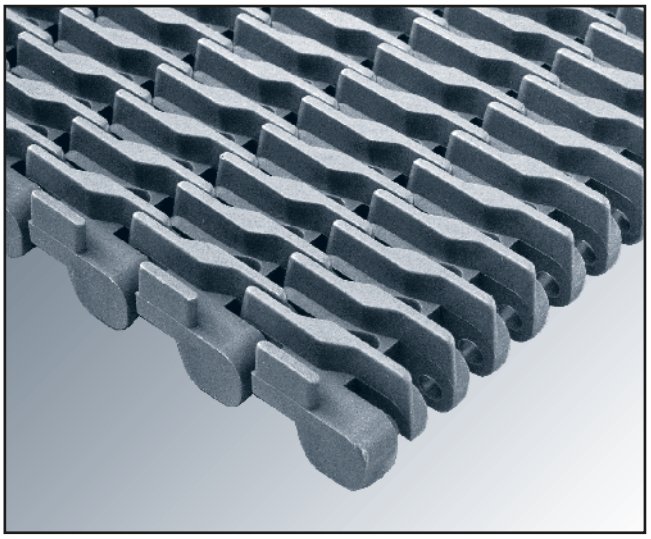
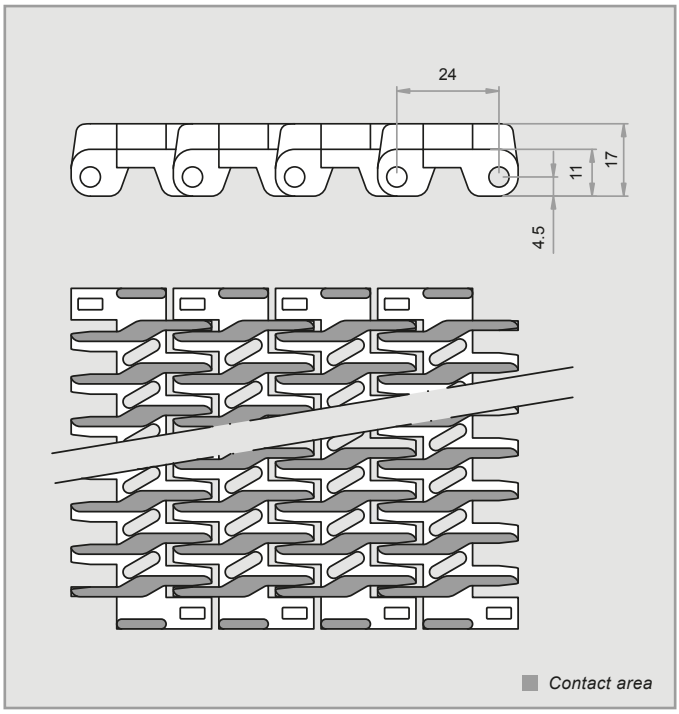
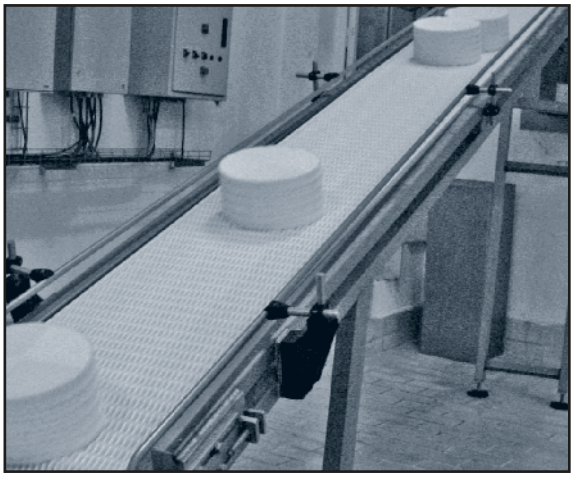
SERIES A24 RAISED RIB



Eurobelt Series A24 Raised Rib conveyor belt has been designed mainly to be used with finger plates. It has ribs that, sticking out 6 mm above the module, provide a greater resistance as well as a better sliding of the product on the conveyor belt surface.



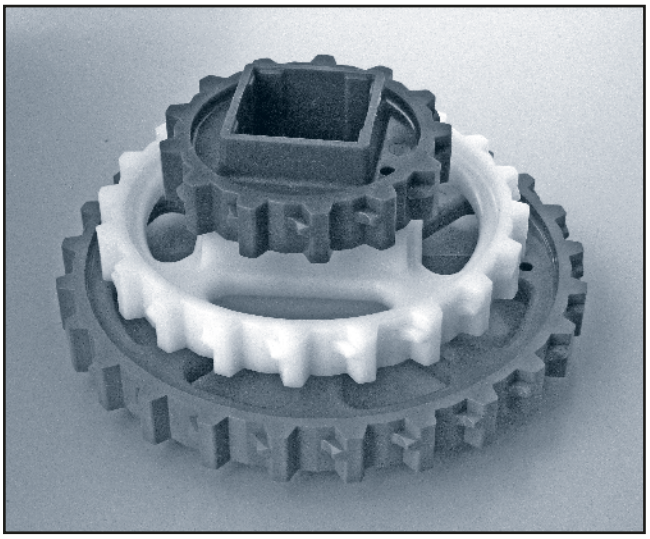


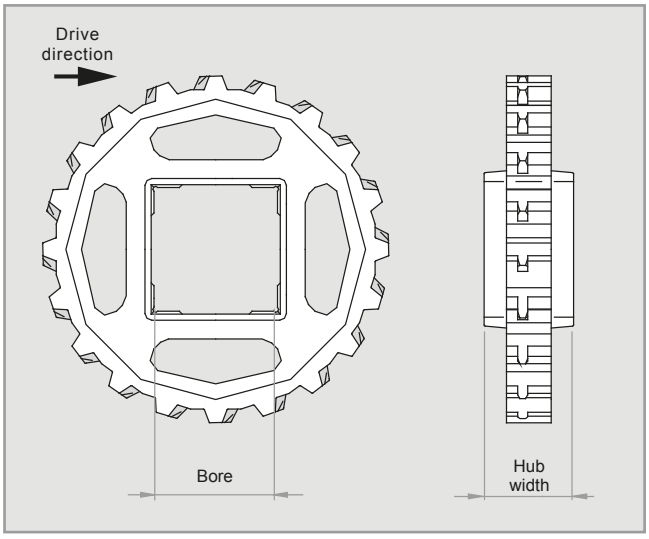
Pitch	24 mm
Surface	Raised Rib
Open area	30 %
Contact area	30 %
Maximum opening (approx.)	[9.5 x 3] mm
Thickness	17 mm
Drive system	Central
Belt width	Multiples of 10 mm
Rod diameter	Ø 4.6 mm
Retention system	Cap

Material of the belt	Material of the rod	Belt strength (kg/m)	Temperature range (ºC)	Belt weight (kg/m²)	Available colours in stock
PP - Polypropylene	PP - Polypropylene	950	+1 to +104	6.45	[G]
AC - Polyacetal	PP - Polypropylene	1,850	+1 to +90	9.90	[B]
	PE - Polyethylene	1,700	-40 to +65	9.94	[B]

Colours: [W] White - [G] Grey - [B] Blue - [N] Natural - [O] Black. // The materials and colours that are normally in stock are those above indicated. In special cases in which it is needed a belt in a material or colour different from those above mentioned, you should ask directly to EUROBELT.

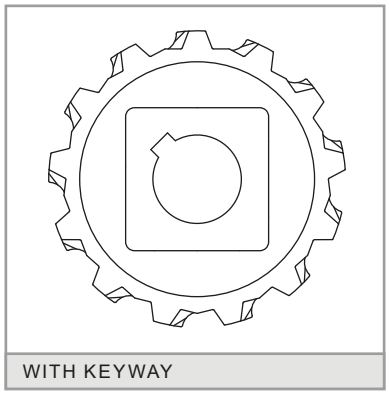
ACCESSORIES [SPROCKETS]



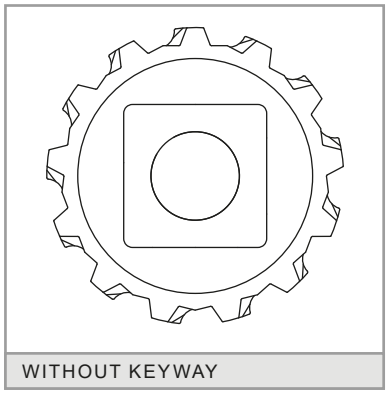


Nº of teeth T	Pitch diameter	Bore for square shaft		Hub width	Materials
		mm	inch		
7	55.31	20	-	20	Polypropylene Polyacetal Stainless steel
13	100.25	40	1.5"	40	
20	153.41	40 60	1.5"	40	
25	191.48	40 60 90	1.5"	40	

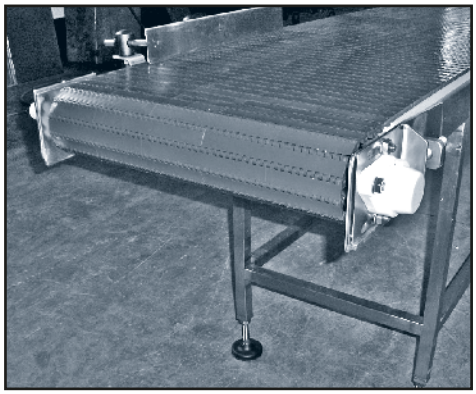
SPROCKETS FOR SQUARE SHAFT



WITH KEYWAY



WITHOUT KEYWAY



We have plastic sprockets for round shaft with and without keyway. We also have sprockets to be used with motor drum in applications needing a special cleaning or in conveyors in which it is not possible to place the motor in the outside due to problems of space or safety.

ACCESSORIES [RETAINING RINGS]

INSTALLATION

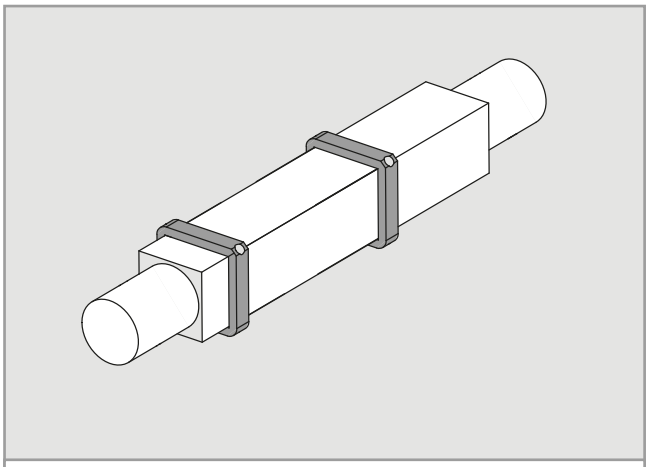
These rings are placed at every side of the central sprocket to fasten it to the shaft in order to avoid any lateral movements of the belt.

They are manufactured in AISI 316 stainless steel and they are fixed by means of a set screw stuffed in the ring itself.

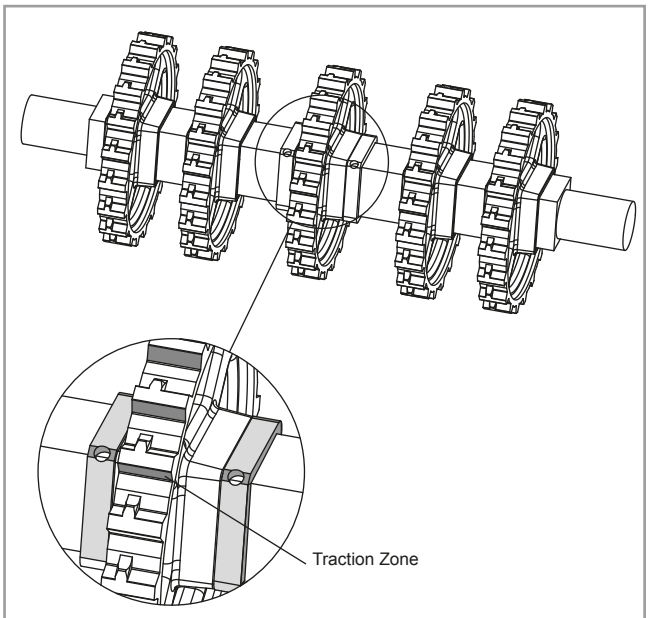
One sprocket, duly fixed with 2 retaining rings, should be put in the centre. Then you should place the same quantity of sprockets at every side of the central one but without any fixing, as they will absorb the possible belt expansions and contractions.

The same procedure should be carried out in both shafts.

Bore for square shaft	Screws
20	M 5 x 5
40	M 6 x 6
60	M 6 x 6
90	M 6 x 6



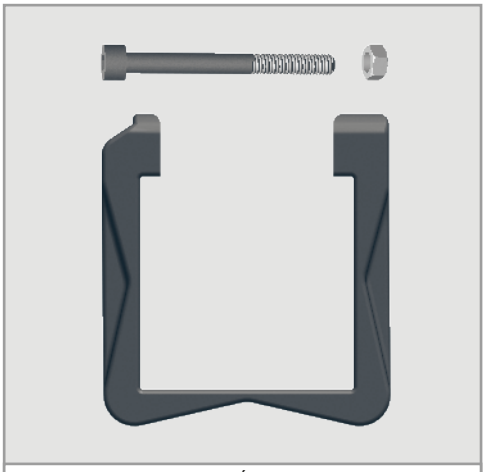
RETAINING RINGS



CENTRAL SPROCKET

ACCESSORIES [FASTENING RING CLU]

The CLU Eurobelt retainer rings guarantee the fastening of the Central Sprocket on both drive and idle shafts.



ANILLO DE RETENCIÓN CLU

High-resistance ACETAL.

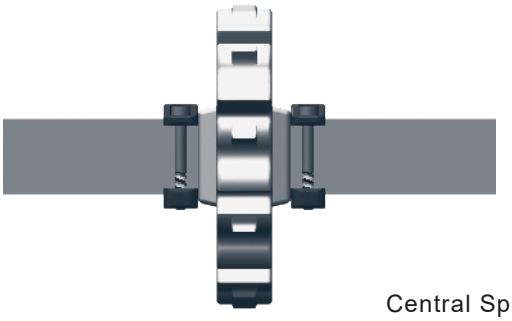
Working temperature: +60ºC / -40ºC

Pour arbre carré de 40 mm ó 1 ½"

The belt can expand or contract due to the temperature.

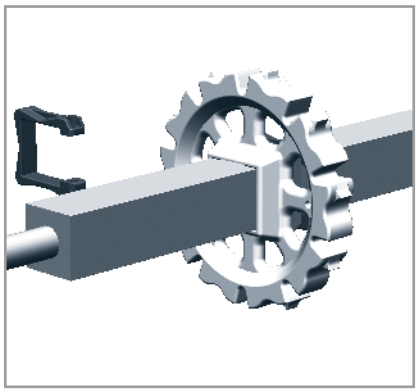
The drive system of modular belts requires the central sprocket not to move axially both in the drive and the idle shafts.

The rest of sprockets can slide freely on the shaft adapting to the possible changes of the belt, so that the correct position of the teeth is guaranteed.

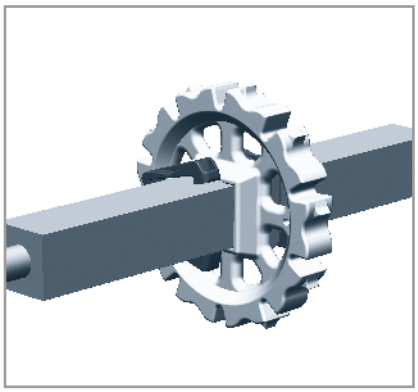


Central Sprocket

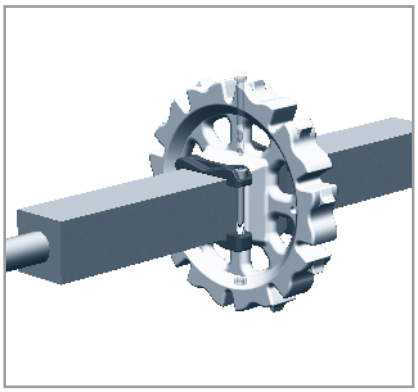
QUICK AND EASY INSTALLATION



1.Direct installation without dismantling the shaft.

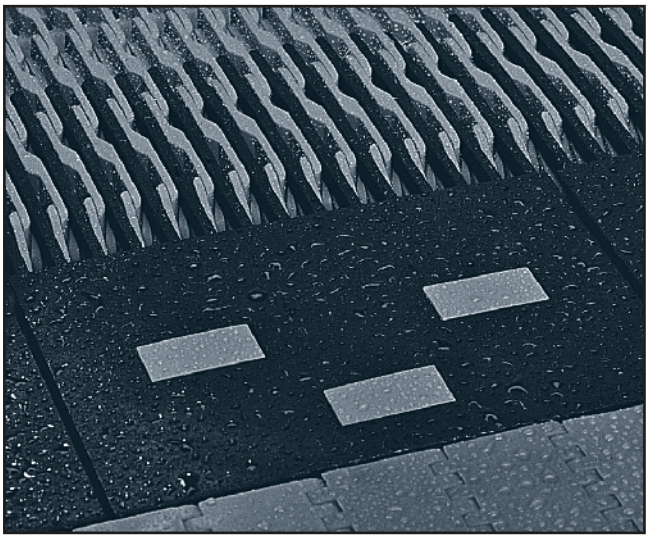


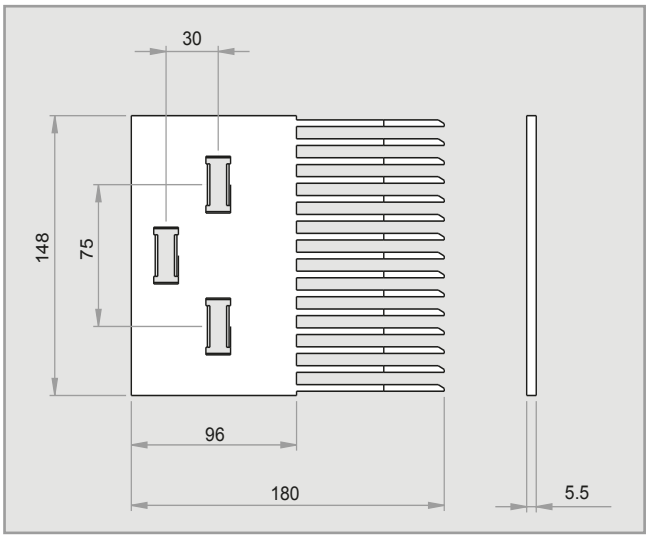
2.Easy placing on the shaft by opening the ring.



3.Reliable closing of the ring by means of a screw and nut at a low cost.

ACCESSORIES [FINGER PLATES]





They have been designed to be used with the Raised Rib belts in applications in which it is necessary to transfer the product by means finger plates.

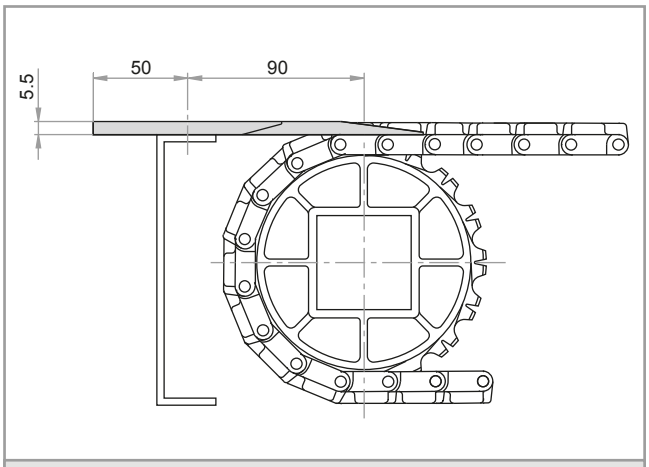
The finger plates are manufactured in nylon and acetal. They have 15 teeth that hide among the projecting ribs of the belt, allowing the constant flow of product as the belt is engaged. They avoid the use of conventional dead plates and consequently the problems by stumbling and fall of the product.

They have three fastening holes that enable little displacements to achieve a better coupling with the belt.

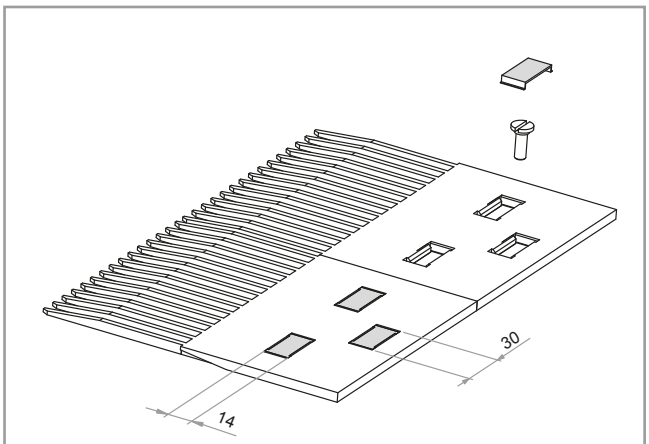
Those holes are located so that they reduce to the minimum the vibrations owing to the turn of the belt over the sprockets.

The finger plates can be easily installed in the structure of the conveyor putting a screw in each hole. The dimensions of these screws are: M 6 x 19 mm.

Materials / Colours	Nº of teeth	Nº of holes
Nylon / Black	15	3
Polyacetal / Grey		



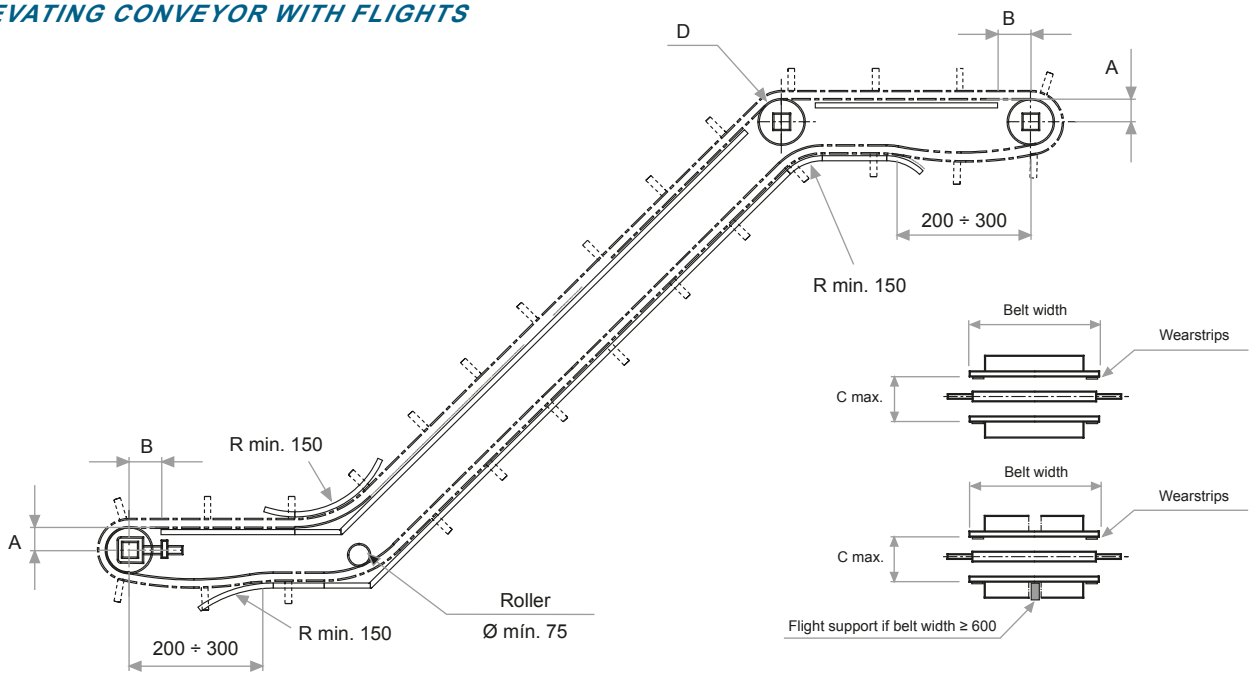
DESIGN DATA



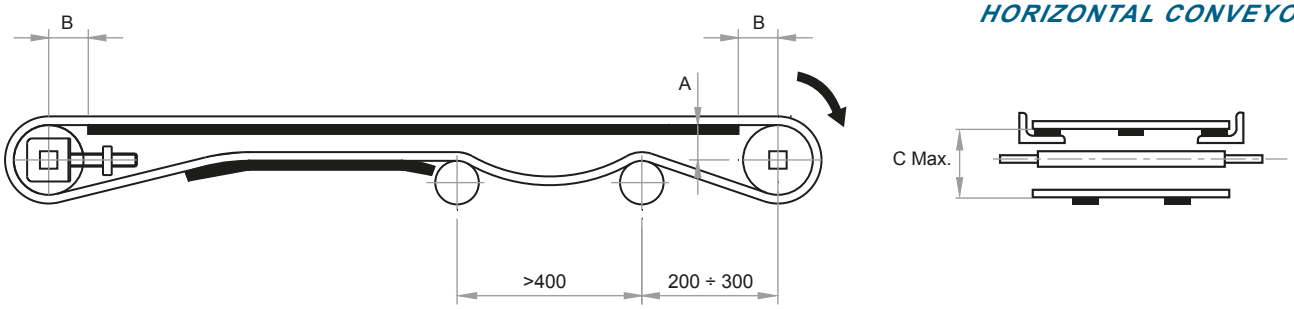
INSTALLATION

CONSTRUCTION DATA [CONVEYOR]

ELEVATING CONVEYOR WITH FLIGHTS



HORIZONTAL CONVEYOR



[A] Distance between the sliding surface of the belt and the centre of the shaft.

[B] Distance between the vertical of the shaft and the beginning of the sliding surface.

[C] Distance between the sliding surface of the belt and the support of the return way.

[D] If sprockets are used in the inflexion shaft, do not retain the central one.

[R] This radius must be as big as allowed by the application in order to minimize the wear (min. 150 mm). For belts with side guards, consult about this radius.

In the construction of conveyors, the distances appearing in the chart below must be respected according to the belt Series and the size of the sprockets.

Nº of teeth T	Ø Pitch	A	B max.	C max.
7	55.31	22	25	55
13	100.25	46	40	100
20	153.41	72	50	155
25	191.48	91	60	195

[Dimensions in mm]

TABLE OF SPROCKETS AND WEARSTRIPS

Belt nominal width (mm)		Minimum quantity of sprockets per shaft	Minimum quantity of wearstrips	
			Transport way	Return way
40	100	1	2	2
110	300	3	2	2
310	500	5	4	3
510	700	7	6	4
710	900	9	8	5
910	1,100	11	10	6
1,110	1,300	13	12	7
1,310	1,500	15	14	8
1,510	1,700	17	16	9
1,710	1,900	19	18	11
1,910	2,100	21	20	12
2,110	2,300	23	22	13
2,310	2,500	25	24	14
2,510	2,700	27	26	15

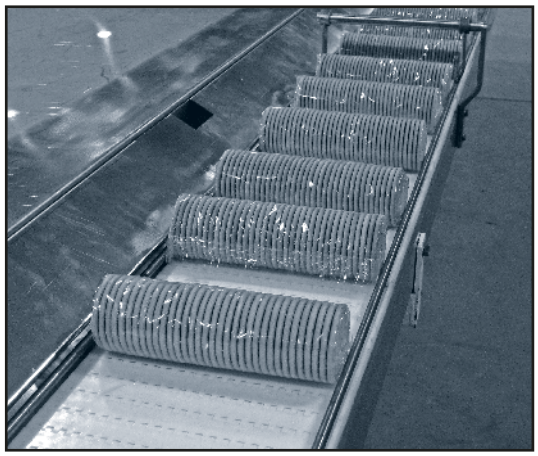
To calculate the necessary minimum quantity of sprockets for the drive shaft as well as for the idle one, the next formula has been used:

$$\text{Minimum quantity} = \frac{\text{Belt width (mm)}}{100\ \text{mm}}$$

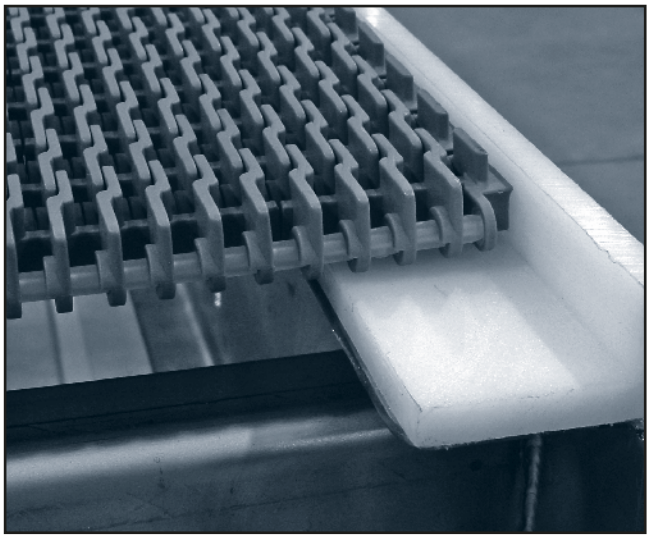
This amount must always be odd.

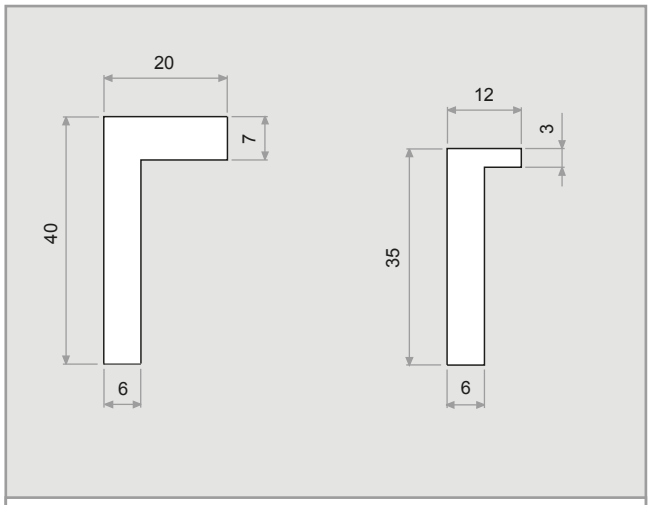
To calculate the quantity of supports, the weight of the product to be transported must be taken into account.

The distance between supports should not exceed 150 mm in the transport way or 300 mm in the return way.



ACCESSORIES [HOLD-DOWN PROFILES]



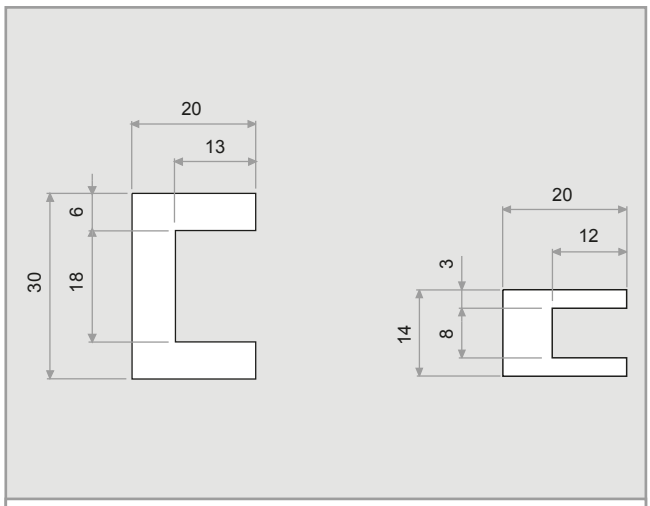


PROFILES IN L

To make the fastening and the support of the belt, EUROBELT has designed two types of hold-down profiles with different geometries, but with the same uses and services.

These profiles, with a low coefficient of friction, are placed between the belt and the structure of the conveyor, reducing the wear of the surfaces in contact, which contributes to prolong the life of the belt.

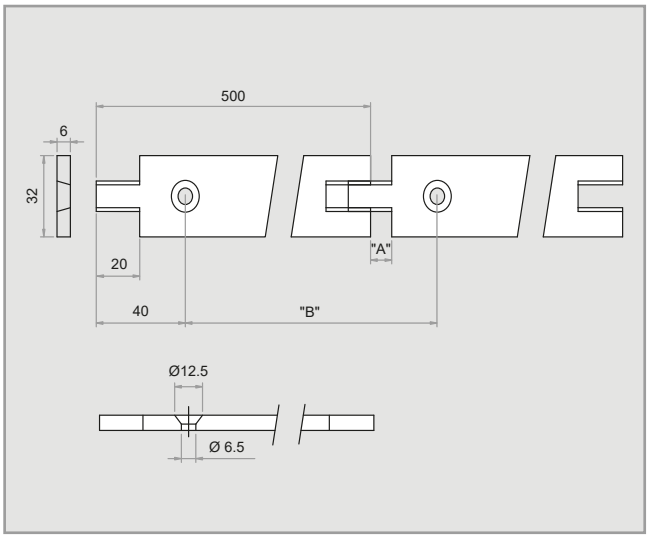
EUROBELT offers all the hold-down profiles in special polyethylenes with very good sliding properties and an excellent resistance to impact.



PROFILES IN U

Accessories	Dimensions	Materials
Profiles in L	40 x 20 x 2.000	Polyethylene
	35 x 12 x 2.000	
Profiles in U	20 x 30 x 2.000	
	20 x 14 x 2.000	

ACCESSORIES [WEARSTRIPS]



The flat wearstrips are fastened by means of flatheaded plastic screws, which contributes to obtain a smooth surface free of any possibility of hooking.

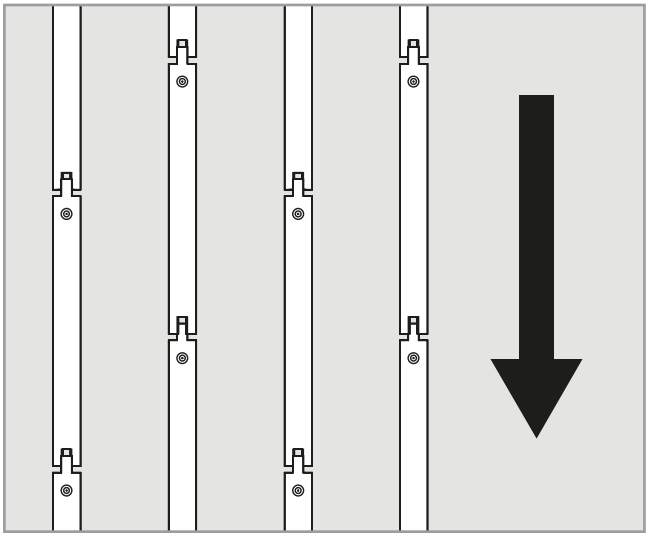
The dimensions of those screws are: M 6 x 25 mm.

Due to their dovetail design, they can adapt to possible longitudinal contractions and expansions of the belt.

Dimensions	Materials
6 x 32 x 500	Polyethylene Conductive polyethylene Polyacetal

The wearstrips arrangement is an important factor in the life span of a conveyor belt. It should be chosen the most suitable configuration according to the transport needs. To calculate the quantity of supports, the weight of the product to be conveyed should be taken into account.

PARALLEL RUNNERS



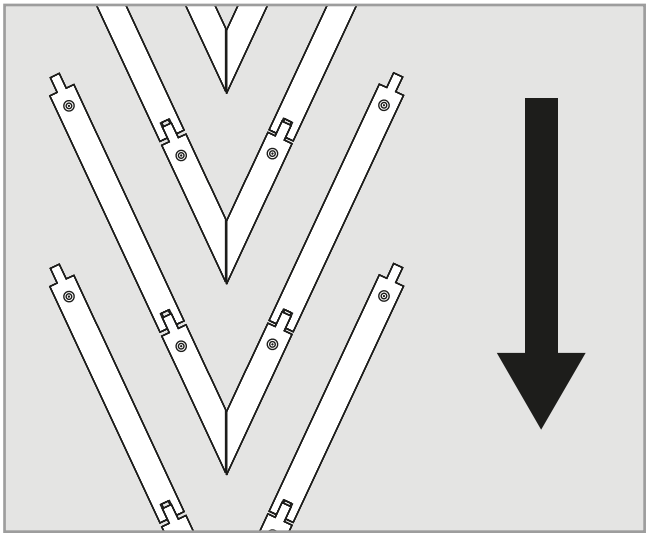
It consists of placing the wearstrips in a parallel and continuous way along the conveyor structure.

It is preferable to position them so that the joints do not coincide.

This is probably the simplest and most economical configuration although, depending on the load to be transported, uneven wears can arise on the back surface of the belt.

It is not advisable for applications with a very heavy load.

CHEVRON ARRAY



The wearstrips are placed throughout the length and breadth of the conveyor, as shown in the picture above.

The possible wear that might occur will be even all over the belt, since it is resting on the wearstrips lengthwise and breadthwise.

With this angle-shaped layout the cleaning and the removal of wastes are easy.

It is advisable for applications bearing heavy loads or for high speeds.