SERIES E50 SLIDING ROLLERS

Pitch	50 mm
Surface	Sliding Rollers
Drive system	Hinge
Belt width	Multiples of 20 mm
Rod diameter	Ø 6 mm
Retention system	Cap
Diameter of small roller	Ø 25 mm
Width of small roller	10 mm
Material of small roller	Polyacetal
Sliding Rollers pitch	Multiples of 50 mm
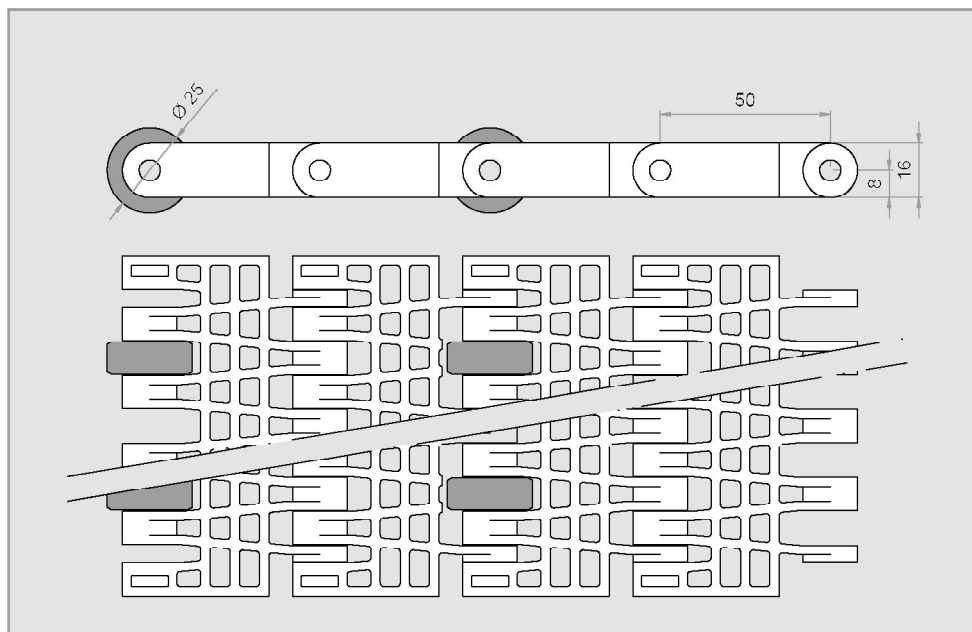
Eurobelt Series E50 Sliding Rollers is provided with small rollers inserted on its surface that rotate around themselves whenever there is product accumulation, avoiding crushing and wear in the base of the product.

This conveyor belt has been designed mainly to solve problems of conveyance of boxes, containers, etc.

Surface of the belt	Belt standard material	Rod standard material	Belt strength (kg/m)	Temperature range (ºC)	Available colours in stock
Flush Grid	PP - Polypropylene	PP - Polypropylene		+1 to +104	[W] - [G]
	PE - Polyethylene	PE - Polyethylene		-50 to +65	[N] - [B]
Open Grid	PP - Polypropylene	PP - Polypropylene		+1 to +104	[W] - [G]
	PE - Polyethylene	PE - Polyethylene		-50 to +65	[N] - [B]

This conveyor belt has been designed mainly to solve problems of conveyance of boxes, containers, etc.

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.

EUROBELT
CONVEYOR BELTS

ACCESSORIES [SPROCKETS]

Drive direction
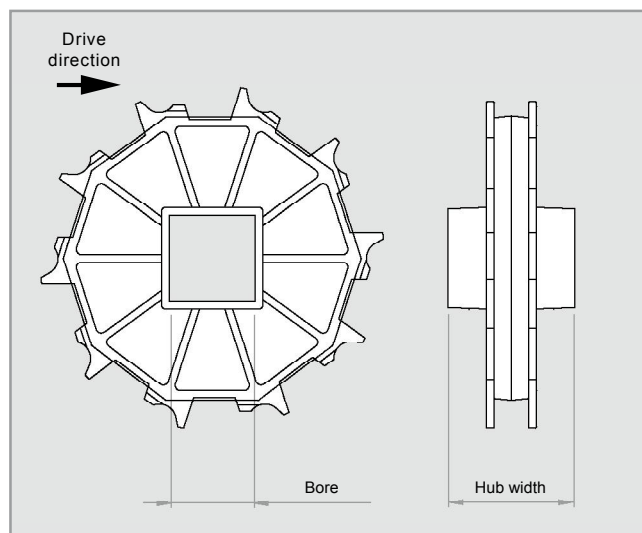
Bore

Hub width

Nº of teeth T	Pitch diameter	Bore for square shaft		Hub width	Materials
		mm	inch		
6	100	40	1.5"	40	Polypropylene
8	130.6	40	1.5"	40	
10	161.8	40 60	1.5" 2.5"	60	Polyacetal
16	256.2	40 60	1.5" 2.5"	60	Stainless steel

SPROCKETS FOR SQUARE SHAFT

WITH KEYWAY
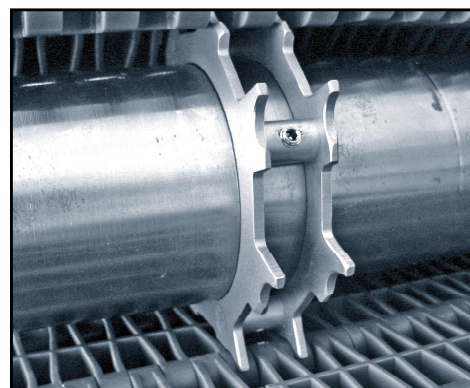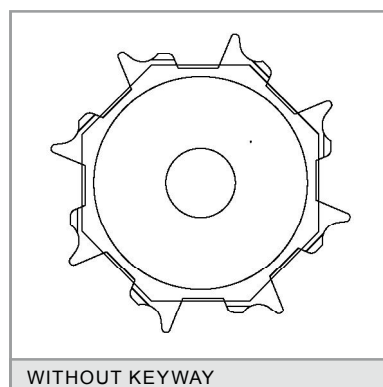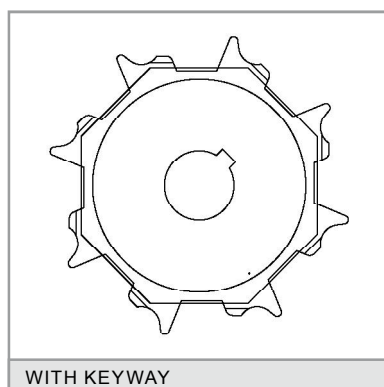
WITHOUT KEYWAY

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]
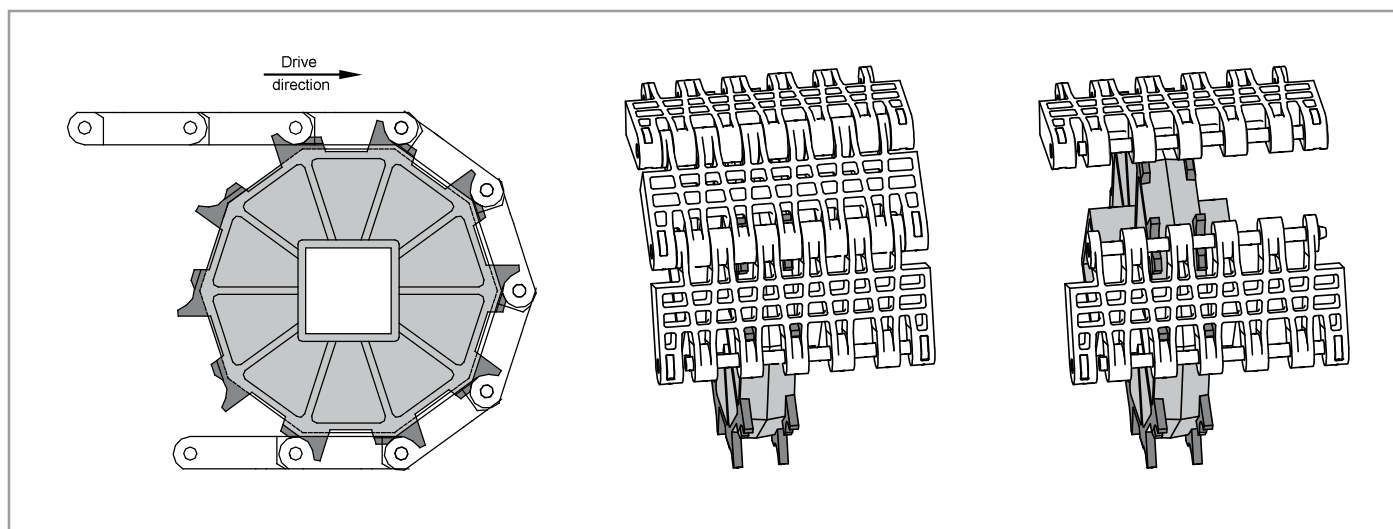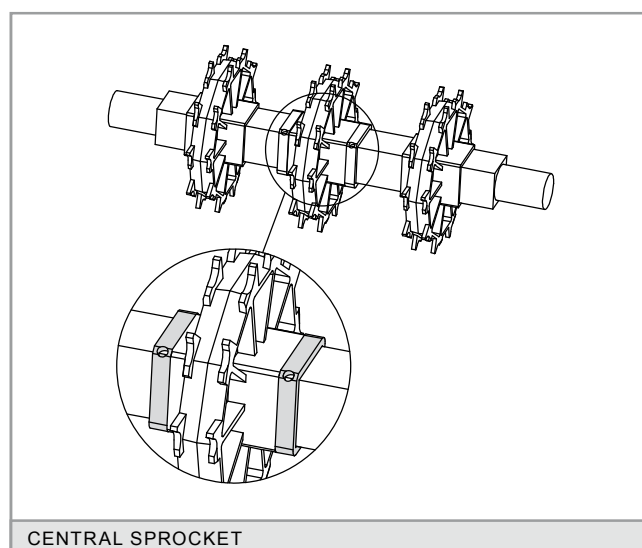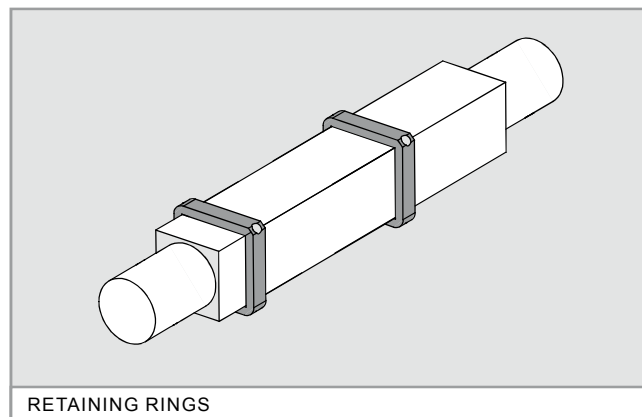
INSTALLATION

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.
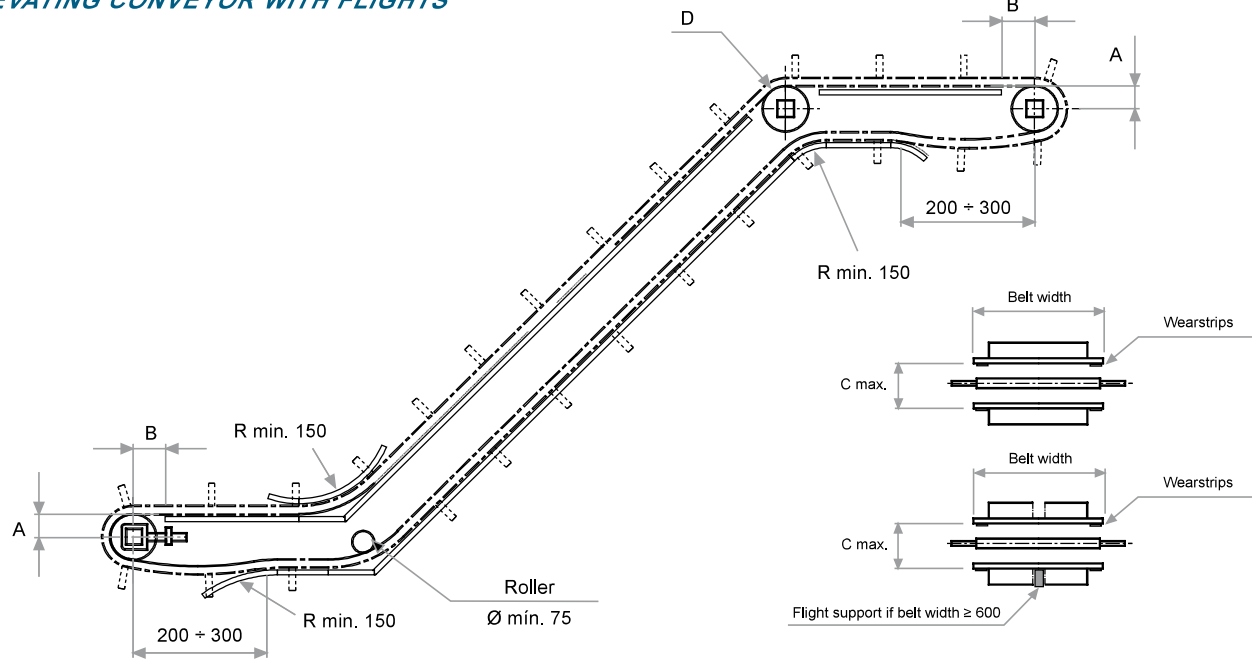
The same procedure should be carried out in both shafts.
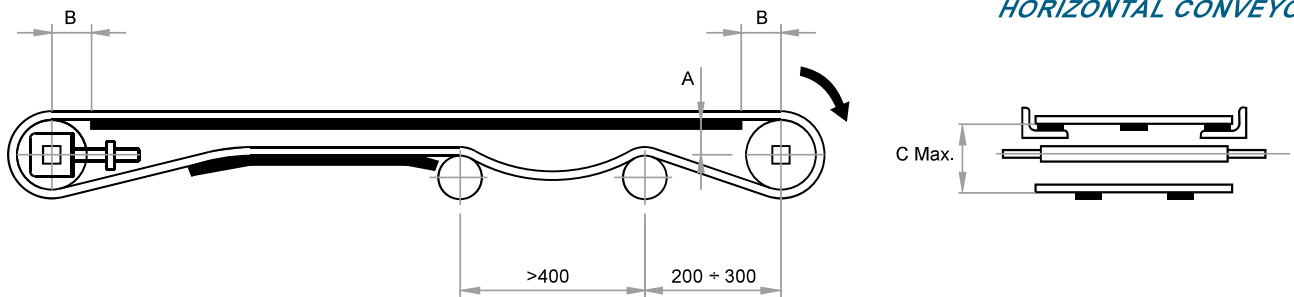
Bore for square shaft	Screws
40	M 6 x 6
60	M 6 x 6

RETAINING RINGS

CENTRAL SPROCKET

Drive direction

CONSTRUCTION DATA [CONVEYOR]

ELEVATING CONVEYOR WITH FLIGHTS

D

B

A

200 ÷ 300

R min. 150

B

R min. 150

A

200 ÷ 300

R min. 150

Roller
Ø mín. 75

Belt width

Wearstrips

C max.

Belt width

Wearstrips

C max.

Flight support if belt width ≥ 600

HORIZONTAL CONVEYOR

B

B

A

C Max.

>400

200 ÷ 300

[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.
6	100	42	55	105
8	130.65	58	60	135
10	161.80	72	76	165
16	256.29	120	80	260

TABLE OF SPROCKETS AND WEARSTRIPS

Belt nominal width (mm)		Minimum quantity of sprockets per shaft	Minimum quantity of wearstrips	
			Transport way	Return way
40	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.