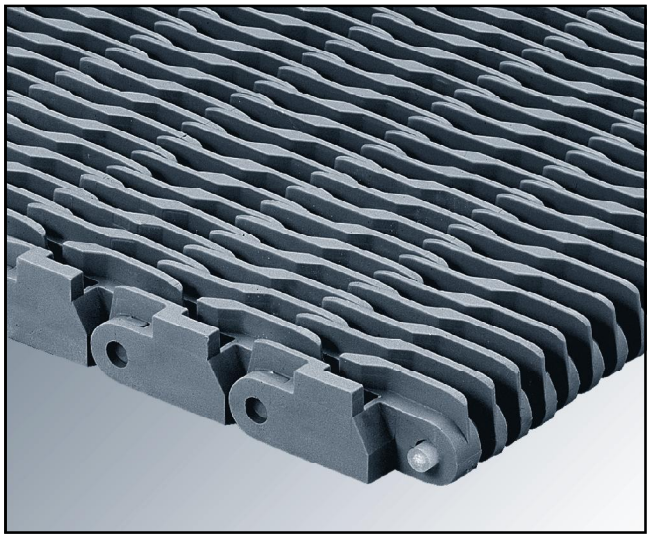
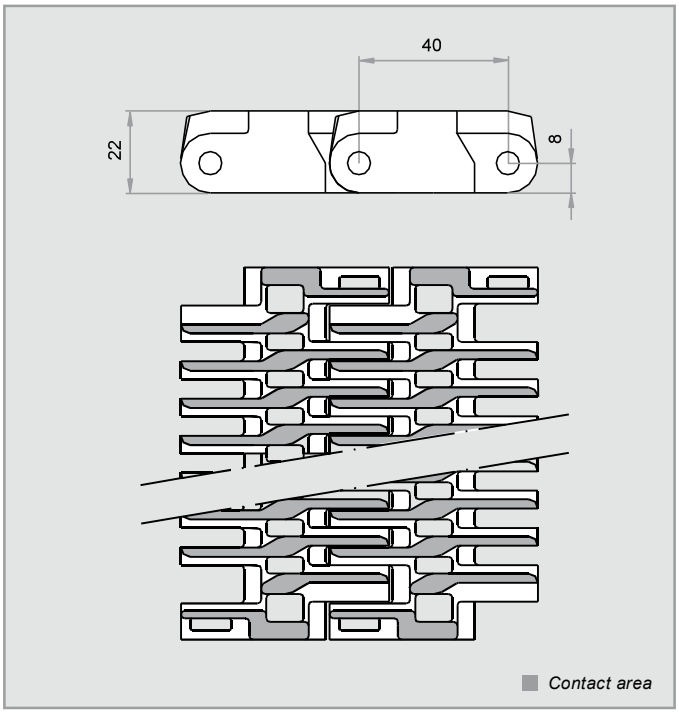
SERIES E41 RAISED RIB





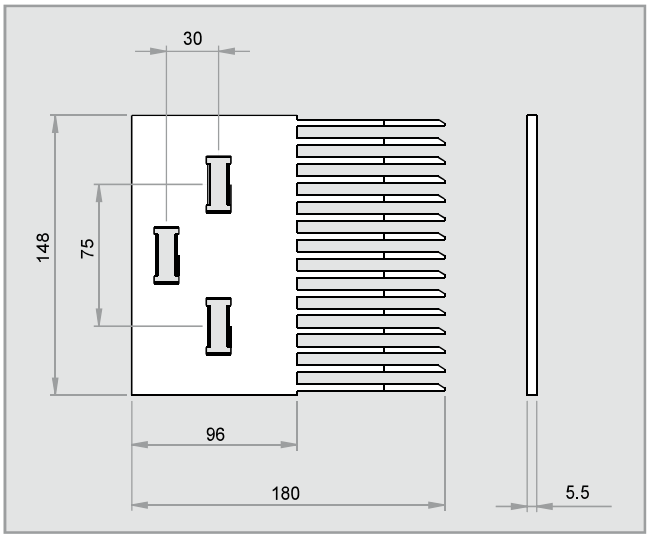
Eurobelt Series E41 Raised Rib conveyor belt, given its configuration of projecting ribs, enables us to make product transfers by using finger plates.
The central reinforcement of the ribs allows the lateral entrance of cans, glass jars, or containers in general, avoiding their overturning as well as any damage in the belt surface.

Pitch	40 mm
Surface	Raised Rib
Open area	25 %
Contact area	31 %
Maximum opening (approx.)	[10 x 7.5] mm
Thickness	22 mm
Drive system	Central
Belt width	Multiples of 10 mm
Rod diameter	Ø 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	3,600	+1 to +104	12.03	[G]

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 [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.

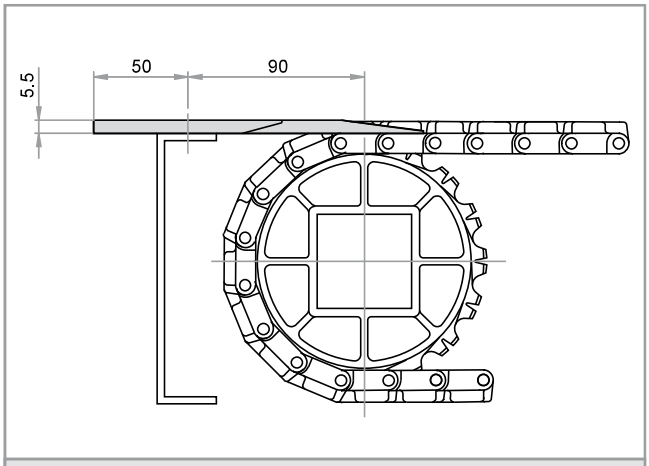
The finger plates are manufactured in nylon and acetal. They have 15 teeth that hide among the projecting ribs of the belt, allowing the constant flow of product as the belt is engaged. They avoid the use of conventional dead plates and consequently the problems by stumbling and fall of the product.

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

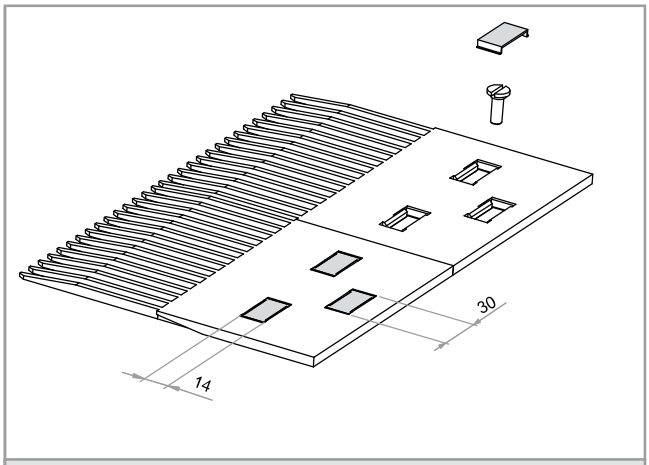
Those holes are located so that they reduce to the minimum the vibrations owing to the turn of the belt over the sprockets.

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		

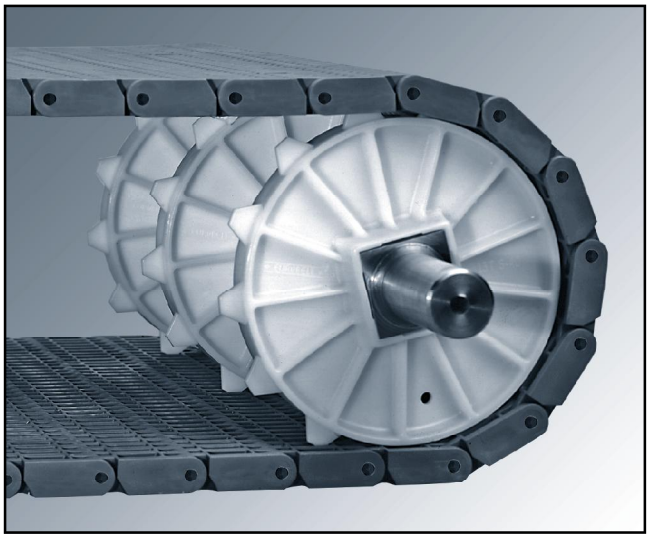


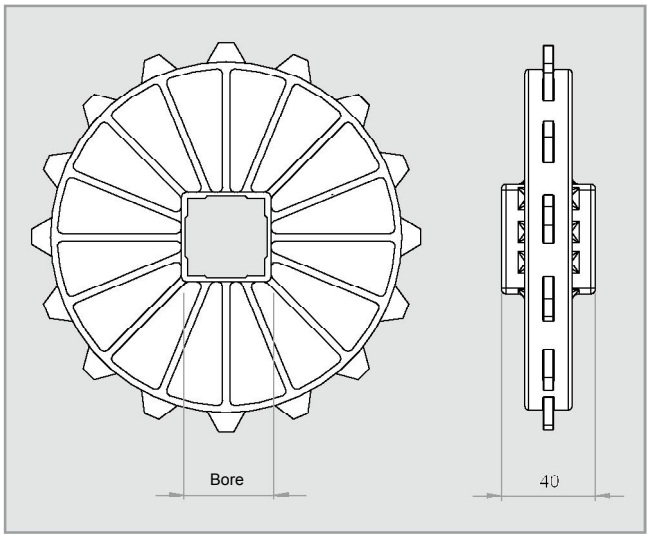
DESIGN DATA



INSTALLATION

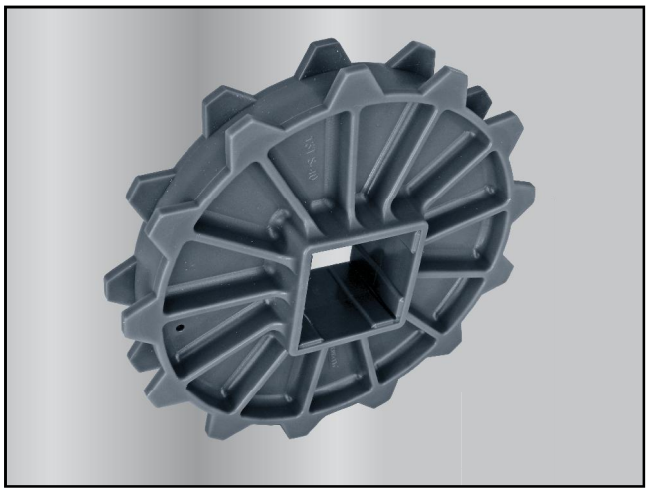
ACCESSORIES [SPROCKETS]





Nº of teeth T	Pitch diameter	Bore for square shaft		Hub width	Materials
		mm	inch		
8	104.5	40	1.5"	40	Polypropylene Polyacetal Stainless steel
10	129.4	40 60	1.5"	40	
13	167.1	40 60	1.5"	40	
16	205	40 60	1.5"	40	
20	255.7	40 60 90	1.5"	40	

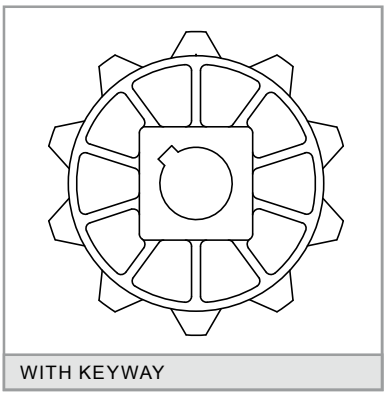
DOUBLE-TOOTHED SPROCKET



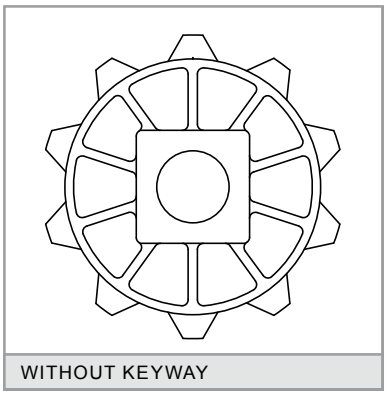
Nº of teeth T	13
Ø Pitch	167.1
Bore for square shaft (mm)	40 60
Bore for square shaft (inch)	1.5" 2.5"
Hub width	40
Materials	Polypropylene Polyacetal

ACCESSORIES [[SPROCKETS AND RETAINING RINGS]

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.

INSTALLATION

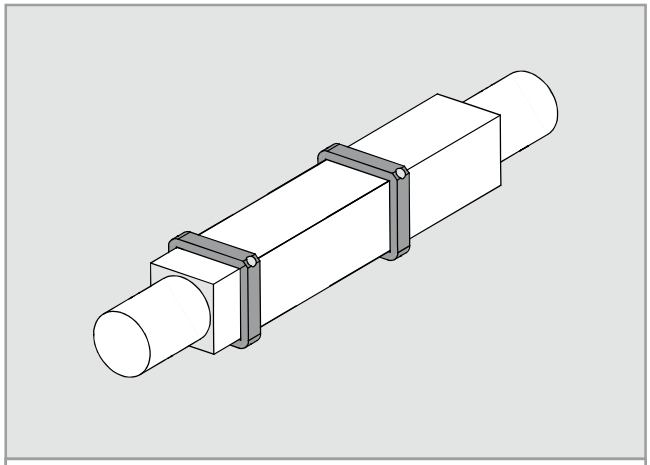
These rings are placed at every side of the central sprocket to fasten it to the shaft in order to avoid any lateral movements of the belt.

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

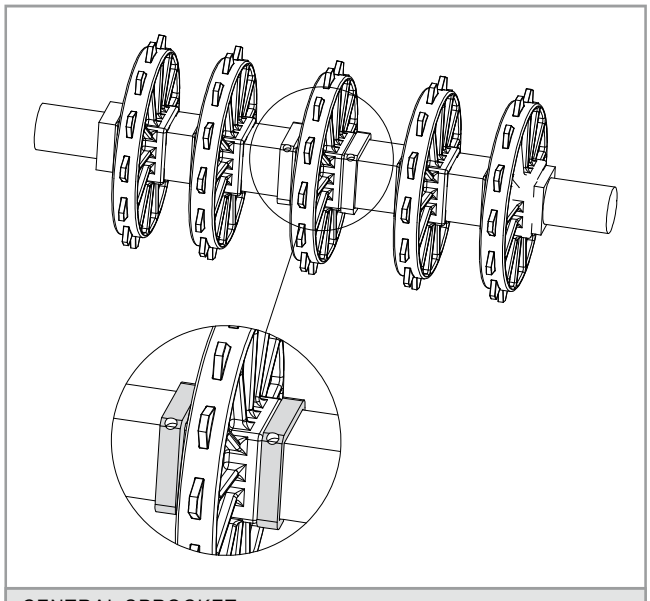
One sprocket, duly fixed with 2 retaining rings, should be put in the centre. Then you should place the same quantity of sprockets at every side of the central one but without any fixing, as they will absorb the possible belt expansions and contractions.

The same procedure should be carried out in both shafts.

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

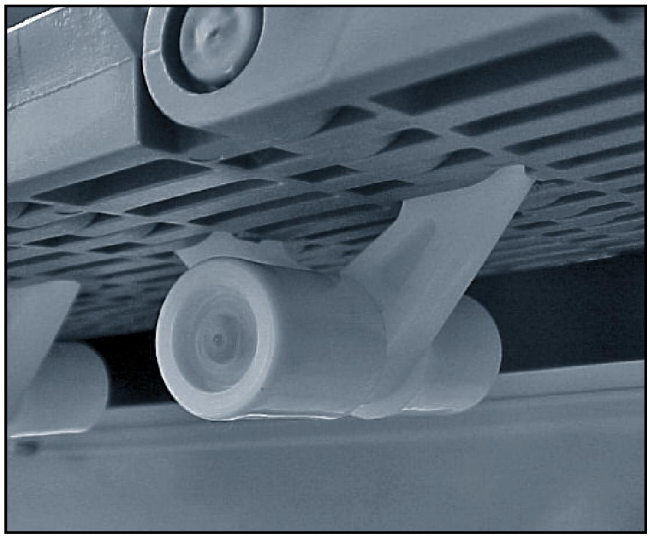


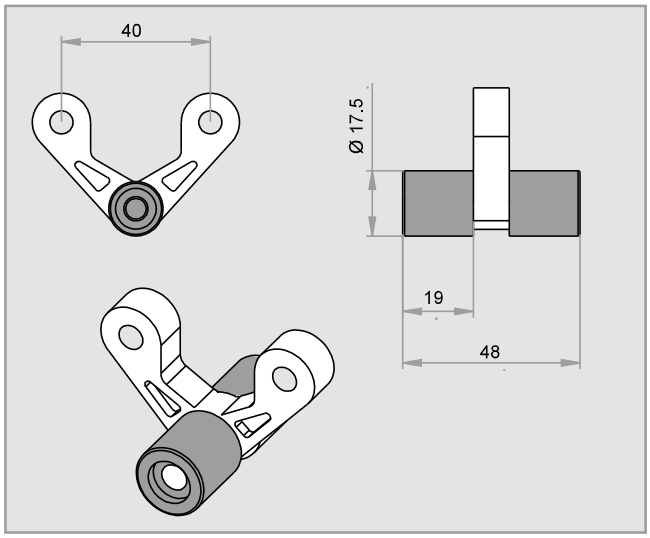
RETAINING RINGS



CENTRAL SPROCKET

ACCESSORIES [HOLD-DOWN ROLLERS]





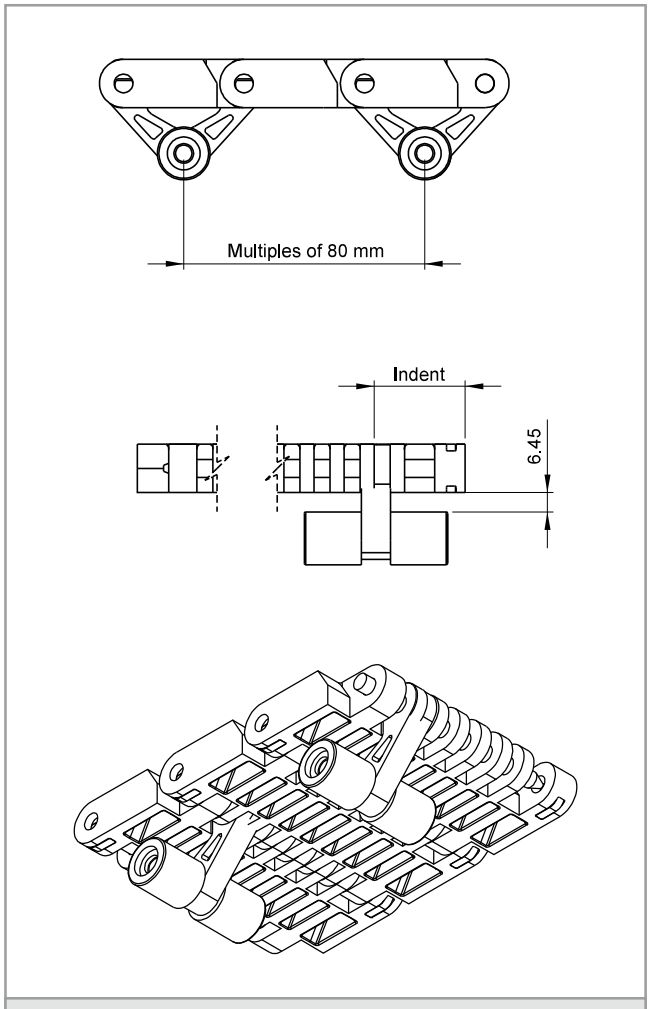
They are used to fasten the belt to the conveyor in all the inflexions.

In applications in which the belt must be submerged, they are placed in the middle of the belt to prevent it from getting bent due to the flotation.

They will roll along rails fastened throughout the conveyor structure. It is recommended to place wearstrips to avoid the wear owing to rolling as far as possible.

The distance between the side edge of the belt and the centre of the hold-down roller (indent) must be a multiple of 5 mm. Hold-down rollers cannot be used with the following sprockets:

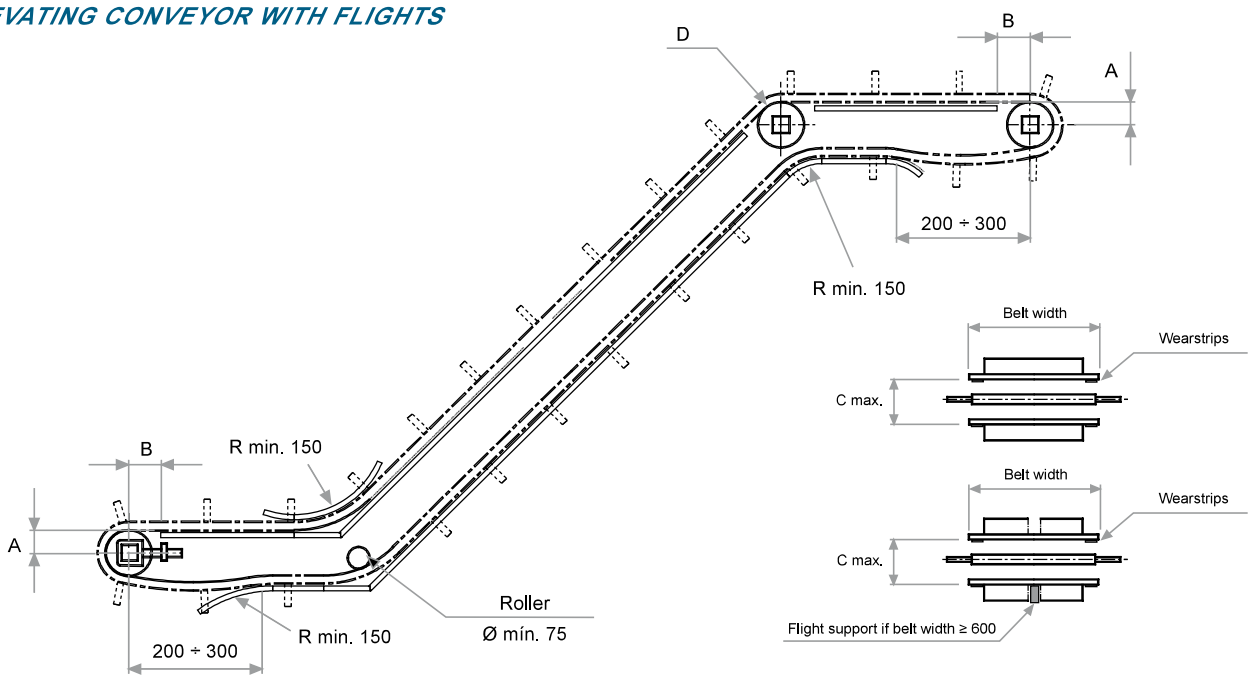
N° of teeth T	Bore for square shaft
8	40
10	60



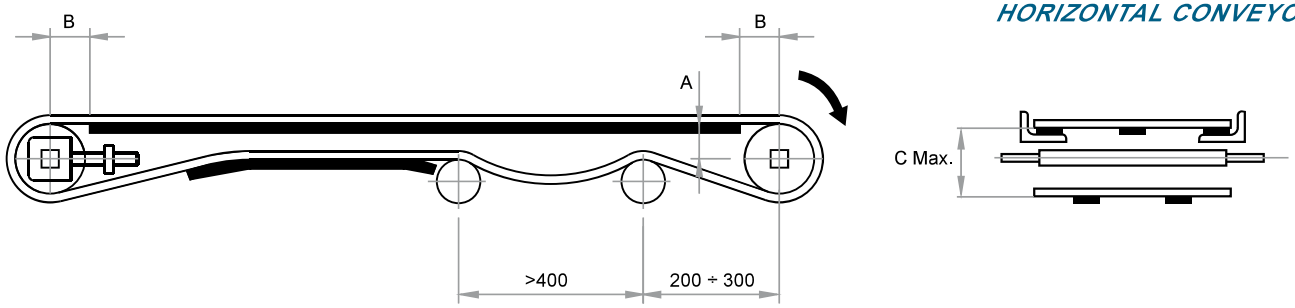
DESIGN DATA

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.
8	104.5	43	45	105
10	129.4	56	55	130
13	167.1	75	70	165
13D	167.1	75	70	165
16	205	94	80	205
20	255.7	120	90	255

TABLE OF SPROCKETS AND WEARSTRIPS

Belt nominal width (mm)		Minimum quantity of sprockets per shaft	Minimum quantity of wearstrips	
			Transport way	Return way
60	150	1	2	2
160	450	3	2	2
460	750	5	3	2
760	1,050	7	5	3
1,060	1,350	9	6	4
1,360	1,650	11	7	5
1,660	1,950	13	9	6
1,960	2,250	15	10	7
2,260	2,550	17	11	8
2,560	2,850	19	12	9
2,860	3,150	21	14	10
3,160	3,450	23	15	11
3,460	3,750	25	16	12
3,760	4,050	27	18	13

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:

$$\text{Minimum quantity} = \frac{\text{Belt width (mm)}}{150\ \text{mm}}$$

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 230 mm in the transport way or 300 mm in the return way.

APPLICATIONS

ACCUMULATION TABLES

PASTEURISERS

ACCUMULATION TABLES

PASTEURISERS

ACCUMULATION TABLES

PALLETISERS