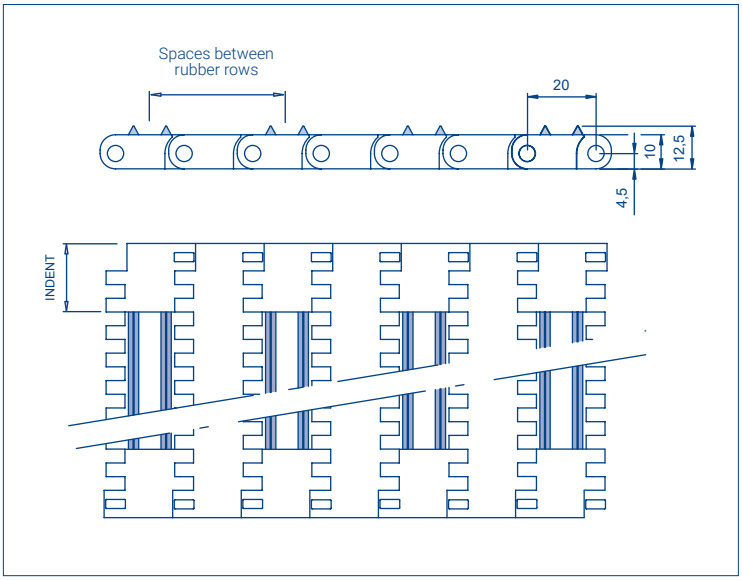
AFHER EUROBELT S.A.
Topacio, 41
47012 Valladolid (Spain)
Tel.: +34 983 217 480
afher@eurobelt.com
www.eurobelt.com

TECHNICAL DATA SHEET (TDS)

Version [05/2025]

Series **E20**
Trian Friction Top



Belt pitch	20 mm
Belt width	Multiples of 8 mm
Rod diameter	4,6 mm
Drive system	Central
Ø min direct rotation roller	26 mm
Ø min reverse rotation roller	100 mm

EUROBELT Series E20 with a pitch of 20 mm and widths in increments of 8 mm can adapt to almost every dimension. It is ideal for replacements which are complicated or having non-metric dimensions.

The traction is carried out in the central part of the modules; that is why it can be used as a bidirectional belt.

It enables transferences of product at high speeds with minimum turn diameters of about 30 mm.

Belt surface	Belt material	Rod material	Belt resistance (kg/m)	Belt weight (kg/m2)	Temperature limit (C°)	Standard Colours[1]	Open Area + opening dimensions	Belt thickness	Retention system
Trian Friction Top	PP-Polypropylene	PP-Polypropylene	*According to the width spacing. Consult.*	Consult	+1 to +104	W - G - A	Consult	Consult	Cap
	PE-Polyethylene	PE-Polyethylene		Consult	-50 to +65	N - B			
	POM -Acetal	PP-Polypropylene		Consult	+1 to +90	B			
		PE-Polyethylene		Consult	-40 to +65	B			

[1]W = White G = Grey N = Natural B = Blue O = Black

Special qualities

	Indent	Spaces between rubber rows	Rubber hardness	Spaces between Trian rods
Trian Friction Top	Multiples of 8 mm Minimum of 24 mm	Multiples of 40 mm	Shore A60	Multiples of 40mm

Food use compliance

Declaration of Conformity (EU)

The substances used are included in the Positive Lists of the Legislation of plastic materials in contact with food, Regulation (EU) 10/2011 and its modifications.

Food and Drug Administration (FDA)

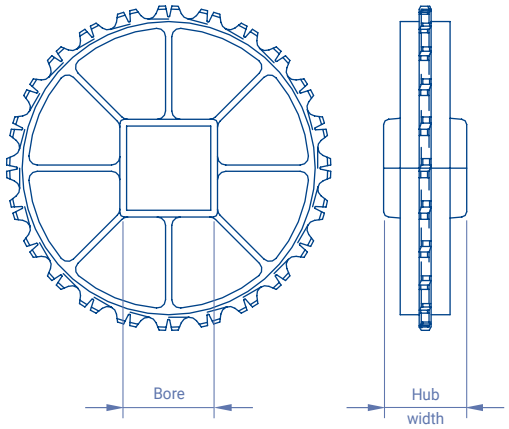
This regulation describes the polymers that can be safely used to manufacture articles that come into direct contact with food, 21CFR 177.1520 (Olefin polymers) and 21 CFR 177.2470 (Polyoxymethylene copolymer).

SPROCKETS

We are 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.

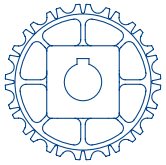
Nº teeth Z	Ø Pitch	Bore for square shaft		Hub width
		mm	inch	
8	52.5	20	3/4	24
16	102.5	40	1.5	40
24	153.5	40 - 60	1.5	40

**Consult the technical department for the availability of split sprocket or mechanized sprocket with different numbers of teeth.*

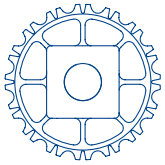


It is manufactured in polypropilene, polyacetal and stainless steel

**check availability in other materials*



WITH KEYWAY



WITHOUT KEYWAY

RETAINING RINGS

Eurobelt retaining rings are used to secure the central gear on the drive and driven shafts.They are placed on both sides of the central sprocket and are part of the self-guiding system of the modular belts, preventing the sprocket from sliding along the shaft and avoiding lateral displacements of the belt.

Additionally, the effects of temperature cause the belt to expand or contract.

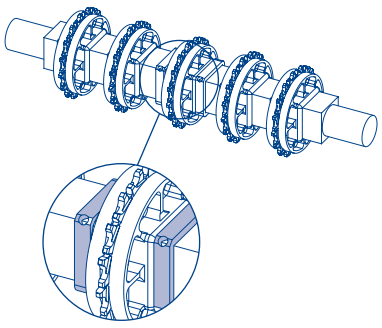
The rest of the sprockets slide freely along the shaft, allowing them to adapt to the variations and lateral movements of the belt. This ensures that the correct tooth position is maintained at all times.

CLE RETAINING RING

**See more in common accessories*

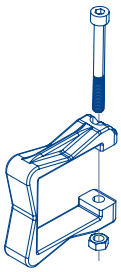
AISI 316 Stainless steel

Bore for square shaft	Screws
20	M5x5
40	M6x6
60	M6x6



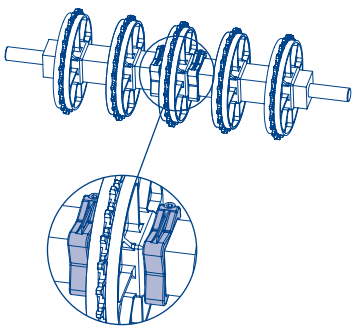
CLU RETAINING RING

**See compatibility with diameters in common accessories*



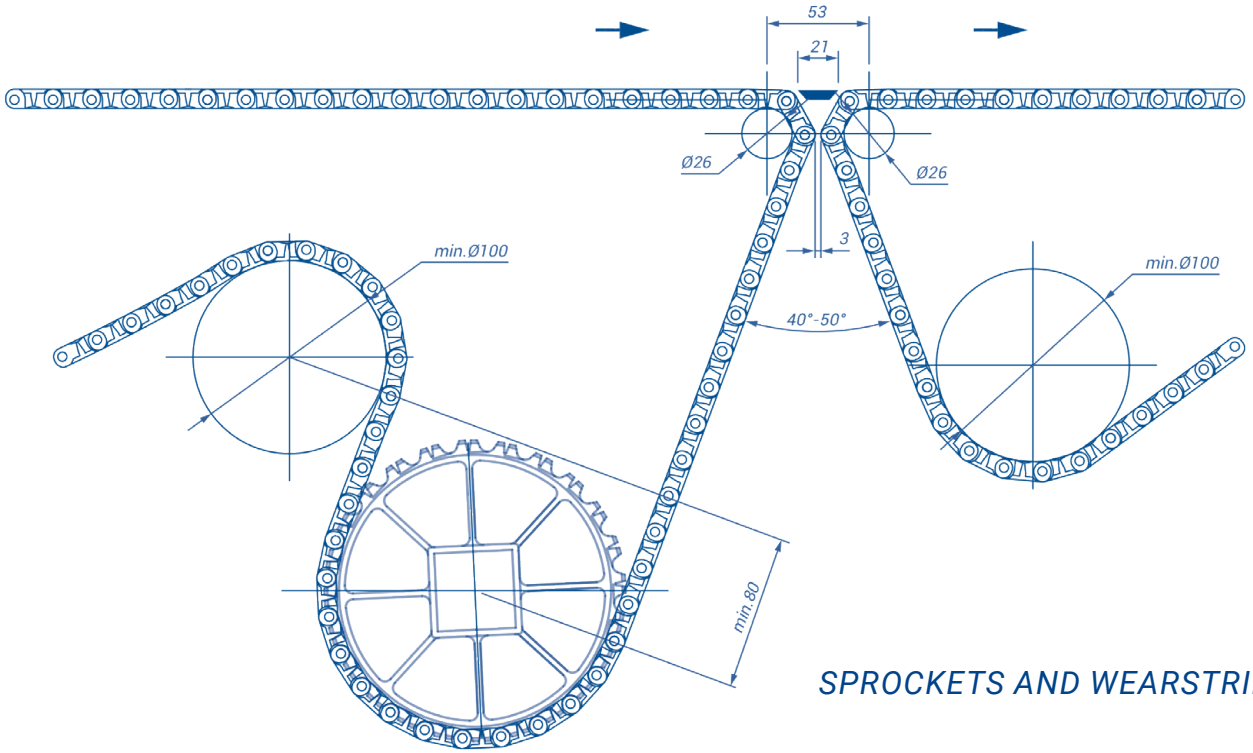
Acetal
High resistance

Working temperature: +60ºC / -40ºC
For bore square 40 mm or 1 1/2”



Series **E20**

CONSTRUCTION DATA



SPROCKETS AND WEARSTRIPS

In every installation there are the so-called dead areas among the different machines and conveyors through which the product must go without any productivity loss.

In EUROBELT we have developed this plastic modular belt, launched as Series E20, with which the dead areas have been reduced up to 20 mm.

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:

$$\text{Minimum quantity} = \frac{\text{Belt width (mm)}}{70\ \text{mm}}$$

This amount must always be odd.

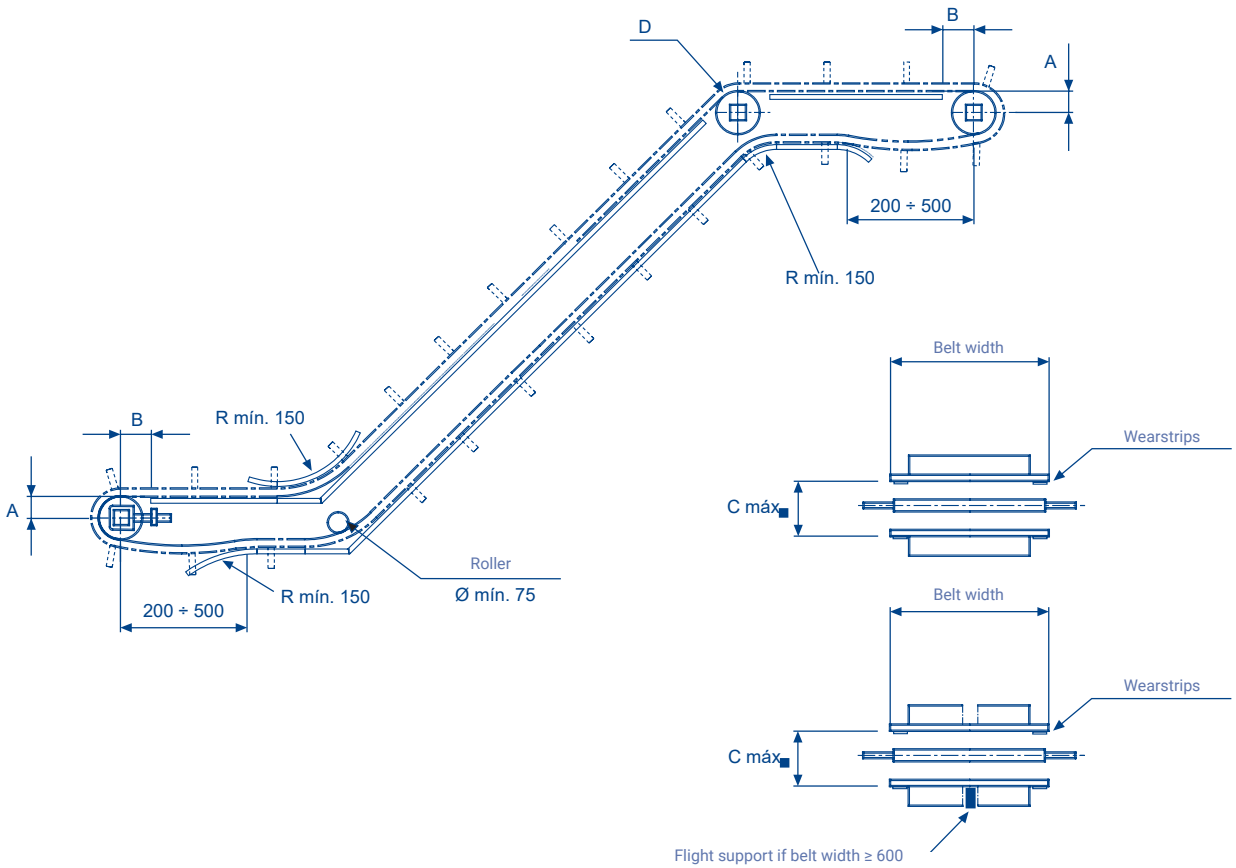
To calculate the quantity of supports, the weight of the product to be transported must be taken into account.

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

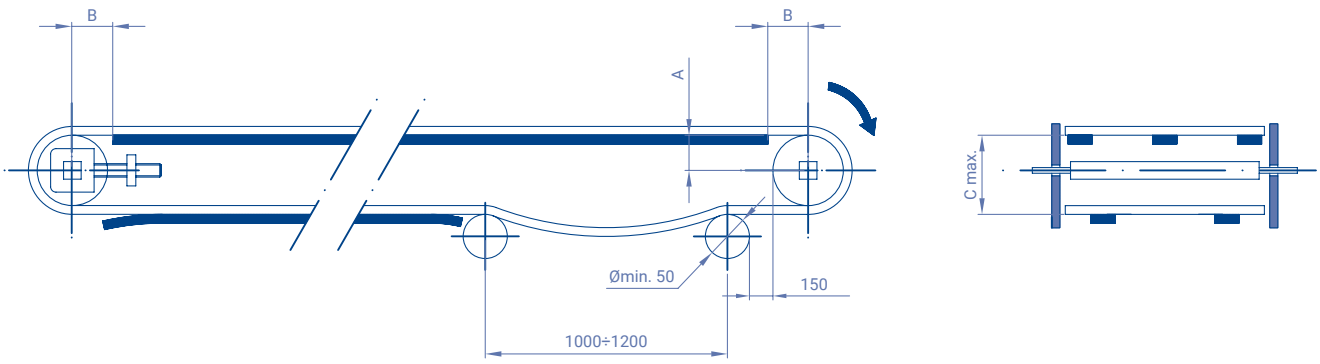
Belt nominal width (mm)		Minimum quantity of sprockets per shaft	Minimum quantity of wearstrips	
			Transport way	Return way
32	104	1	2	2
112	216	3	2	2
224	360	5	3	2
368	504	7	4	2
512	684	9	5	3
656	792	11	6	3
800	936	13	7	4
944	1080	15	8	4
1088	1224	17	8	4
1232	1368	19	9	5
1376	1512	21	10	5
1520	1656	23	11	6
1664	1800	25	12	6
1808	1944	27	13	7
1952	2088	29	14	7
2096	2232	31	15	8
2240	2376	33	16	8
2384	2520	35	17	9
2528	2664	37	18	9

Series **E20**

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.

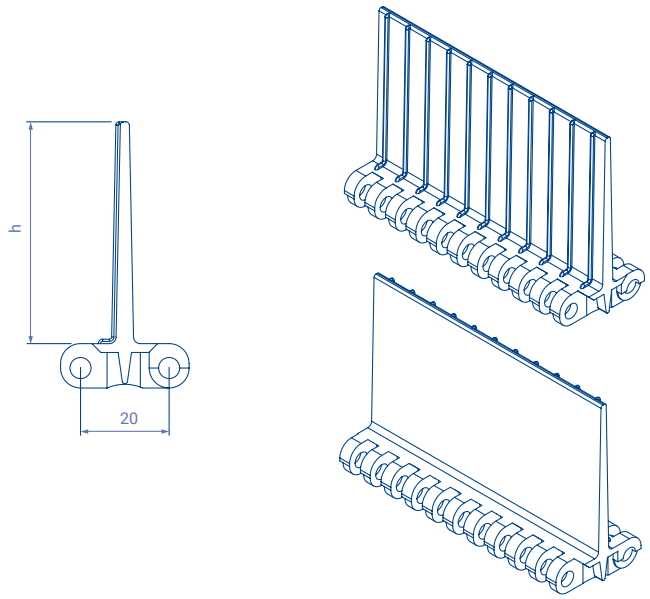
[R] This radius must be as big as allowed by the application in order to minimize the wear (min. 150 mm). For belts with side guards, consult about this radius.

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 Z	Ø Pitch	A	B max.	C max.
8	52,20	20	28	65
16	102,5	46	50	110
24	153,5	72	65	155

FLIGHTS

STRAIGHT FLIGHT
STREAMLINE + NO CLING

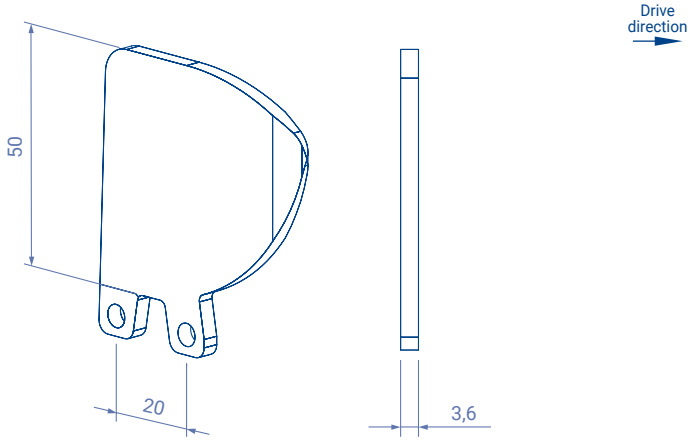


The flights are plastic accessories to be inserted across the belt. They are used to push the product in ascent, descent or accompaniment applications, avoiding that it slips along the belt.

They have two faces, streamline and no cling, both can be used in one way or another one according to the need. Its non-stick side has ribs that project over the surface to prevent the product from sticking. Their edges are completely rounded to avoid any damage of the product. There is the possibility of lowering the standard height for special applications.

Accessories	Height (h)	Materials
Straight flight Streamline + no cling	25 50	Polypropylene Polyethylene Acetal

SIDE GUARDS



The side guards are plastic accessories that act as wingers while accompanying the movement, they are inserted

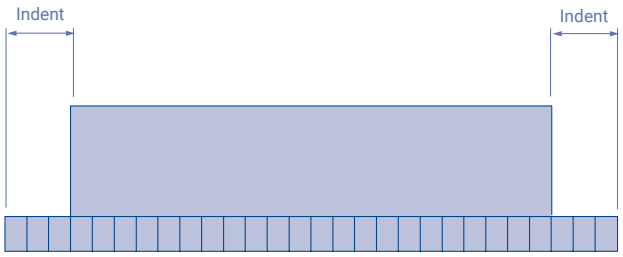
into the belt structure to retain the product laterally, avoiding overflows and frictions with the conveyor structure itself.

Possibility of lowering the standard height for special applications

Height (h)	Materials
50	Polypropylene Polyethylene Acetal

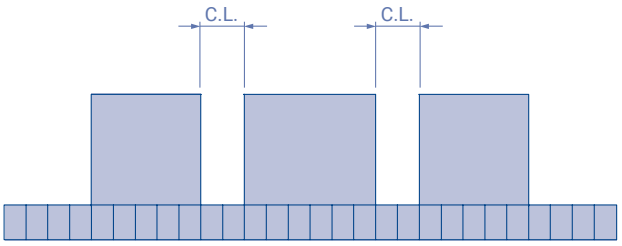
TECHNICAL DATA: FLIGHTS AND SIDE GUARDS

BELT WITH ONLY FLIGHTS



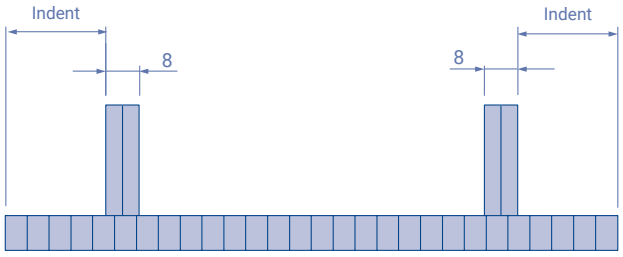
Indent = Multiple of 8 mm (minimum of 24 mm)
Distance between flights = Multiple of 40 mm

BELT WITH LONGITUDINAL CUTS



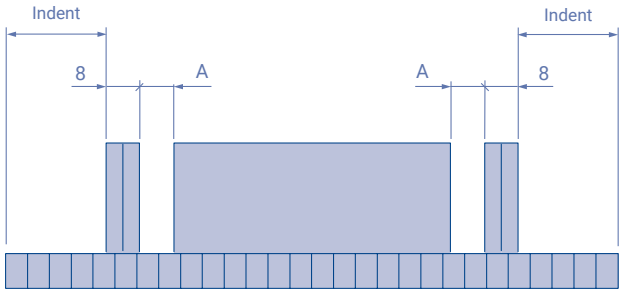
Flight longitudinal cut = Multiple of 8 mm (minimum of 24 mm)

BELT WITH ONLY SIDE GUARDS



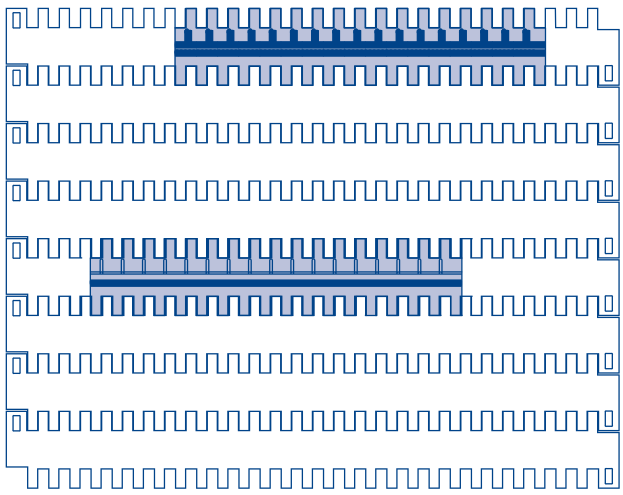
Indent = Multiple of 8 mm (minimum of 16 mm)
Multiple of 8 + 4 mm (minimum of 20 mm)

BELT WITH FLIGHTS AND SIDE GUARDS

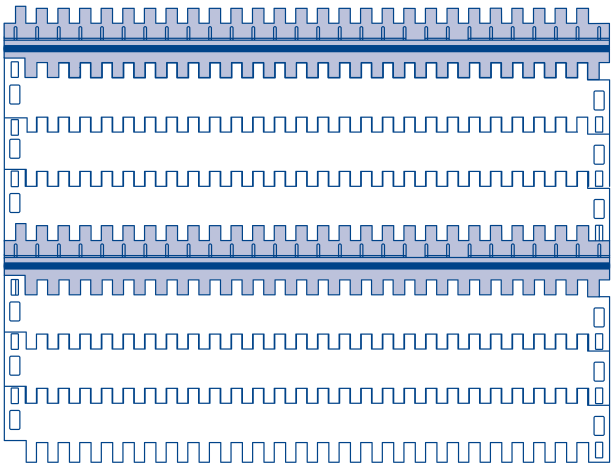


Indent = Multiple of 8 mm (minimum of 16 mm). A = 8 mm
Multiple of 8 + 4 mm (minimum of 20 mm). A = 4 mm

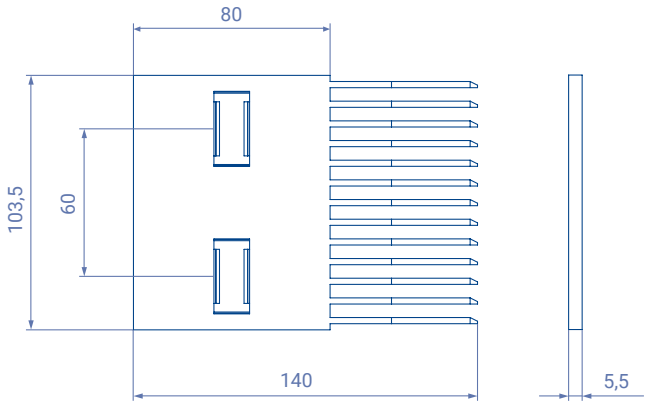
BELT WITH ZIG-ZAG FLIGHTS



BELT WITH FLIGHTS WITHOUT INDENT



FINGER PLATES



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

The finger plates are manufactured in nylon and acetal. They have 13 teeth that hide among the projecting ribs

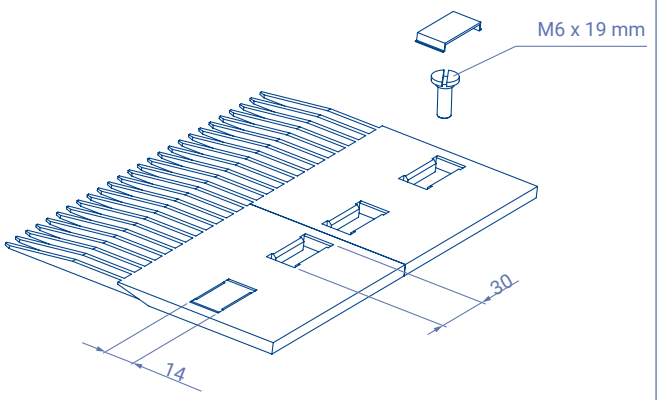
of the belt, allowing the constant flow of product as the belt is engaged. They avoid the use of conventional dead plates and consequently the problems by stumbling and fall of the product.

They have two 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.

Material /Colours	Nº of spikes	Nº of fasteners
Nylon / black Acetal / grey	13	2

INSTALLATION



DESIGN DATA