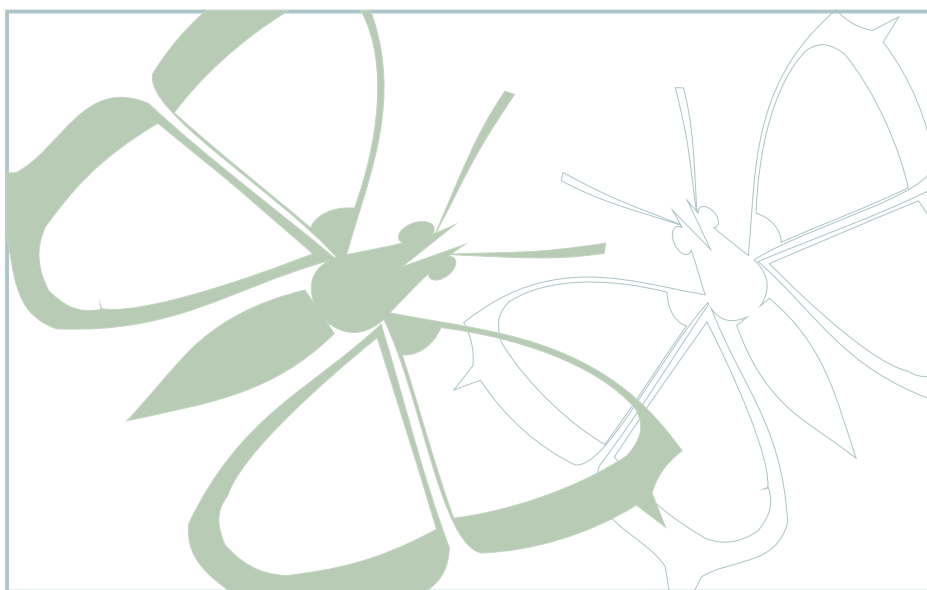


# TEXTILE AIR DIFFUSERS

## TECHNICAL DATA



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3/2009

## TECHNICAL DATA - version 3/2009

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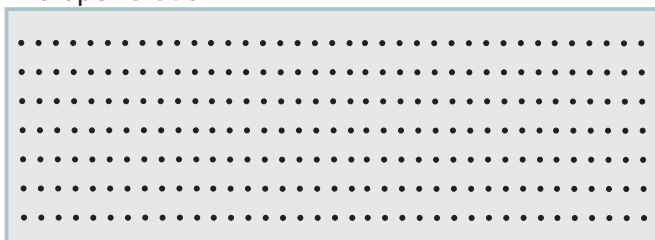
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## I. AIR DISTRIBUTION METHOD

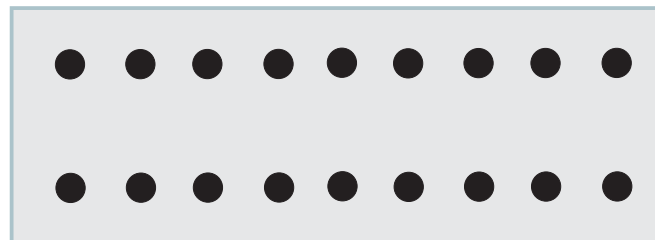
Air is distributed from the fabric diffuser through openings with various sizes. Combinations of sizes and layout of the openings together with various output velocities provide numerous variations. The scope of options begins with distribution of air at low speeds and continues up to targeted air supply for long distances.

There are distinguished small holes with diameters 0.4 mm that are called microperforation are designed for dispersion of air. In case of targeted air supply there are used series of holes with diameters 4mm or more that are called perforation. It is necessary to take into account effects of temperature differences when calculating flow velocity in a certain distance.

Microperforation



Perforation

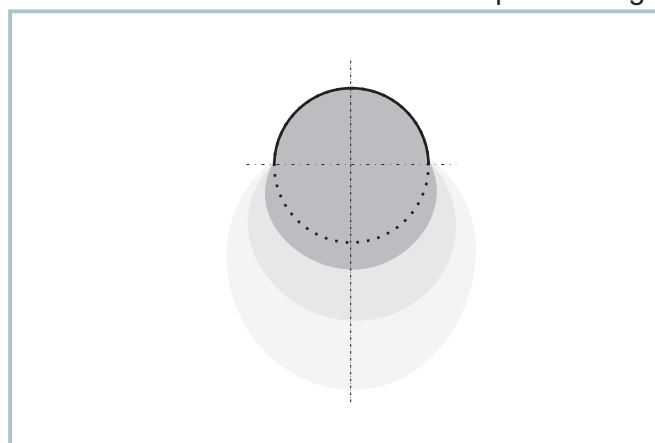


### D

#### DIFFUSED distribution of air using micro-perforation

Diffusers with micro-perforation dispersing air into their surroundings

Example of design

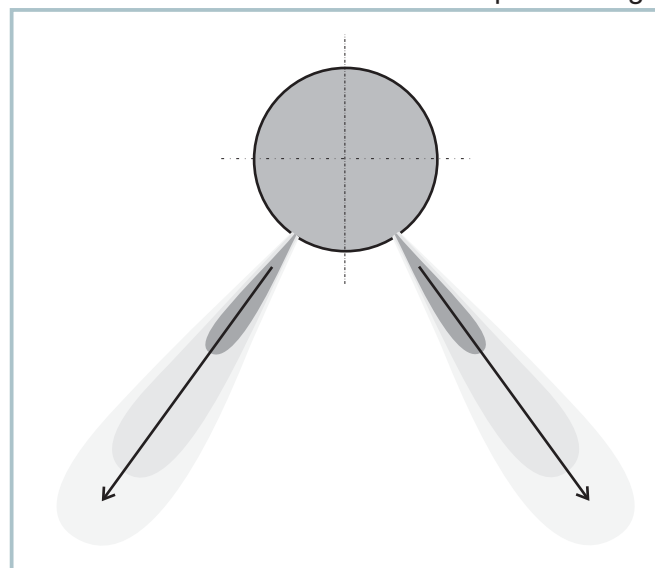


### R

#### DIRECTIONAL distribution of air using perforation

Diffusers with series of holes for longer reach of air flow

Example of design



## II. 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 5 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 6. It is valid or 20 mm distance of the holes. Several parallel rows can be made to increase rectified air flow.

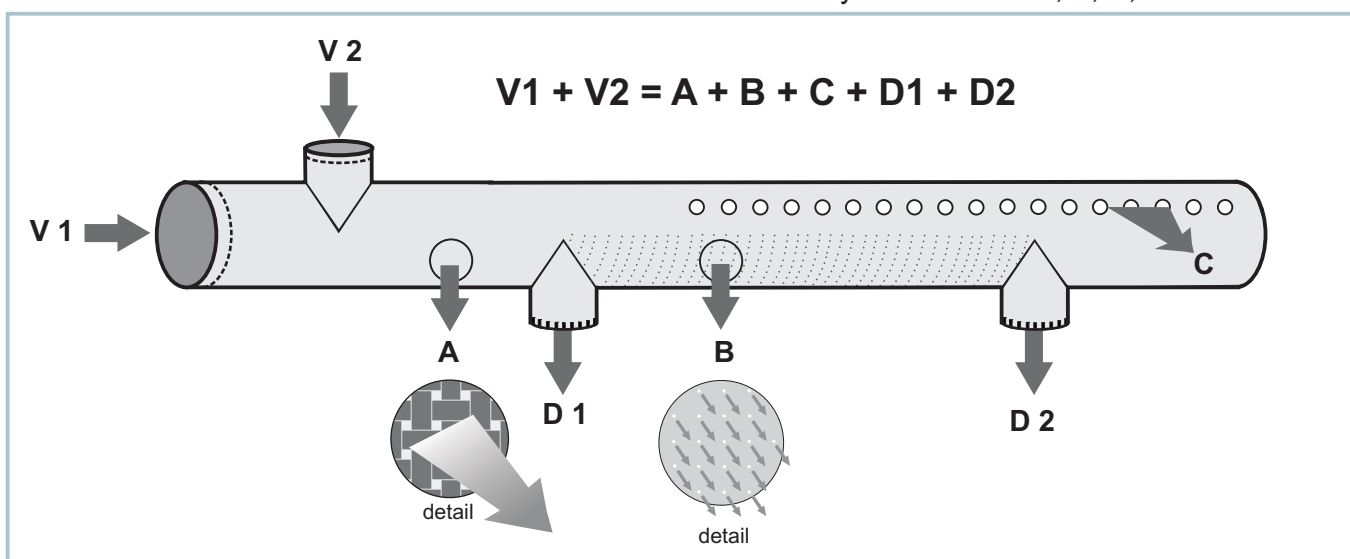
### D - Through an end of a diffuser or through an outlet adapter:

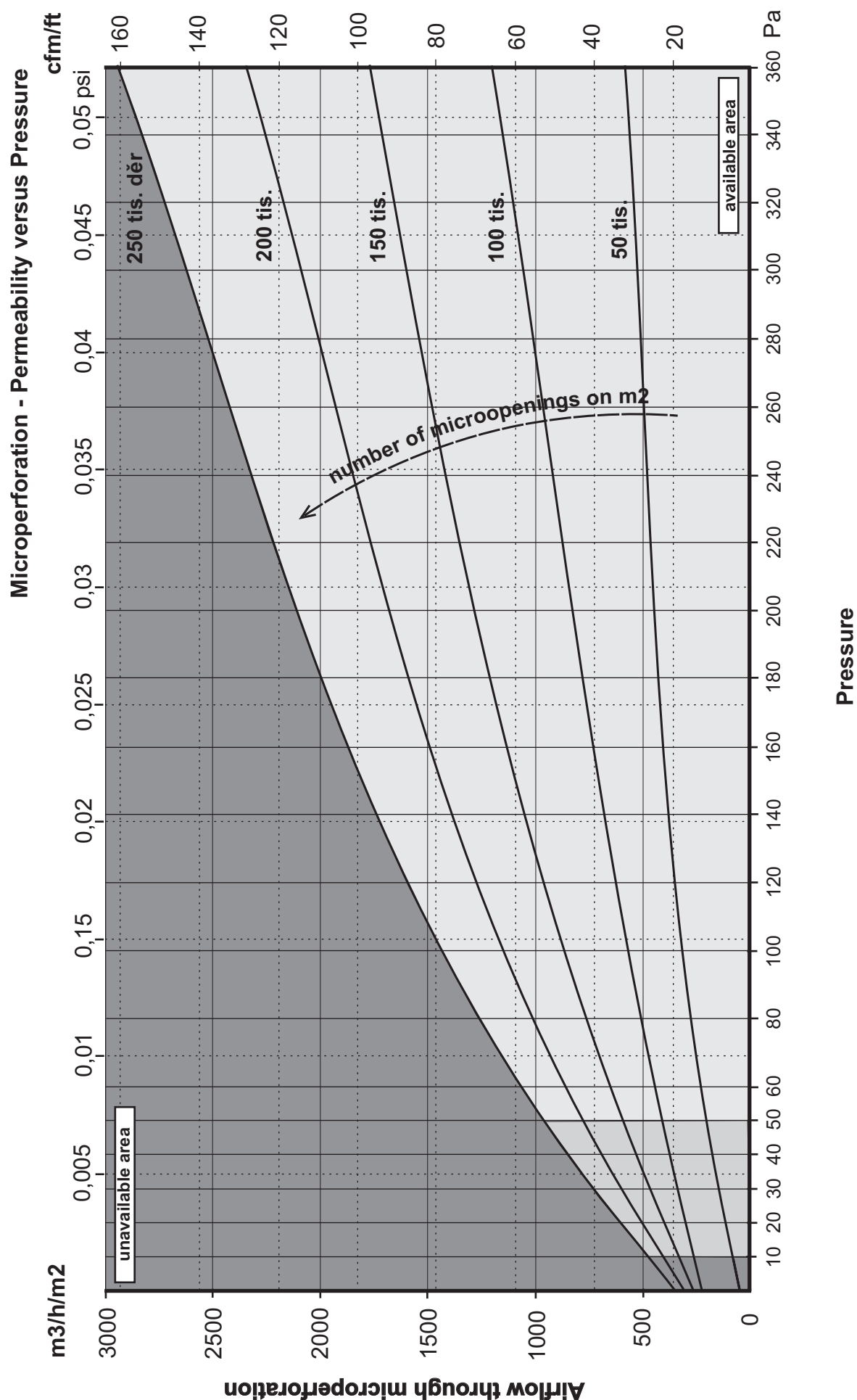
The air flow is conducted to other diffusers, it is not destined for distribution through a computed diffuser.

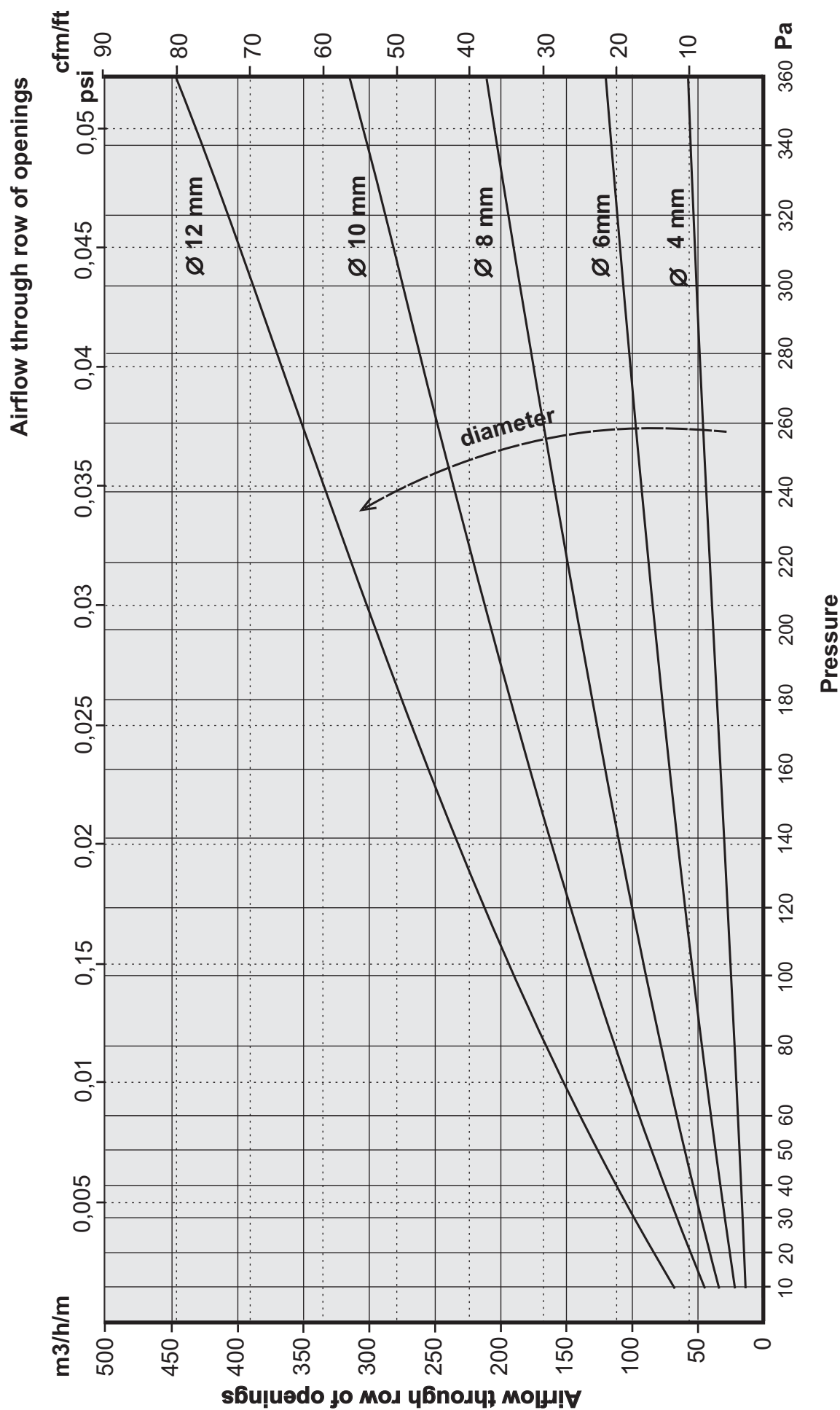
$$\text{Always } V = A + B + C + D.$$

Chart:

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



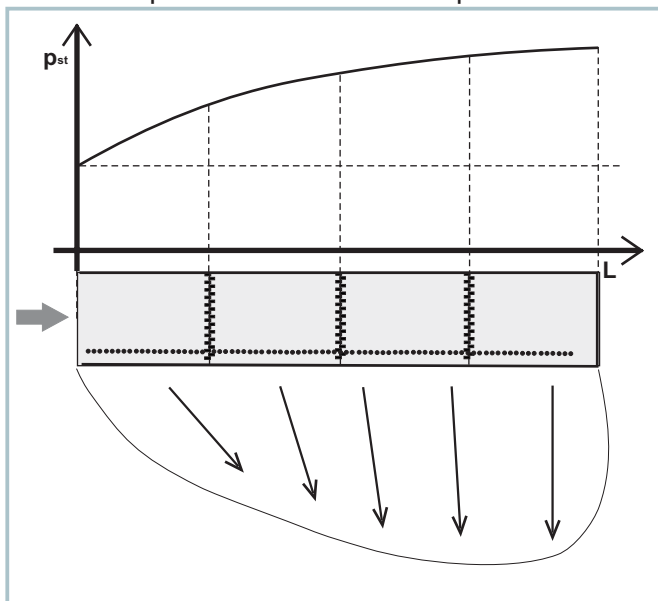




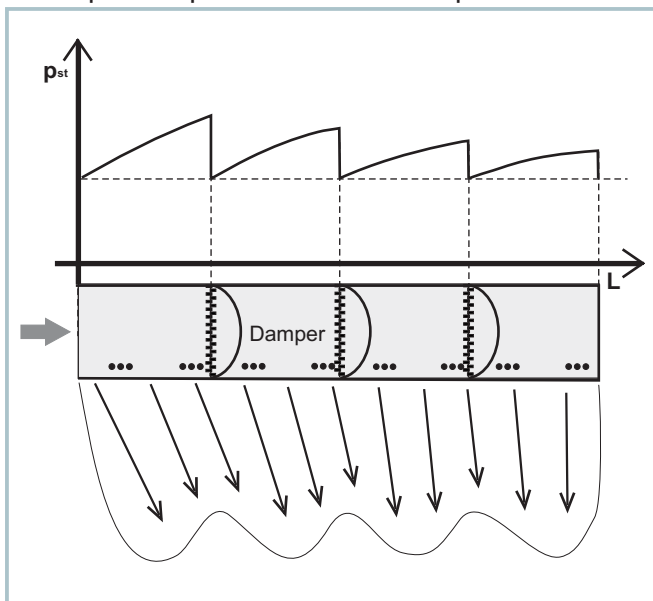
## III. AIR DIFFUSION

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. 2) 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.

1. Uniform perforation without dampers



2. Sequential perforation with dampers

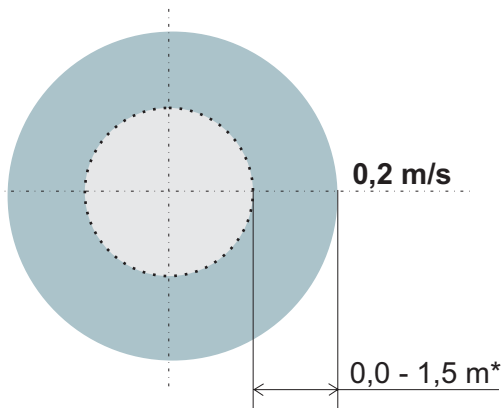


Speed of air-flow in various distances from the diffuser can be calculated by means of our software, which takes all the known effects (i.e. static pressure inside a diffuser, location and dimensions of inlets, and temper. differences) into account. We are ready to verify every your calculation. All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

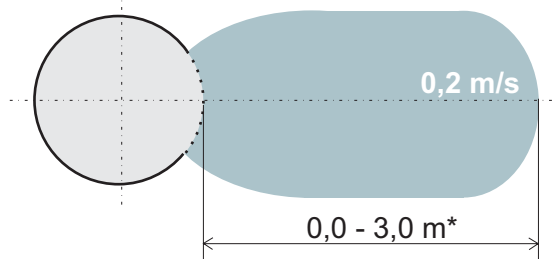
## IV. AIRFLOW REACHES

Textile diffusers are an all purpose tool for air distribution. The textile nozzles have extended possibilities of air distribution by means of the textile diffusers. Nowadays we are covering the entire range of airflow reaches used at real applications.

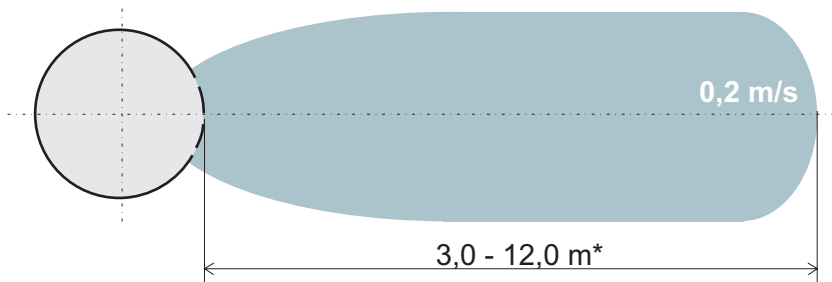
microperforation



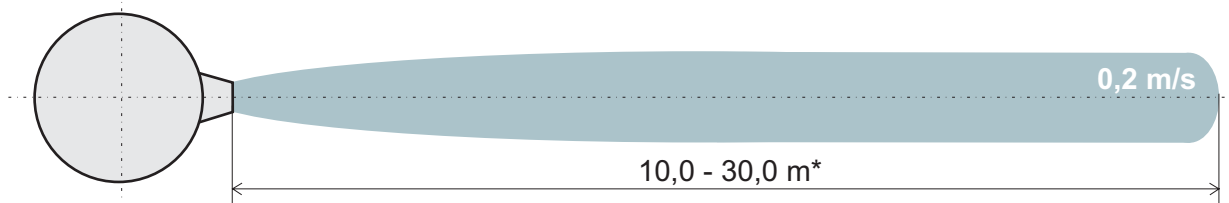
directional microperforation



perforation



textile nozzle

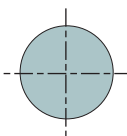


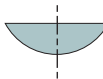




\* The airflow reaches vary in dependance on static pressure in the diffuser.



## V. SECTION

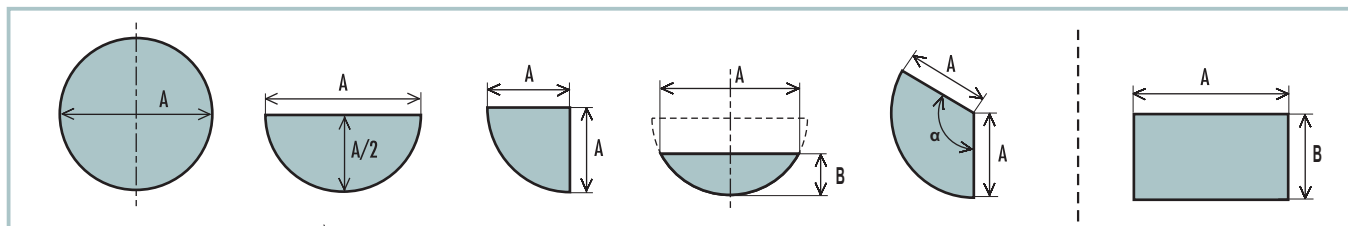
We distinguish among six different diffuser sections:

<b>C</b>	<b>CIRCULAR</b>		The basic version, easy maintenance, preferentially recommended.
<b>H</b>	<b>HALF - ROUND</b>		Use where there is not enough space for circular diffuser and in exacting interiors.
<b>Q</b>	<b>QUARTER - ROUND</b>		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.
<b>SG</b>	<b>SEGMENT</b>		Use where there is not enough space even for a half-round diffuser.
<b>SC</b>	<b>SECTOR</b>		Use where a quarter-round section cannot be used because of a nonstandard construction of a ceiling.
<b>S</b>	<b>SQUARE</b>		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.

## VI. 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.

### Three steps to determine correct dimensions of the diffuser

Use the respective diagrams on the following pages and proceed as follows:

#### Step S1:

Determine the calculation pressure for the diffuser. It is static pressure of the fan that corresponds to the calculation flow rate. In case that some ducting or other diffuser is installed before the fabric diffuser, then pressure shall be reduced by the pressure loss arising from passage through this section. See also par. "Calculation pressure" below.

#### Step S2:

At the calculation pressure level choose a suitable in put velocity into the diffuser. You are limited by:

- Desired comfort concerning to the aerodynamic noise; higher velocity means higher noise level. The given levels occur immediately at the source, decreasing level with increasing distance.
- Possible vibrations of the diffuser fabric. In case you get in the diagram under some of the curves, some vibrations of fabric probably occur during operation of the equipment, caused by turbulent flow and local underpressure. Intensity of such vibrations increases according to the curves in the diagram.
- High internal flow speed has adverse effects to spreading of air in the room as it deflects outgoing air from the perpendicular line to the diffuser; as higher speed, as bigger deflection and vice versa.

#### Step S3:

Assign the desired flow rate to the chosen velocity and read the smallest possible dimension of the diffuser. Use of a larger opening is possible in view of distribution of air.

### Calculation pressure

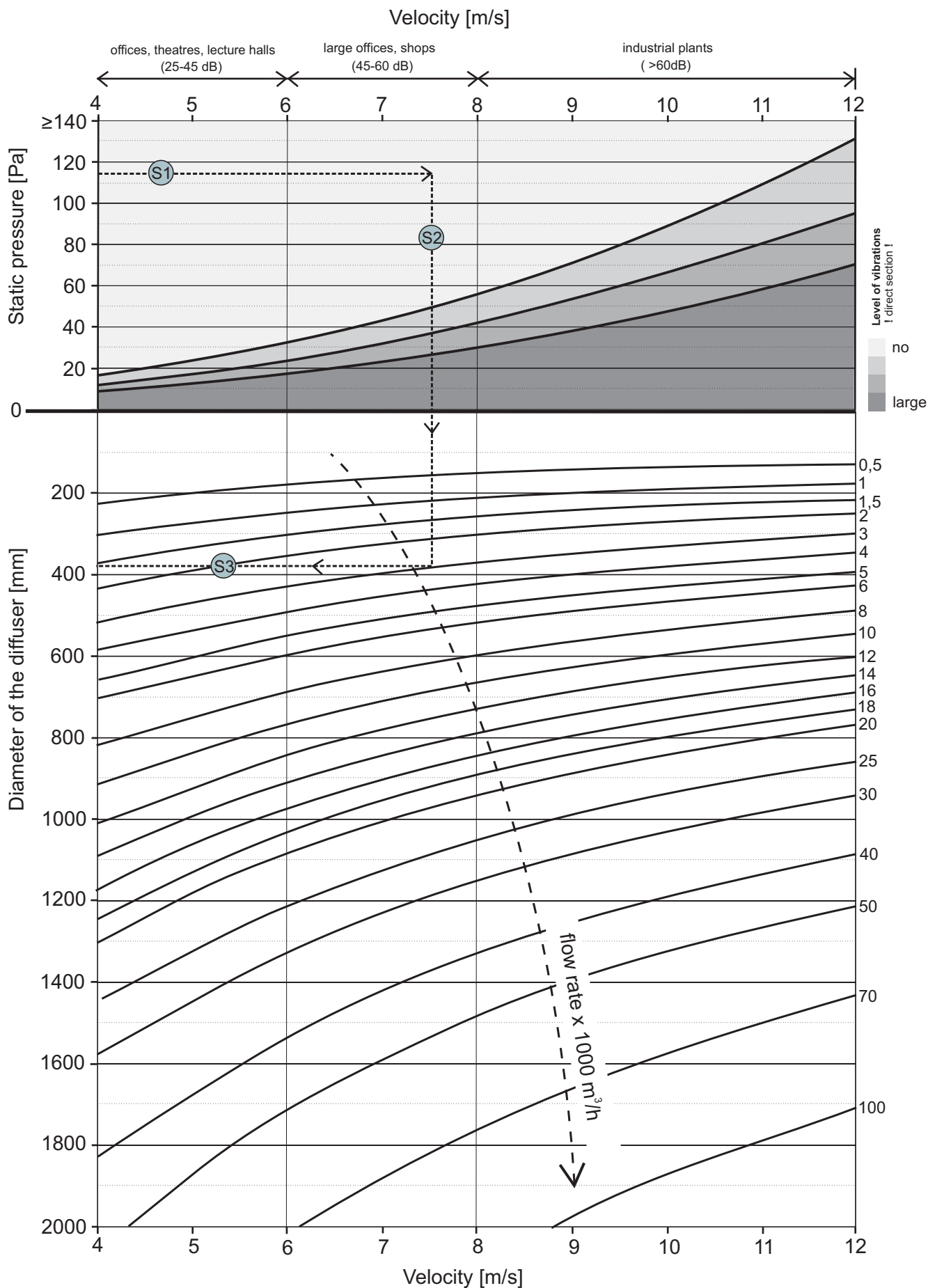
Calculation pressure can be used to overcome friction (along the length) and local (in shaped pieces) losses in the fabric diffuser and also to achieve the desired distribution (passage through fabric). Friction losses are usually negligible due to their dependence on the longitudinal velocity. Air flows from the diffuser and its longitudinal flow rate decreases to zero. In case that pressure can be influenced, it is recommended to use higher pressures. Static pressure over 140 Pa is, however, uneconomical except cases with high friction or local loss (long distribution systems or frequent shaped pieces). Increasing pressure makes appearance and inflation of the ducts better. In case of light-weight materials there is sufficient to use lower pressure to achieve correct shapes.

For quick and exact calculation use our software or demand it from our authorized partners.

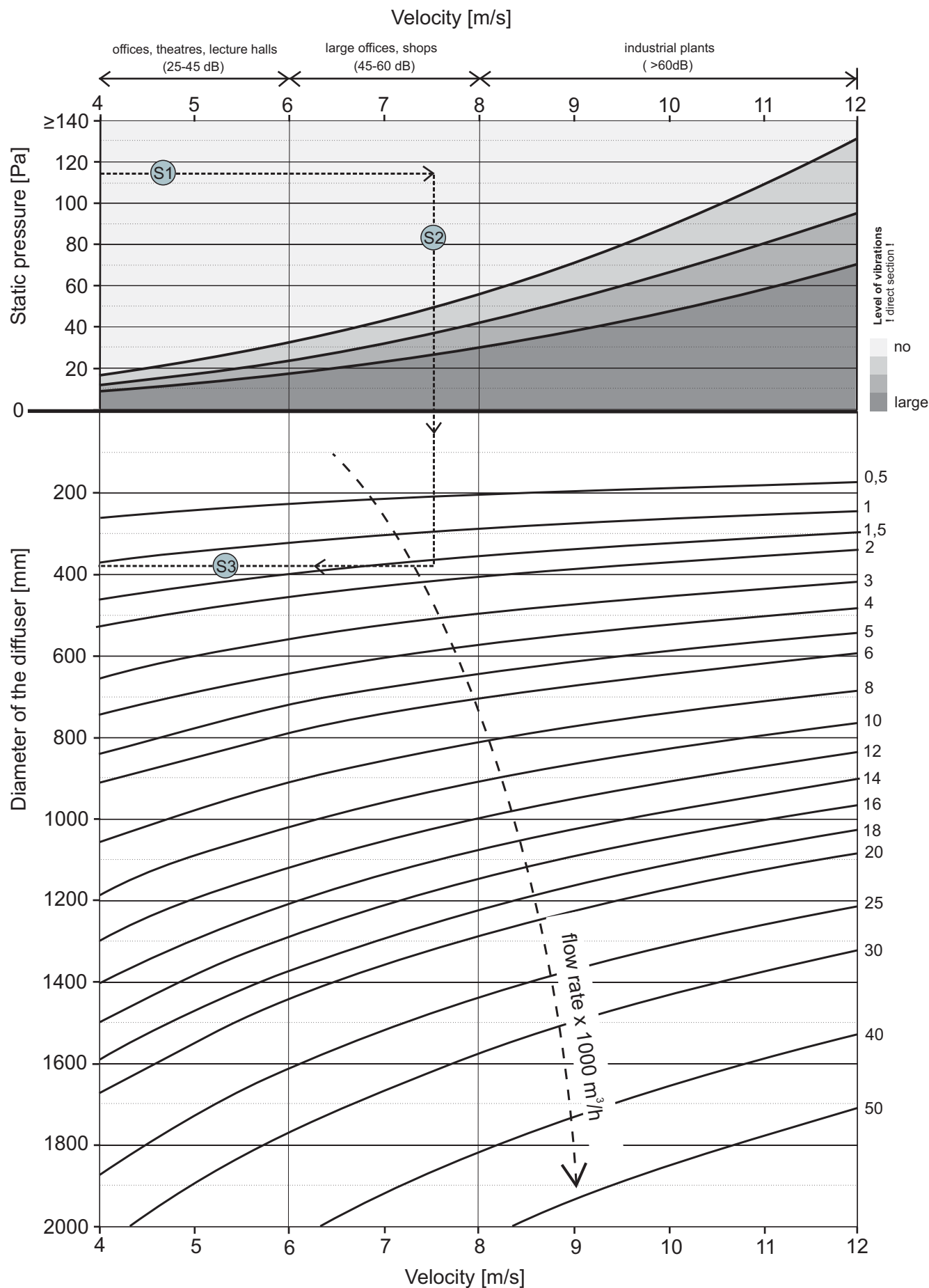
### Re-calculation of flow rate units

m <sup>3</sup> /h	100	500	1000	1698	2000	3597	5000	7000	10000	m <sup>3</sup> /h
l/s	27,8	139	278	472	556	1000	1390	1946	2780	l/s
cfm	58,9	294,5	589	1000	1178	2118	2945	4123	5890	cfm

## Design of the diameter - CIRCULAR AND QUADRANT CROSS SECTIONS



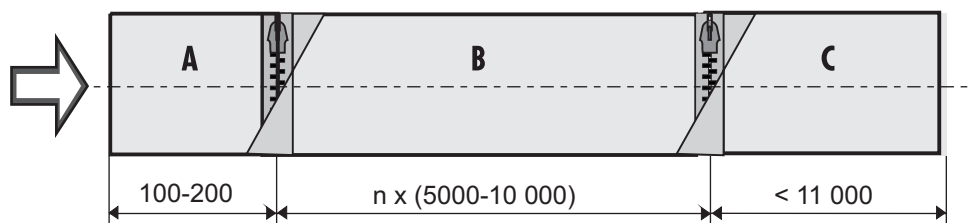
## Design of the diameter - HALF - ROUND SECTIONS



## VII. 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:



A = free beginning from 100 to 200 mm

B = through part from 5.000 to 10.000 mm

C = blind part arbitrary length from 1.000 to 11.000 mm

n = 0, 1, 2, ... cca 40

The parts are linked up by zips the number of the zippers can be adjusted acc. to the customers' demand.

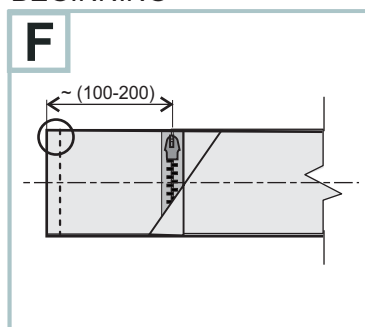
The total length of a diffuser (A + B + C) is to be indicated in a specification.

The diffuser is divided into parts during manufacturing.

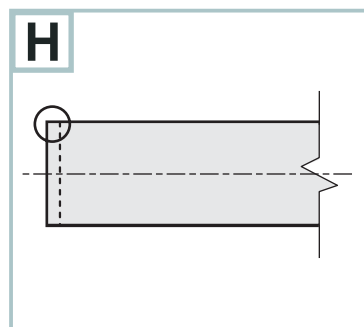
The allowance in length is + 1% when the diffusers are being produced.

## VIII. TYPE OF ENDING

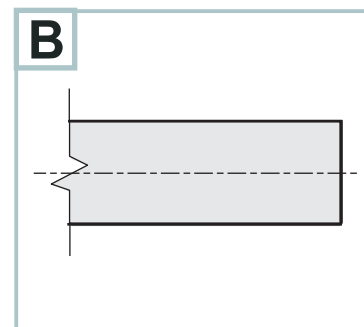
### BEGINNING



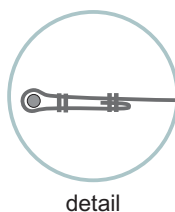
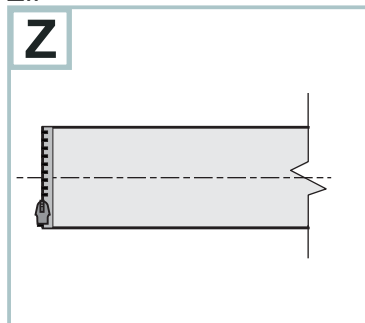
### HEMMING



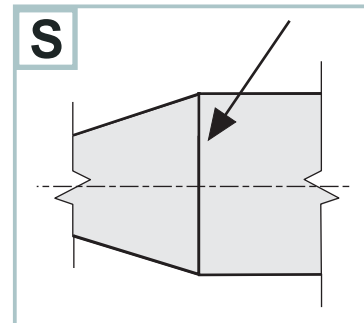
### BLANKING



### ZIP

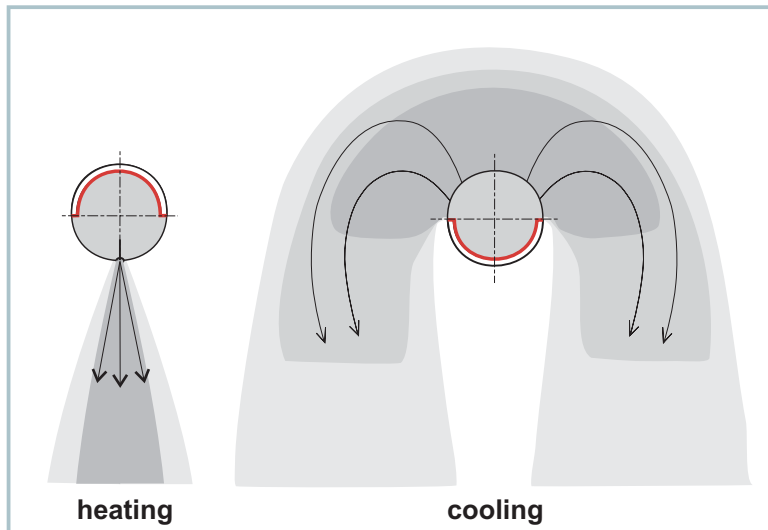


### SUTURE



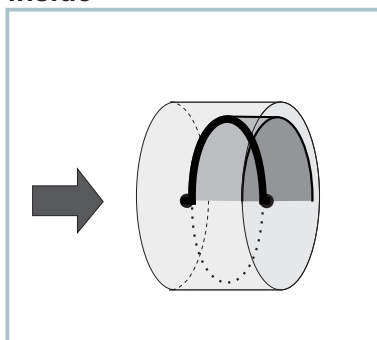
## IX. MEMBRANE DIFFUSER

**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 maximum allowed lengthwise air velocity in the membrane diffuser is 6,0 m/s. The membrane could be damaged at higher velocities.



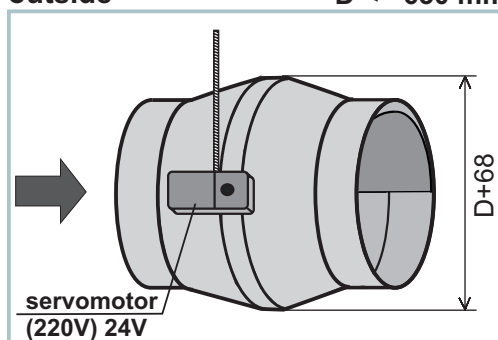
**THE FLAP:** Is used to switch over between the two modes. The flap is made of PMS or PMI fabric (according to fire resistance), inner construction is made of galvanized steel. The length is 400 mms always.

inside



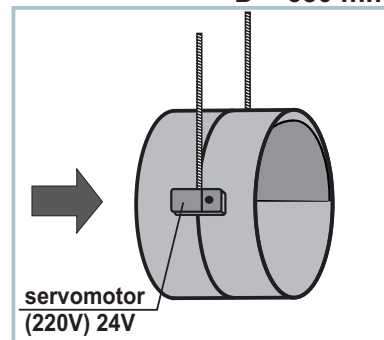
outside

$D \leq 630 \text{ mm}$



outside

$D > 630 \text{ mm}$



The flap  $D \leq 630 \text{ mm}$  is hung in 1 point (see detail O, page 49), The flap  $D > 630 \text{ mm}$  is hung in 2 points (see detail P, page 49).

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

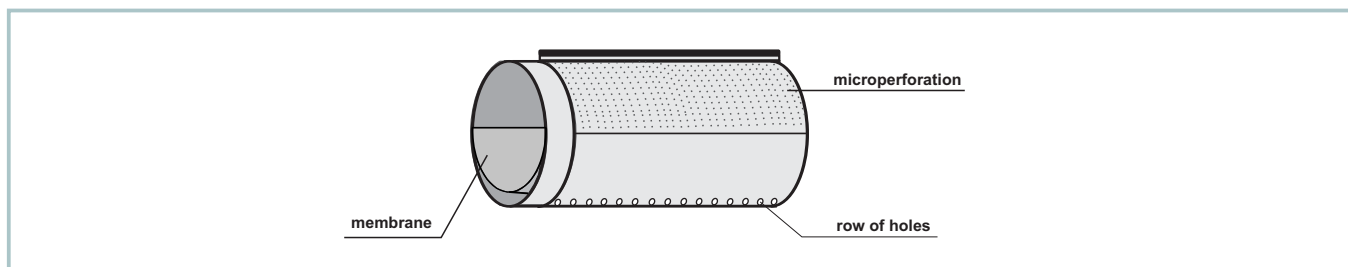
Transition time:

Type NXR230 cca 140 s

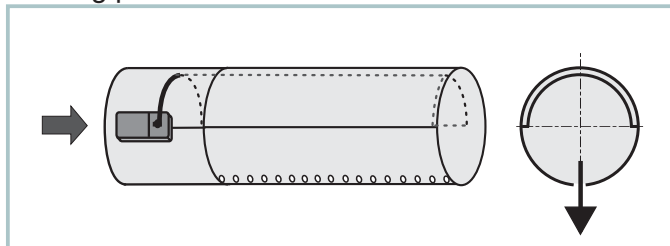
Type NXR24 - 22B BE cca 280 s

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. 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. While switching over the fan has to be in operation, ideally at decreased air volume. The supplier will take account of possible inobservance of the recommendation in case of complaint procedure.

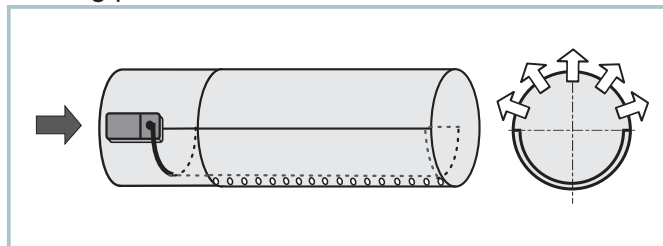
**THE DIFFUSER:** The membrane covers one half of the diffuser and uncovers the other one.



Heating position



Cooling position



Servo motor 24V or 230V.

## X. INSULATED DUCT

### INSULATED DUCT

**I** It is used for reduction of thermal losses with overcoming of non-air-conditioned sections between the machine room and the room being solved. As insulation there is used a 4 cm layer of non-woven polyester fabric that is sewn in between inner light-weight and outer usually medium-weight fabric. As outer layer there can be used any of our materials. Sewing together rather reduces thickness of insulation to approx. 20 - 30 mm. The achieved maximal coefficient of heat diffusion is  $1.8 \text{ W/m}^2\text{K}$ . We deliver standardly 2 m pieces in all diameters including shaped pieces. One reinforcing plastic ring is installed each 2 m. These insulated hoses reduce noise very effectively as documented in measurement of a 1 m long duct (hose) with diameter 500 mm.

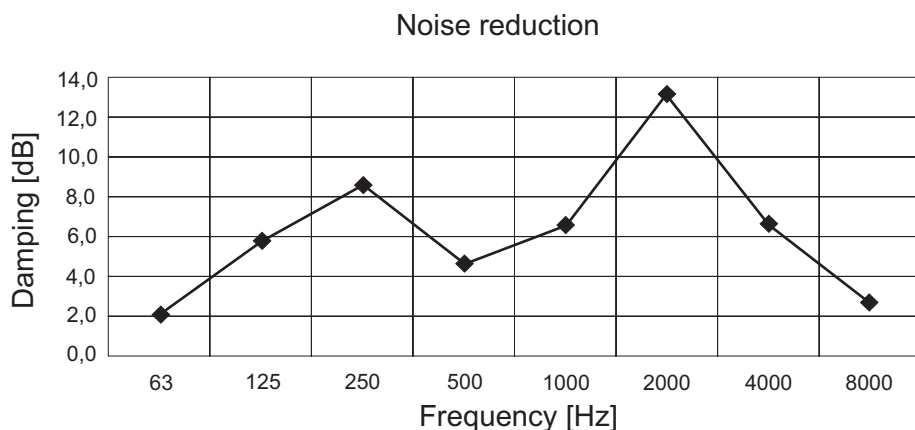
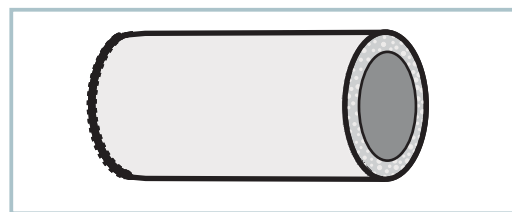
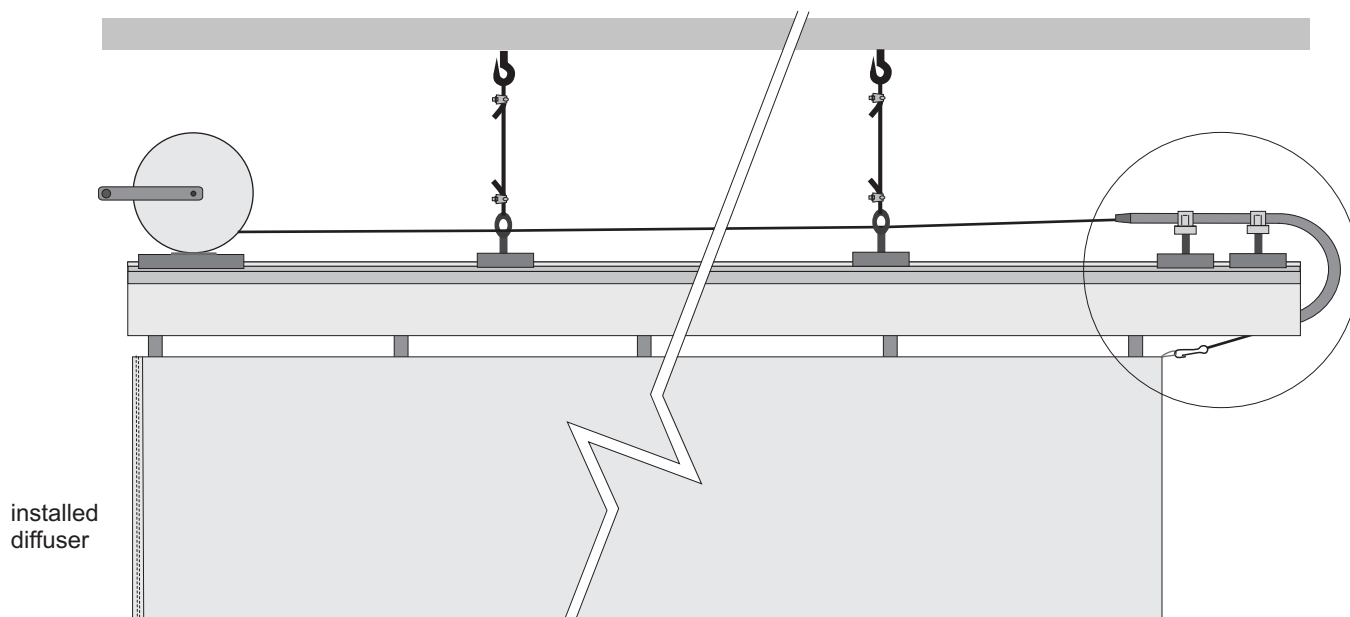
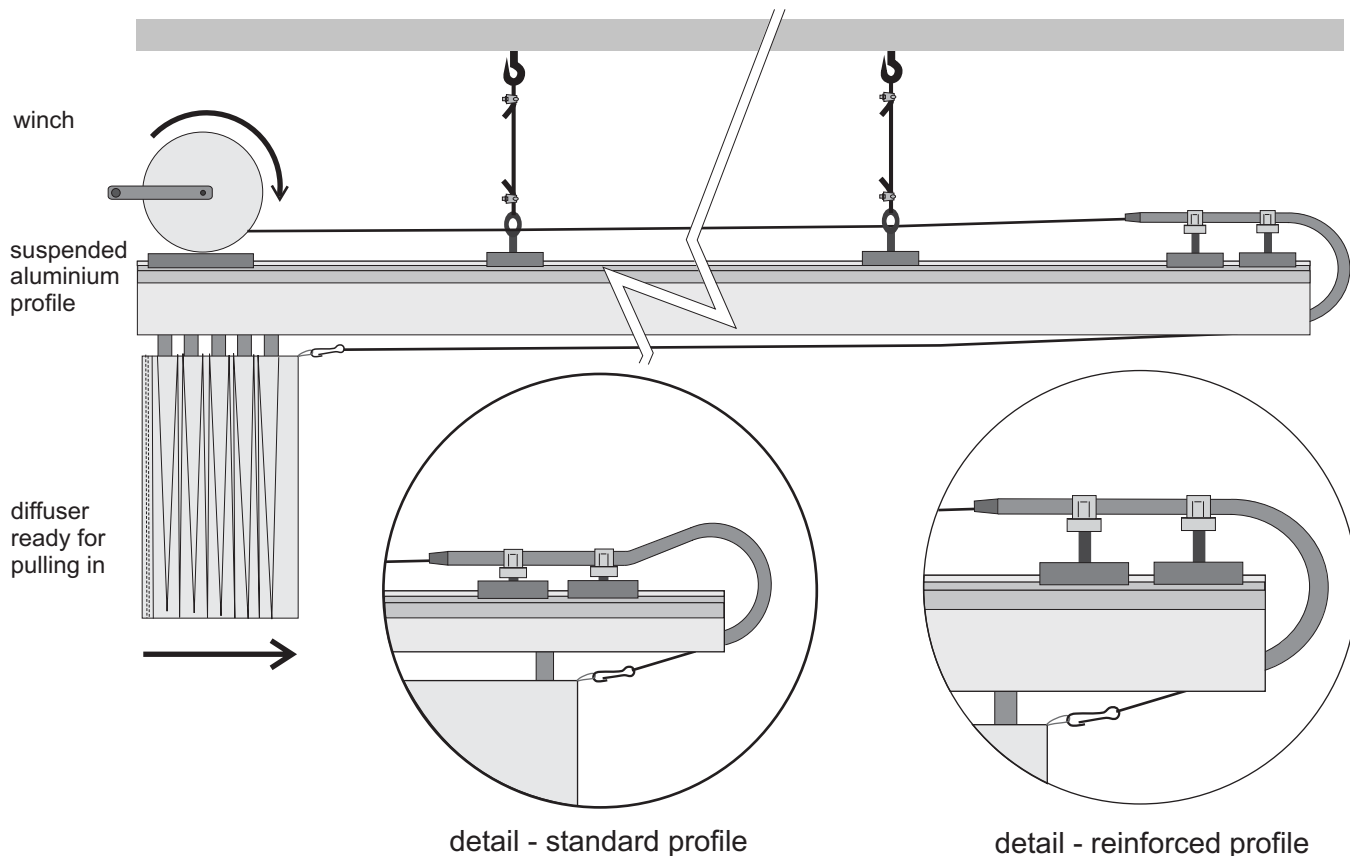


Diagram of noise reduction in frequency bands with use of insulated ducts

## XI. WINCH

**W** The whole diffuser can be pulled into the aluminium profiles from one place using a simple winch. This simplifies significantly assembling and disassembling. Such winch can be used in particular with installation over technological equipment where the outlets are not easy accessible.

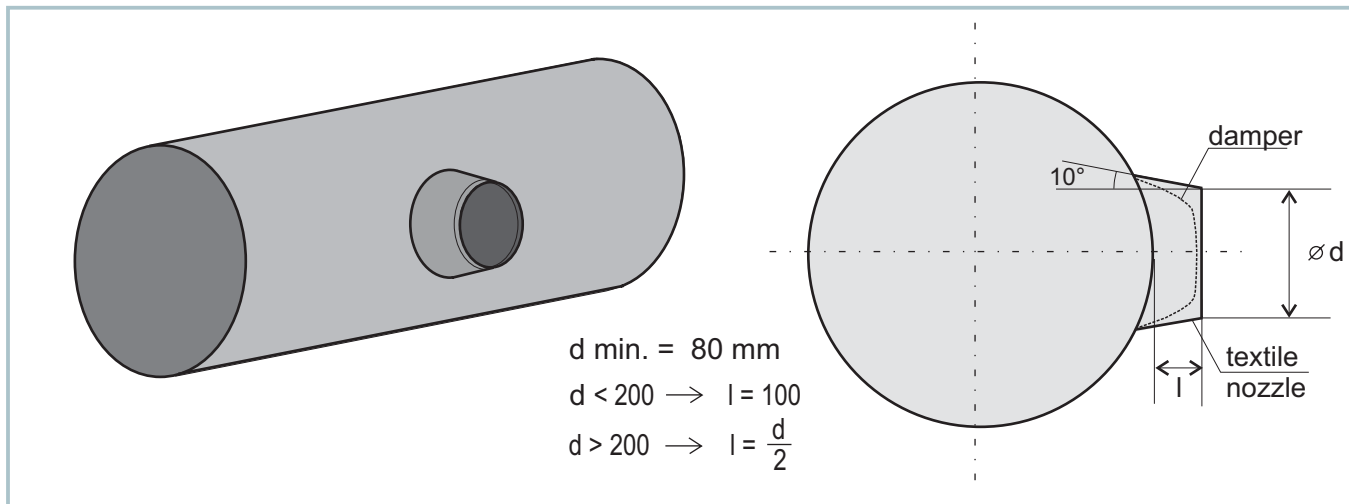
It is only suitable for installation 5, 5D, 5F, 5I, 5DI, 5FI





## XII. TEXTILE NOZZLE

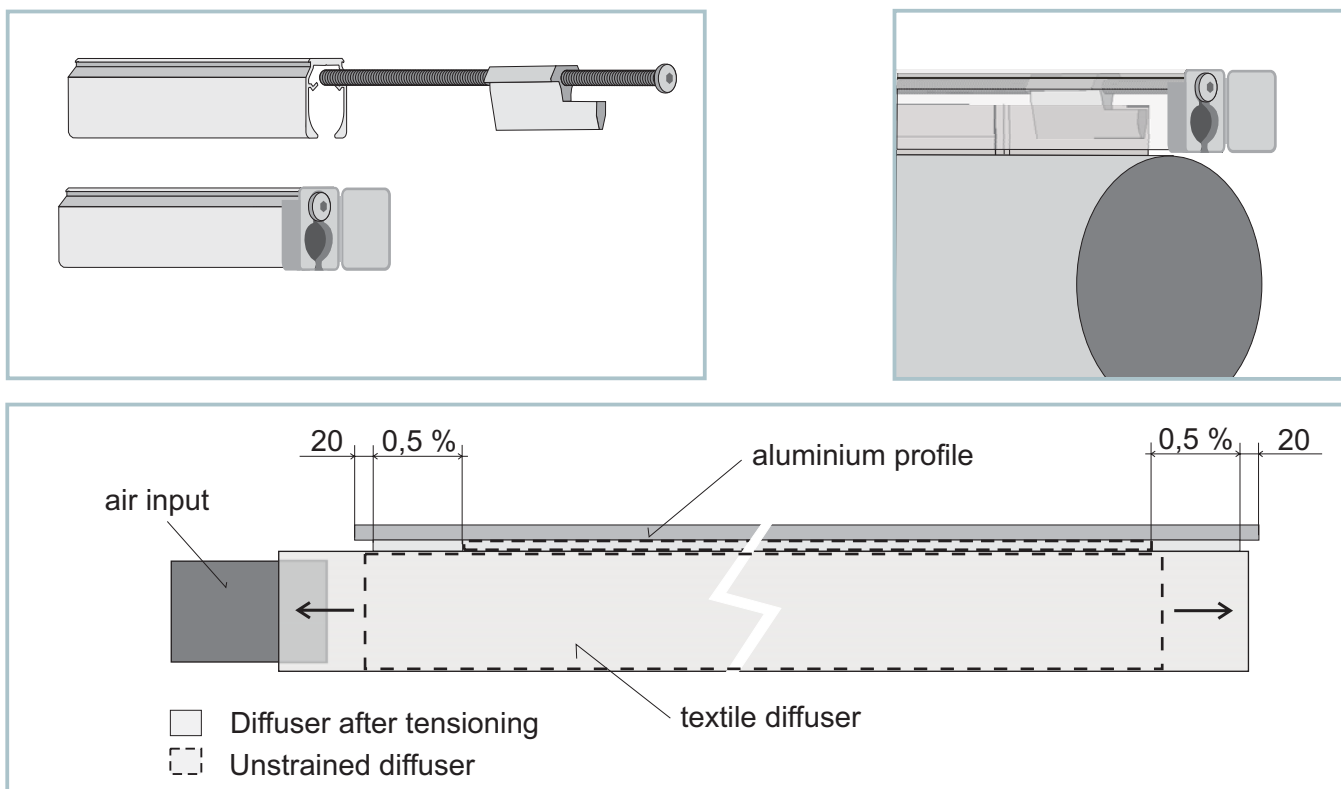
**N** By means of the textile nozzle the transported air can reach longer distance than by means of the perforation. Depending on the static pressure and temperature difference the airflow reach can be even longer than 20 m. Use our software for dimensioning or ask our authorised distributors for a help.



XII. TEXTILE NOZZLE

## XIII. SCREW TENSIONER IN THE PROFILE










An application of screw tensioner helps to smooth out both crumpled fabrics, wrinkles which have appeared due to packing and transportation and a small non-precision of sewing. Elasticity of fabric enables its tensioning attended by prolongation for about 1%. For that reason installed unstrained diffuser is for 1% shorter than value given on the draft and the correct length is achieved by tensioner. This type of tensioner is possible to use for all alternatives of installation using aluminium profile and enlarged strip. See installation alternatives on page 18. Installation procedure is described in mounting instructions



XIII. SCREW TENSIONER IN THE PROFILE

Concept of tensioning

## XIV. INSTALLATION

Installation options			
Installation number	Cross section scheme	Type of suspension	Additional accessories
0	without mounting material and hooks		
1		wire	D, F, K
2		wire	D, F, K
3		profile	A, B, C, G, J, L, H
4		profile	B, C, G
5		suspension profile	A, B, C, G, I, D, E, F, K, L
6		suspension profile	A, B, C, G, I, D, E, F, K, L
7		tensioner <small>can be added to any other installation</small>	D, F, H
8		profiles	A, B, C, G, L, H
9		velcro	

It is possible to combine the method of installation and additional accessories. The complete list of combinations see Attachment 1.

OVERVIEW OF ADDITIONAL ACCESSORIES	untagged	suspension by hooks and aluminium profile or by wire
	A	enlarged strip instead of hooks
	B	plastic profile
	C	aluminium profile with aluminium hangers
	D	stainless wire and stainless mounting material
	E	thread bar
	F	plastic coated wire and stainless mounting material
	G	stainless profile
	H	tensioner at blanking
	I	reinforced aluminium profile
	J	Velcro
	K	galvanized chain
	L	screw tensioner in the profile

## XV. OTHER EQUIPMENT

### 1. TYRES

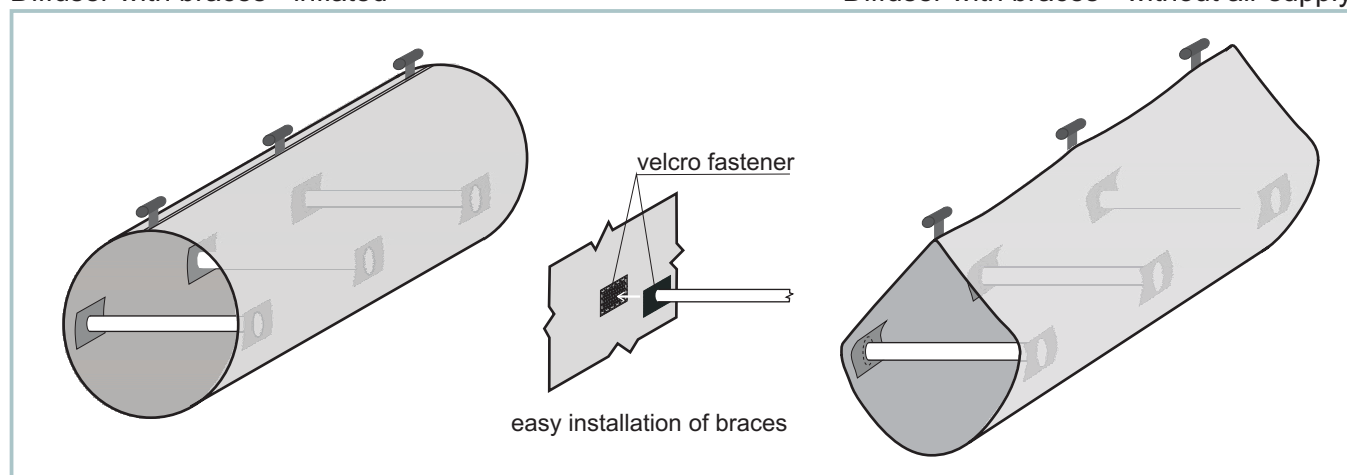
**TY** They are used to retain the shape of a circular diffuser even if it is not inflated. Are made of stainless wire or plastic tube. The standard distance between two tyres is 500 mm. The tyres can be either inside or outside the diffuser. The tyres are fixed to a diffuser by Velcros, therefore they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

### 2. BRACES

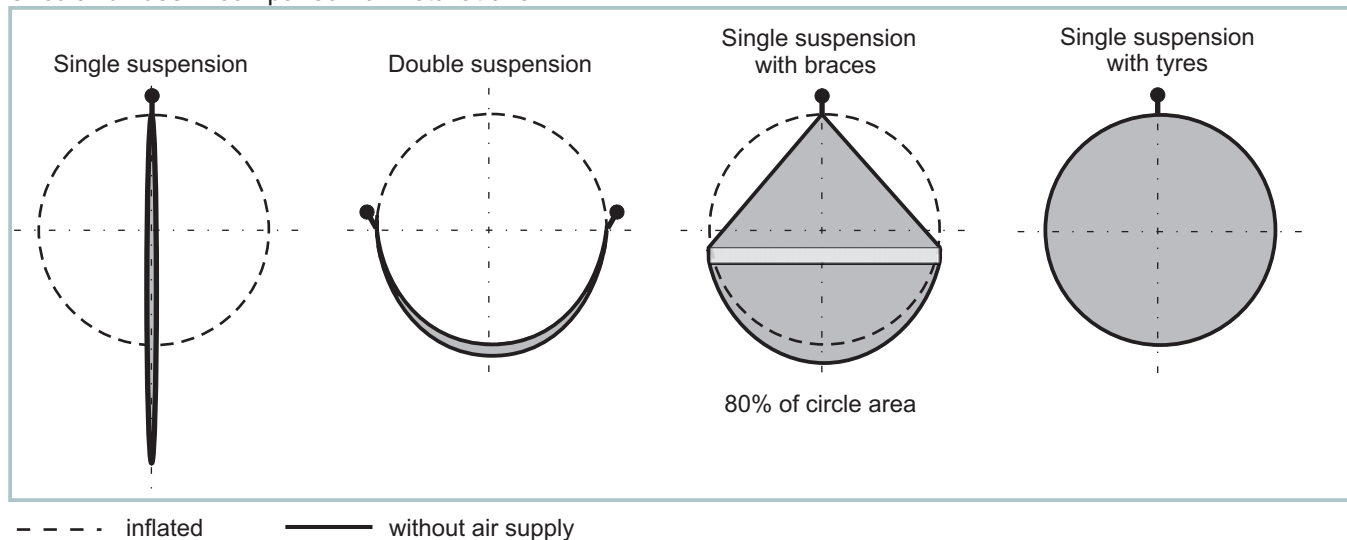
**BR** Braces keep the shape of a circular diffuser when it is not inflated. They are made of fireproof plastic, the usage possibilities are illustrated in the pictures. Braces are fixed inside diffusers with Velco fasteners, they can be removed before and reinstalled after maintenance easily. Braces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

Diffuser with braces - inflated

Diffuser with braces - without air supply



Circular diffuser - comparison of installations

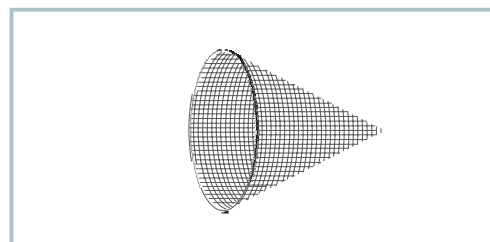


## 3. EQUALIZER

It is the device for modulation of turbulences in the airflow, mostly made from a sieve.

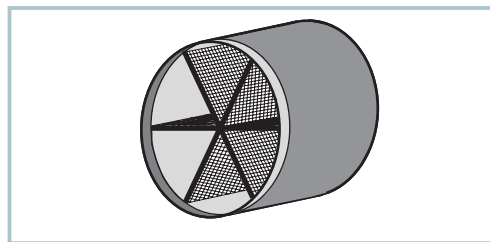
**EQ**

cone made of sieve



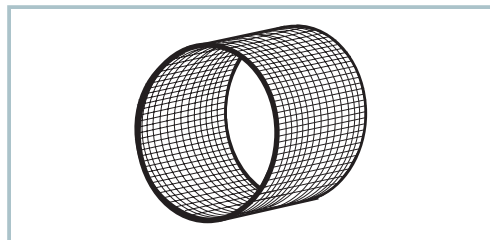
**EQS**

"star" made of sieve sewn in a diffuser



**EQC**

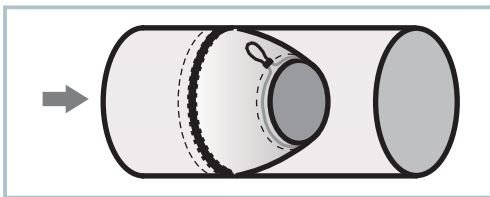
sieve cylinder with a tyre



## 4. DAMPER

**DM**

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 III. Air diffusion.



## 5. UNIFORMING INSERT

**UI**

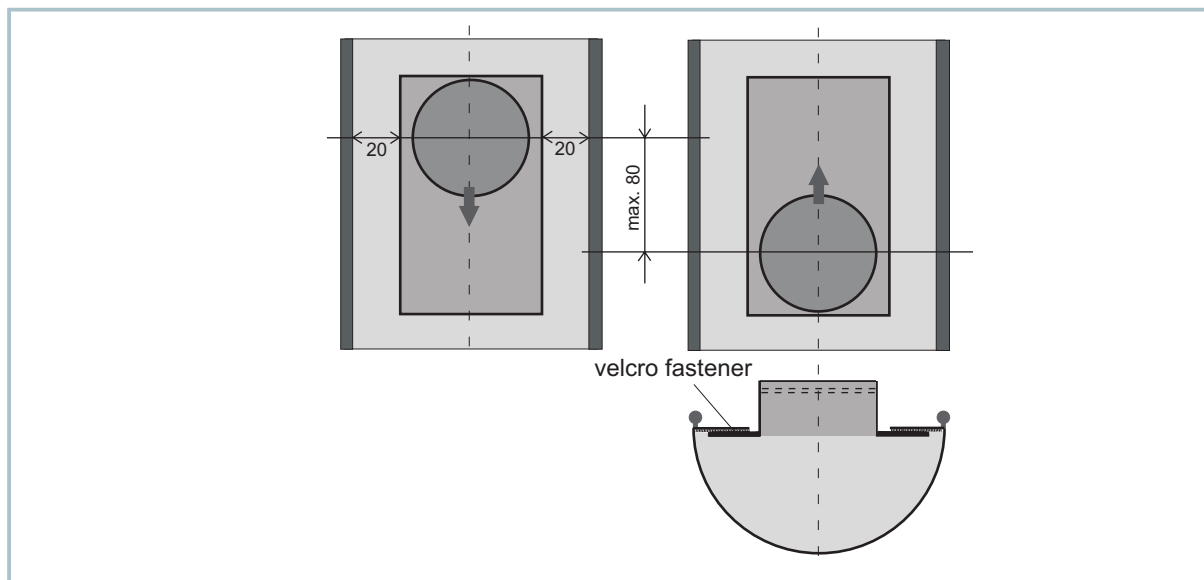
Distribution of air from structured microperforation is uniform sufficiently for absolute majority of cases. In case of extreme needs of uniformity or in cases when structured microperforation cannot be used (due to high flow rate per  $m^2$ ), the diffusers are provided with special built-in structures for even better uniformity of air flow distribution. This structure is made of a very permeable fabric and covers usually whole surface of the diffuser.

## 6. 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”).



## 7. MANOMETER

**MN**

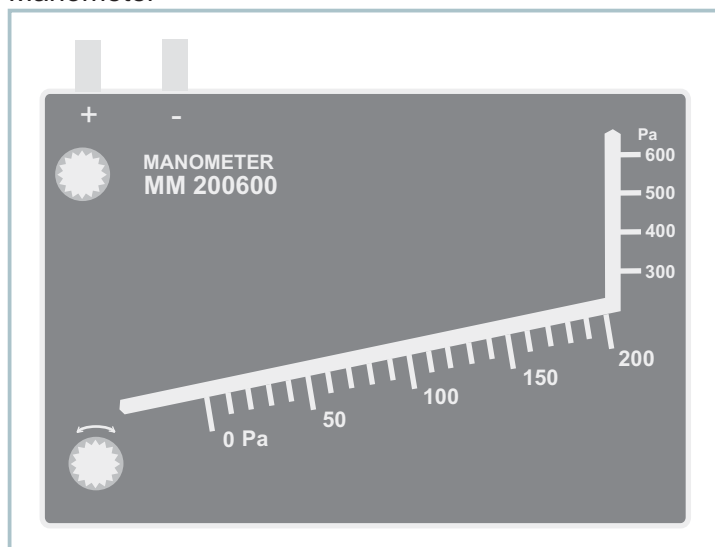
Static pressure inside a textile diffuser can be monitored by means of a simple manometer (supplied on request). Static pressure exceeding a particular level because of dirt should instigate washing of the diffuser.

**Manometer** - the topical static pressure is read on a scale

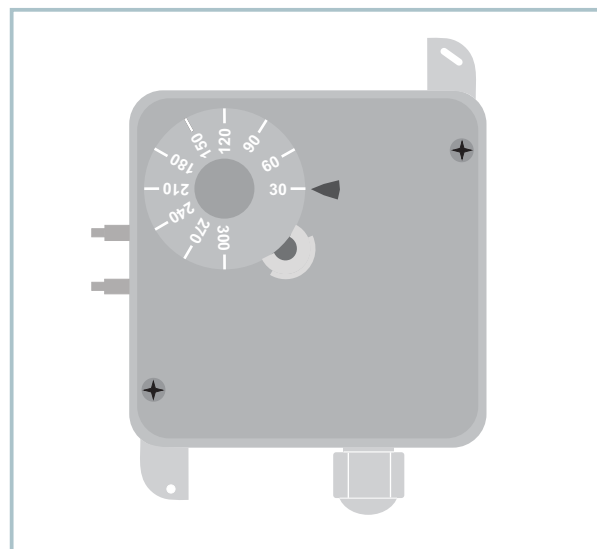
**Switch manometer** - connection of the circuit signalizes exceeding of a set value.

For installation see detail S, page 49.

Manometer



Switch manometer



## XVI. INSTRUCTIONS FOR DESIGNERS

### □ VIBRATION OF FABRIC

Air turbulences and occurrence of a local negative pressure may cause vibrations to waving of fabric. This occurs usually after the fan or shaped pieces such as bend or extension, where flow direction changes. This feature is discussed in details in the chapter V. 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 20) 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 user. 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.

### □ 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.

### □ INSTALLATION 9 AND 3J

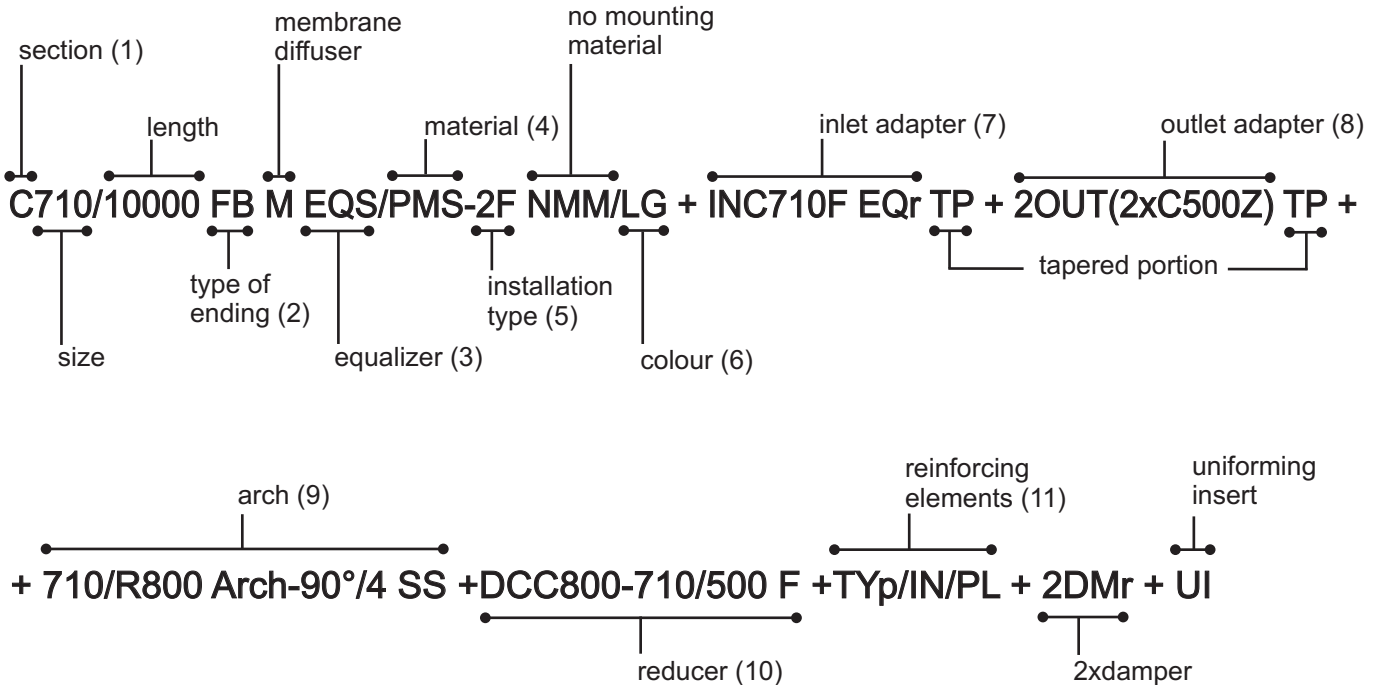
Installations using Velcro are suitable for the rooms where only stainless steel or plastic material are permitted (diffusers of polyester fabric are considered as plastic diffusers in this view). Half-round diffusers (installation 9) do not have any back flat part and therefore these can be used for dispersion of air from the duct terminated in the wall without any necessity to connect it using a connection strip or flange. The self-sticking part of Velcro limits this type of connection of the diffusers to the temperature range -20 to +50 °C. Resistance to chemicals (e.g. disinfection preparations) shall be considered according to local conditions. Velcro cannot be attached to plaster or similar surfaces. The surface for sticking shall be perfectly smooth, clean and degreased.

### □ PREFILTRATION

Diffusers with microperforation or perforation require a minimal prefiltration at a level EU 3 only. A use without any air filter can lead to a total blockage of textile by dirt!

## XVII. SPECIFICATION

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

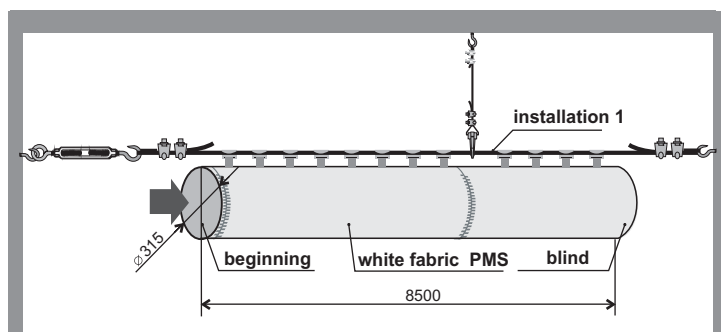


1. **Section:** C - circular, H - half-round, Q - quarter-round, SC - segment, SG - sector, S - square, see chapter V.
2. **Type of ending:** F - free beginning, Z - zip, H - hemming, S - suture, B - blanking, see chapter VIII.
3. **Equalizer:** EQ - cone, EQS - star, EQC - cylinder, r - removable, see chapter XV/3
4. **Material:** Permeability: P - permeable, N - non-permeable  
Weight: M - medium, H - heavy, L - light  
Characteristic: S - standard, E - excellent fire resistance, I - increased fire resistance, T - trevira CS, B - antibacterial, F - foil, A - antistatic, see appendix 2 - Material characteristics
5. **Installation type:** see chapter XIV.
6. **Colour:** WH - white, BL - blue, LG - light grey, YE - yellow, DG - dark grey, GR - green, RE - red, BC - black, SP - special, TR - translucent, GY - grey
7. **Inlet adapter:** C(section)710(size)F(type of ending) EQ(equalizer)
8. **Outlet adapter:** 2(number)C(section)500(size)Z(type of ending)
9. **Arch:** 710(size)/R800(radius) Arch-90°(angle)/4(number of segments) SS(type of ending)
10. **Reducer:** D(reducer)C(section)C(section)800(first size) -710(second size)/500(length)F(type of ending)
11. **Reinforcing elements:** TY - tyre, BR - braces, p - without tyres-only velcro, r - removable, IN/OUT, PL/ST - plastic/stainless, see chapter XV/1,2

## EXAMPLES:

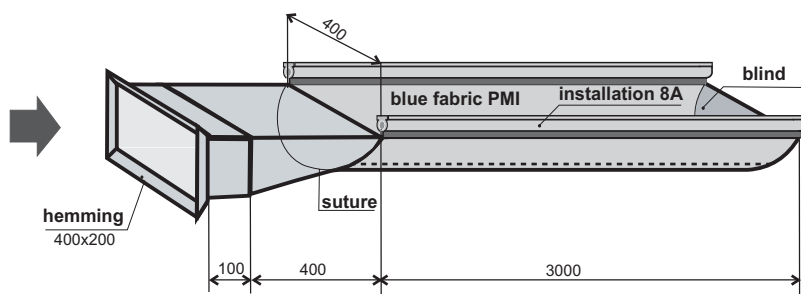
C315/8500 FB/PMS-1WH

**A**



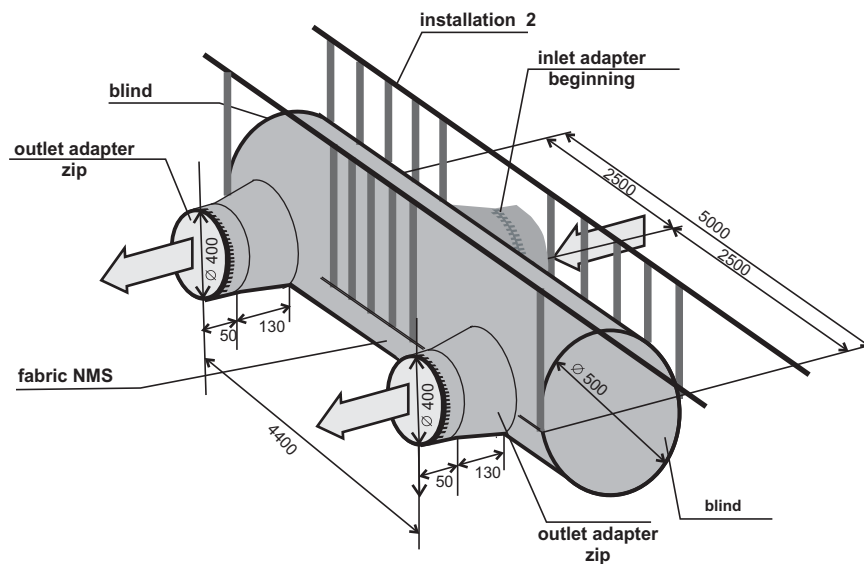
H400/3500SB/PMI-8A/BL+DSH400x200-400/500H

**B**



C500/5 000 BB/PMS-2/WH+INC500F TP+2OUT(2xC400Z TP)

**C**





## XVIII. ENTERING OF SPECIFICATION OF THE TEXTILE DIFFUSER

Use fax number: +420 469 311 857

Or fill in the application form on [www.prihoda.eu](http://www.prihoda.eu)

<b>ORDER NAME:</b>			
<b>COMPANY:</b>		<b>CONTACT:</b>	
<b>TELEPHONE:</b>		<b>E-MAIL:</b>	
<b>THE OFFER SHALL BE SUBMITTED AT THE LATEST:</b>			

<b>POSITION NO.:</b>		<b>AIR FLOW:</b>	
<b>NUMBER OF PIECES:</b>		<b>ROOM TEMPERATURE:</b>	
<b>POSITIONS TOTAL:</b>		<b>TOTAL DIFFUSER LENGTH:</b>	
<b>STATIC PRESSURE:</b>		<b>TEMPERATURE OF SUPPLIED AIR:</b>	

**REDUCE DIMENSIONS ALONG THE LENGTH:** ☐ Yes ☐ No

**BASIC SHAPE OF THE DIFFUSER:**

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

**CONNECTION 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 ☐ NMF ☐ 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 29:**

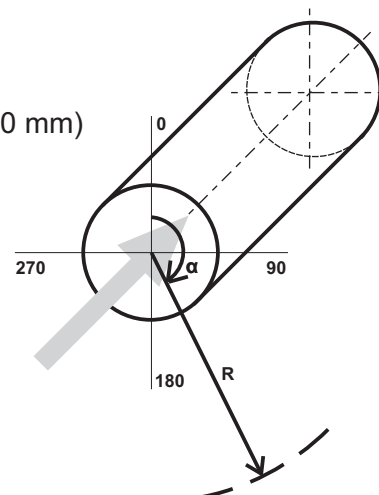
**REINFORCING ELEMENTS:** ☐ No one  
☐ Stainless tyres (all diameters)  
☐ Plastic tyres (diameter min. 400 mm)  
☐ Braces

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

**RECTIFYING OF AIR FLOW** (if desired):

Distance - R   
 Angle -  $\alpha$    
 Velocity - v

**NOTES:**



## XIX. 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 (PMS, PMI, PLS, PLI, PMB, PMT) can be washed in a common industrial washing machine. Impermeable fabrics (NMS, NMI, NLS, NLI, NMT) require a gentle mode washing, fabric NHI, NHE, and NMD hand washing only. If the washed diffuser has tyres, braces or turn-buckles, these solid elements must be removed before the washing process. Induction surface dirt (see article XIII) can be vacuumed, washing is unnecessary.











### 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, or to use more powerful washing powder. 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 whitenned 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 ironned 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

## XX. 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
PMS	yes	Medium	Standard	100% polyester
PMI	yes	Medium	Increased f.r.	100% polyester modified
PMTB	yes	Medium	Increased f.r. Antibacterial	100% trevira CS
PMB	yes	Medium	Antibacterial	100% polyester + silver
PLS	yes	Light	Standard	100% polyester
PLI	yes	Light	Increased f.r.	100% polyester modified
NMS	no	Medium	Standard	100% polyester
NMI	no	Medium	Increased f.r.	100% polyester modified
NLS	no	Light	Standard	100% polyester
NLI	no	Light	Increased f.r.	100% polyester modified
NMF	no	Medium	Foil	100% polyethylen
NHI	no	Heavy	Increased f.r.	100% polyester + 2x PVC + Sb <sub>2</sub> O <sub>3</sub>
NHE	no	Heavy	Excellent f.r.	100% glass fibre + 2x polyurethane
NMA	no	Medium	Antistatic	glass fibre + 2x PVC + carbon

f.r. - Fire resistance

For other material characteristics, please, see Appendix 1 - Material lists, page 51

**Colours:** The following colours are being supplied

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

For exact colour shades, please, see our shadecard for that particular type of fabric:

- see appendix shadecard (in Prihoda catalogue)
- or order a shadecard at [info@prihoda.eu](mailto:info@prihoda.eu)

Consult special colours with our authorized representatives.

## XXI. WARRANTY

Material	Warranty period
PMS, NMS, PMI, NMI, PMT, NMT	10 years
NHI, PMB, NHE, PLS, NLS, PLI, NLI	2 years
NMF, NMA, other equipment, installation with Velcro, mounting material and other parts of diffusers	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.

## XXII. COMPLAINT

Use fax number: **+420 469 311 857**

Or fill in the application form on **[www.prihoda.eu](http://www.prihoda.eu)**

**PRIHODA ORDER NO.:**

see Prihoda bill of delivery , order confirmation , drawing or washing tag :

**INSTALLED IN** (month and year):

**END USER** (name of company or building):

**TYPE OF THE ROOM** (e.g. storage, production, office etc.):

**WHO FOUND THE FAULT OR WHO COMPLAINED AND WHEN:**

**DESCRIPTION OF THE FAULT:**

Photos, videos, drawings etc. please send to [orders@prihoda.eu](mailto:orders@prihoda.eu) (one e-mail max. 8 MB)

**POSITIONS, WHERE THE FAULT HAS APPEARED:**

see Prihoda drawings , order confirmation or washing tags

**SUGGESTIONS OF A SOLUTION** (wishes of the customer):

**CONTACT DATA**

**COMPANY:**

**CONTACT:**

**TELEPHONE:**

**E- MAIL:**

## APPENDIX 1 - DETAILED OVERVIEW OF INSTALLATION TYPES

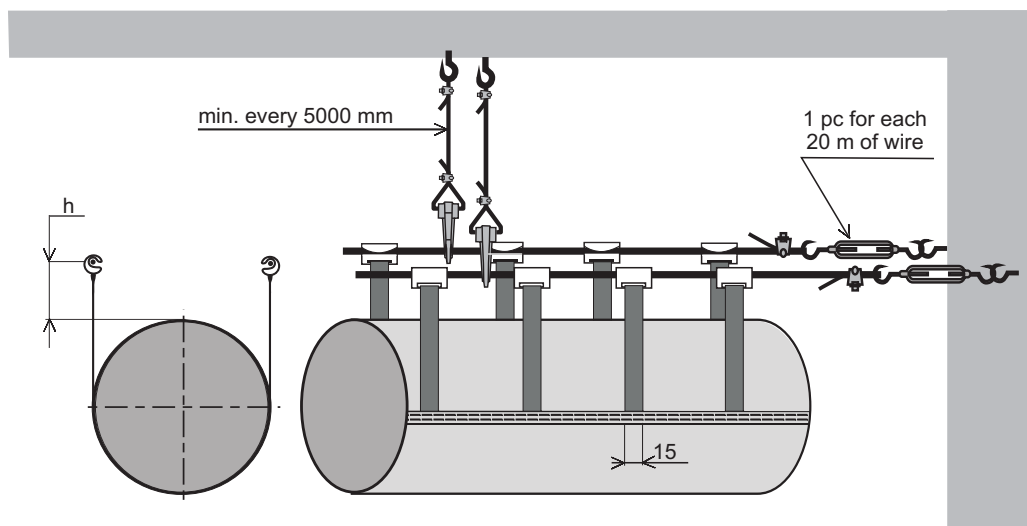
3/2009

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



**see details A, B, T**

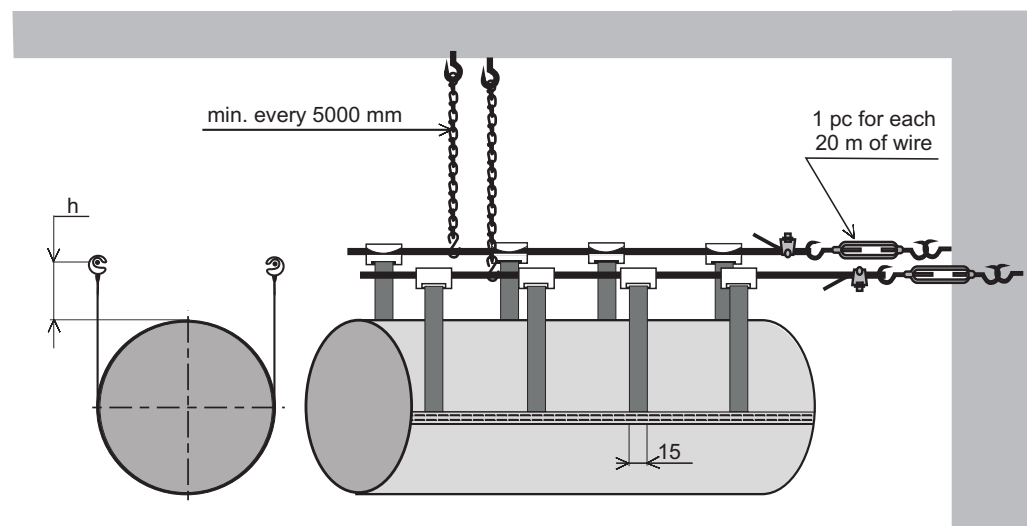
- 2** **DIFFUSER:** with hooks, double suspension, **SUPPORTING ELEMENT:** plastic-coated stranded wire  
**VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel
- 2D** **DIFFUSER:** with hooks, double suspension, **SUPPORTING ELEMENT:** stainless steel stranded wire,  
**VERTICAL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

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

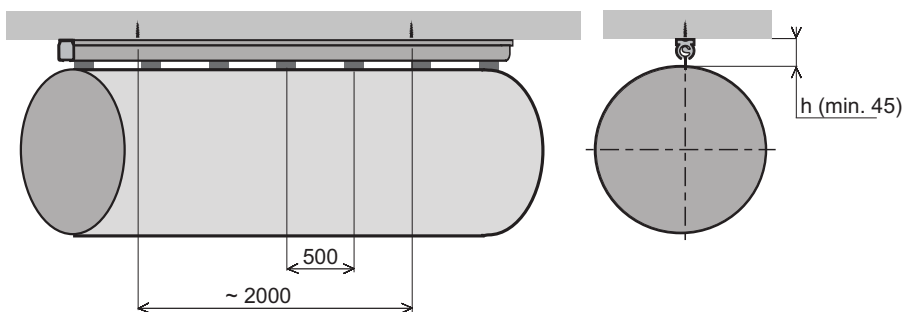


section: **C**

see details A, B, T

**3**

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



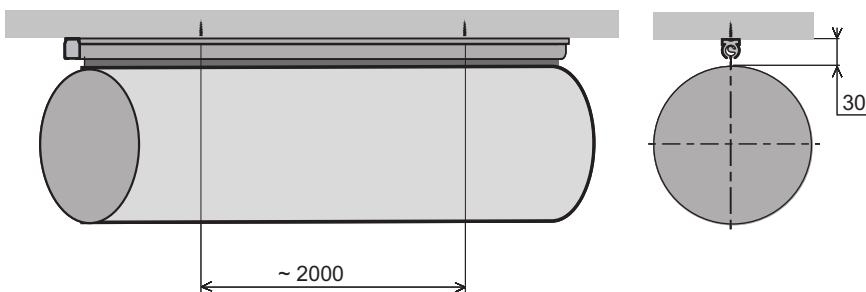
section: **C**

see detail D

**3A**

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

**3AL**

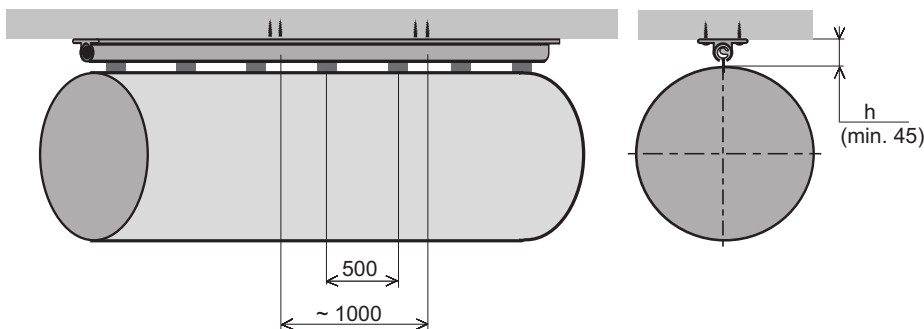


section: **C**

see detail D

**3B**

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

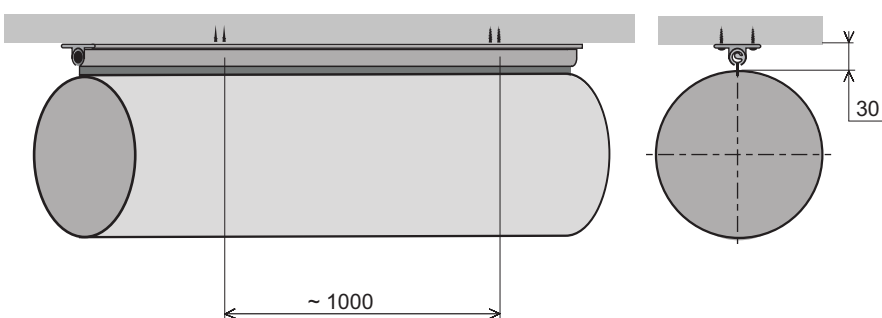


section: **C**

see detail H

**3AB**

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

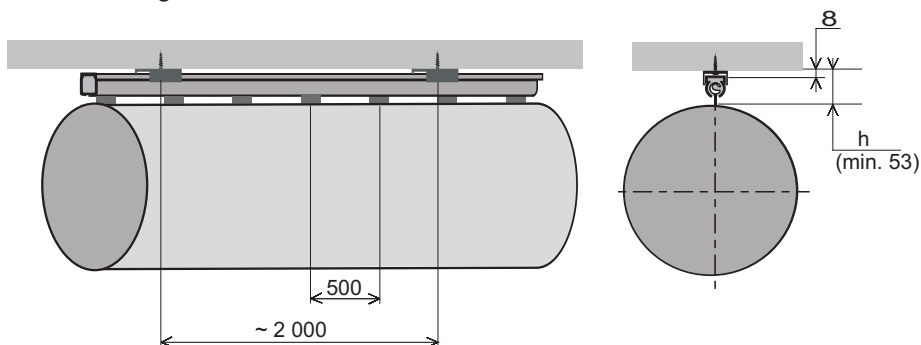


section: **C**

see detail H

## 3C

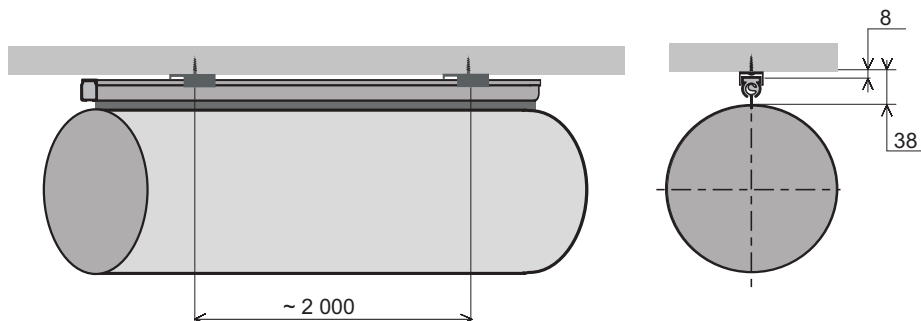
**DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** no, **METAL PARTS:** no



section: **C**

see detail J

## 3AC

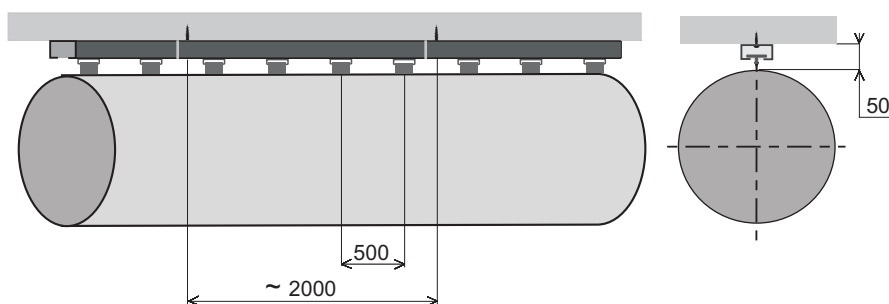


section: **C**

see detail J

## 3G

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

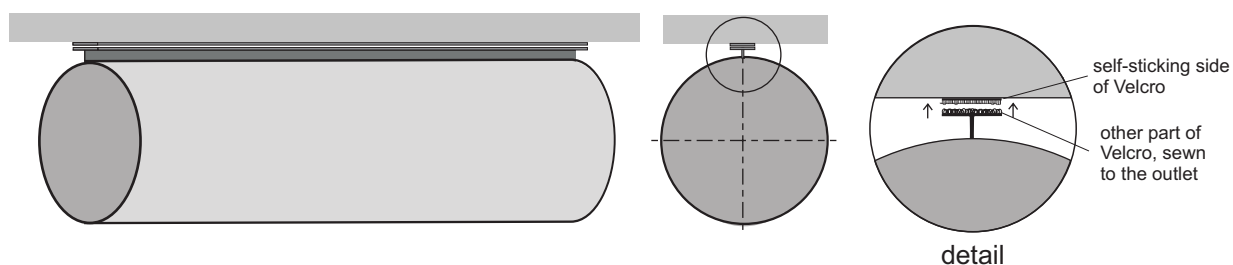


section: **C**

see detail N

## 3AJ

**DIFFUSER:** with enlarged strip, single suspension, **SUPPORTING ELEMENT:** self-sticking Velcro, **VERTICAL HANGER:** no, **METAL PARTS:** no



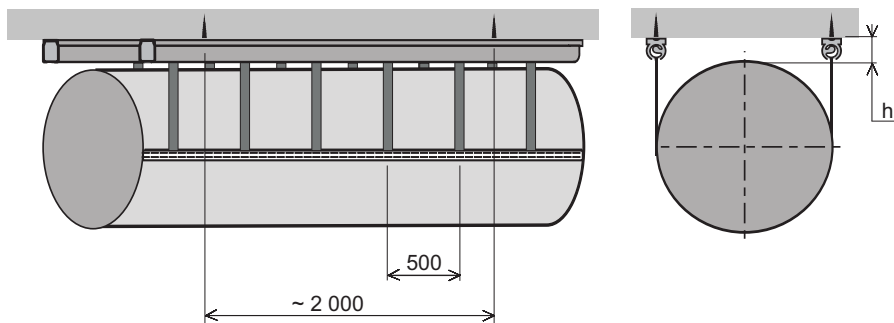
section: **C**

! max. 50°C



**4**

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

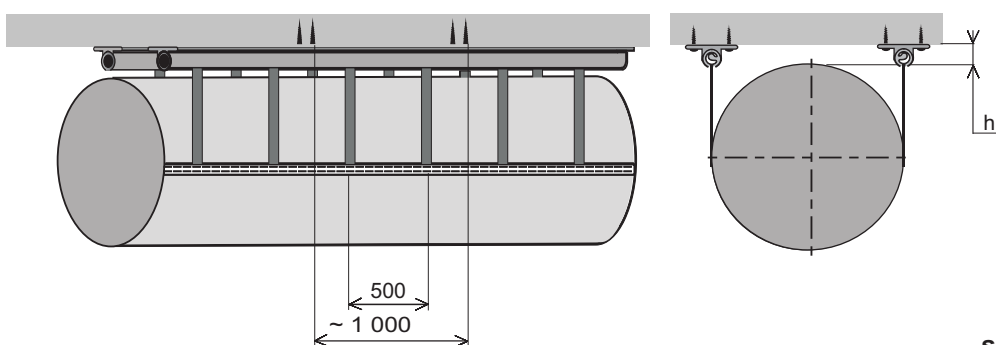


section: **C**

see detail D

**4B**

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

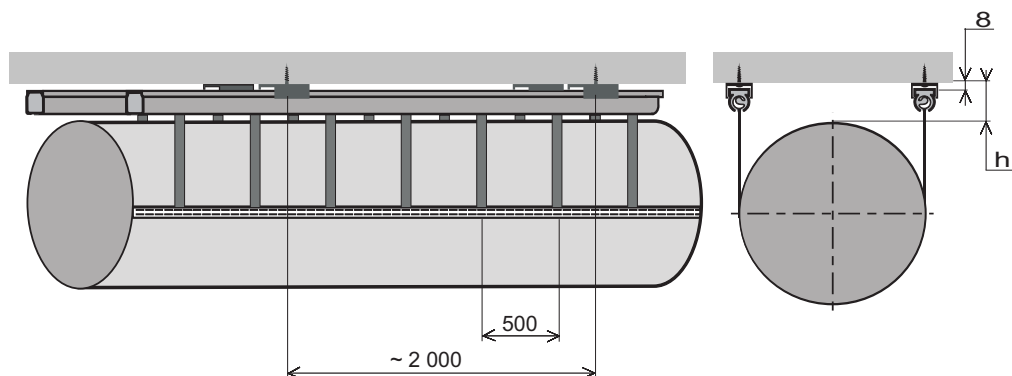


section: **C**

see detail H

**4C**

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

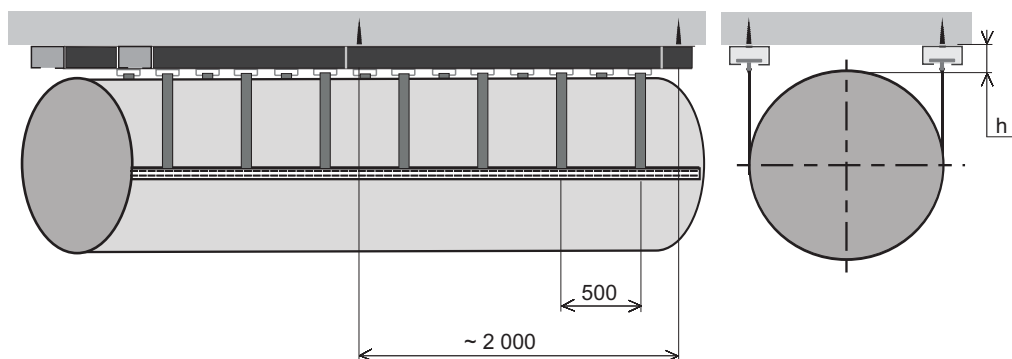


section: **C**

see detail J

**4G**

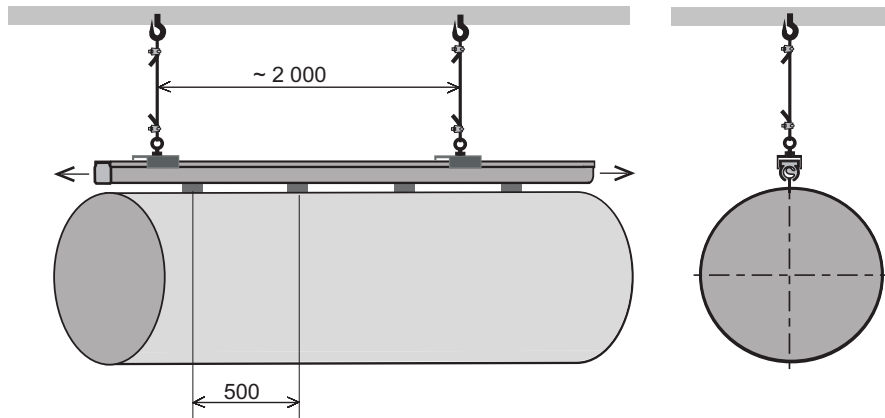
**DIFFUSER:** with hooks, double suspension, **SUPPORTING ELEMENT:** stainless profile, **VERTICAL HANGER:** no, **METAL PARTS:** no



section: **C**

see detail N

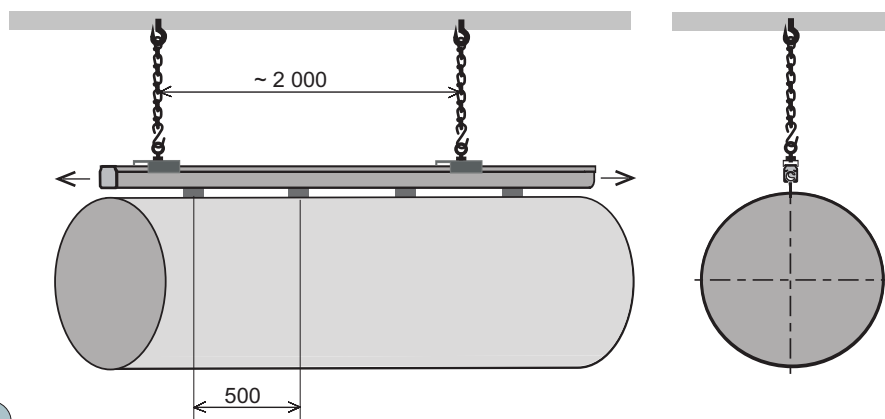
- 5** **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel
- 5D** **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** aluminium profile with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

- 5K** **DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** galvanized chain, **METAL PARTS:** galvanised steel

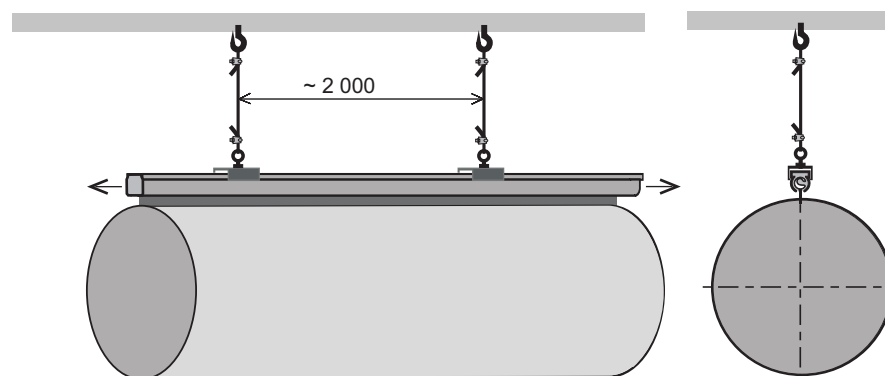


section: **C**

see details E,K,U

- 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

- 5AL**
- 5ADL**
- 5AFL**



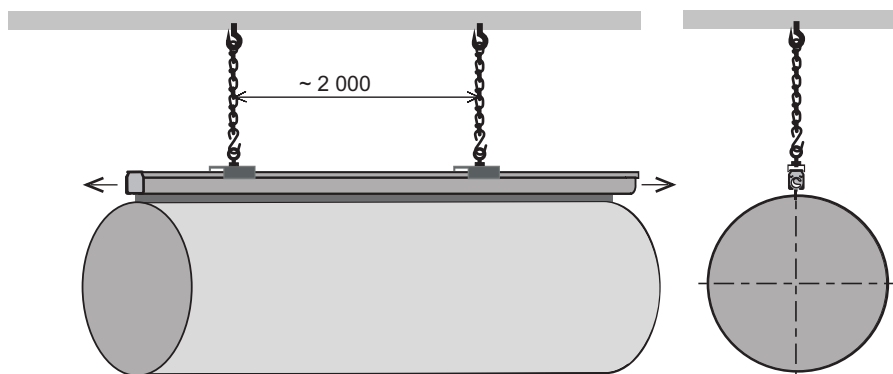
section: **C**

see details E,G,K

**5AK**

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

**5ALK**



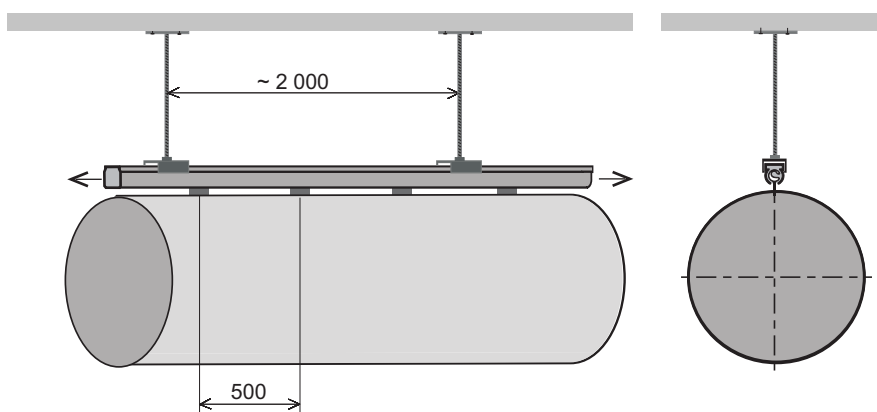
section:

**C**

see details E,K,U

**5E**

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



section:

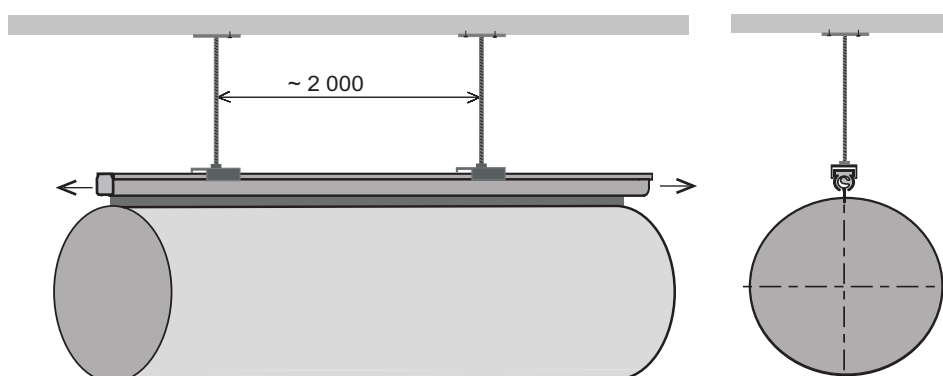
**C**

see details E,F

**5AE**

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

**5AEL**



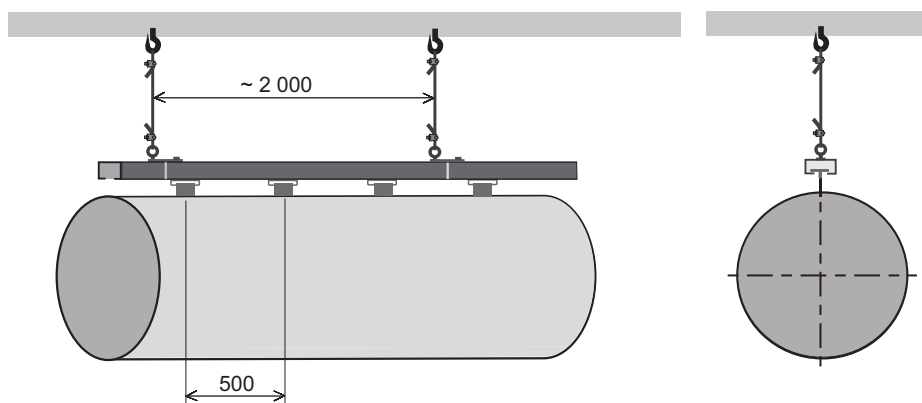
section:

**C**

see details E,F

**5G**

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

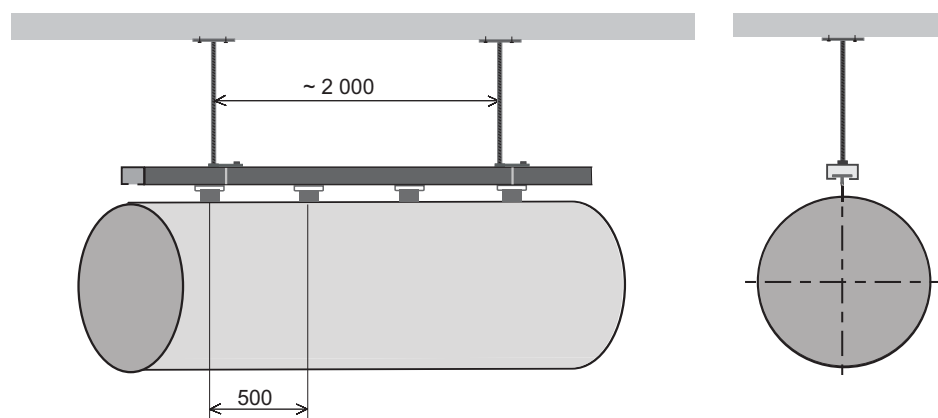


section: **C**

see detail **M**

**5EG**

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



section **C**

see detail **M**

**5I**

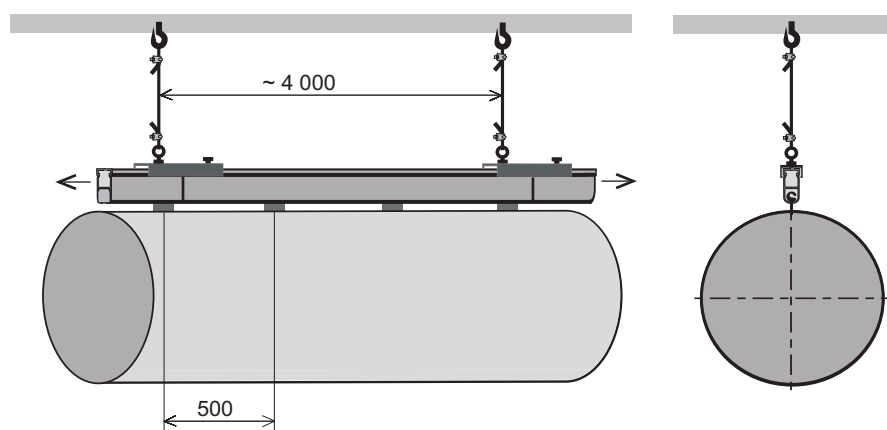
**DIFFUSER:** with hooks, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

**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

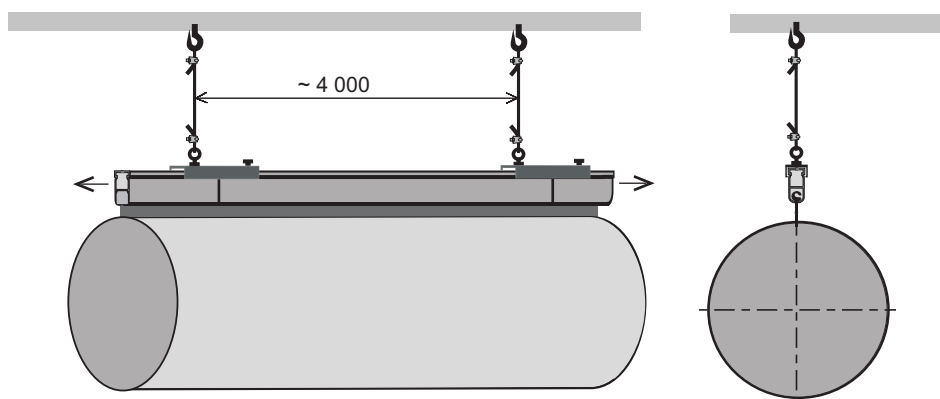
**5ADI** **DIFFUSER:** with enlarged strip, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel stranded wire. **METAL PARTS:** galvanised steel

**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

**5AIL**

**5ADIL**

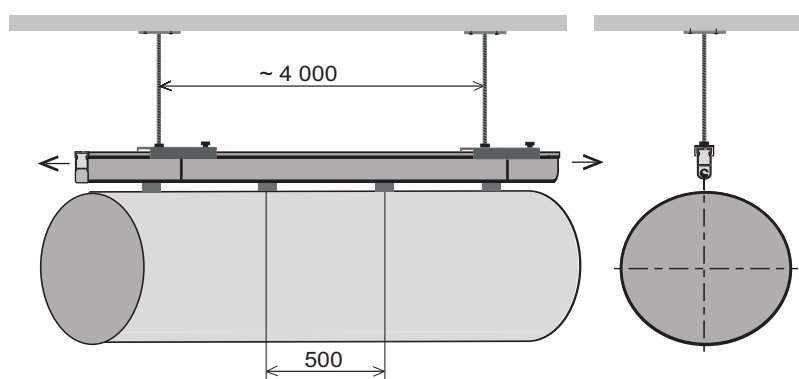
**5AFIL**



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

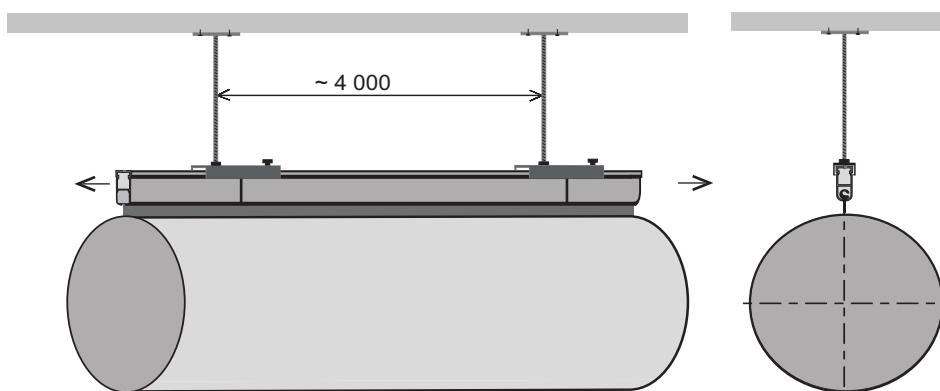


section: **C**

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

**5AEIL**



section: **C**

see details F,R

**6**

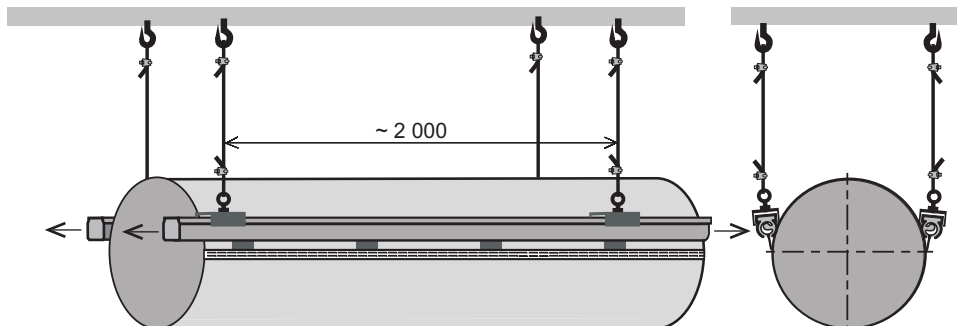
**DIFFUSER:** with hooks, double suspension, **SUPPORTING ELEMENT:** aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

**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

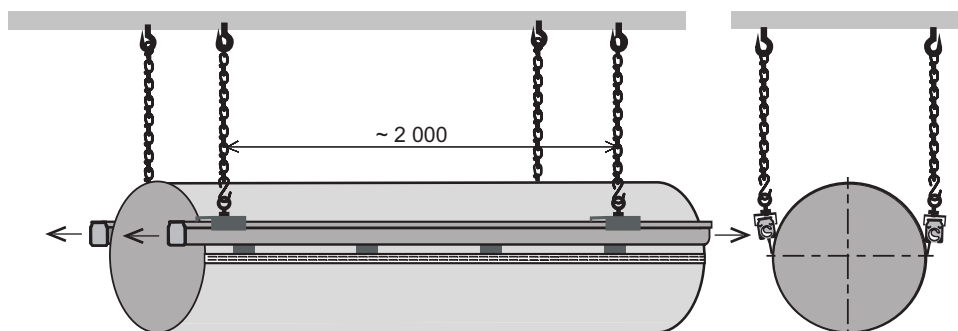


section: **C**

see details E,G,K

**6K**

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



section: **C**

see details E,K,U

**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.

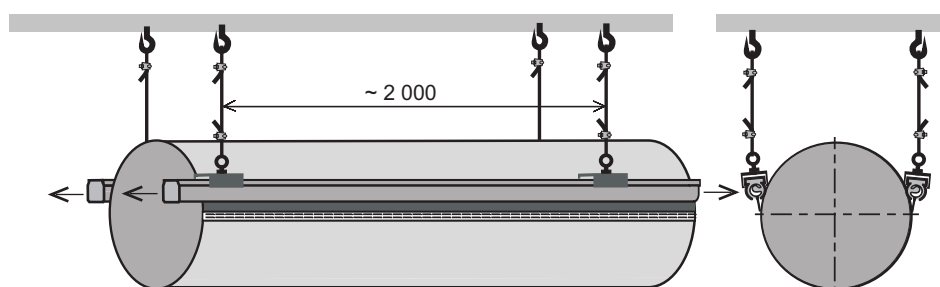
**6AF**

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

**6AL**

**6ADL**

**6AFL**



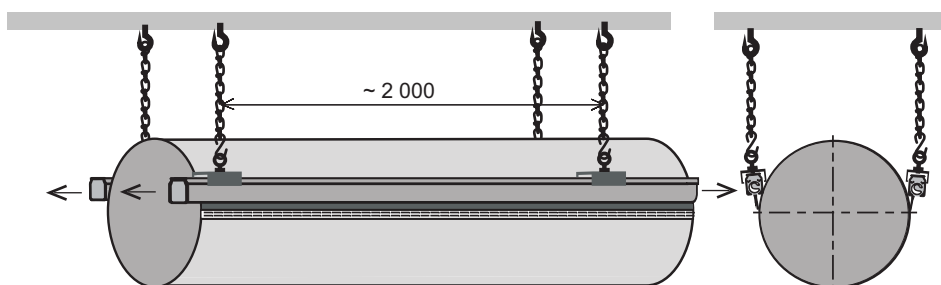
section: **C**

see details E,G,K

**6AK**

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

**6ALK**

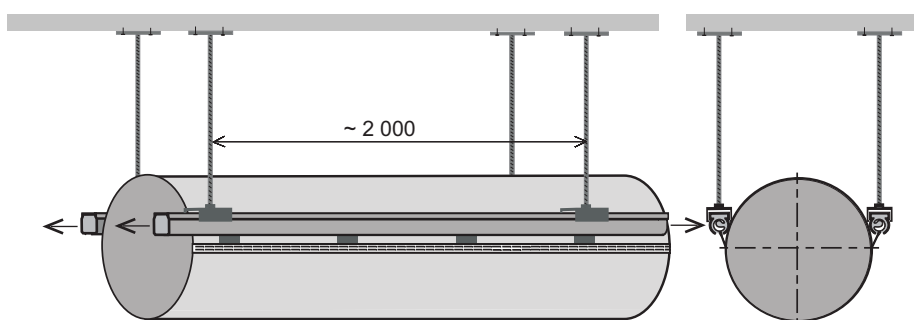


section: **C**

see details E,K,U

**6E**

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



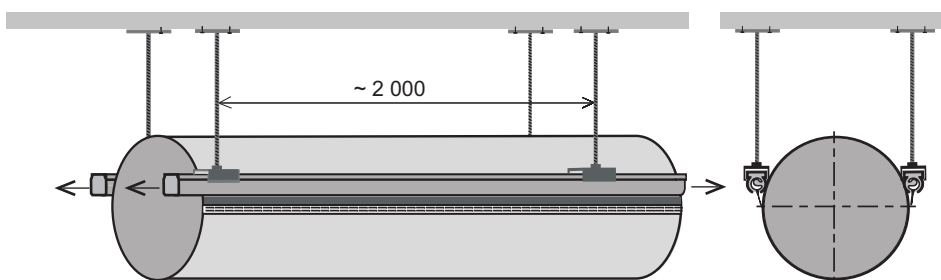
section: **C**

see details E,F

**6AE**

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

**6AEL**

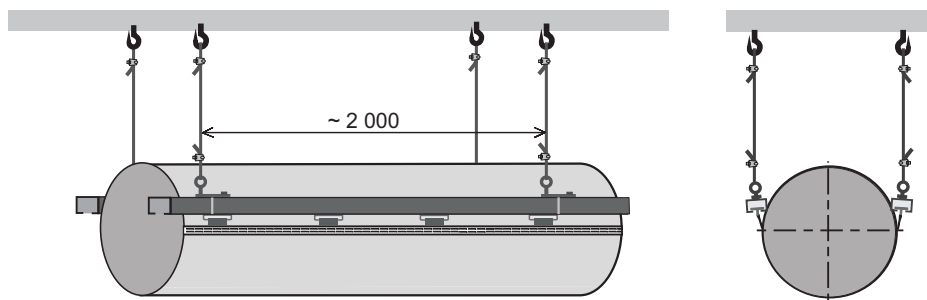


section: **C**

see details E,F

**6G**

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

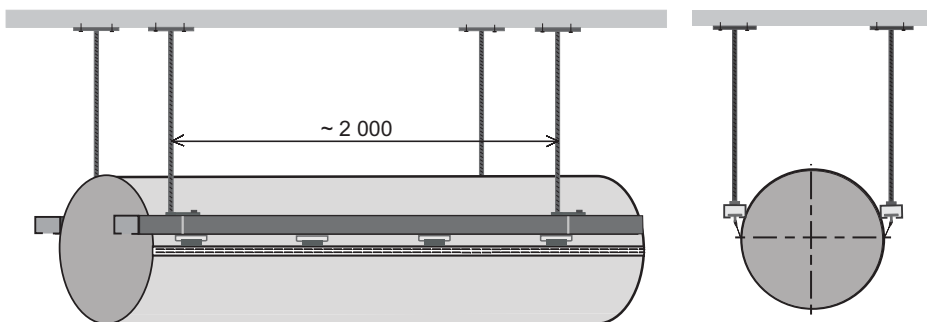


section: **C**

see detail M

**6EG**

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



section: **C**

see detail M

**6I**

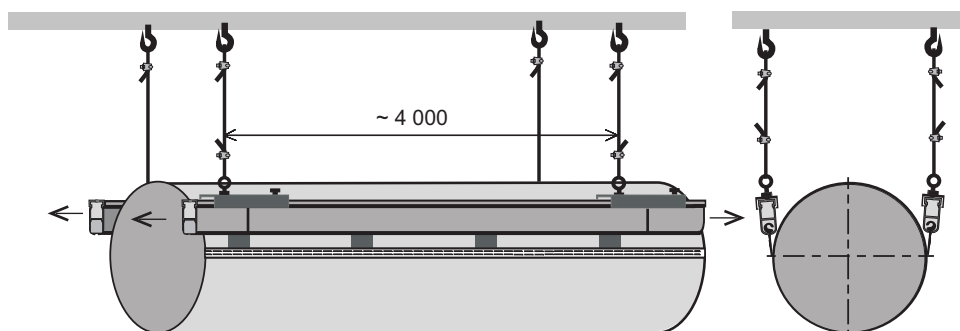
**DIFFUSER:** with hooks, double suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** plastic-coated stranded wire, **METAL PARTS:** galvanised steel

**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

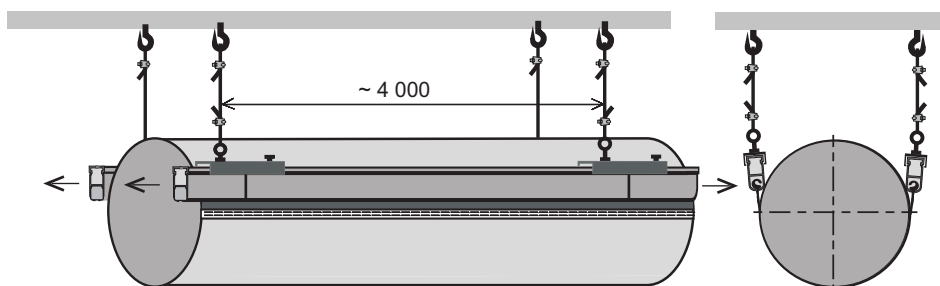
**6ADI** **DIFFUSER:** with enlarged strip, single suspension, **SUPPORTING ELEMENT:** reinforced aluminium profile with aluminium anchorage, **VERTICAL HANGER:** stainless steel stranded wire. **METAL PARTS:** galvanised steel

**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

**6AIL**

**6ADIL**

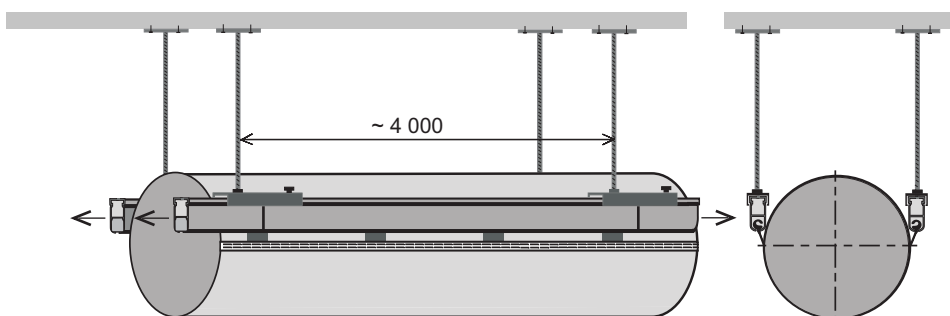
**6AFIL**



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

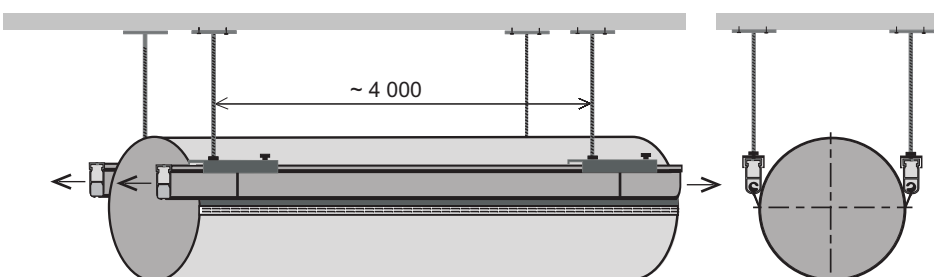


section: **C**

see details F,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

**6AEIL**



section: **C**

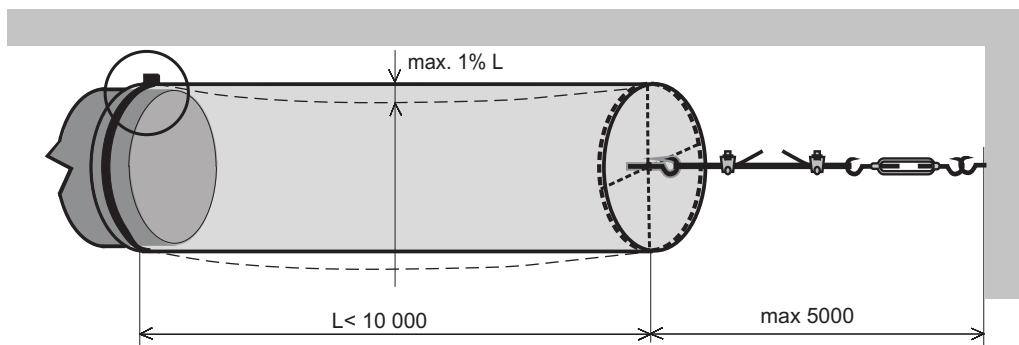
see details F,R

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

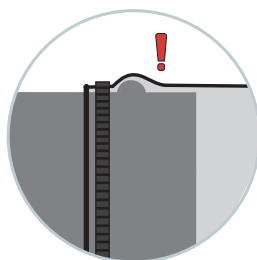
**7** **DIFFUSER:** with stainless tyre in blind end, **SUPPORTING ELEMENT:** plastic-coated stranded wire, **VERTICAL HANGER:** no, **METAL PARTS:** galvanised steel

**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.



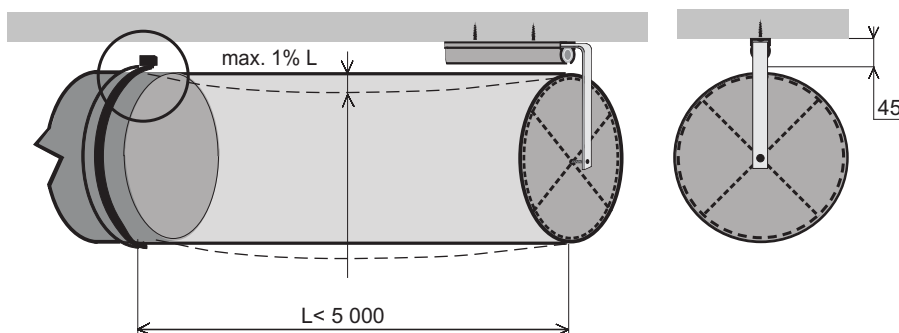
section: **C**

detail

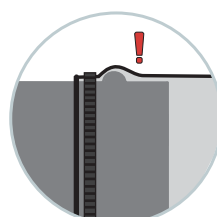
see detail A

**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.



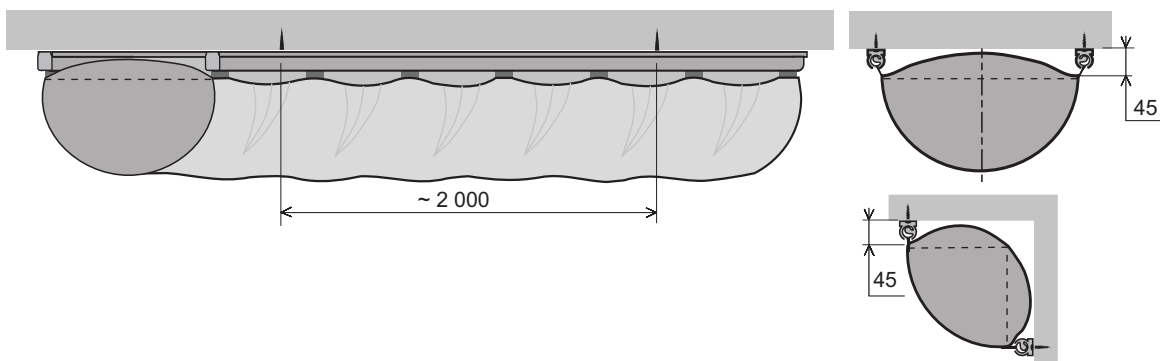
section: **C**

detail

see details Q

**8**

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



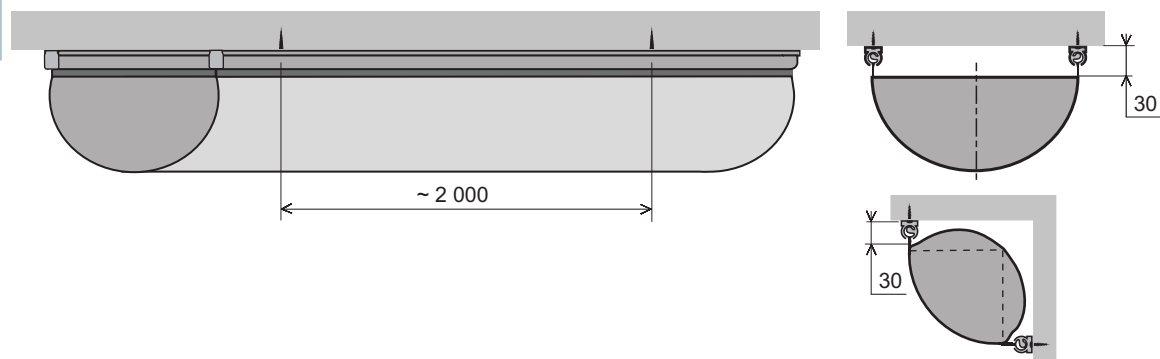
section:    

see details D,L

**8A**

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

**8AL**

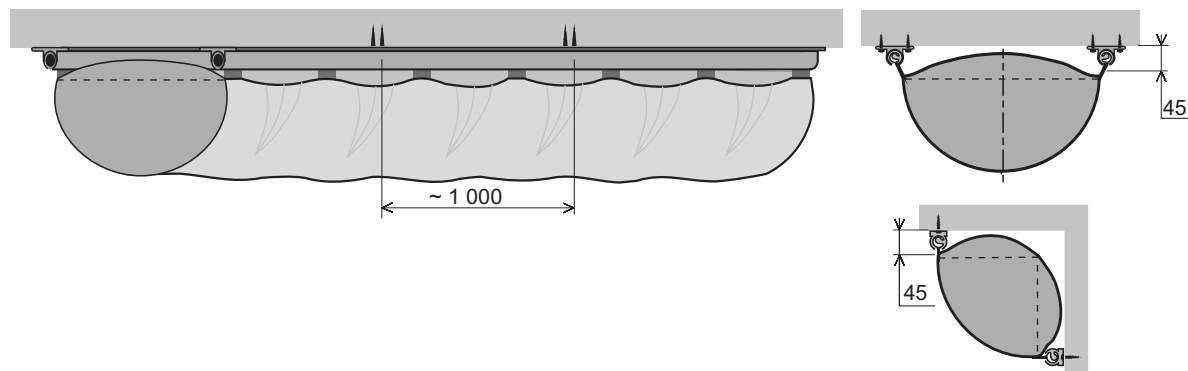


section:    

see details D,I,L

**8B**

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

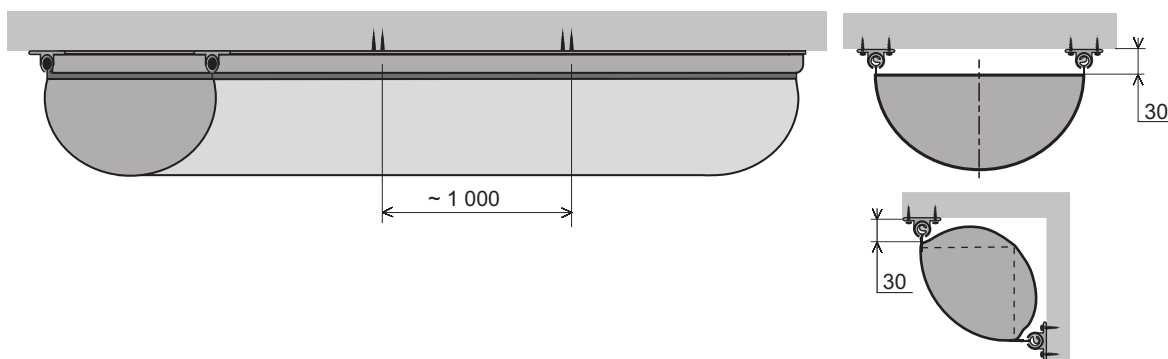


section:    

see detail H

## 8AB

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



section:

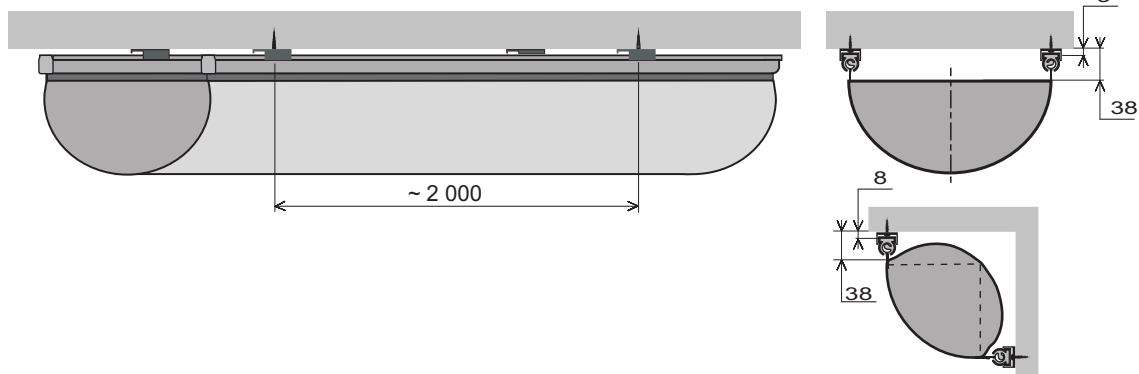


see detail H

## 8AC

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

## 8ACL



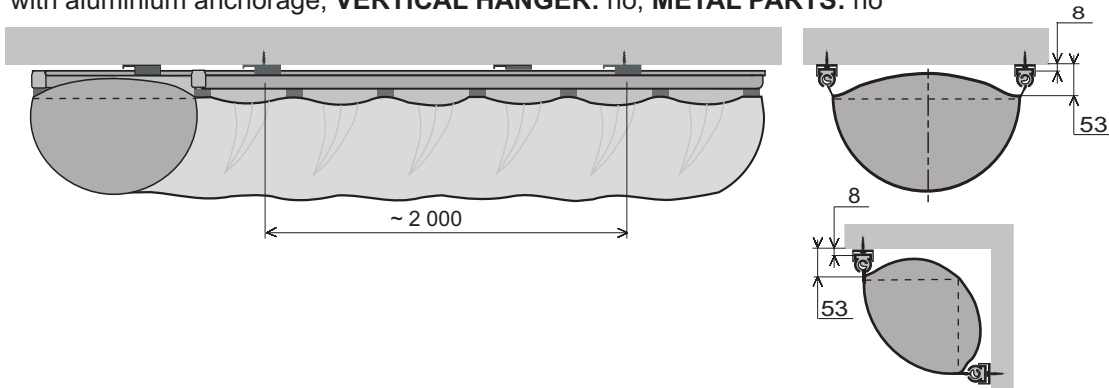
section:



see details J,L

## 8C

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



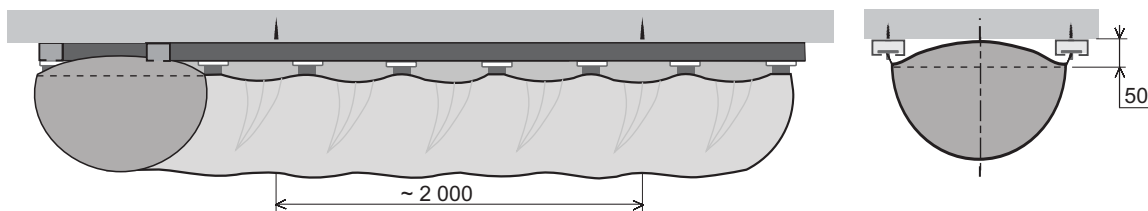
section:



see details J,L

**8G**

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



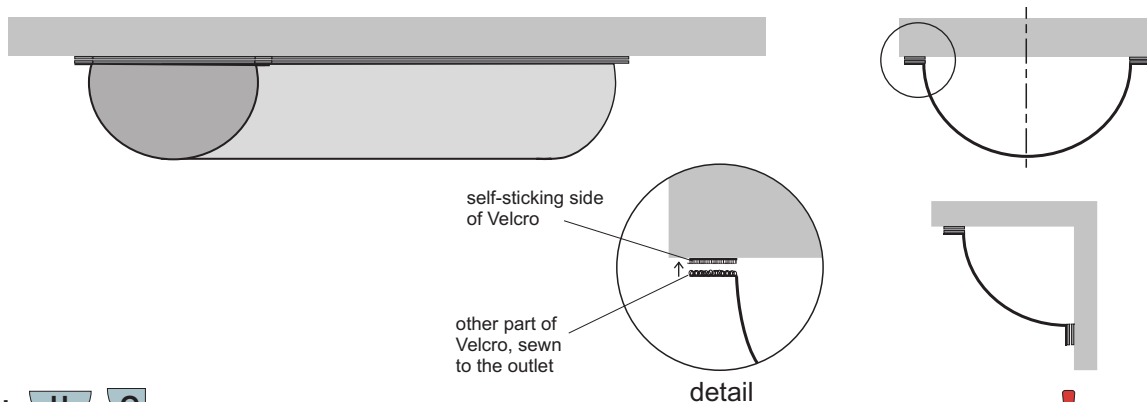
section:



see detail N

**9**

**SUPPORTING ELEMENT:** self-sticking Velcro, **VERTICAL HANGER:** no, **METAL PARTS:** no



section:



! max. 50°C

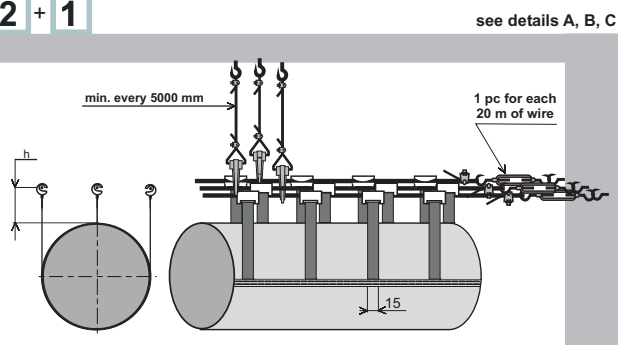
## COMBINATIONS

### 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

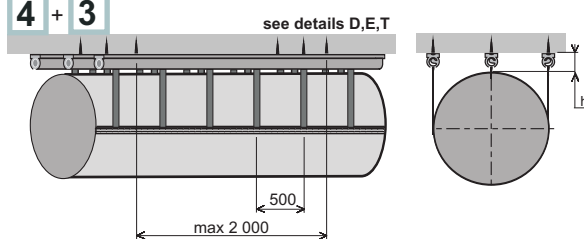
Examples:

**2 + 1**



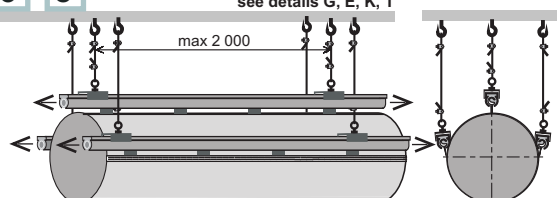
see details A, B, C

**4 + 3**



see details D,E,T

**6 + 5**



see details G, E, K, T

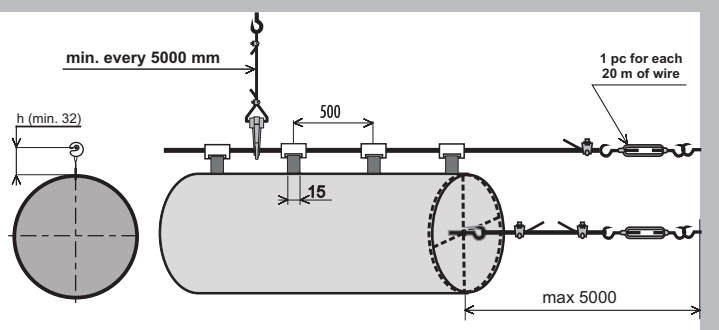
## 2. ADDITIONAL TENSIONING TYRE:

### ORDINARY INSTALLATION + 7

Examples:

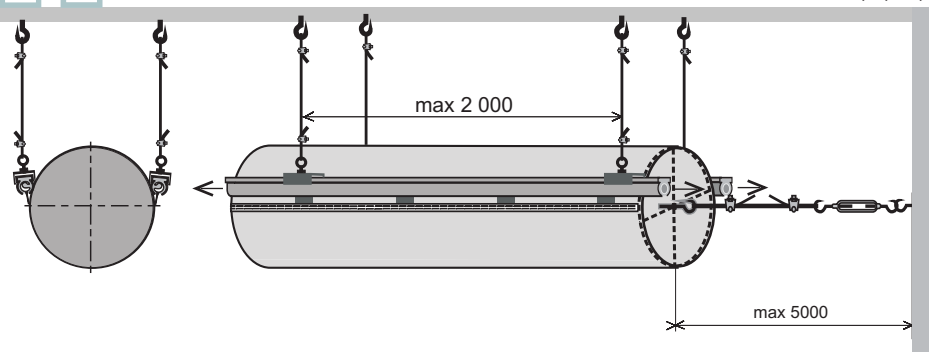
**1 + 7**

see details A, B, C



**6 + 7**

see details G, E, K, T



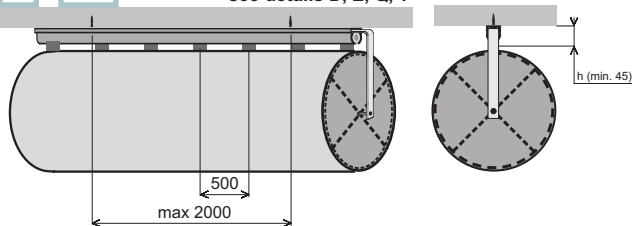
### COMBINATION OF INSTALLATION + 7H:

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:

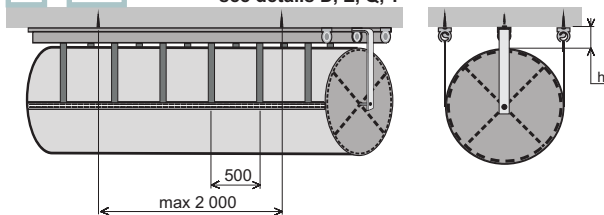
**3 + 7H**

see details D, E, Q, T



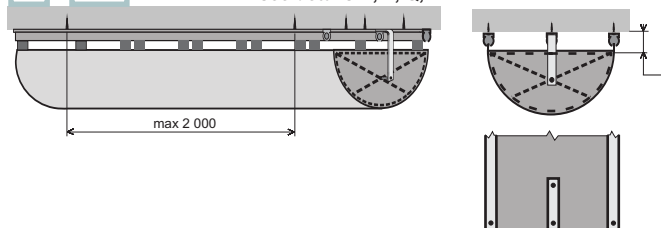
**4 + 7H**

see details D, E, Q, T



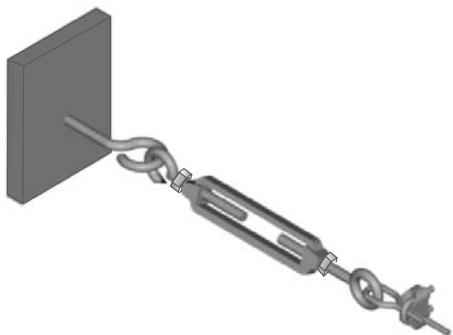
**8 + 7H**

see details D, E, Q, T



## DETAILS

**A**



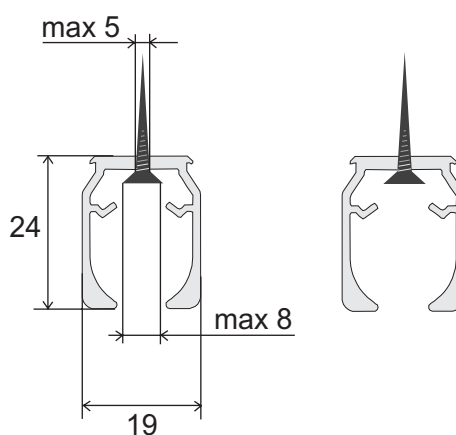
**B**



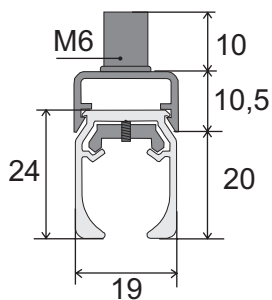
**C**



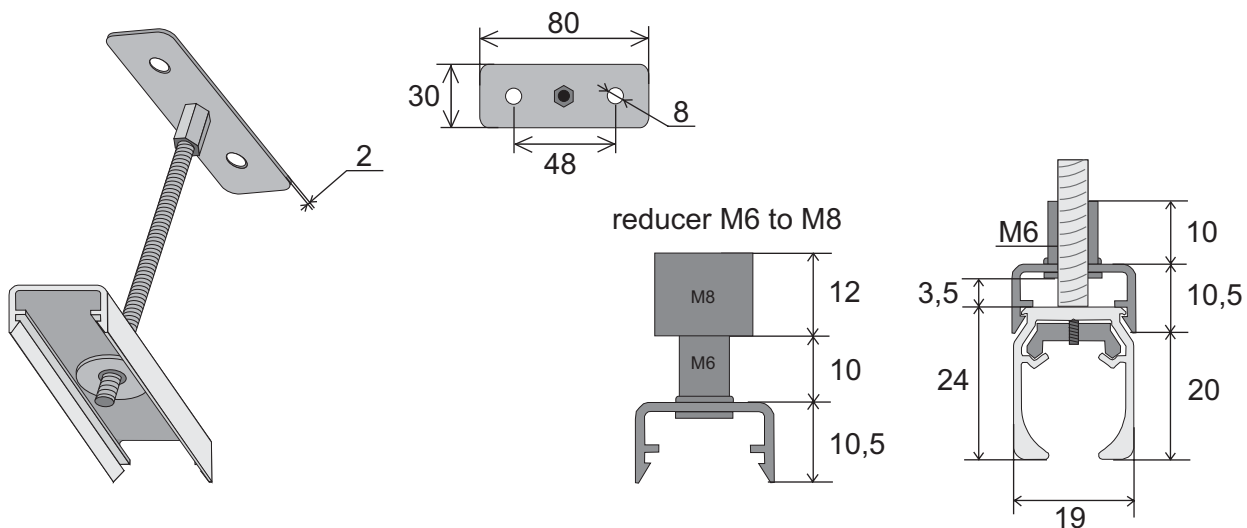
**D**

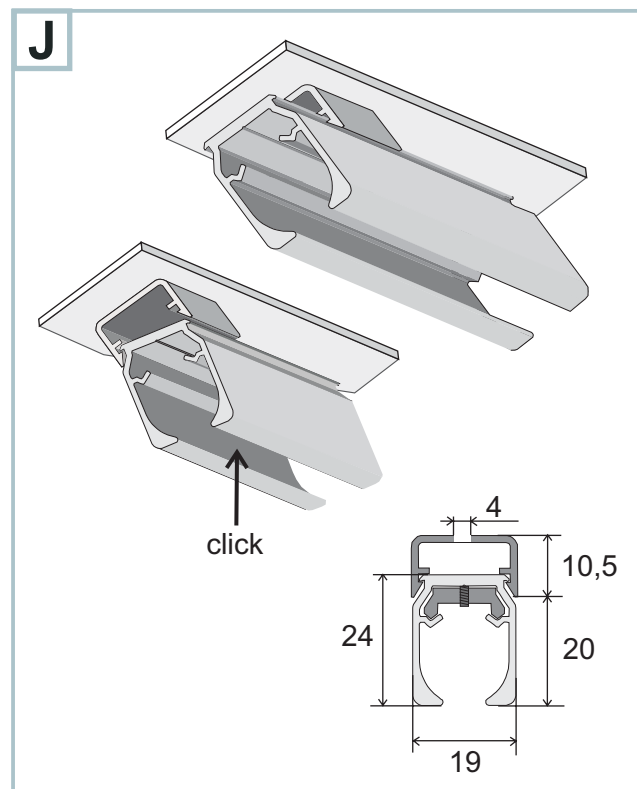
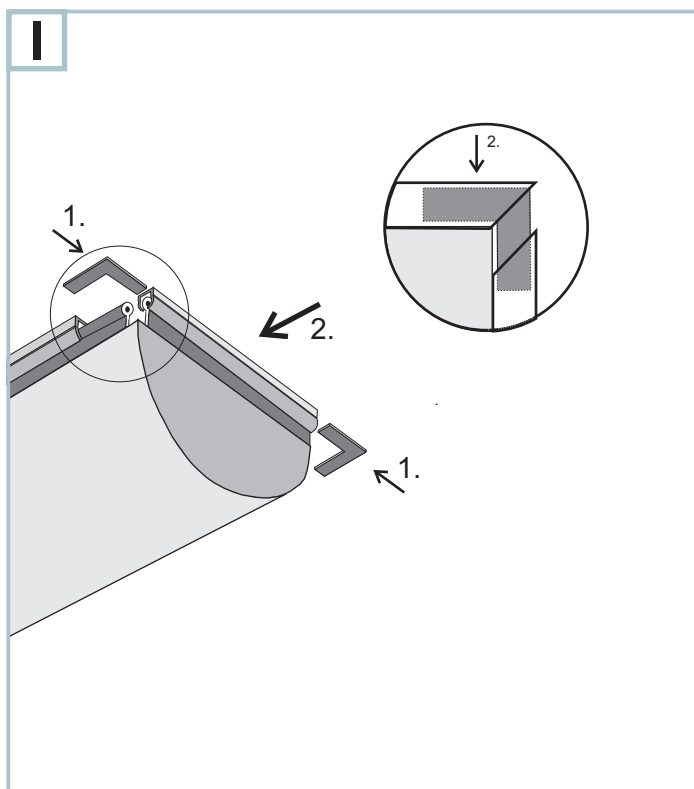
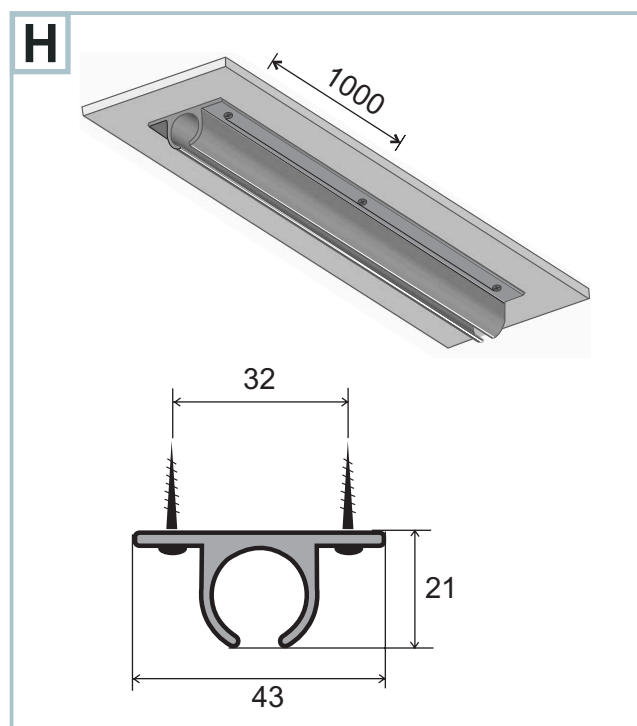
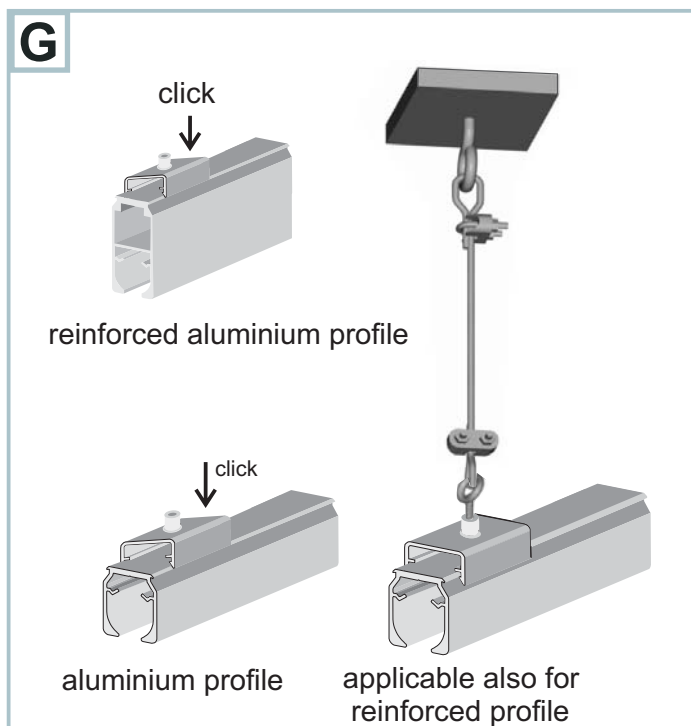


**E**

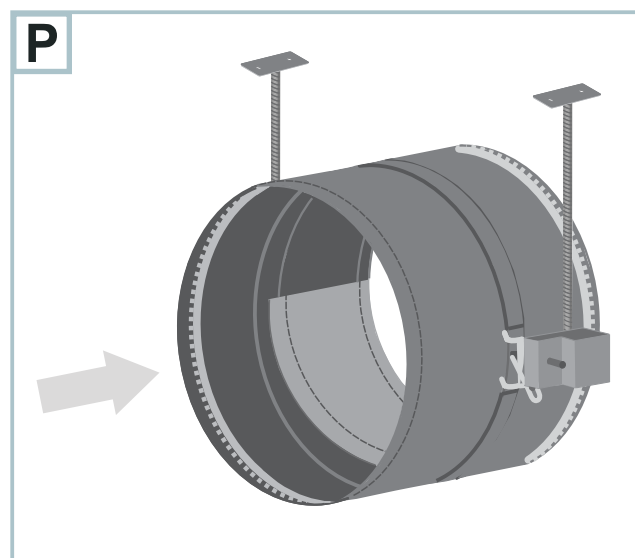
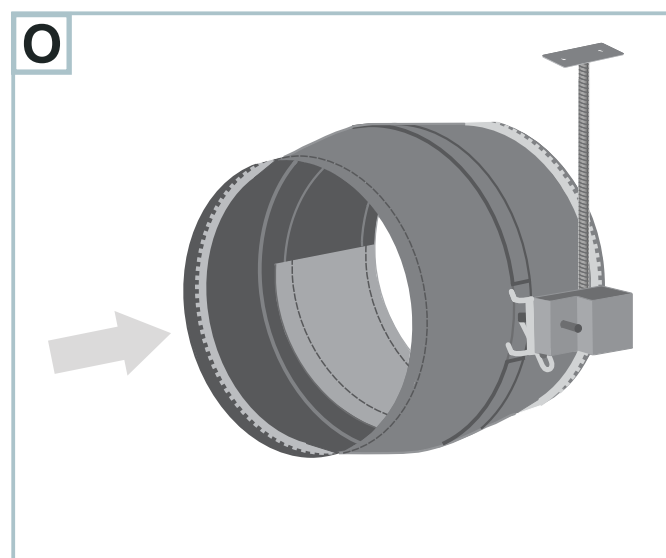
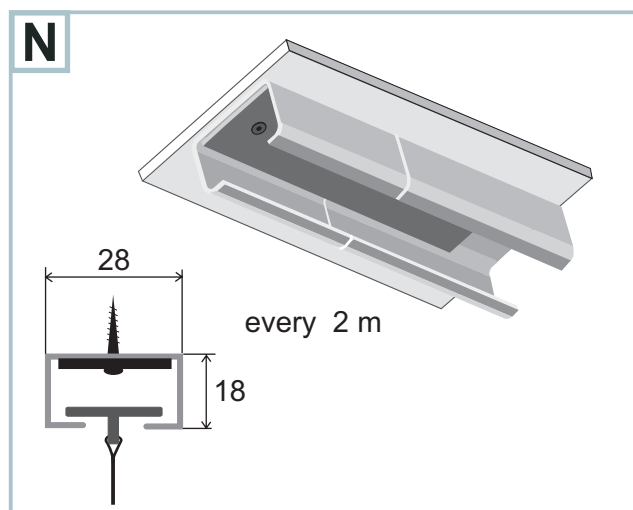
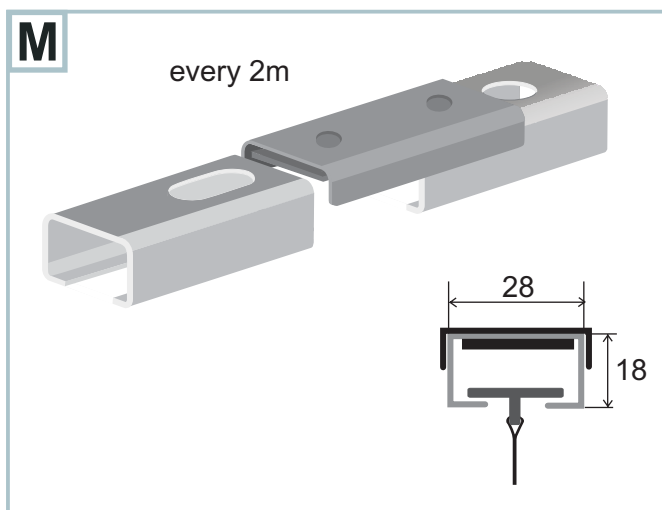
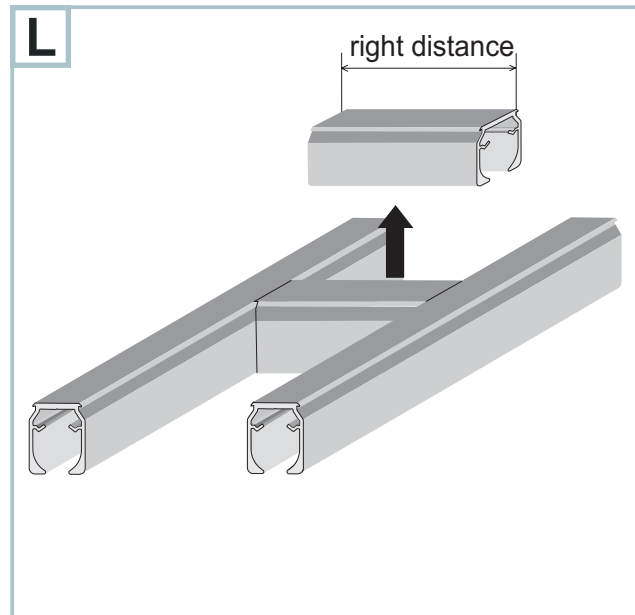


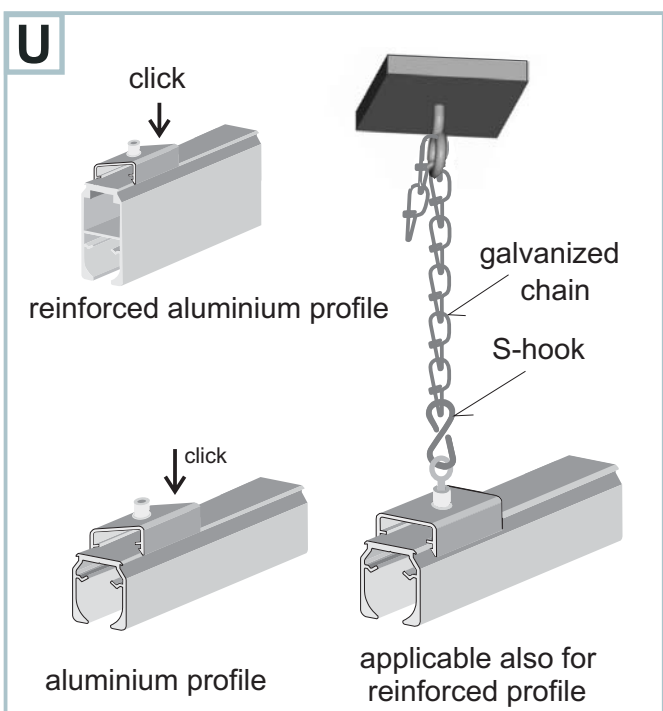
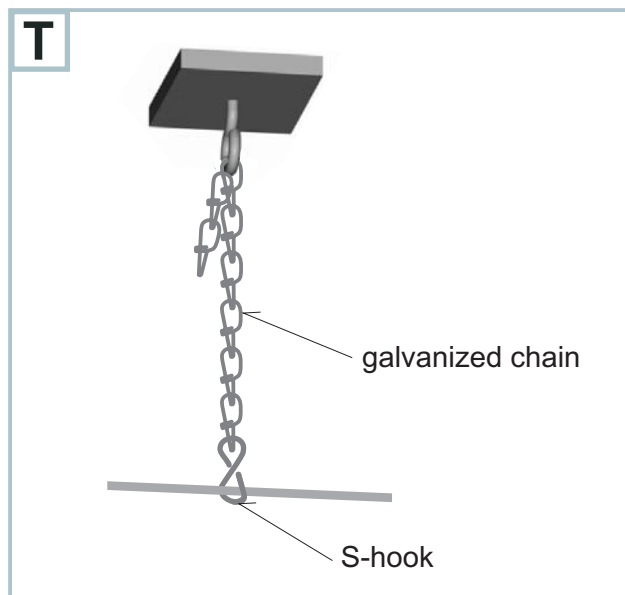
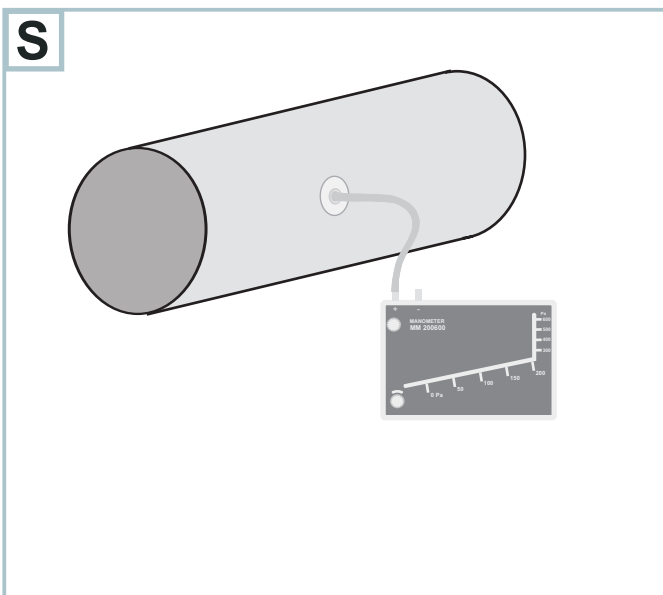
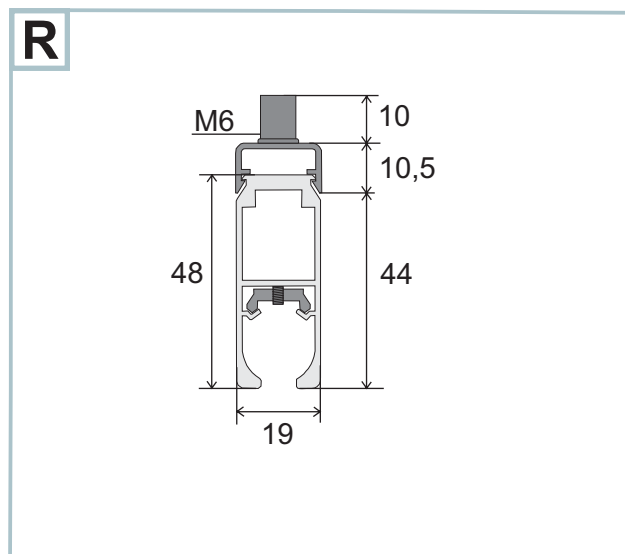
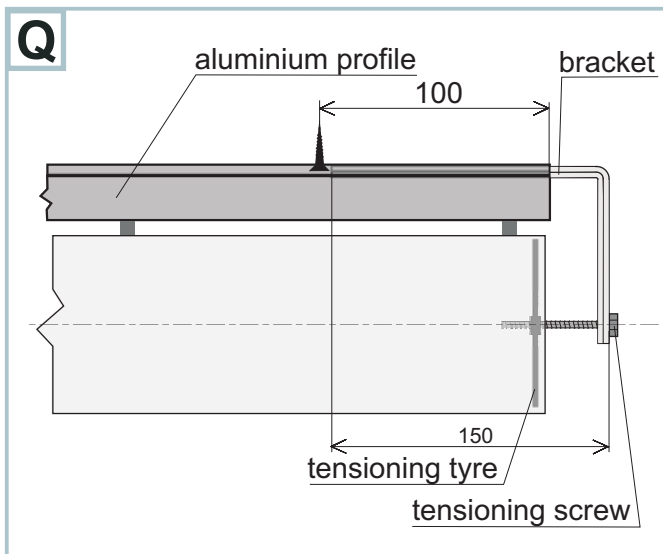
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## APPENDIX 2 - MATERIAL CHARACTERISTICS






MATERIAL CHARACTERISTICS		FABRIC: PMS
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	55
FIRE RESISTANCE	EN 13501-1: 2002	E
TEMPERATURE RESISTANCE	°C	-60 to +110
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	> 7,9.10 <sup>12</sup>
WEIGHT	g/m <sup>2</sup>	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	EN ISO 6330-2000 % warp / weft, 40°C	1/1
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2100 / 1100
TENSIBILITY WARP / WEFT	%	40 / 37
GROSS CALORIFIC POTENTIAL	MJ/m <sup>2</sup> (EN ISO 1716)	7,22
CALORIFIC VALUE	MJ/m <sup>2</sup> (EN ISO 1716)	6,82






MATERIAL CHARACTERISTICS		FABRIC: PMI
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester modified, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	55
FIRE RESISTANCE	EN 13501-1: 2002	B-s1, d0
TEMPERATURE RESISTANCE	°C	-60 to +110
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	> 3,7.10 <sup>11</sup>
WEIGHT	g/m <sup>2</sup>	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	EN ISO 6330-2000 % warp / weft, 40°C	1/1
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2100 / 1100
TENSIBILITY WARP / WEFT	%	40 / 38
GROSS CALORIFIC POTENTIAL	MJ/m <sup>2</sup> (EN ISO 1716)	7,61
CALORIFIC VALUE	MJ/m <sup>2</sup> (EN ISO 1716)	7,16

MATERIAL CHARACTERISTICS		FABRIC: PMTB
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% trevira CS, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	30
FIRE RESISTANCE	EN 13501-1: 2002	B-s1, d0
TEMPERATURE RESISTANCE	°C	-60 to +110
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	
WEIGHT	g/m <sup>2</sup>	310
THICKNESS	mm	0,5
FINISHING		thermofixation
WEAVE	DIN 61101-1	plain
SETT OF FABRIC 10 CM	EN 1049-2:1993 warp / weft	480 / 260
COLOUR STABILITY	EN ISO 105	
WASHING SHRINKAGE	EN ISO 6330-2000 % warp / weft, 40°C	1/1
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	1000 / 1000
TENSIBILITY WARP / WEFT	%	48/38






MATERIAL CHARACTERISTICS		FABRIC: <b>PMB</b>
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester, silver, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	55
FIRE RESISTANCE	EN 13501-1: 2002	E
TEMPERATURE RESISTANCE	°C	-60 to +110
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	
WEIGHT	g/m <sup>2</sup>	290
THICKNESS	mm	0,48
FINISHING		thermofixation (190°C)
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	EN ISO 6330-2000 % warp / weft, 40°C	1/1
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2100 / 1100
TENSIBILITY WARP / WEFT	%	40/38

The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: PLS
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	45
FIRE RESISTANCE	EN 13501-1: 2002	E
TEMPERATURE RESISTANCE	°C	-15 to +70
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	> 7,9.10 <sup>12</sup>
WEIGHT	g/m <sup>2</sup> (EN 12127)	80
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	4
WASHING SHRINKAGE	EN ISO 6330-2000 % warp / weft, 40°C	0,5/0,5
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	450 / 450
TENSIBILITY WARP / WEFT	% (EN ISO 13934-1)	33/39
GROSS CALORIFIC POTENTIAL	MJ/m <sup>2</sup> (EN ISO 1716)	1,66
CALORIFIC VALUE	MJ/m <sup>2</sup> (EN ISO 1716)	1,57






MATERIAL CHARACTERISTICS		FABRIC: <b>PLI</b>
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester modified, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	45
FIRE RESISTANCE	EN 13501-1: 2002	B-s1, d0
TEMPERATURE RESISTANCE	°C	-15 to +70
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	2,5.10 <sup>12</sup>
WEIGHT	g/m <sup>2</sup> (EN 12127)	79
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	455 / 420
COLOUR STABILITY	EN ISO 105	4
WASHING SHRINKAGE	EN ISO 6330-2000 % warp / weft, 40°C	0,5/0,5
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	500 / 400
TENSIBILITY WARP / WEFT	% (EN ISO 13934-1)	36 / 36








MATERIAL CHARACTERISTICS		FABRIC: <b>NMS</b>
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	E
TEMPERATURE RESISTANCE	°C	-30 to +110
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	> 7,9.10 <sup>12</sup>
WEIGHT	g/m <sup>2</sup>	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	EN ISO 6330-2000 % warp / weft, 40°C	1/1
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2100 / 1100
TENSIBILITY WARP / WEFT	%	40 / 38
GROSS CALORIFIC POTENTIAL	MJ/m <sup>2</sup> (EN ISO 1716)	7,22
CALORIFIC VALUE	MJ/m <sup>2</sup> (EN ISO 1716)	6,82






## MATERIAL CHARACTERISTICS

FABRIC: **NMI**






TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester modified, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	B-s1, d0
TEMPERATURE RESISTANCE	°C	-30 to +110
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	2,8.10 <sup>10</sup>
WEIGHT	g/m <sup>2</sup>	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	EN ISO 6330-2000 % warp / weft, 40°C	1/1
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	2100 / 1100
TENSIBILITY WARP / WEFT	%	40 / 38
GROSS CALORIFIC POTENTIAL	MJ/m <sup>2</sup> (EN ISO 1716)	7,61
CALORIFIC VALUE	MJ/m <sup>2</sup> (EN ISO 1716)	7,16






MATERIAL CHARACTERISTICS		FABRIC: <b>NLS</b>
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	E
TEMPERATURE RESISTANCE	°C	-15 to +70
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	
WEIGHT	g/m <sup>2</sup>	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	EN ISO 6330-2000 % warp / weft, 40°C	0,5/0,5
ABSORPTION OF MOISTURE	%	1
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	450 / 450
TENSIBILITY WARP / WEFT	%	
GROSS CALORIFIC POTENTIAL	MJ/m <sup>2</sup> (EN ISO 1716)	1,66
CALORIFIC VALUE	MJ/m <sup>2</sup> (EN ISO 1716)	1,57

The missing data will be supplied gradually.






MATERIAL CHARACTERISTICS		FABRIC: NLI
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester modified, endless fibre	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	B-s1, d0
TEMPERATURE RESISTANCE	°C	-15 to +70
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	3,5.10 <sup>12</sup>
WEIGHT	g/m <sup>2</sup>	90
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	EN ISO 6330-2000 % warp / weft, 40°C	0,5/0,5
ABSORPTION OF MOISTURE	%	
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	450 / 450
TENSIBILITY WARP / WEFT	%	

The missing data will be supplied gradually.






MATERIAL CHARACTERISTICS		FABRIC: <b>NMF</b>
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyethylen	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	0
FIRE RESISTANCE	ČSN EN 13501-1: 2002	F
TEMPERATURE RESISTANCE	°C	-30 to +70
WEIGHT	g/m <sup>2</sup>	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	EN ISO 6330-2000 % warp / weft, 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

MATERIAL CHARACTERISTICS		FABRIC: <b>NHE</b>
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% glass fibre + 2x polyurethane	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	A2-s1, d0
TEMPERATURE RESISTANCE	°C	-50 to +180
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	
HEAT CONDUCTANCE	Wm <sup>-1</sup> K <sup>-1</sup>	
WEIGHT	g/m <sup>2</sup>	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	EN ISO 6330-2000 % warp / weft, 40°C	
ABSORPTION OF MOISTURE	%	
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	500 / 300
TENSIBILITY WARP / WEFT	%	5 / 5
GROSS CALORIFIC POTENTIAL	MJ/m <sup>2</sup> (EN ISO 1716)	0,48

The missing data will be supplied gradually.

MATERIAL CHARACTERISTICS		FABRIC: NHI
TREATMENT SYMBOLS	    	
BASIC MATERIAL	100% polyester + 2x PVC+Sb <sub>2</sub> O <sub>3</sub>	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	0
FIRE RESISTANCE	EN 13501-1: 2002	B -s2, d0
TEMPERATURE RESISTANCE	°C	-20 to +70
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	4,9.10 <sup>13</sup>
WEIGHT	g/m <sup>2</sup>	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	EN ISO 6330-2000 % warp / weft, 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: <b>NMA</b>
TREATMENT SYMBOLS	    	
BASIC MATERIAL	glass fibre + 2xPVC+ carbon	
PERMEABILITY	m <sup>3</sup> /h/m <sup>2</sup> by 120 Pa	0
FIRE RESISTANCE	ISO 4589-2	33,6
TEMPERATURE RESISTANCE	°C	-20 to +60
SURFACE RESISTANCE	Ω (EN 1149-1:1995)	4,0 x 10 <sup>5</sup>
HEAT CONDUCTANCE	Wm <sup>-1</sup> K <sup>-1</sup>	
WEIGHT	g/m <sup>2</sup>	320
THICKNESS	mm	0,3
FINISHING		
WEAVE	DIN 61101-1	
SETT OF FABRIC 10 CM	EN 1049-2 warp / weft	
COLOUR STABILITY	EN ISO 105	
WASHING SHRINKAGE	EN ISO 6330-2000 % warp / weft, 40°C	
ABSORPTION OF MOISTURE	%	
STRENGTH WARP / WEFT	N/10 mm (EN ISO 13934-1:1999)	400 / 350
TENSIBILITY WARP / WEFT	%	4 / 4

The missing data will be supplied gradually.