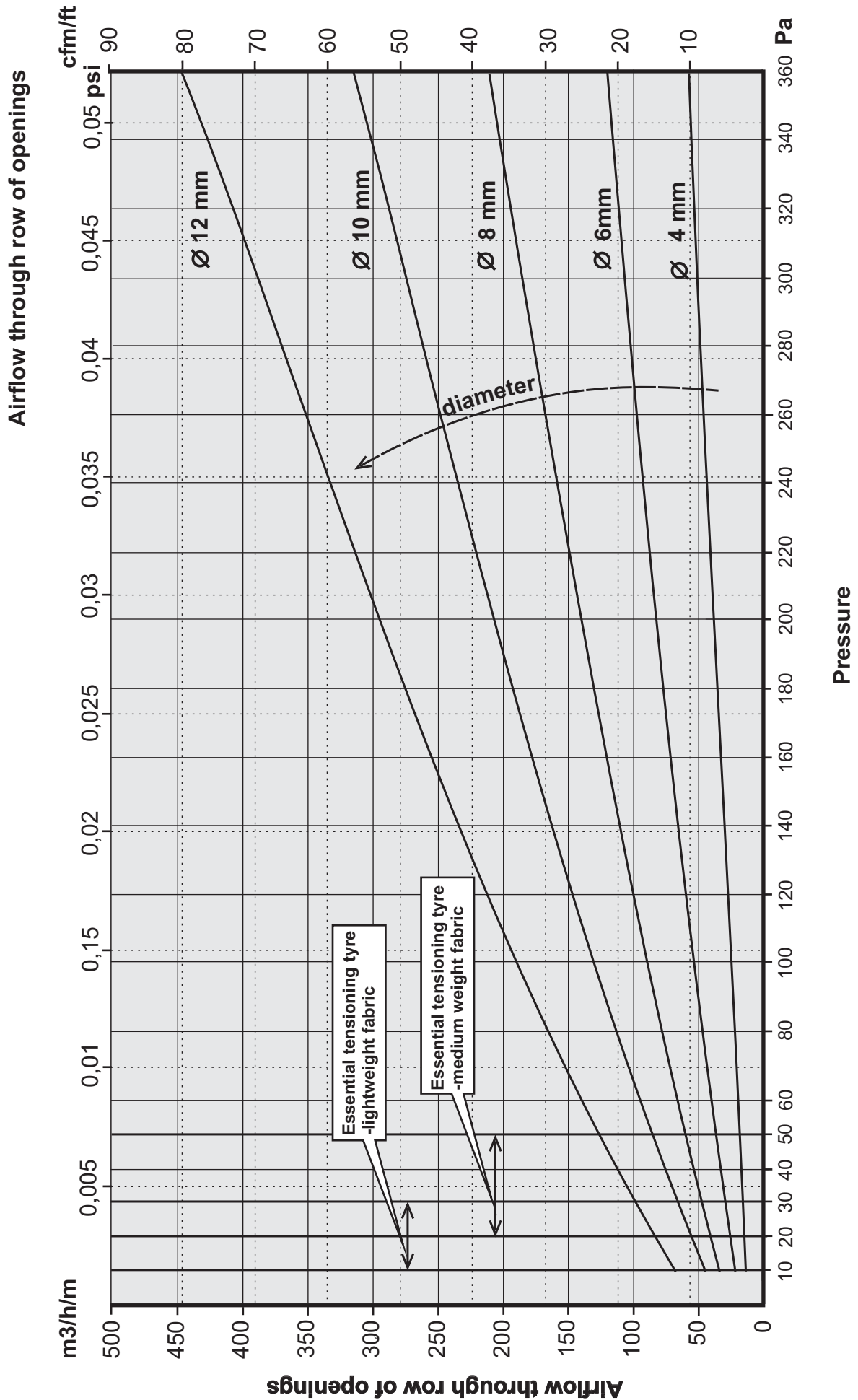


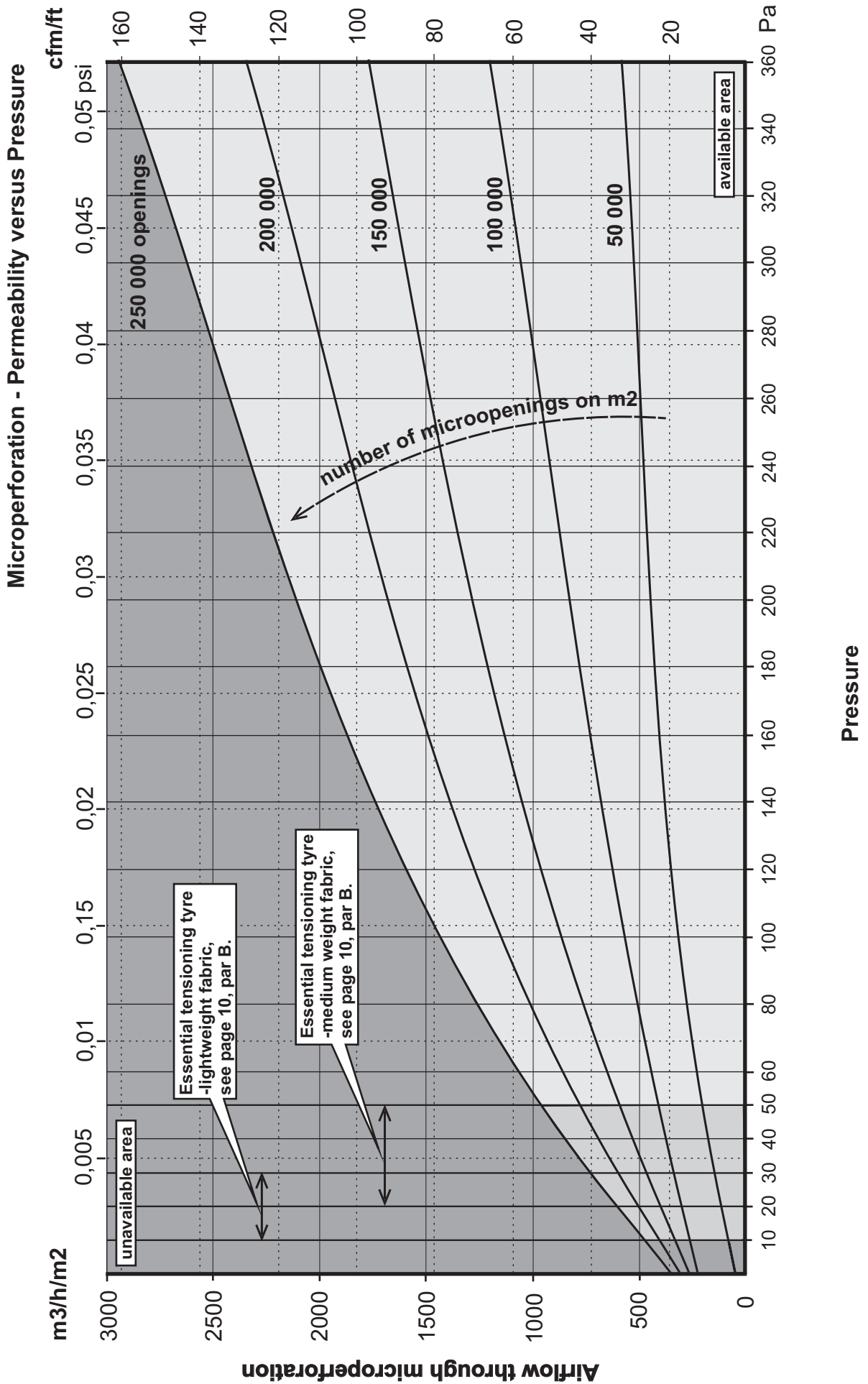
We are always at your disposal to verify your calculation.

Our firm co-operators are provided with the software, which accelerates the calculation.

We advise you to consult all your designs.

The list of the authorized dealers is to be found on www.prihoda.eu.

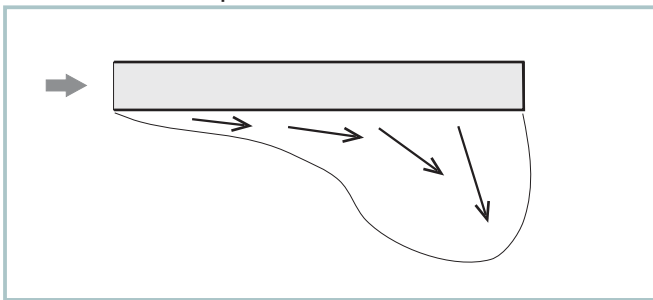




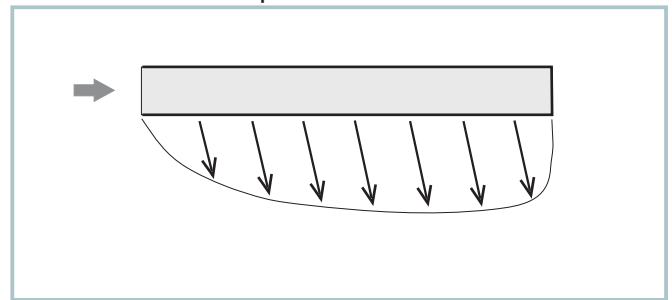
IX. AIR DIFFUSION

Air diffuses from a correctly designed diffuser evenly along its all length. Static pressure alongside the diffuser determines the degree of evenness. In practice, unevenness usually does not exceed 10%. Dampers regulating the course of static pressure (as illustrated in the graph pic. 4) can provide further evenness of the diffused air. The dampers are highly recommended for long perforated diffusers, particularly if the distance between the diffuser and the floor is greater than 3 mts. The dampers can be installed also additionally, installation by the zippers is the easiest possible. Even air diffusion does not provide even air distribution in a room automatically. Properly located microperforation openings (for structured microperforation see pic. 1,2) or larger perforation openings (for sequential perforation see pic. 3,4) can provide even distribution.

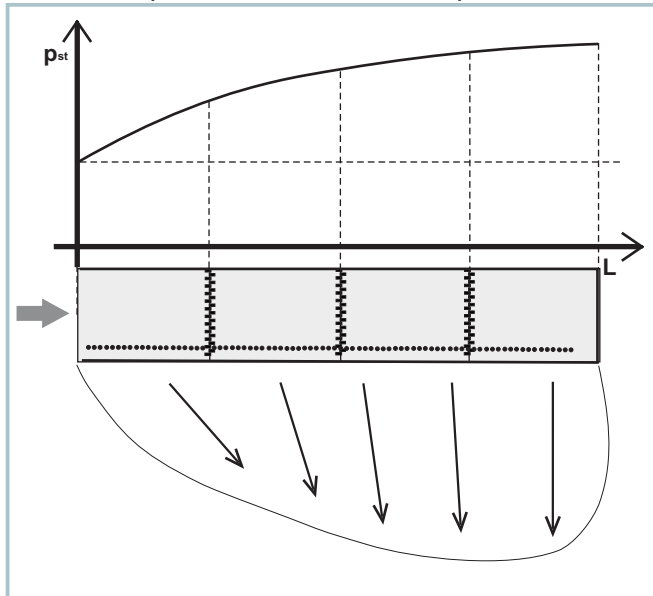
1. Uniform microperforation



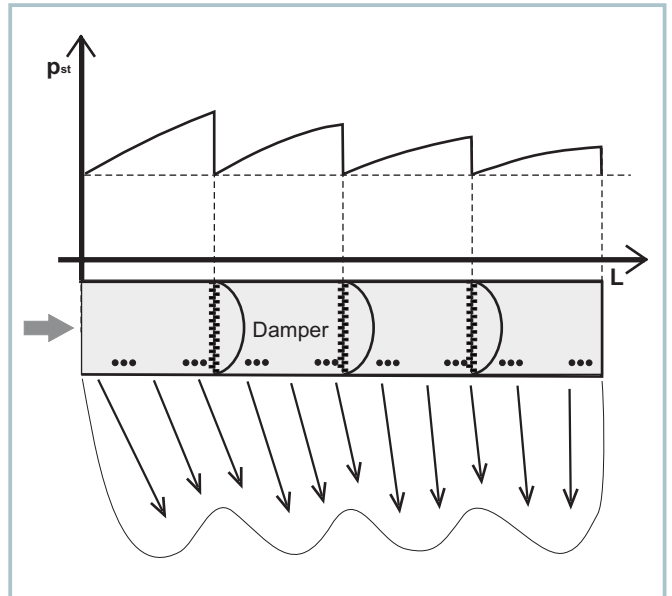
2. Structured microperforation



3. Uniform perforation without dampers



4. Sequential perforation with dampers



Speed of air-flow in various distances from the diffuser can be calculated by means of our software, which takes all the known effects (i.e. static pressure inside a diffuser, location and dimensions of inlets, and temper. differences) into account. We are ready to verify every your calculation. All our authorized dealers have the software at the disposal. Their addresses can be found on www.prihoda.eu.

X. INSTALLATION

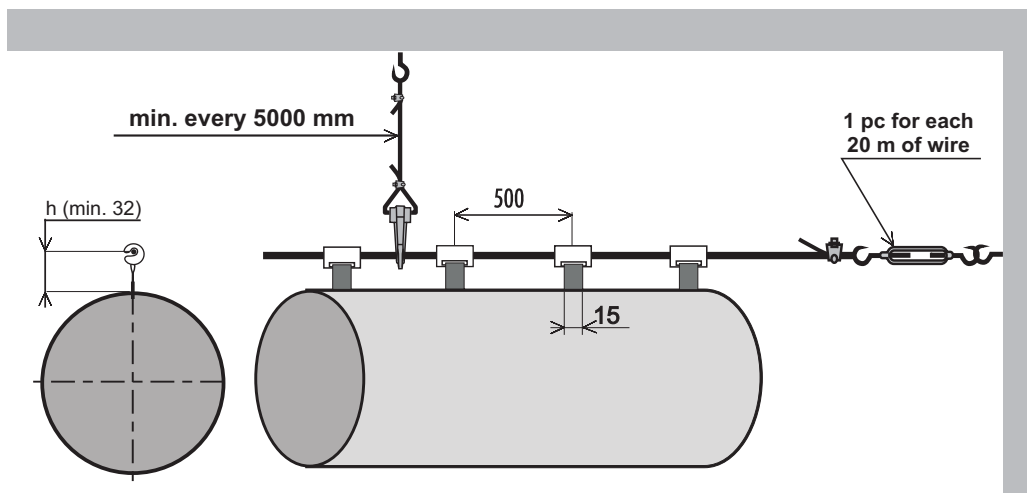
The number of the chosen type of instalation (according to the pictures below) is to be stated in a specification.

0 Without mounting material and hooks

1 **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** plastic-coated stranded wire, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

1D **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** stainless steel stranded wire, **VERTICAL HANGER:** stainless steel stranded wire, **METAL PARTS:** stainless steel

1F **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** plastic-coated stranded wire, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel



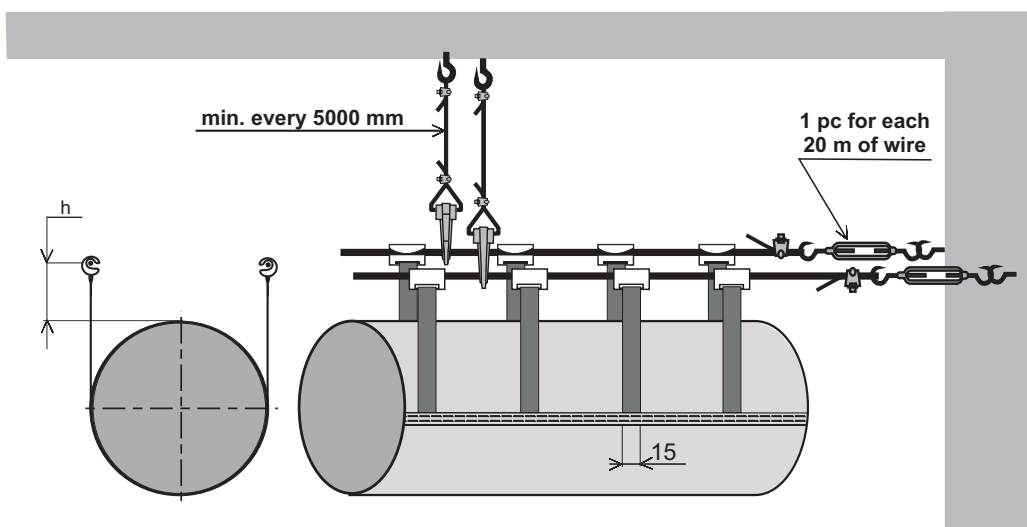
section: **C**

see details A, B, C

2 **DIFFUSER:** with hooks, double suspension, **SUPPORTING ELEMENT:** plastic-coated stranded wire, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

2D **DIFFUSER:** with hooks, double suspension, **SUPPORTING ELEMENT:** stainless steel stranded wire, **VERTICAL HANGER:** stainless steel stranded wire, **METAL PARTS:** stainless steel

2F **DIFFUSER:** with hooks, double suspension, **SUPPORTING ELEMENT:** plastic-coated stranded wire, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel

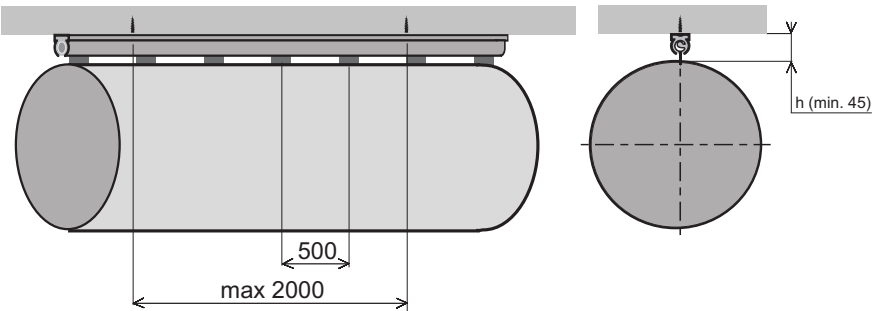


section: **C**

see details A, B, C

3

DIFFUSER: with hooks, single suspension, **SUPPORTING ELEMENT:** direct anchored aluminium profile, **VERTICAL HANGER:** no, **METAL PARTS:** no

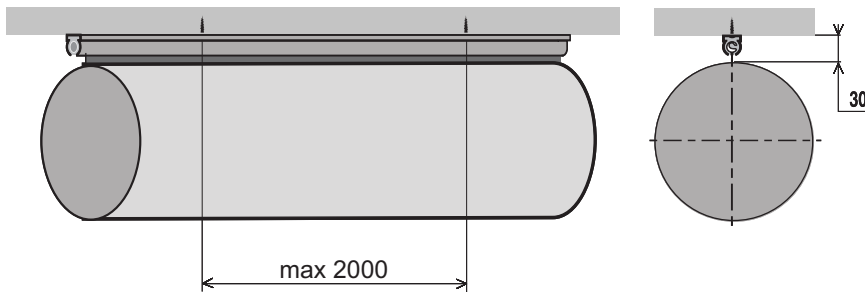


section: **C**

see details D, E

3A

DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** direct anchored aluminium profile, **VERTICAL HANGER:** no, **METAL PARTS:** no

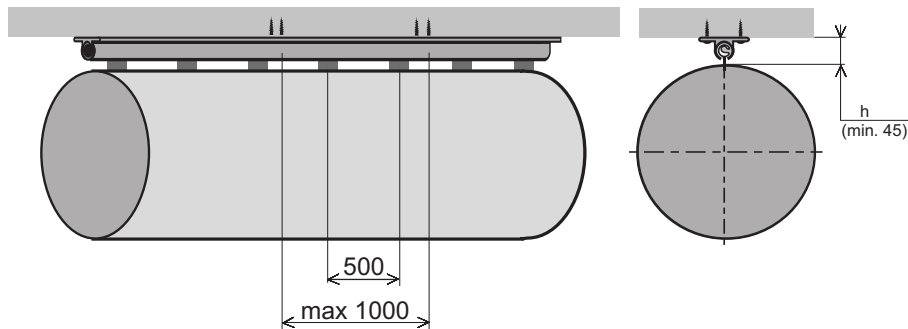


section: **C**

see details D, E

3B

DIFFUSER: with hooks, single suspension, **SUPPORTING ELEMENT:** direct anchored plastic profile, **VERTICAL HANGER:** no, **METAL PARTS:** no

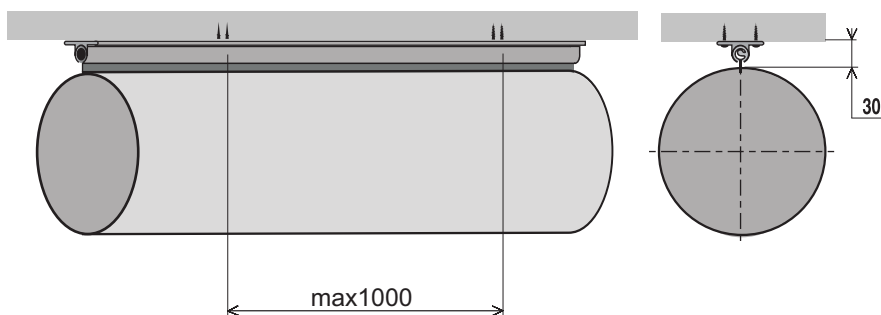


section: **C**

see details H

3AB

DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** direct anchored plastic profile, **VERTICAL HANGER:** no, **METAL PARTS:** no



section: **C**

see details H

3C **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** no, **METAL PARTS:** no

section: **C** see details E, J

3AC **DIFFUSER:** with enlarged strip, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** no, **METAL PARTS:** no

section: **C** see details E, J

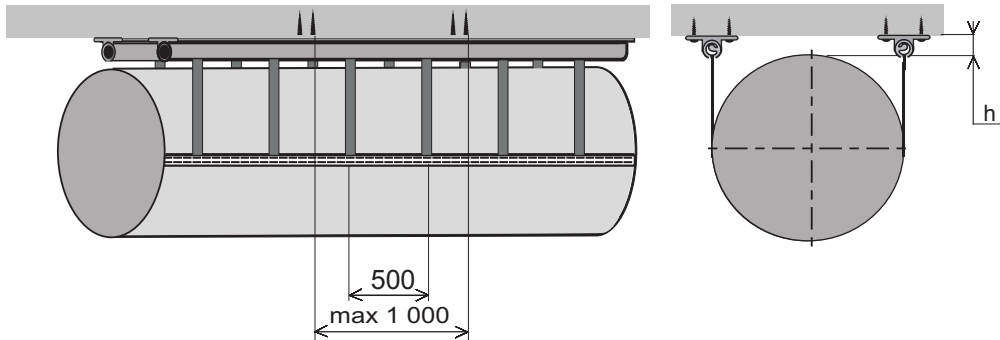
3G **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** stainless profile, **VERTICAL HANGER:** no, **METAL PARTS:** no

section: **C** see details M,N

4 **DIFFUSER:** with hooks, double suspension, **SUPPORTING ELEMENT:** direct anchored aluminium profile, **VERTICAL HANGER:** no, **METAL PARTS:** no

section: **C** see details D, E

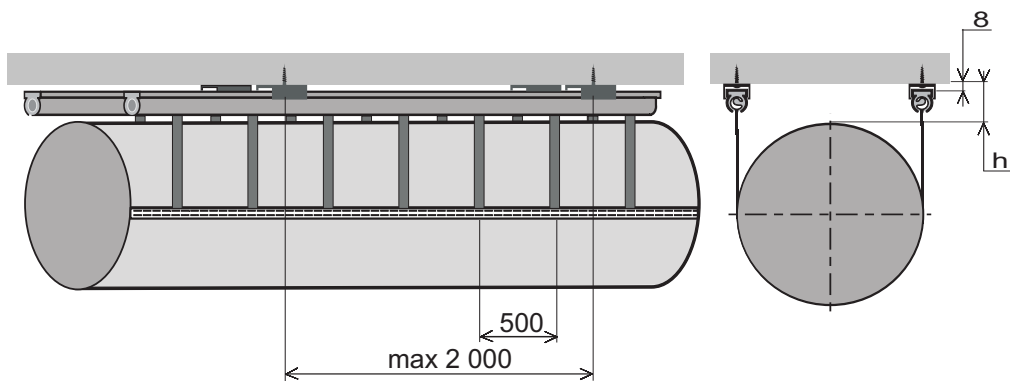
4B DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** direct anchored plastic profile, **VERTICAL HANGER:** no, **METAL PARTS:** no



section: **C**

see details H

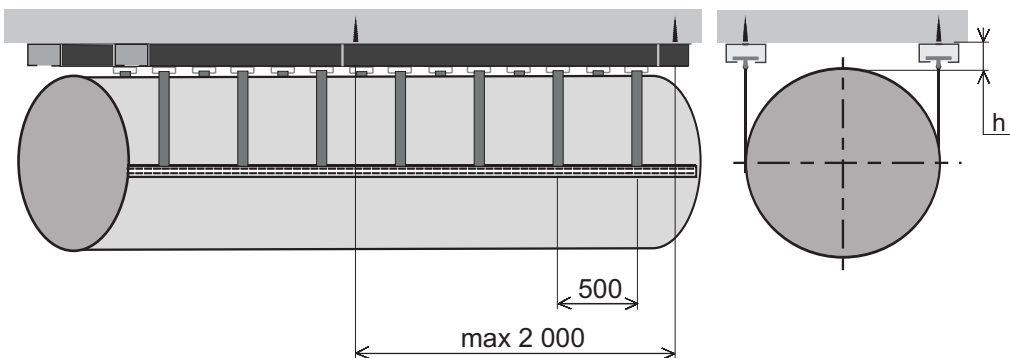
4C DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** no, **METAL PARTS:** no



section: **C**

see details E, J

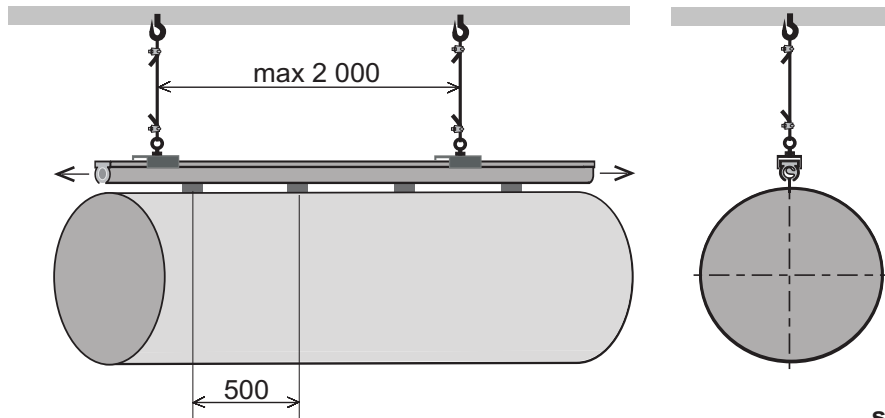
4G DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** stainless profile, **VERTICAL HANGER:** no, **METAL PARTS:** no



section: **C**

see details M, N

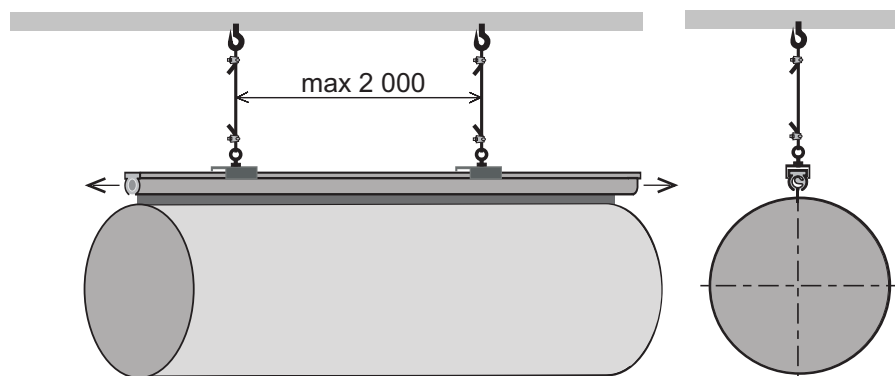
- 5** **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel
- 5D** **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel, **METAL PARTS:** stainless steel.
- 5F** **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel



section: **C**

see details E, F, G, K

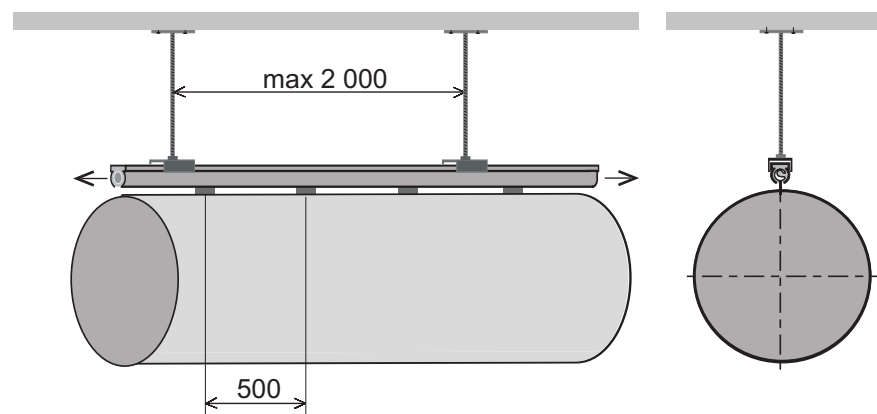
- 5A** **DIFFUSER:** with enlarged strip, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel
- 5AD** **DIFFUSER:** with enlarged strip, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel stranded wire, **METAL PARTS:** galvanised steel
- 5AF** **DIFFUSER:** with enlarged strip, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel



section: **C**

see details E, F, G, K

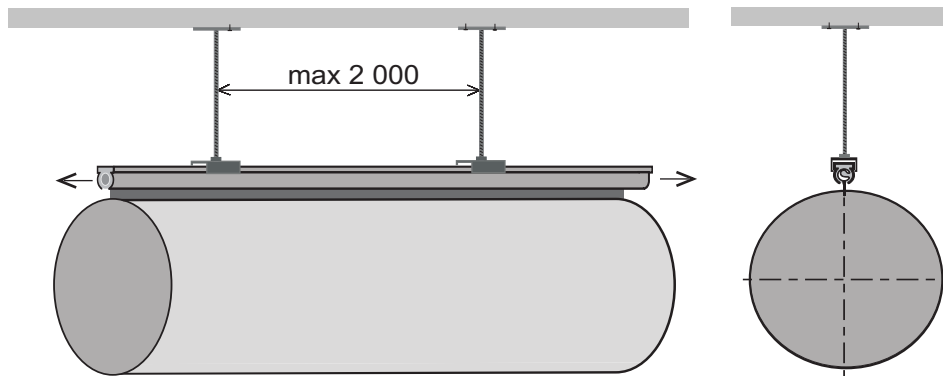
- 5E** **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** galvanised steel threaded rod, **METAL PARTS:** galvanised steel



section: **C**

see details E, F, G

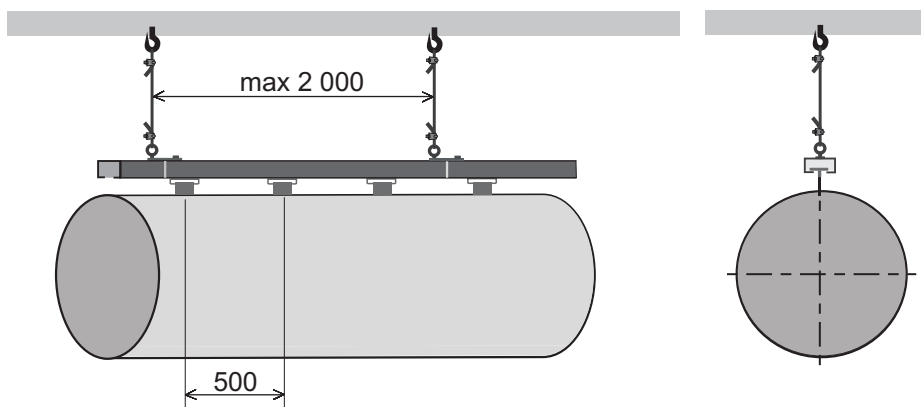
5AE **DIFFUSER:** with enlarged strip, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** galvanised steel threaded rod, **METAL PARTS:** galvanised steel



section: **C**

see details E, F, G

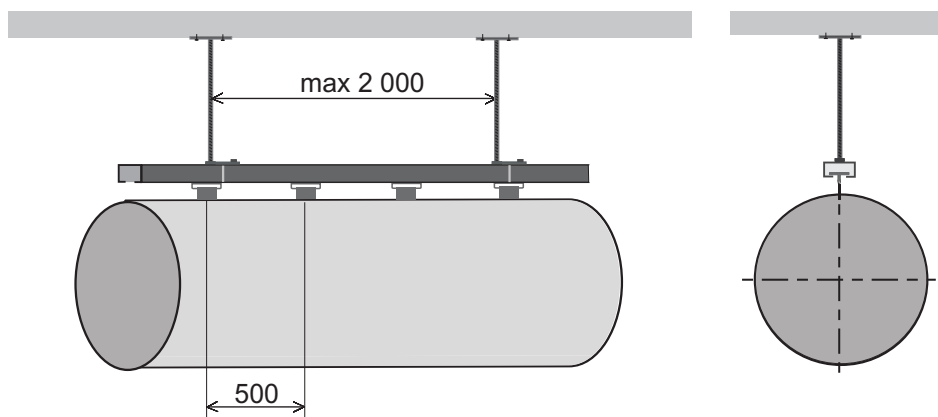
5G **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** stainless profile, **VERTICAL HANGER:** stainless steel stranded wire, **METAL PARTS:** stainless steel



section: **C**

see details F, M

5EG **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** stainless profile, **VERTICAL HANGER:** stainless steel threaded rod, **METAL PARTS:** stainless steel



section **C**

see details F, M

5I

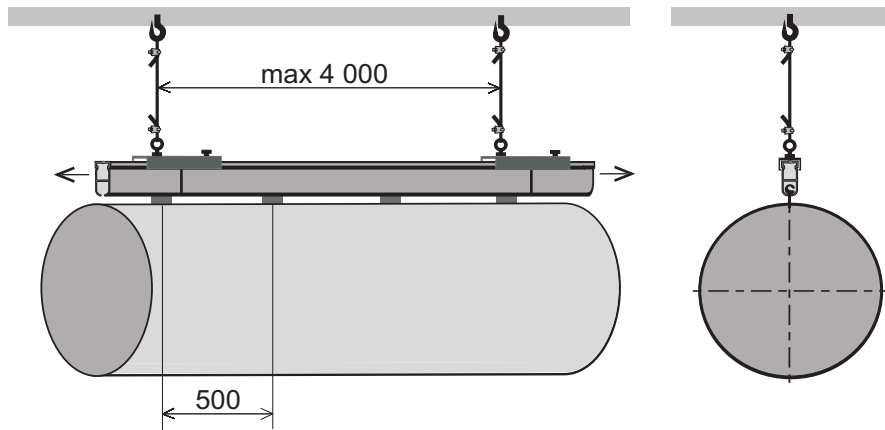
DIFFUSER: with hooks, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

5DI

DIFFUSER: with hooks, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel, **METAL PARTS:** stainless steel

5FI

DIFFUSER: with hooks, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel



section: **C**

see details **G, K, R**

5AI

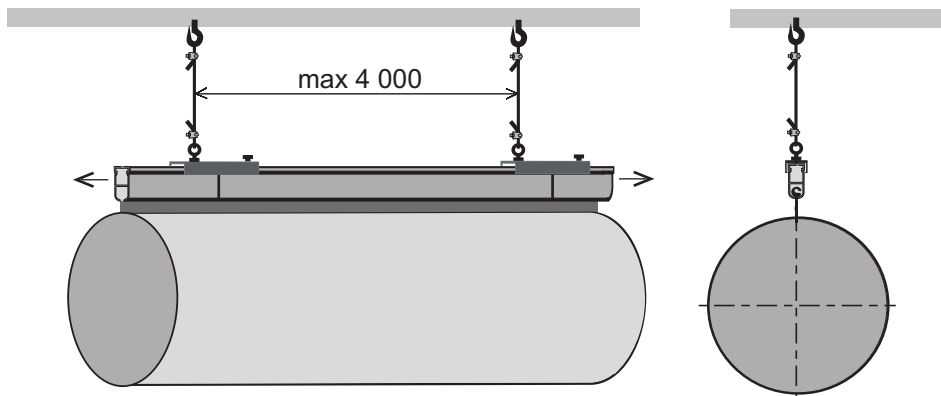
DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

5ADI

DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel stranded wire, **METAL PARTS:** galvanised steel

5AFI

DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel

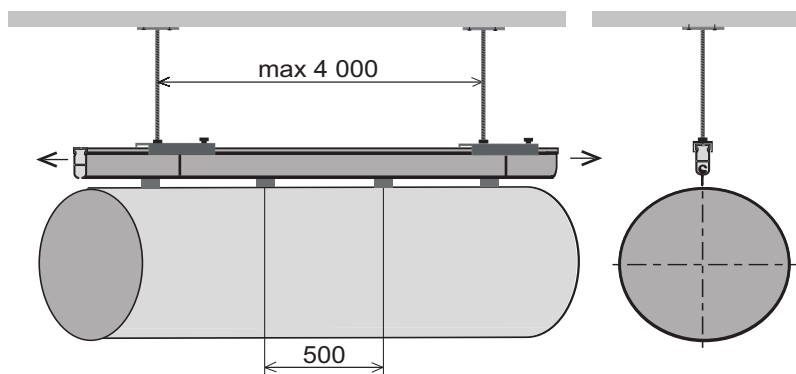


section: **C**

see details **G, K, R**

5EI

DIFFUSER: with hooks, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** galvanised steel threaded rod, **METAL PARTS:** galvanised steel

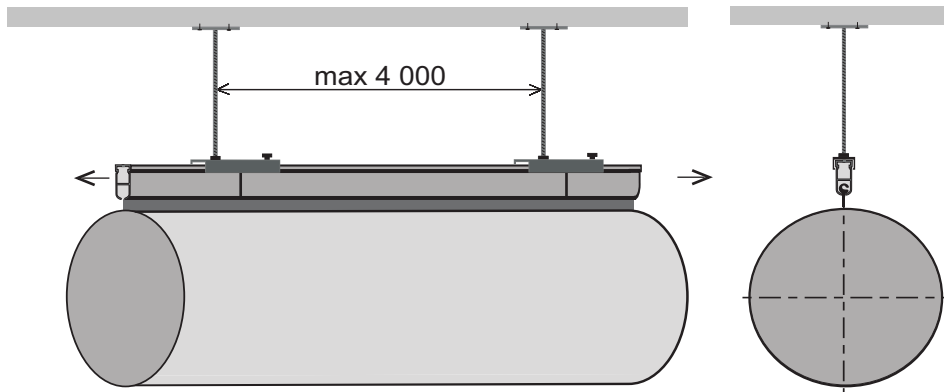


section: **C**

see details **F, R**

5AEI

DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** galvanised steel threaded rod, **METAL PARTS:** galvanised steel



section: **C**

see details F, G, R

6

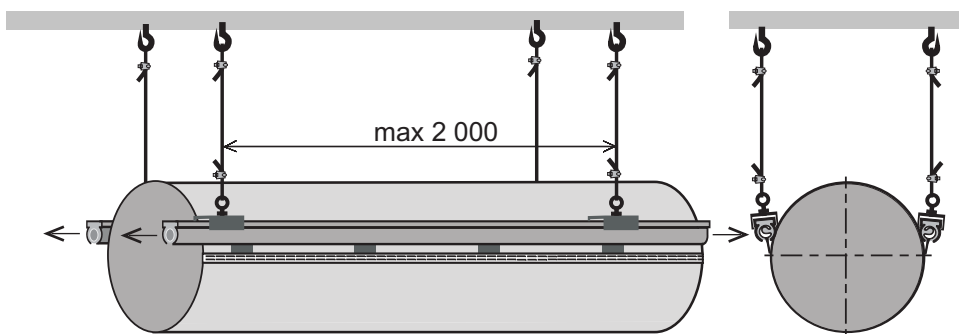
DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

6D

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel, **METAL PARTS:** stainless steel

6F

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel



section: **C**

see details E, F, G, K

6A

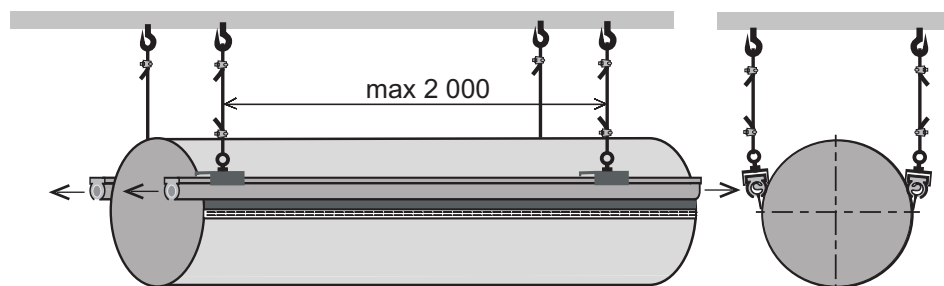
DIFFUSER: with enlarged strip, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

6AD

DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel stranded wire, **METAL PARTS:** galvanised steel.

6AF

DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel

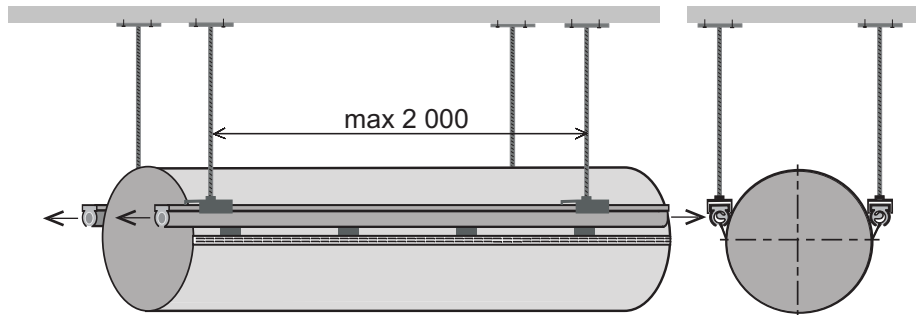


section: **C**

see details E, F, G, K

6E

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** galvanised steel threaded rod, **METAL PARTS:** galvanised steel

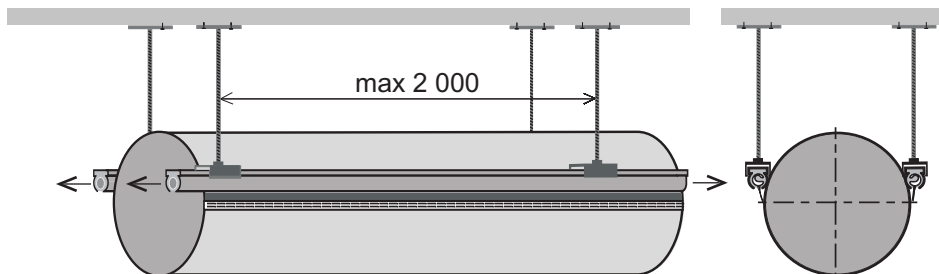


section: **C**

see details E, F, G

6AE

DIFFUSER: with enlarged strip, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** galvanised steel threaded rod, **METAL PARTS:** galvanised steel

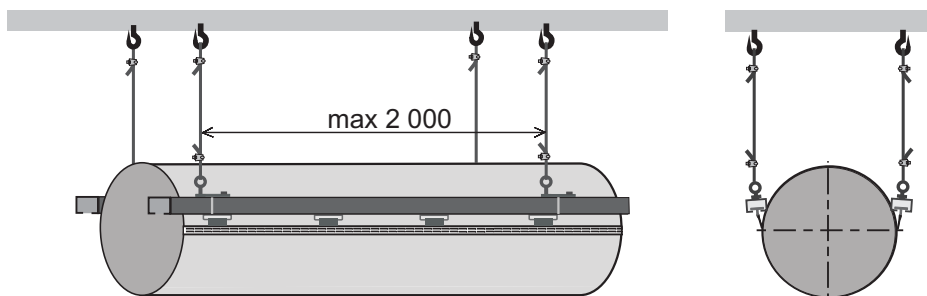


section: **C**

see details E, F, G

6G

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** stainless profile, **VERTICAL HANGER:** stainless steel stranded wire, **METAL PARTS:** stainless steel

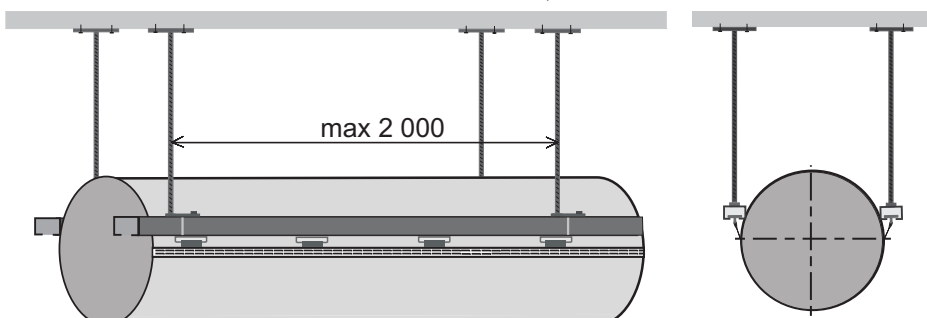


section: **C**

see details F, M

6EG

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** stainless profile, **VERTICAL HANGER:** stainless steel threaded rod, **METAL PARTS:** stainless steel



section: **C**

see details F, M

6I

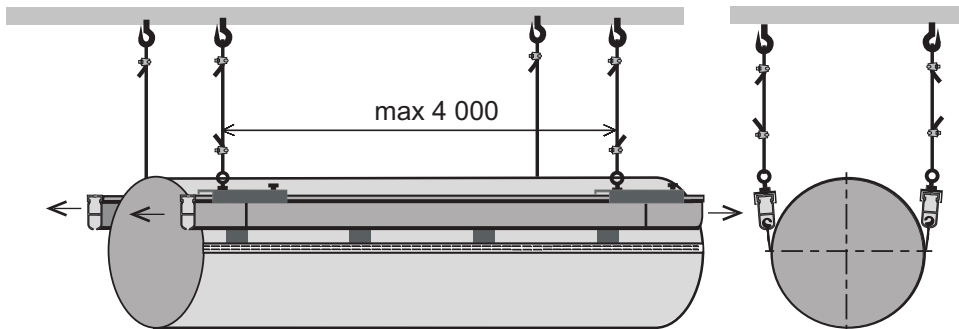
DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

6DI

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel, **METAL PARTS:** stainless steel

6FI

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel



section: **C**

see details G, K, R

6AI

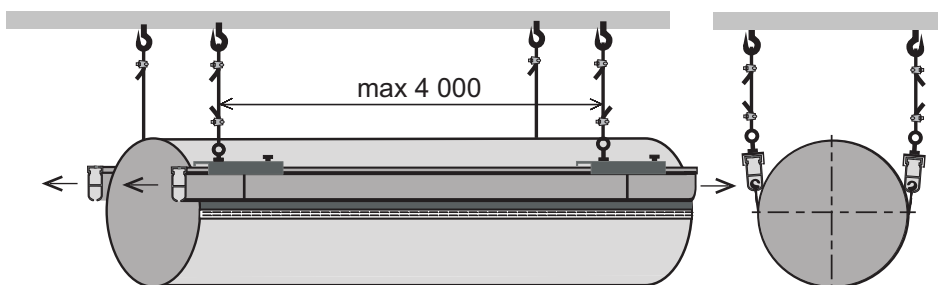
DIFFUSER: with enlarged strip, double suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

6ADI

DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel stranded wire, **METAL PARTS:** galvanised steel

6AFI

DIFFUSER: with enlarged strip, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** stainless steel

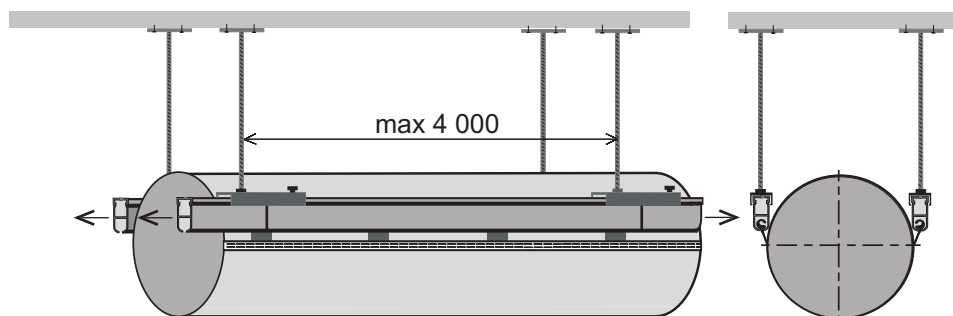


section: **C**

see details G, K, R

6EI

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** galvanised steel threaded rod, **METAL PARTS:** galvanised steel

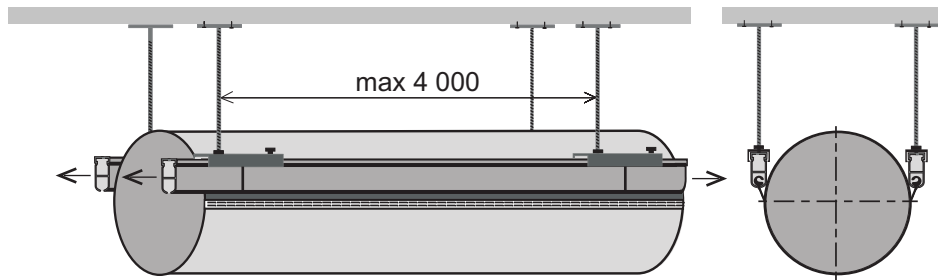


section: **C**

see details F, G, R

6AEI

DIFFUSER: with enlarged strip, double suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** galvanised steel threaded rod, **METAL PARTS:** galvanised steel



section: **C**

see details F, G, R

TENSIONING SYSTEM - anchored to a sturdy structure in the direction of the diffuser axis.

7

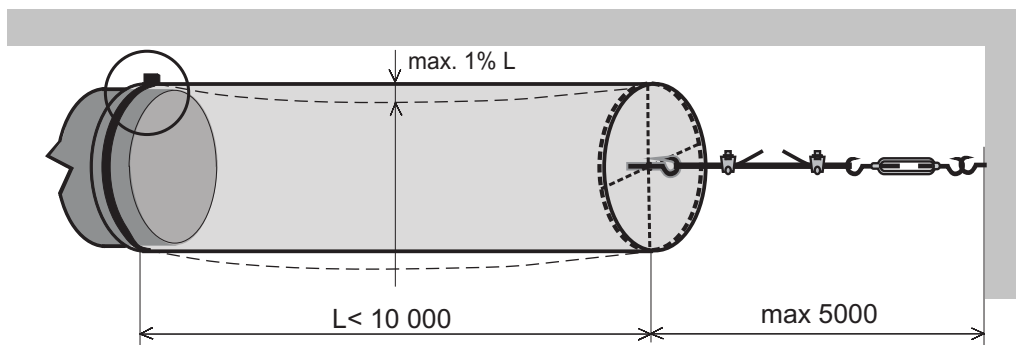
DIFFUSER: with stainless tyre in blind end, **SUPPORTING ELEMENT:** plastic-coated stranded wire, **VERTICAL HANGER:** no, **METAL PARTS:** galvanised steel

7D

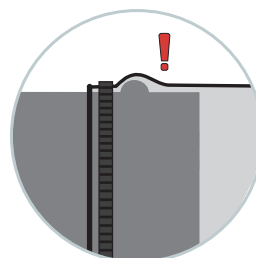
DIFFUSER: with stainless tyre in blind end, **SUPPORTING ELEMENT:** stainless steel stranded wire, **VERTICAL HANGER:** no, **METAL PARTS:** stainless steel

7F

DIFFUSER: with stainless tyre in blind end, **SUPPORTING ELEMENT:** plastic-coated stranded wire, **VERTICAL HANGER:** no, **METAL PARTS:** stainless steel



When a diffuser is being strained, it may elongate by 1% of length in consequence of stretchability of the fabric. The diffuser length should not exceed 10 m.



detail

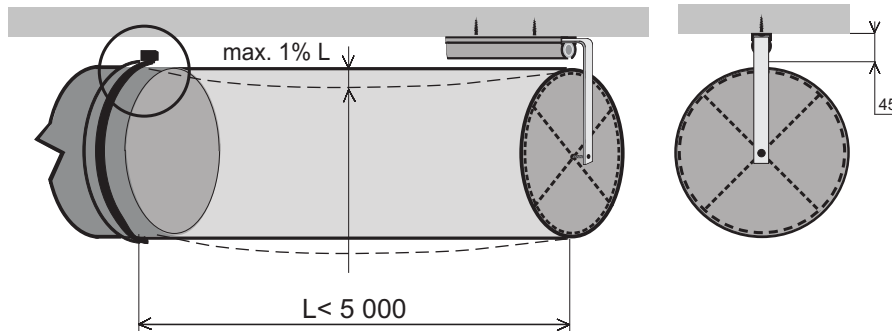
section: **C**

see detail A

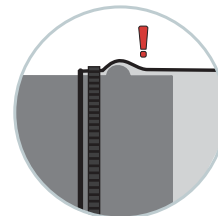
TENSIONING SYSTEM - anchored to an aluminium profile on a sturdy structure

7H

DIFFUSER: with stainless tyre in blind end, **SUPPORTING ELEMENT:** aluminium profile, **VERTICAL HANGER:** no, **METAL PARTS:** galvanised steel



When a diffuser is being strained, it may elongate by 1% of length in consequence of stretchability of the fabric. The diffuser length should not exceed 5 m.



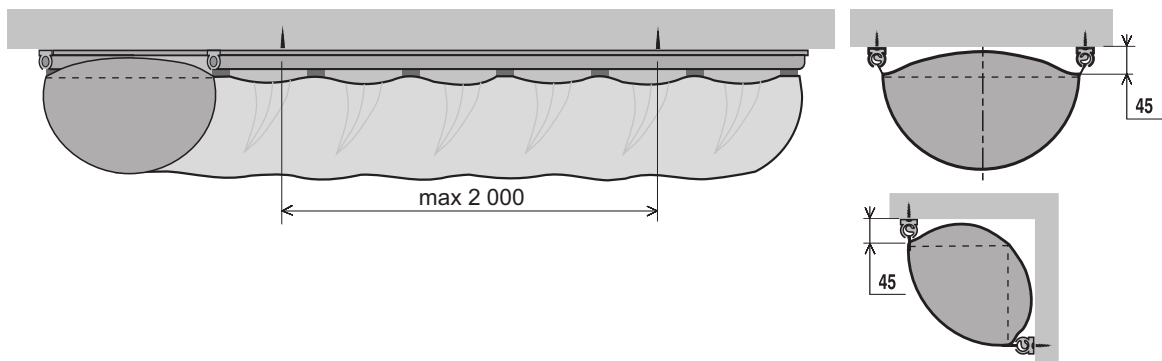
section: **C**

detail

see details **Q**

8

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** direct anchored aluminium profile, **VERTICAL HANGER:** no, **METAL PARTS:** no.

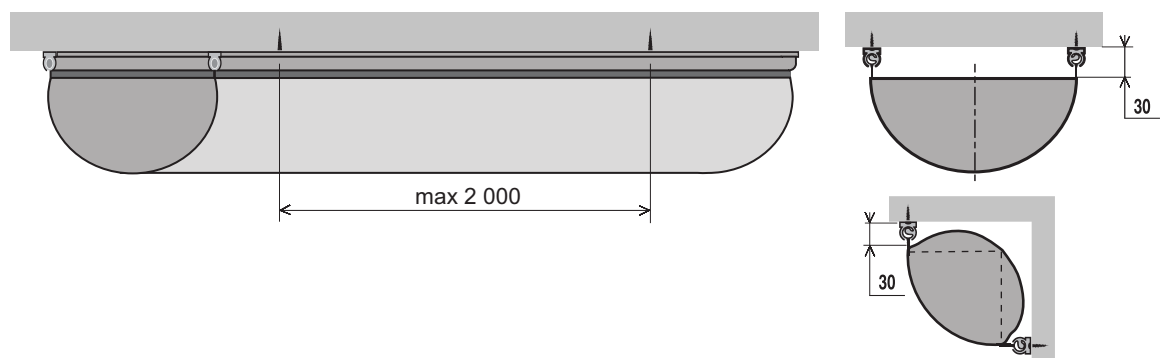


section: **H** **Q** **SG** **SG**

see details **D, E, I**

8A

DIFFUSER: with enlarged strip, double suspension, **SUPPORTING ELEMENT:** direct anchored aluminium profile, **VERTICAL HANGER:** no, **METAL PARTS:** no

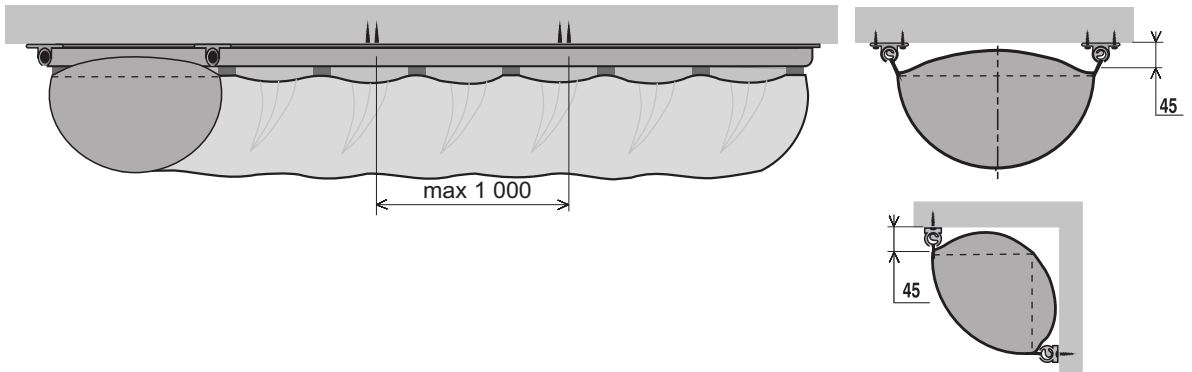


section: **H** **Q** **SG** **SG**

see details **D, E, I**

8B

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** direct anchored plastic profile, **VERTICAL HANGER:** no, **METAL PARTS:** no

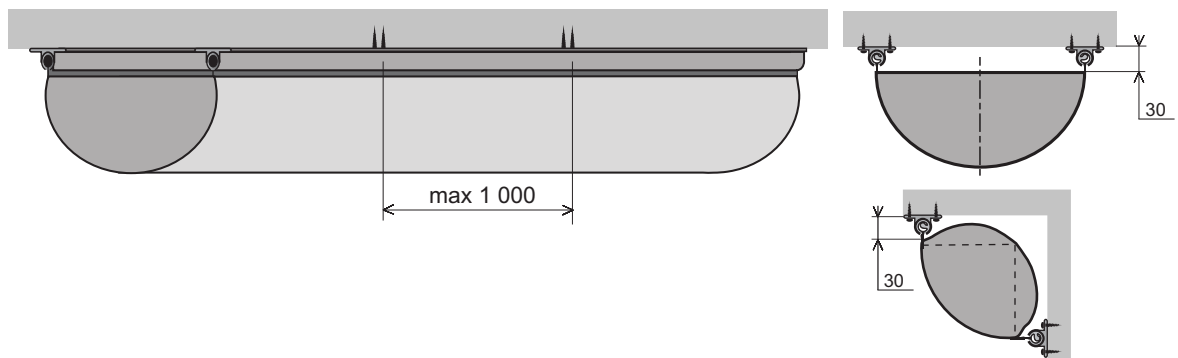


section:

see details H

8AB

DIFFUSER: with enlarged strip, double suspension, **SUPPORTING ELEMENT:** direct anchored plastic profile, **VERTICAL HANGER:** no, **METAL PARTS:** no

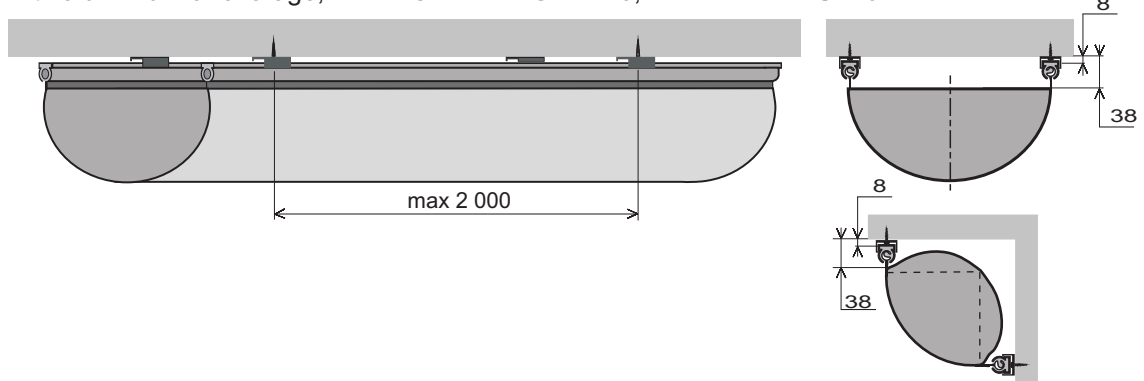


section:

see details H

8AC

DIFFUSER: with enlarged strip, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** no, **METAL PARTS:** no

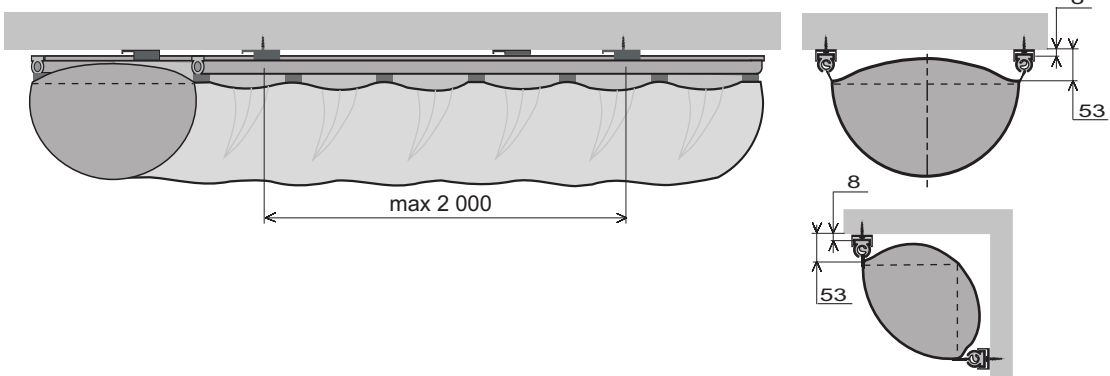


section:

see details J, E

8C

DIFFUSER: with enlarged strip, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** no, **METAL PARTS:** no

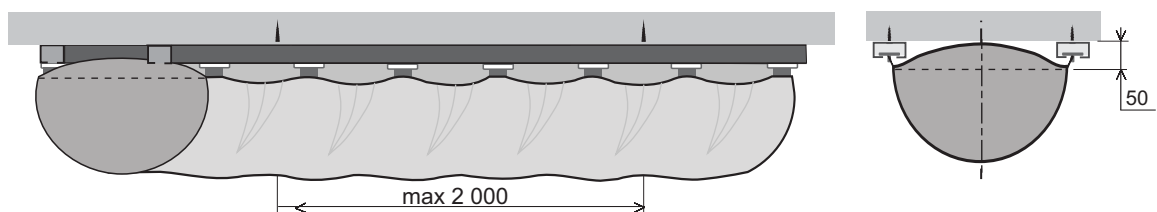


pro průřez:

viz detaily J, E

8G

DIFFUSER: with hooks, double suspension, **SUPPORTING ELEMENT:** stainless profile, **VERTICAL HANGER:** no, **METAL PARTS:** no



pro průřez:

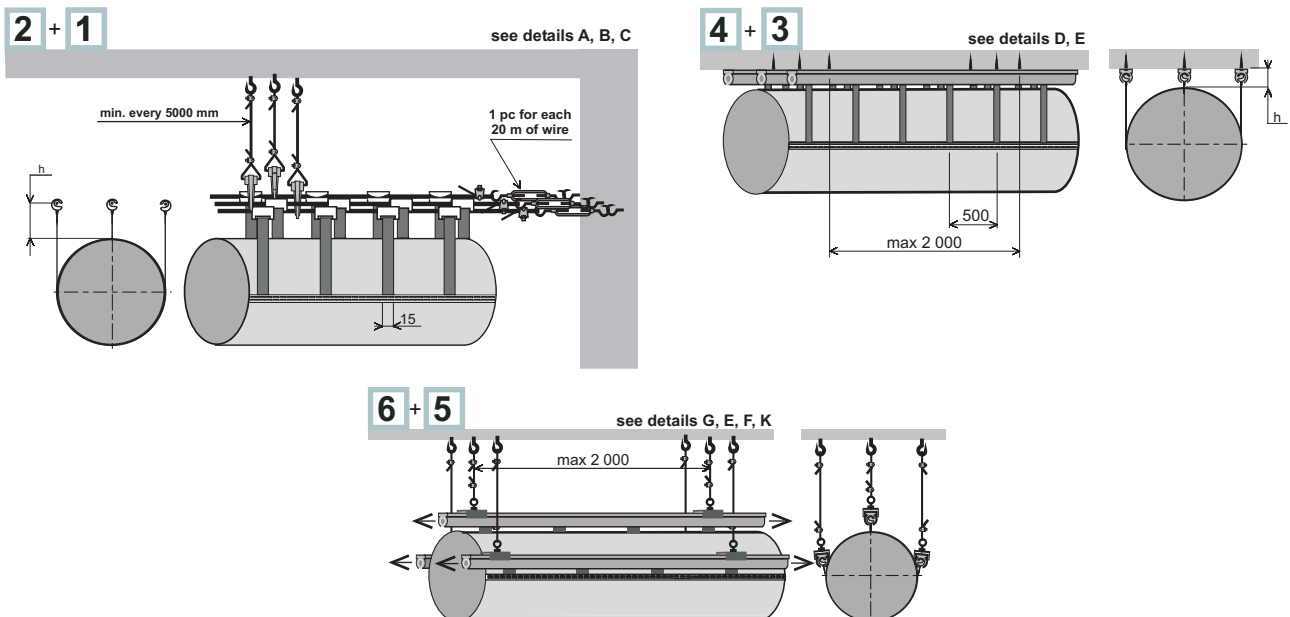
viz detaily L, N

COMBINATIONS

1. COMBINATION OF SINGLE AND DOUBLE INSTALLATION: .

2+1, 2D+1D, 2F+1F, 4+3, 4B+3B, 4C+3C, 4G+3G,
6+5, 6A+5A, 6AD+5AD, 6AE+5AE, 6AF+5AF, 6D+5D, 6E+5E, 6EG+5EG, 6F+5F, 6G+5G,
6I+5I, 6AI+5AI, 6ADI+5ADI, 6AEI+5AEI, 6AFI+5AFI, 6DI+5DI, 6EI+5EI, 6FI+5FI

Examples:

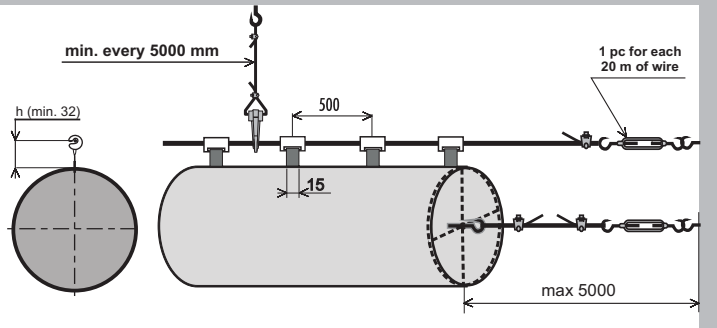


2. ADDITIONAL TENSIONING TYRE: ORDINARY INSTALLATION + 7

Examples:

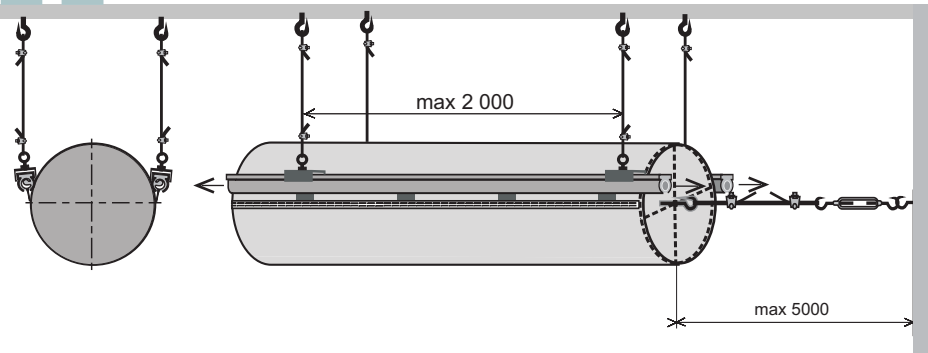
1 + 7

see details A, B, C



6 + 7

see details G, E, F, K



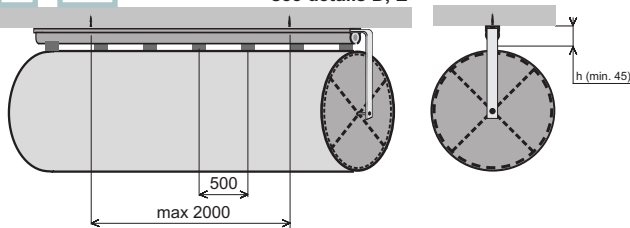
COMBINATION OF INSTALLATION + 7H:

3+7H, 3A+7H, 3AC+7H, 3C+7H, 4+7H, 4B+7H, 4C+7H, 4G+7H, 8+7H, 8A+7H, 8B+7H, 8C+7H, 8AB+7H, 8AC+7H, 8G+7H

Examples:

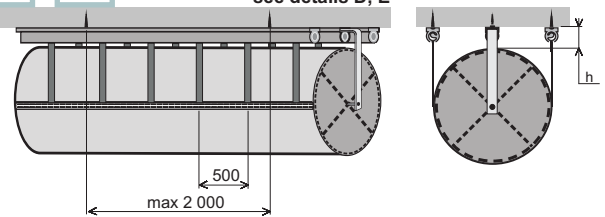
3 + 7H

see details D, E



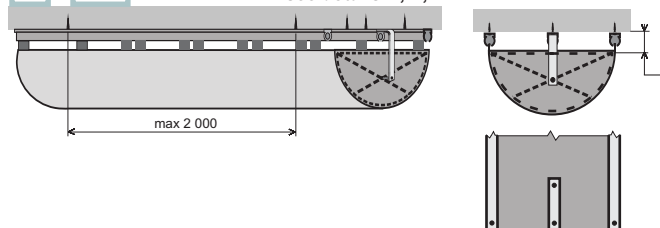
4 + 7H

see details D, E

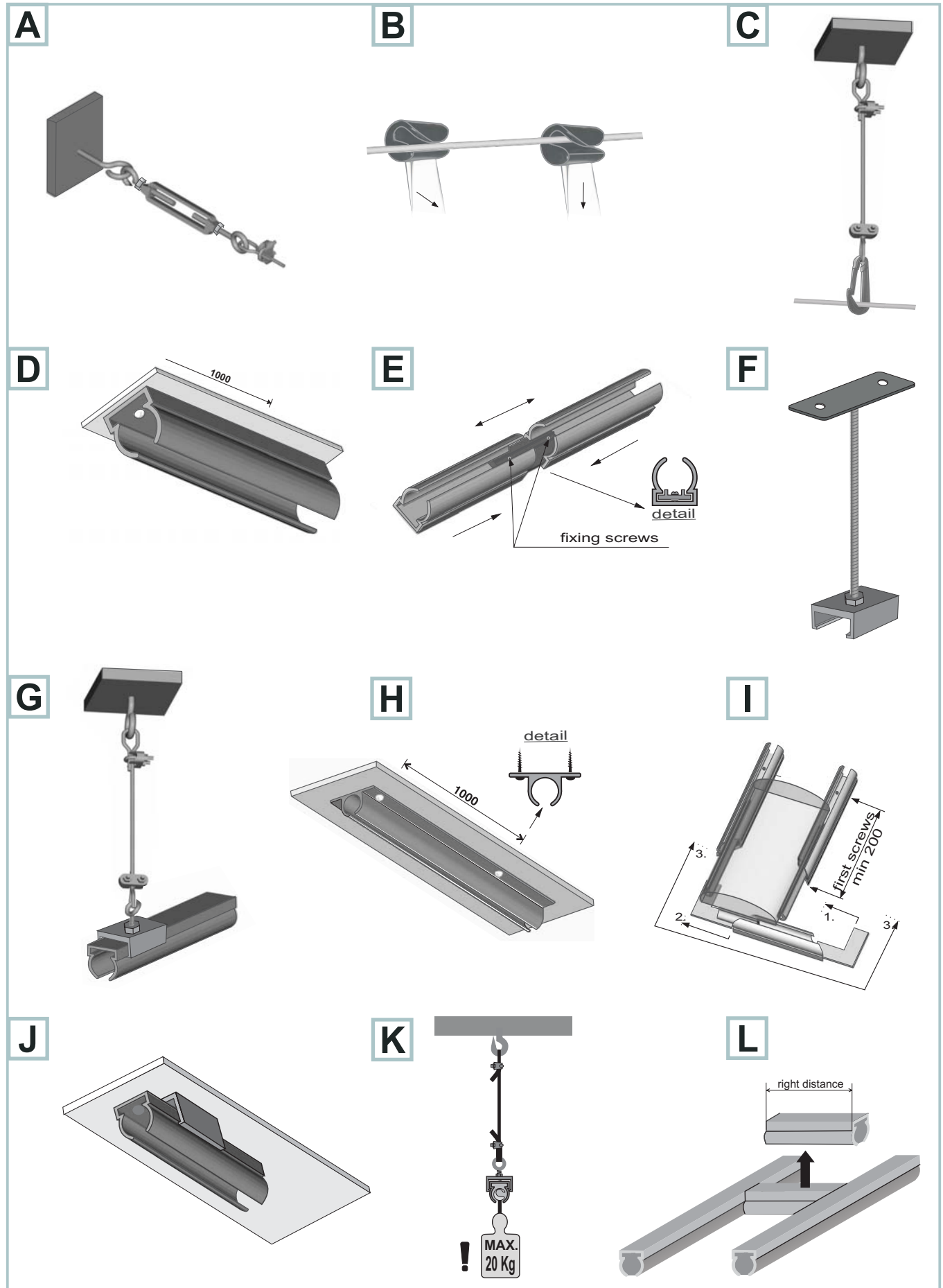


8 + 7H

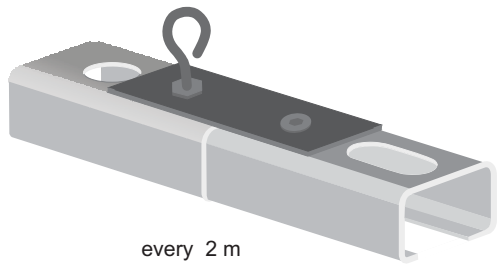
see details D, E, I



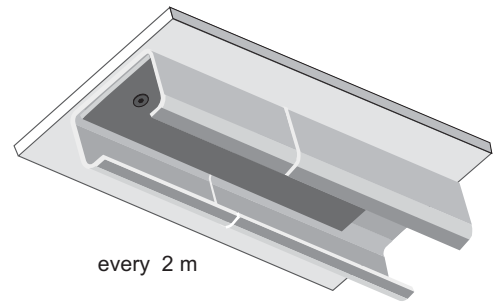
DETAILS



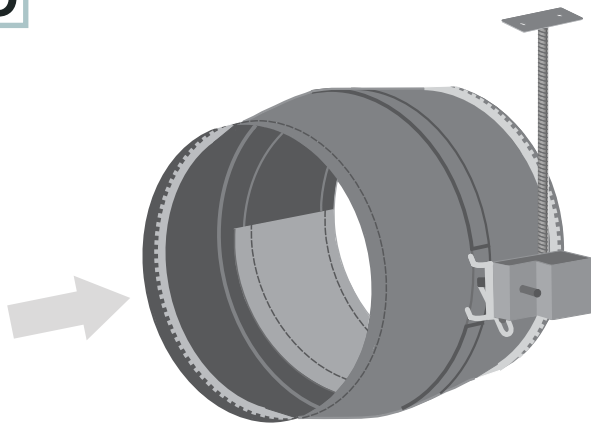
M



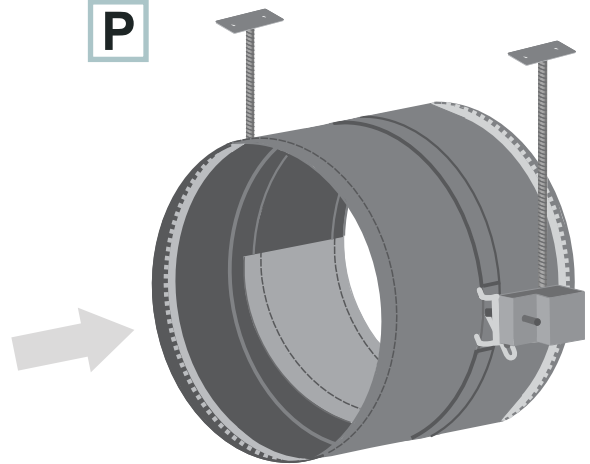
N



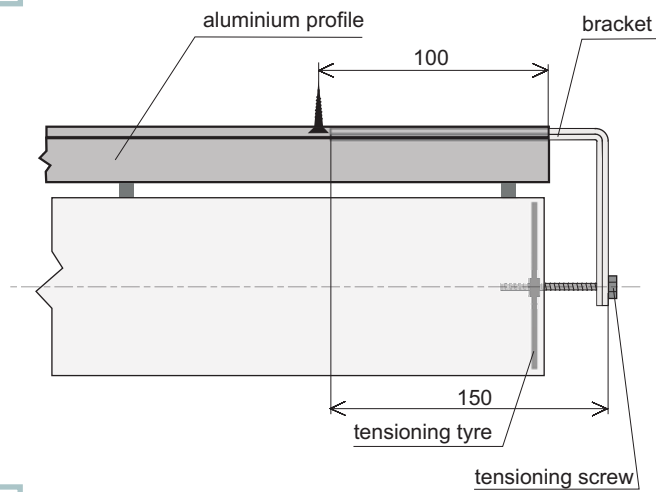
O



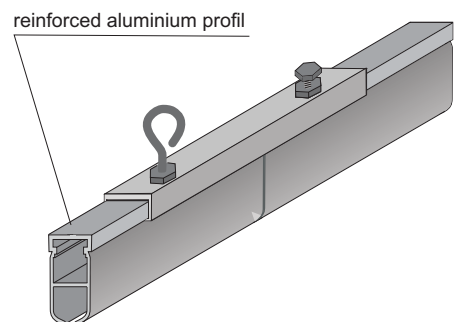
P



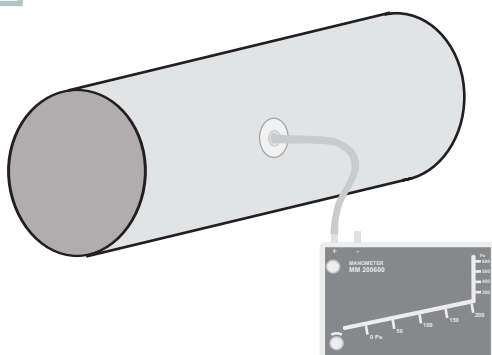
Q



R



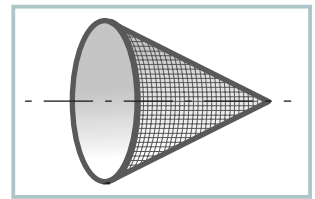
S



XI. OTHER EQUIPMENT

1. EQUALIZER

EQ To make uniform the air flow behind e.g. a ventilator, a shaped piece even. It is usually a cone made of sieve.



2. COLOURS

WH white	YE yellow	BL blue
GR green	RE red	DG dark grey
LG light grey	BC black	SP special

See the supplement - shadecard of that particular material.
Consult special colours with our authorized representatives.

3. TYRES

TY They are used to retain the shape of a circular diffuser even if it is not inflated.
Are made of stainless wire or plastic tube. The standard distance between two tyres is 500 mm. The tyres can be either inside of outside the diffuser. The tyres are fixed to a diffuser by Velcros, therefore they can be detached when the diffuser is maintained.

4. ANTISTATIC

AS You ought to use diffusers made of conductive enough fabric where there is an explosion hazard. We have lightweight fabric with these properties at disposal. Specific cases are to be consulted with the producer.

5. MANOMETER

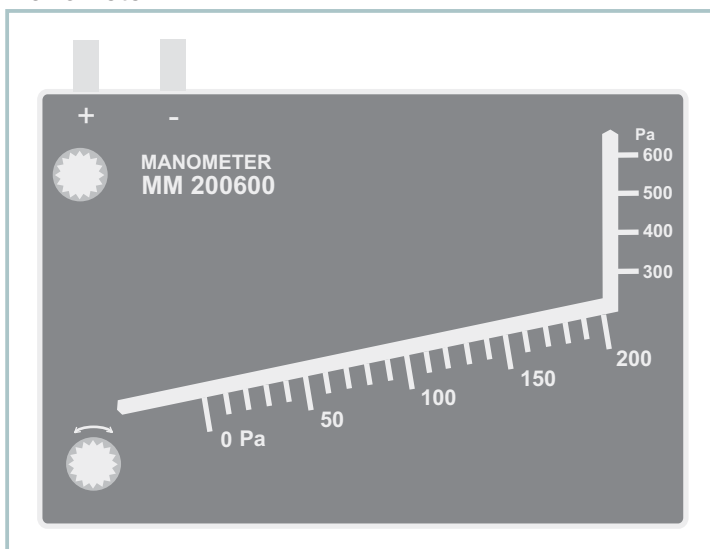
MN Static pressure inside a textile diffuser can be monitored by means of a simple manometer (supplied on request). Static pressure exceeding a particular level because of dirt should instigate washing of the diffuser.

Manometer - the topical static pressure is read on a scale

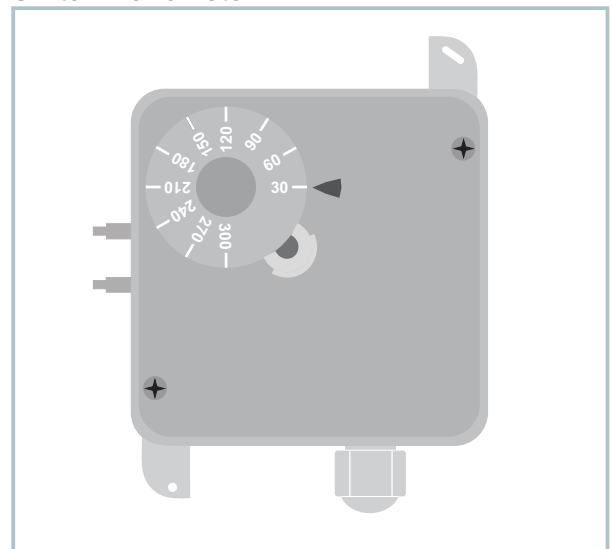
Switch manometer - connection of the circuit signalizes exceeding of a set value.

For installation see detail S, page 32.

Manometer

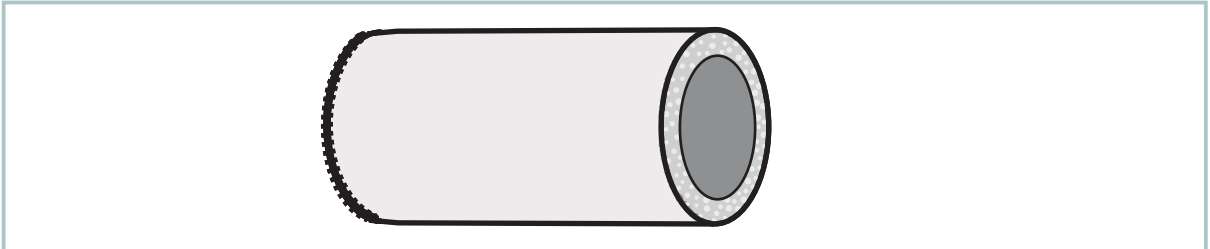


Switch manometer



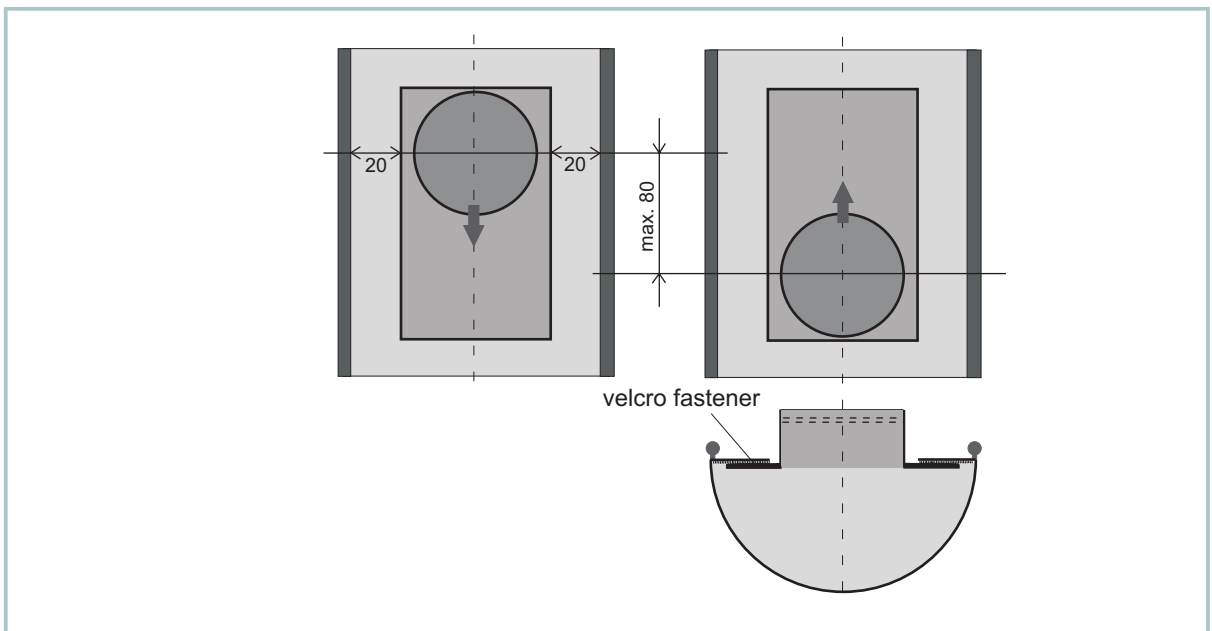
6. INSULATED DUCTING

I Sheets of resilient insulating material covered by any of the above mentioned fabrics form an insulated ducting. The insulated ducting minimalizes heat loss inevitable if the ducting passes through a non air-conditioned space between a machine room and projected room. The depth of the insulation is either 10 or 20 mm. Appropriate coefficients of heat penetration are 3.6 or 1.8 W/sqm.K. Insulated ducting is specified as follows: particular fabric plus symbol I10 or I20. E.g. PMS+I20 stands for 20 mm insulation with PMS fabric.



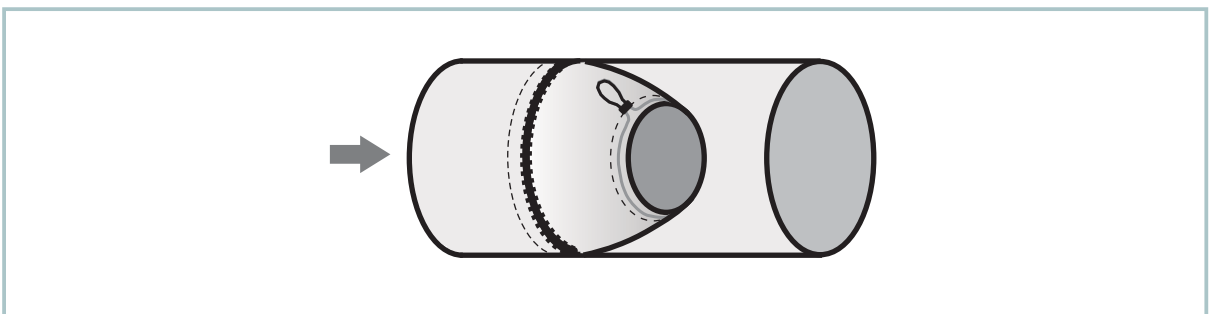
7. MOVEABLE ADAPTER

IN M **OUT M** Adapters on a straight part of a half-round or quarter-round diffuser can be designed in a way to be movable in the direction of the diffuser by even 80 mm. Moveable adapter can be helpful in case the real position of the adapter does not correspond to the one on the drawing. „INM“ symbolizes the moveable adapter in a specification (letter M attached to the symbol of a common adapter “IN”).



8. DAMPER

EQ Damper is a blunt cone made of a permeable fabric. The lesser diameter of the cone is adjustable by means of a string with an arresting stop. A damper opened to its maximum equivalent to the diameter of the diffuser provides zero pressure loss. Complete tightness, on the other hand, provides the maximum local pressure loss. Having unfastened a neighbouring zipper you can modify adjustment of the damper easily. For further description of its function and possible use see chapter IX. Air diffusion.



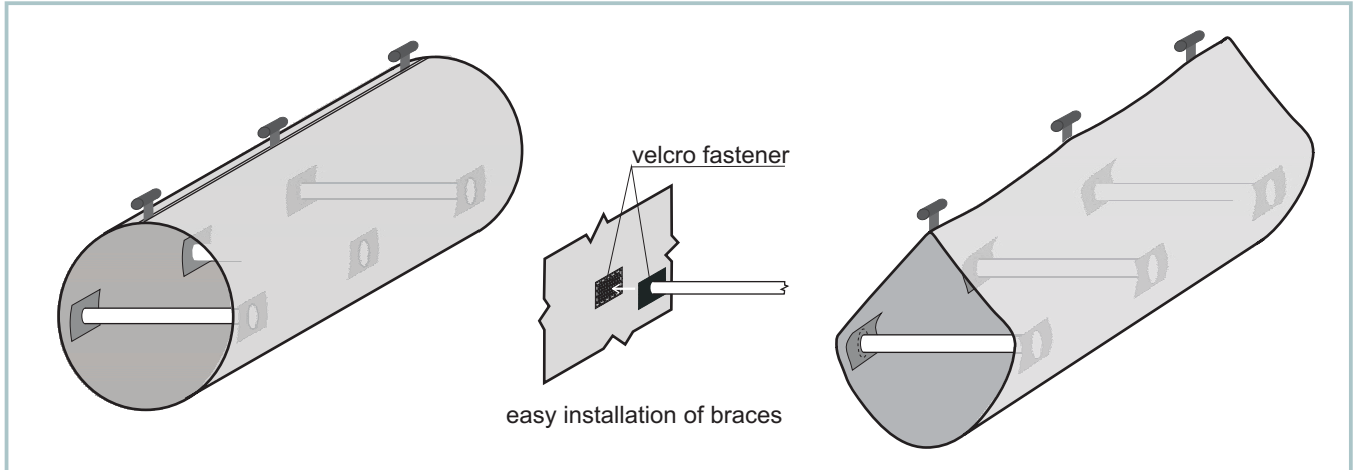
9. BRACES

BR

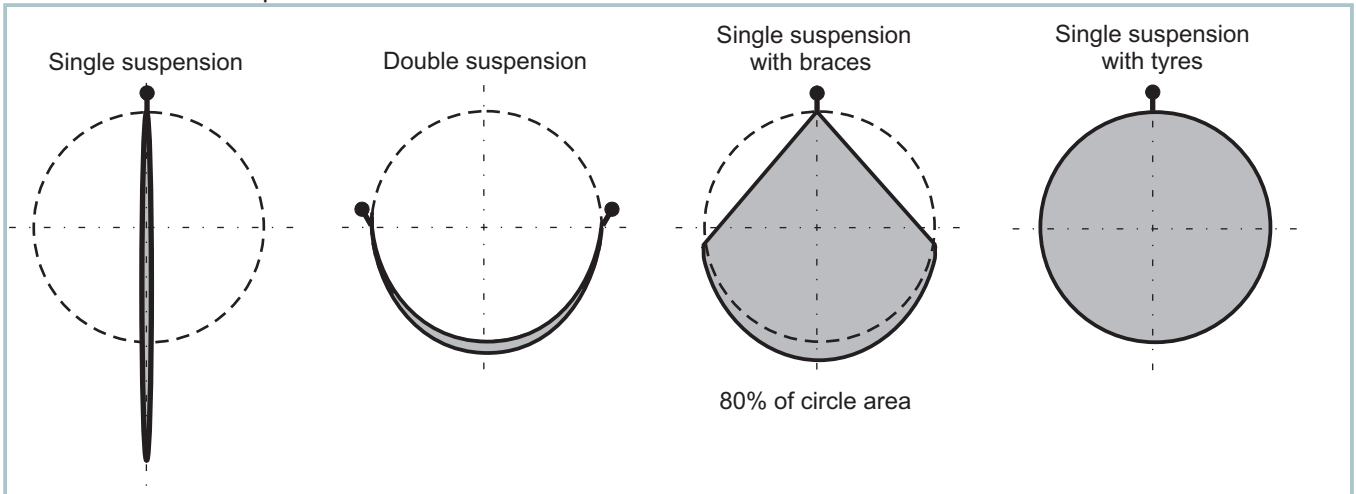
Braces keep the shape of a circular diffuser when it is not inflated. They are made of fireproof plastic, the usage possibilities are illustrated in the pictures. Braces are fixed inside diffusers with Velcro fasteners, they can be removed before and reinstalled after maintenance easily. Braces are cheaper substitute to tyres.

Diffuser with braces - inflated

Diffuser with braces - without air supply



Circular diffuser - comparison of installations



--- inflated — without air supply

XII. INSTRUCTIONS FOR DESIGNERS

□ VIBRATION OF FABRIC

Turbulent air flowing inside a diffuser can cause vibrations or even oscillation of the fabric. Such defects occur usually right behind the ventilator or shaped piece (such as arch or adapter), where the air flow changes its direction. In case of straight parts, the defects are caused by low pressure along with high air flow velocity. Particular situations can be examined more exactly by the help of graphs on pages 10, 11. A straight piece of duct at least 1 m long, of a constant diameter, placed before the inlet, contribute to uniform air flow significantly. A turbulence equalizer (see page 33) usually eliminates vibrations. It, however, causes noticeable pressure loss at the same time.

□ STAINLESS MOUNTING MATERIAL

Application of galvanised turn-buckles and locknuts is inadmissible in food industry.

□ TYRES

You can neither wash the diffusers in a washing machine nor spin-dry them unless you detach the tyres.

□ STOCKPILE

To have a spare diffuser is often of advantage to an investor. A spare diffuser is to be used when the original diffuser is maintained.

□ CONDENSATION

Do not forget that condensation of water on the outside surface of a diffuser is excluded only if the diffuser is made of permeable fabric. If you use diffusers made of impermeable fabric, you are to make a professional judgement about air humidity in the room and the temperature of the diffused air.

□ NHE FABRIC

The fabric is fragile and can crack at folds. Prevent the folded fabric from a load and formation of sharp-edged folds! The brunt of air the starting ventilator brings about can damage the fabric. Provide for gradual starting up of the ventilator.

□ MEMBRANE DIFFUSER

The main purpose of a membrane diffuser is to adjust the air flow to the heating or cooling mode. The diffuser is not destined for temperature regulation at a work place, which should be primarily regulated by a heat supply control. The transition of the flap position lasts cca. 140 seconds. Because the membrane vibrates intensely while being displaced, the frequency of transitions should be limited to the needful minimum. We recommend to condition the transition act by a certain temperature difference. E.g. When the supply air is colder than the air in the room, the air flow should be altered from the rectified current to the diffused one by means of the flap. Proper hysteresis e.g. 2 3 °C can reduce the frequency of transitions to the minimum. The supplier will take account of possible inobservance of the recommendation in case of complaint procedure.

□ COLOUR SELECTION - INDUCTION POLLUTION

The customer himself selects colours to his taste, except for dirty environment (e.g. rubber industry), where usage of dark colours is recommended. The environment dust embed on the diffuser surface (effect of induction) and debase its appearance as a result. Such a dust coat, however, does not affect the diffuser function and cannot be a subject of claim.

XIII. ENTERING OF SPECIFICATION OF THE TEXTILE DIFFUSER

Use fax number: +420 469 311 857

Or fill in the application form on www.prihoda.eu

ORDER NAME:	<input type="text"/>		
COMPANY:	<input type="text"/>	CONTACT:	<input type="text"/>
TELEPHONE:	<input type="text"/>	E-MAIL:	<input type="text"/>
THE OFFER SHALL BE SUBMITTED AT THE LATEST:			<input type="text"/>

POSITION NO.:	<input type="text"/>	AIR FLOW:	<input type="text"/>
NUMBER OF PIECES:	<input type="text"/>	ROOM TEMPERATURE:	<input type="text"/>
POSITIONS TOTAL:	<input type="text"/>	TOTAL DIFFUSER LENGTH:	<input type="text"/>
OVERPRESSURE:	<input type="text"/>	TEMPERATURE OF SUPPLIED AIR:	<input type="text"/>

REDUCE DIMENSIONS ALONG THE LENGTH: Yes No

BASIC SHAPE OF THE DIFFUSER:

- circular
- half - round
- quarter - round
- segment
- sector

CONNECTIN OF THE DIFFUSER

- 1. Shape:** circular **2. Dimension:**
- half - round
 - quarter - round
 - square with flange
 - square without flange

COLOUR: white blue yellow green special
 dark grey light grey red black

FABRIC: PLS PLI PMS PMI NLS NLI NMS NMI NMD NHI NHE

SIDE INLET ADAPTER (number and dimension):

SIDE OUTLET ADAPTER (number and dimension):

INSTALLATION: Vertical distance from the ceiling:

Suspension: 1. single double
 2. stranded wire profiles

Proper type of installation - page 16:

REINFORCING ELEMENTS: No one
 Stainless tyres (all diameters)
 Plastic tyres (diameter min. 400 mm)
 Braces

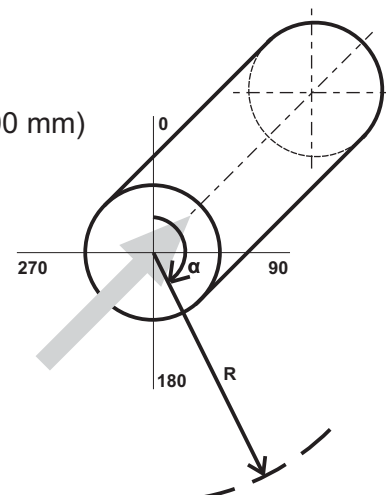
AIR FLOW: Diffused Rectified
 Membrane diffuser (circular shape only)

RECTIFIING OF AIR FLOW (if desired):

Distance - R

Angle - α

Velocity - v



NOTES:

XIV. ASSEMBLY

The diffusers (having been washed) must be kept dry and wrapped in a clean dry place till the installation. After unwrapping, the diffusers must not come into contact with dirt. The mechanics must have their hands washed. The diffusers should be installed according to the pictures 1 - 8 G. All the supply part of the air duct must be absolutely clean before the diffuser is inflated for the first time. Do not start up the ventilator until the whole duct is installed. There is a danger that the fabric could be damaged.

Read through all the under-mentioned instructions and think over your concrete conditions. These instructions and the drawing of the particular installation are parts of every shipment. Look through the drawing and compare it to the marked pictures. If there are differences between the drawings, the drawing of the concrete installation is to be used.

The diffusers are divided into several sections connected by zippers. Each section is marked with a number, which is given in the technical drawing attached to the supply. This number corresponds to the marking on the washing labels sewn in by the zippers. The form of the number is: position - section number / total number of sections. E.g.: 02 - 03 / 05 means 2nd position, its 3rd section from among 5.

RECOMMENDED TECHNIQUE OF INSTALLATION

1 Prepare the mounting material which is not included in the supply:

wall plugs, hooks and screws. The list of the supplied mounting material is attached.

2 Install the diffusers according to the pictures 1 - 8C and according to the drawing of your concrete installation which is attached to the supply.

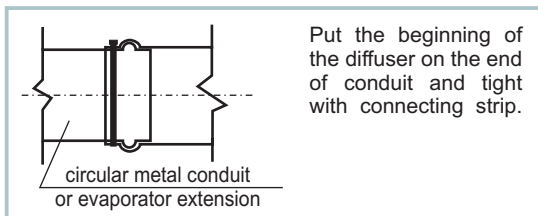
The technique of your installation is coloured.

3 Other mounting instructions:

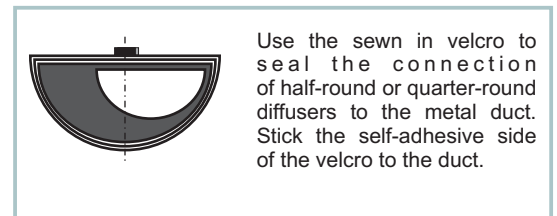
- If a special design is not required the standard distance between the upper right side of the duct and the wire is 32 mm.
- for installations 2,4,6,8: horizontal distance between stranded wires or profiles corresponds to a diffuser size.
- for installations 1,2,5,6: arrange hangers to required lengths and install them first (there is one wire hanger per every min. 5 m length of wire or every 2 m length of profile).
- for installations 1,2: install turn-buckles in completely open position.
- for installations 5,6: It is important to tighten the thread bar properly against the profile and fix it with a safety nut.(see details F, G).
- textile connecting strips are fixated in the tags sewn on diffuser connecting pieces.

4 Mounting of diffusers to metal conduit or evaporator:

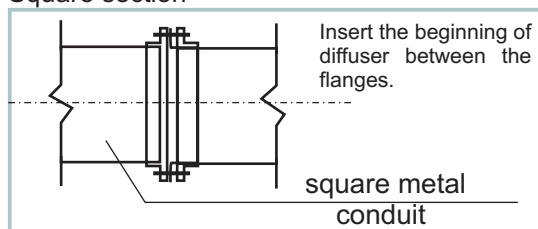
Circular section



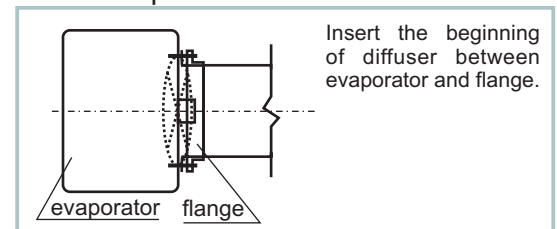
Half-round section



Square section



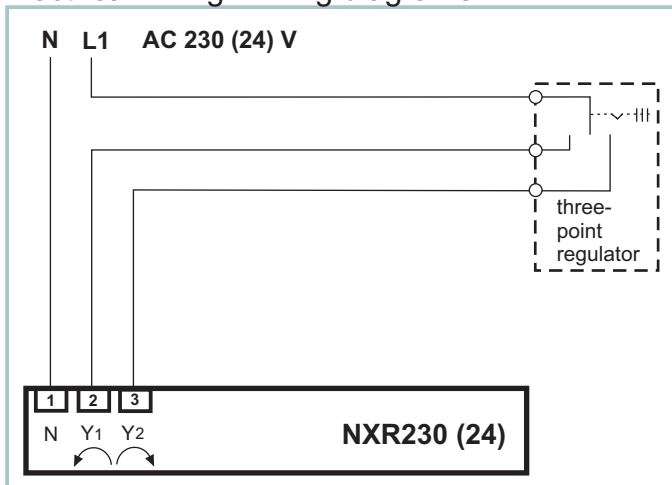
To the evaporator side



5 Mounting of Membrane diffusers:

- when you have attached the beginning of the diffuser according to point 4, zip the flap of the membrane on to the beginning.
- anchor the flap by means of a threaded rod (diameter up to 630 incl. - one threaded rod, diameter over 630 - two rods) see detail O, P on page 32.
- install the subsequent part of the diffuser on a wire or into a profile and zip it on to the flap - the membrane at first, the diffuser afterwards.

Electrical wiring: Wiring diagrams



Minimize the frequency of position transitions by means of a proper heat supply control. Facilitate the transition only when certain temperature has been reached. Determine the proper hysteresis (e.g. 2 - 3 °C) according to local conditions.

- When the servomotor has been plugged in, the flap turns to either of the starting positions.
- The position of the flap can be altered manually after the rotary knob on the case has been turned to the proper position.
- The membrane position can be watched by means of a joystick.
- 0° and 180° are working positions of a servo motor. A halt position differing from the working positions by ± 5° does not affect the functionality.

! The producer does not warrant for undamaged state of the membrane if the flap is turned behind the border positions !

6 Assembly of a tensioner:

Installation 7: Connect the diffuser according to point 4. Anchor the wire with the tensioner on a sturdy structure opposite the blanking in the direction of the diffuser axis. Pull the other end of the wire through to the tensioning tyre sewn in the blanking, adjust the length of the wire. Tightening of the tensioner effects the proper strain.

Installation H: Attach the aluminium profile to the ceiling or a structure according to detail Q page 32. Put the bracket with the tensioning screw into the profile. Attach it to the tensioning tyre sewn in. Tightening of the tensioner effects the proper strain.

7 NHE fabric:

- The fabric is fragile and can crack at folds. Prevent the folded fabric from a load and formation of sharp-edged folds!
- The brunt of air the starting ventilator brings about can damage the fabric. Provide for gradual starting up of the ventilator.

8 Smell from diffusers:

- The openings in the fabric are burnt by lasers. A smell of burning and smoke exhale during the burning process.
- Residue of smells can exhale also from the finished products for a short time after their installation. In such a case, an intensive fresh-air blowing is recommended for two weeks time. All the smells vanish within that time. Health-innoxiousness was demonstrated by chemical analysis.

XV. MAINTENANCE

All our diffusers are made of high-quality resistant materials without a natural fibre admixture. The used material is specified when your order is technically processed. The diffusers made of permeable fabric can be washed in a common industrial washing machine. The diffusers made of the fabrics NHI, NHE and NMD can be washed manually only. Remove the tyres or the blind end reinforcements from the diffuser equipped with these tough parts before washing them.











The process of washing:

Observe the set maintenance symbols of the particular product thoroughly before you wash it. The washing labels are sewn in in the diffusers by the zips.

We recommend:

1. Wash the diffusers with common detergents (dosing according to the directions for use), the effect of washing is enhanced if the diffuser is turned inside out. We advise you to repeat the washing up to four times acc. to level of contamination. A special detergent (we will recommend one by request according to the particular dirt) should be used if the fabric is badly soiled.
2. Use a disinfectant only if it is essential according to the local service instructions. The chemical composition of the disinfectant must not harm the diffuser fabric (see maintenance symbols). Observe the producer's dosing instructions.
3. Rinse the diffusers in clean water.
4. Spin-dry the diffusers gently, install them and finish drying by the air flow from the ventilator.

Symbols key:

	max. temperature for washing 40°C normal mechanical action normal rinsing normal separating
	gentle washing in a washing machine, maximum temperature 40 °C, gentle mechanical action, rinsing in water cooling down, gentle spin-driing
	washing only by hands product must not be washed in washing machine max. temperature 40°C cautious handling
	product must not be whitened with detergents disengaged chlorine
	dry in a drum-drying machine use lower temperature of drying
	product can't be dried in a drum-drying
	ironing within of max. temperature of ironing surface 110°C, cautious with steam ironing
	product must not be ironed steaming is inadmissible
	product must not be dry cleaned the stains must not be removed by organic solvents
	product can be dry cleaned with tetrachlorethen, monofluortrichlormethan and all solvents mentioned with symbol F usual cleaning progresses are without any limits

XVI. MATERIAL LIST

Textile materials

The material used is essential for correct function of the diffusers that meets requirements of technical regulations and provides sufficiently long service life.

Our products are manufactured only of synthetic materials and their basic overview can be found in the following table:

Designation	Permeability	Weight	Characteristic	Material
PLS	Yes	Light	Standard f.r.	100% polyester
PLI	Yes	Light	Increased f.r.	100% polyester modified
PMS	Yes	Medium	Standard f.r.	100% polyester
PMI	Yes	Medium	Increased f.r.	100% polyester modified
PMB	Yes	Medium	Antibacterial	100% polyester + silver
NLS	No	Light	Standard f.r.	100% polyester
NLI	No	Light	Increased f.r.	100% polyester modified
NMS	No	Medium	Standard f.r.	100% polyester
NMI	No	Medium	Increased f.r.	100% polyester modified
NMF	No	Medium	Foil	100% polyethylene
NHI	No	Heavy	Increased f.r.	100% polyester + PVC + Sb ₂ O ₃
NHE	No	Heavy	Excellent f.r.	100% glass fibre + 2x polyurethane
NMA	No	Medium	Antistatic	glass fibre + 2x PVC + carbon

f.r. - Fire resistance


XVII. WARRANTY

Material	Warranty period
PMS, NMS, PMI, NMI	10 years
NHI, PMB, NHE	2 years
NMF, NMA, PLS, NLS, PLI, NLI, other equipment, mounting material	1 year


A claim for repairs of the goods under warranty expires if the mounting and maintaining instructions supplied with the goods have not been followed. And furthermore, every diffusers has sewn in washing labels specifying basic maintenance instructions valid for that particular fabric. A diffuser teared forcibly cannot be a subject of a complaint. Splitting of seams and tearing of the fabric or hanging items caused by overpressure or surge of air-flow can be subjects of a complaint only if in operation, the actual parameters (flow and overpressure) are equal to those calculated.

The difference between grey shades no. 5 and 3 on the scale for assessment of variation in shades (pursuant to EN ISO 105-A02:1995) is our shade difference limit. The supplied shade is admitted to be incorrect only if its difference from our shadecard exceeds this difference limit.


XVII. MATERIAL CHARACTERISTICS

MATERIAL CHARACTERISTICS		FABRIC: PLS
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester, monofilament	
PERMEABILITY	m ³ /h/m ² by 120 Pa	45
FIRE RESISTANCE	EN 13501-1: 2002	F
TEMPERATURE RESISTANCE	°C	-15 to +70
SURFACE RESISTANCE	EN 1149-:1995	> 7,9.10 ¹²
WEIGHT	g/m ² (EN 12127)	75
THICKNESS	mm (EN ISO 5084)	0,09
FINISHING		thermofixation (180°)
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	450 / 420
COLOUR STABILITY	EN ISO 105	5-4
WASHING SHRINKAGE	max. % (40°C)	1
ABSORPTION OF MOISTURE	%	0,5
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	600 / 500
TENSIBILITY WARP / WEFT	% (EN ISO 13934-1)	33/39


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: PLI
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester modified, monofilament	
PERMEABILITY	m ³ /h/m ² by 120 Pa	45
FIRE RESISTANCE	EN 13501-1: 2002	B-s1, d0
TEMPERATURE RESISTANCE	°C	-15 to +70
SURFACE RESISTANCE	EN 1149-1:1995	
WEIGHT	g/m ² (EN 12127)	73
THICKNESS	mm (EN ISO 5084)	0,09
FINISHING		thermofixation
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	425 / 420
COLOUR STABILITY	EN ISO 105	
WASHING SHRINKAGE	max. % (40°C)	
ABSORPTION OF MOISTURE	%	0,4
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	530 / 500
TENSIBILITY WARP / WEFT	% (EN ISO 13934-1)	36 / 36


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: PMS
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester, monofilament	
PERMEABILITY	m ³ /h/m ² by 120 Pa	55
FIRE RESISTANCE	EN 13501-1: 2002	F
TEMPERATURE RESISTANCE	°C	-60 to +110
SURFACE RESISTANCE	EN 1149-1:1995	> 7,9.10 ¹²
WEIGHT	g/m ²	290
THICKNESS	mm	0,48
FINISHING		thermofixation (190°)
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	460 / 290
COLOUR STABILITY	EN ISO 105	4
WASHING SHRINKAGE	max. % (40°C)	1
ABSORPTION OF MOISTURE	%	0,5
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2400 / 1500
TENSIBILITY WARP / WEFT	%	40 / 37


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: PMI
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester modified, monofilament	
PERMEABILITY	m ³ /h/m ² by 120 Pa	55
FIRE RESISTANCE	EN 13501-1: 2002	B-s1, d0
TEMPERATURE RESISTANCE	°C	-60 to +110
SURFACE RESISTANCE	EN 1149-1:1995	> 3,7.10 ¹¹
WEIGHT	g/m ²	295
THICKNESS	mm	0,46
FINISHING		thermofixation (190°)
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	460 / 290
COLOUR STABILITY	EN ISO 105	4
WASHING SHRINKAGE	max. % (40°C)	1
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2400 / 1500
TENSIBILITY WARP / WEFT	%	40 / 38


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: PMB
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester, silver	
PERMEABILITY	m ³ /h/m ² by 120 Pa	55
FIRE RESISTANCE	EN 13501-1: 2002	F
TEMPERATURE RESISTANCE	°C	-60 až +110
SURFACE RESISTANCE	EN 1149-1:1995	
WEIGHT	g/m ²	290
THICKNESS	mm	0,48
FINISHING		
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	460 / 290
COLOUR STABILITY	EN ISO 105	4
WASHING SHRINKAGE	max. % (40°C)	1,5
ABSORPTION OF MOISTURE	%	
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2100 / 1100
TENSIBILITY WARP / WEFT	%	


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: NLS
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester, monofilament	
PERMEABILITY	m ³ /h/m ² by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	F
TEMPERATURE RESISTANCE	°C	-15 to +70
SURFACE RESISTANCE	EN 1149-1:1995	
WEIGHT	g/m ²	82
THICKNESS	mm	
FINISHING		thermofixation (190°)
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	450 / 420
COLOUR STABILITY	EN ISO 105	4
WASHING SHRINKAGE (% (40°C), warp / weft)	PNs 4745963/20/80/97	2/2
ABSORPTION OF MOISTURE	%	
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	500 / 460
TENSIBILITY WARP / WEFT	%	


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: NLI
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester modified, monofilament	
PERMEABILITY	m ³ /h/m ² by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	B-s1, d0
TEMPERATURE RESISTANCE	°C	-15 to +70
SURFACE RESISTANCE	EN 1149-1:1995	
WEIGHT	g/m ²	86
THICKNESS	mm	
FINISHING		thermofixation (190°)
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	450 / 420
COLOUR STABILITY	EN ISO 105	4
WASHING SHRINKAGE (% (40°C), warp / weft)	PNs 4745963/20/80/972	2/2
ABSORPTION OF MOISTURE	%	
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	500 / 460
TENSIBILITY WARP / WEFT	%	


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: NMS
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester, monofilament	
PERMEABILITY	m ³ /h/m ² by120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	F
TEMPERATURE RESISTANCE	°C	-30 to +110
SURFACE RESISTANCE	EN 1149-1:1995	> 7,9.10 ¹²
WEIGHT	g/m ²	313
THICKNESS	mm	0,54
FINISHING		thermofixation (190°)
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	460 / 290
COLOUR STABILITY	EN ISO 105	4
WASHING SHRINKAGE	max. % (40°C)	1
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2400 / 1500
TENSIBILITY WARP / WEFT	%	40 / 38


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: NMI
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester modified, monofilament	
PERMEABILITY	m ³ /h/m ² by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	B-s1, d0
TEMPERATURE RESISTANCE	°C	-30 to +110
SURFACE RESISTANCE	EN 1149-1:1995	2,8.10 ¹⁰
WEIGHT	g/m ²	328
THICKNESS	mm	0,51
FINISHING		thermofixation (190°)
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	460 / 290
COLOUR STABILITY	EN ISO 105	4
WASHING SHRINKAGE	max. % (40°C)	1
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2400 / 1500 min.
TENSIBILITY WARP / WEFT	%	40 / 38


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: NMF
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyethylen	
PERMEABILITY	m ³ /h/m ² by120 Pa	0
FIRE RESISTANCE	ČSN EN 13501-1: 2002	F
TEMPERATURE RESISTANCE	°C	-30 to +70
WEIGHT	g/m ²	85
THICKNESS	mm	0,1
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	40 / 20
WASHING SHRINKAGE	max. % (40°C)	0
ABSORPTION OF MOISTURE	%	0
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	360 / 220
TENSIBILITY WARP / WEFT	%	32 / 32


The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: NHI
TREATMENT SYMBOLS		
BASIC MATERIAL	100% polyester + 2x PVC+Sb ₂ O ₃	
PERMEABILITY	m ³ /h/m ² by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	B -s2, d0
TEMPERATURE RESISTANCE	°C	-20 to +70
SURFACE RESISTANCE	EN 1149-1:1995	4,9.10 ¹³
WEIGHT	g/m ²	480 ±20
THICKNESS	mm	0,4 ±0,02
FINISHING		Laminating
WEAVE	DIN 61101-1	
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	1000x1000
COLOUR STABILITY	EN ISO 105	
WASHING SHRINKAGE	max. % (40°C)	
ABSORPTION OF MOISTURE	%	
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	320 / 240
TENSIBILITY WARP / WEFT	%	19,5 / 22,5

The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: NHE
TREATMENT SYMBOLS		
BASIC MATERIAL	100% glass fibre + 2x polyurethane	
PERMEABILITY	m ³ /h/m ² by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	A2-s1, d0
TEMPERATURE RESISTANCE	°C	-50 to +180
SURFACE RESISTANCE	EN 1149-1:1995	
HEAT CONDUCTANCE	Wm ⁻¹ K ⁻¹	
WEIGHT	g/m ²	460
THICKNESS	mm	0,43
FINISHING		
WEAVE	DIN 61101-1	
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	190 / 120
COLOUR STABILITY	EN ISO 105	
WASHING SHRINKAGE	max. % (40°C)	
ABSORPTION OF MOISTURE	%	
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	500 / 300
TENSIBILITY WARP / WEFT	%	5 / 5

The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: NMA
TREATMENT SYMBOLS		
BASIC MATERIAL	glass fibre + 2xPVC+ carbon	
PERMEABILITY	m ³ /h/m ² by 120 Pa	0
FIRE RESISTANCE	ISO 4589-2	33,6
TEMPERATURE RESISTANCE	°C	-20 to +60
SURFACE RESISTANCE	Ω (ČSN 341382)	4,0 x 10 ⁵
HEAT CONDUCTANCE	Wm ⁻¹ K ⁻¹	320
WEIGHT	g/m ²	0,3
THICKNESS	mm	
FINISHING		
WEAVE	DIN 61101-1	
SETT OF FABRIC 10 CM	EN 1049-2 warp / weft	
COLOUR STABILITY	EN ISO 105	
WASHING SHRINKAGE	max. % (40°C)	
ABSORPTION OF MOISTURE	%	400 / 350
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	4 / 4
TENSIBILITY WARP / WEFT	%	

The missing data will be supplied gradually.