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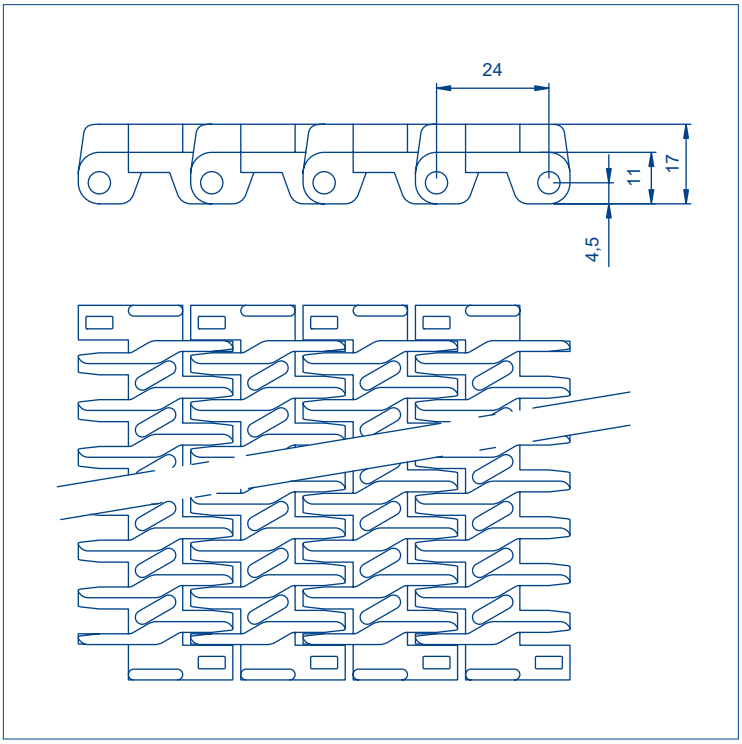
TECHNICAL DATA SHEET (TDS)

Version [05/2025]

Series ***A24***
Raised Rib



Belt pitch	24 mm
Belt width	Multiples of 10 mm
Rod diameter	4,6 mm
Drive system	Central
Ø min direct rotation roller	35 mm
Ø min reverse rotation roller	100 mm

Two of the most important concerns in the market for conveyor belts are: to obtain a sure traction and easy cleaning. At EUROBELT we develop the A24 Series, thinking that these two technological challenges be rigorously met.

The A24 Series has a direct drive on two inclined sides and with a large contact surface with the sprocket, which optimum pushing conditions and make it one of the belts with the most reliable traction on the market.

The special design of this Series makes it easy for us to access the parts that are difficult to clean. That is why it has been conceived with open ends, work and return surfaces completely smooth, openings in the articulation areas and sprockets with large rounded holes that make easy the most scrupulous cleaning.

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
Raised Rib	PP-Polypropylene	PP - Polypropylene	950	6,53	+1 to +104	Consult	30% Maximum [9,5 x 3] mm	17 mm	Cap
	POM -Acetal	PP - Polypropylene	1850	9,86	+1 to +90	Consult			
		PE-Polyethylene	1700	9,89	-40 to +65	Consult			

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

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).

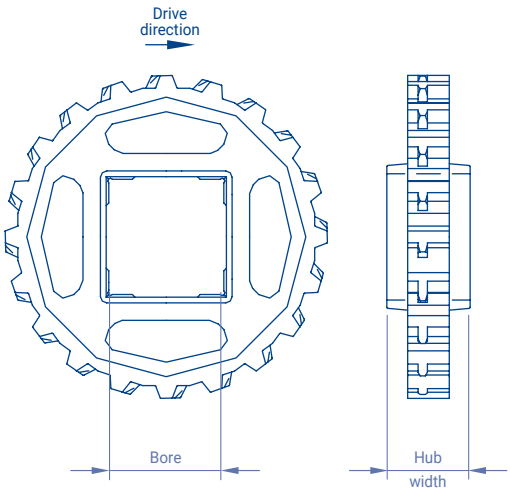
Series **A24**

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.

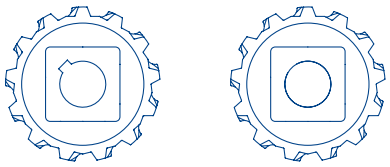
Nº teeth Z	Ø Pitch	Bore for square shaft		Hub width
		mm	inch	
7	55,31	20	-	20
13	100,25	40	1,5	40
20	153,41	40-60	1,5	40
25	191,48	40-60-90	1,5	40

**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.

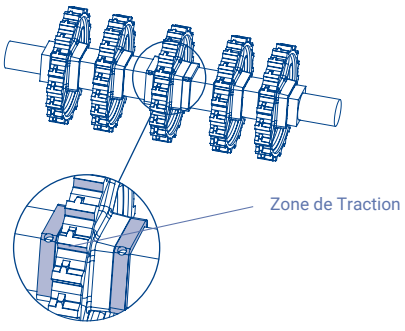
The rest of the sprockets slide freely along the shaft, allowing them to adapt to the variations and lateral movements of the belt. This ensures that the correct tooth position is maintained at all times.

CLE RETAINING RING

**See more in common accessories*

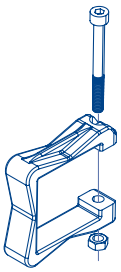
AISI 316 Stainless steel

Bore for square shaft	Screws
20	M5x5
40	M6x6
60	M6x6
90	M6x6



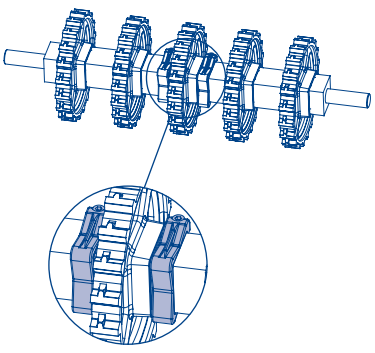
CLU RETAINING RING

**See compatibility with diameters in common accessories*



Acetal
High resistance

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



CONSTRUCTION DATA

SPROCKETS AND WEARSTRIPS

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:

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

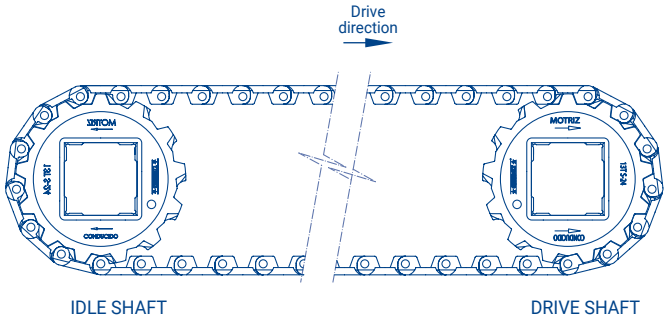
This amount must always be odd.

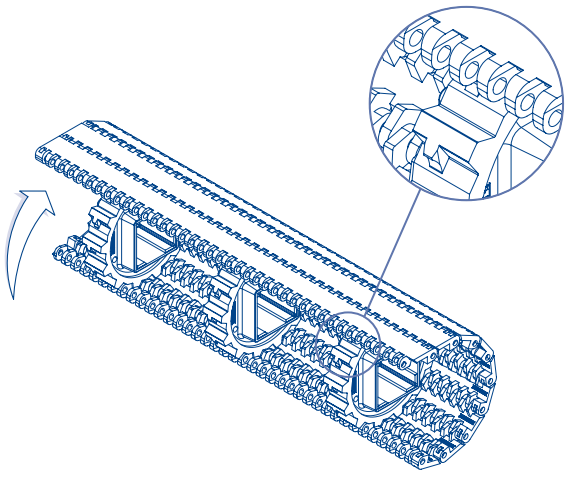
To calculate the quantity of supports, the weight of the product to be transported must be taken into account.

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

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	1100	11	10	6
1110	1300	13	12	7
1310	1500	15	14	8
1510	1700	17	16	9
1710	1900	19	18	11
1,910	2100	21	20	12
2110	2300	23	22	13
2310	2500	25	24	14
2510	2700	27	26	15

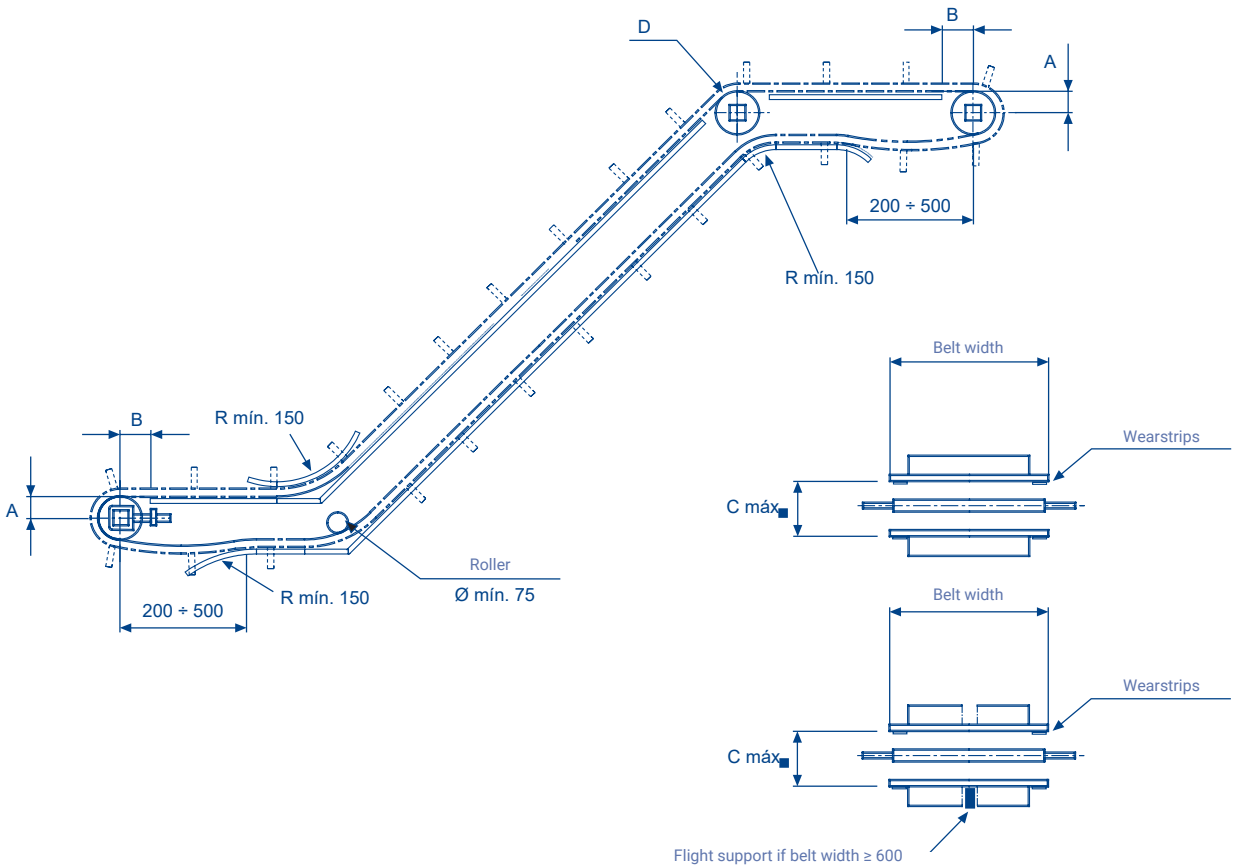
BELT AND SPROCKETS INSTALLATION



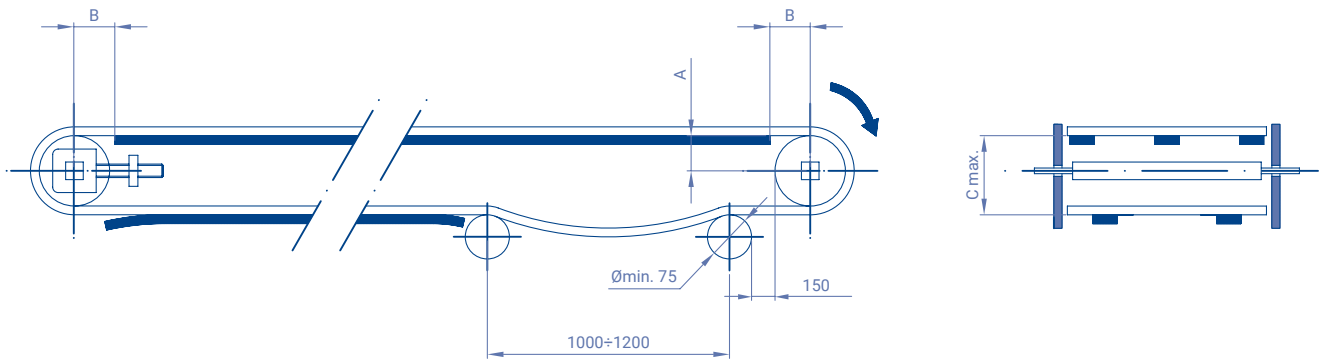


Series **A24**

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.
7	55,31	22	25	55
13	100,25	46	40	100
20	153,41	72	50	155
25	191,48	91	60	195

Series **A24**

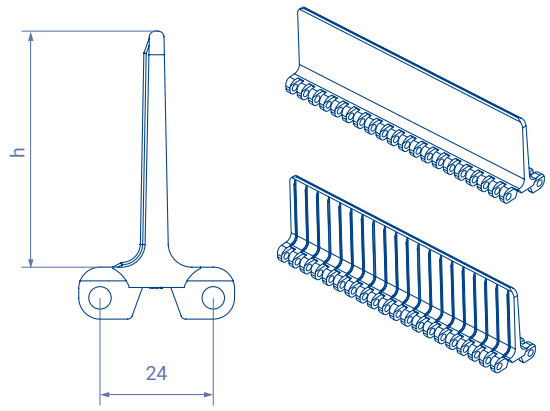
FLIGHTS

Accessories	Height (h)	Materials
Straight flight Streamline + no cling	25 50	Polypropylene Polyethylene Acetal
Bent flight	45	Polypropylene Polyethylene Acetal

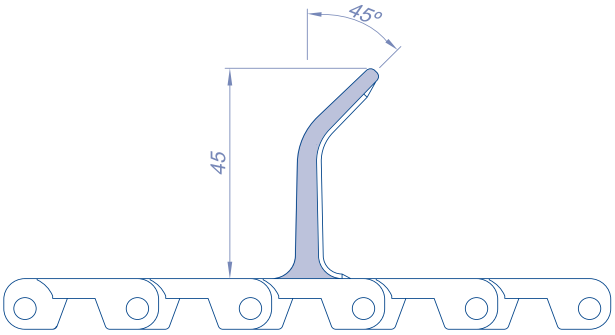
The flights are plastic accessories to be inserted across the belt. They are used to push the product in ascent, descent or accompaniment applications, avoiding that it slips along the belt.

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.

STRAIGHT FLIGHT
STREAMLINE + NO CLING

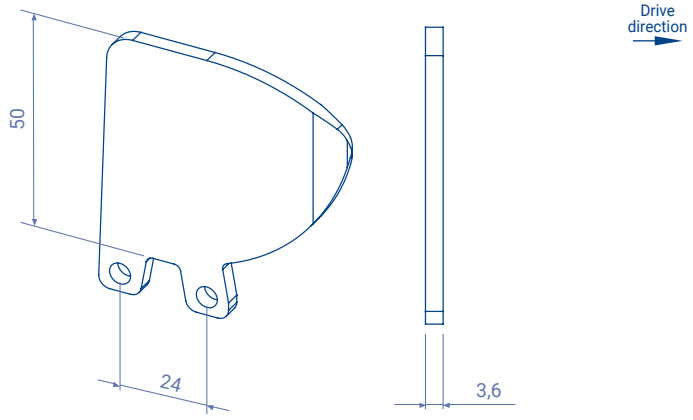


BENT FLIGHT



Bent flights are available for applications where maximum flight capacity is required at steep inclines

SIDE GUARDS



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

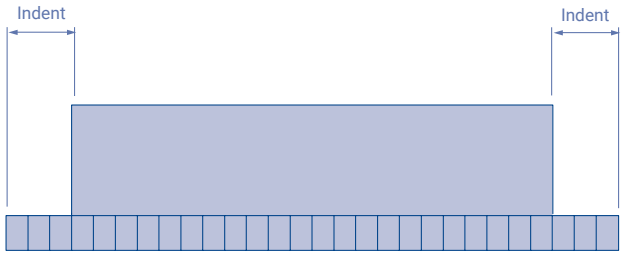
into the belt structure to retain the product laterally, avoiding overflows and frictions with the conveyor structure itself.

Possibility of lowering the standard height for special applications

Height (h)	Materials
50	Polypropylene Polyethylene Acetal

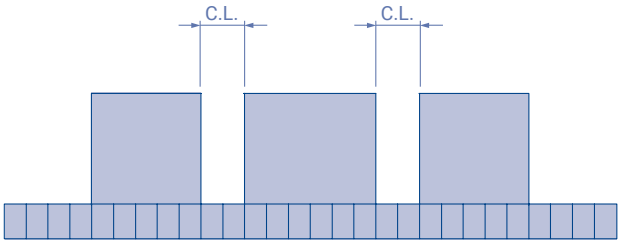
TECHNICAL DATA: FLIGHTS AND SIDE GUARDS

BELT WITH ONLY FLIGHTS



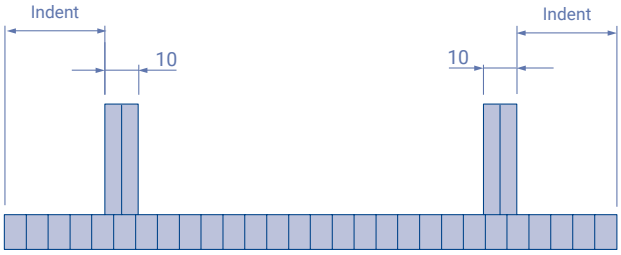
Indent = Multiple of 10 mm (minimum of 30 mm)
Distance between flights = Multiple of 48 mm

BELT WITH LONGITUDINAL CUTS



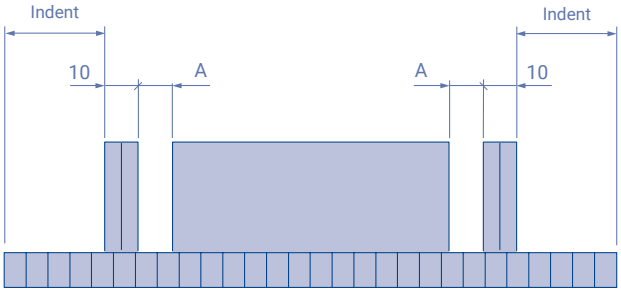
Flight longitudinal cut = Multiple of 10 mm (minimum of 30 mm)

BELT WITH ONLY SIDE GUARDS



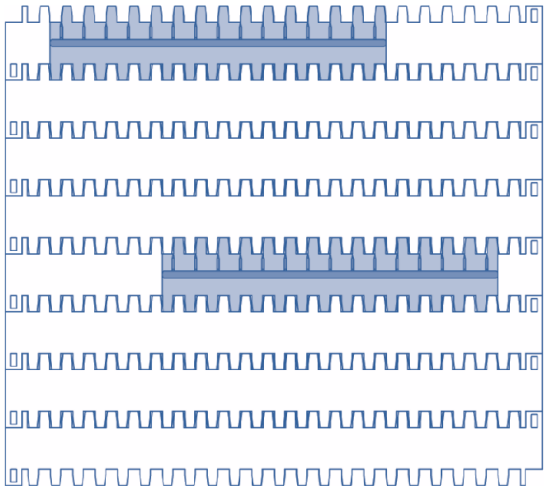
Indent = Multiple of 10 mm (minimum of 30 mm)
Multiple of 10 + 5 mm (minimum of 25 mm)

BELT WITH FLIGHTS AND SIDE GUARDS

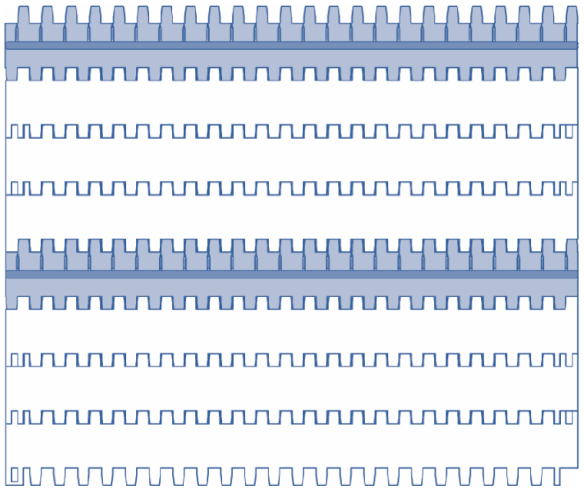


Indent = Multiple of 10 mm (minimum of 30 mm). A = 10 mm
Multiple of 10 + 5 mm (minimum of 25 mm). A = 5 mm

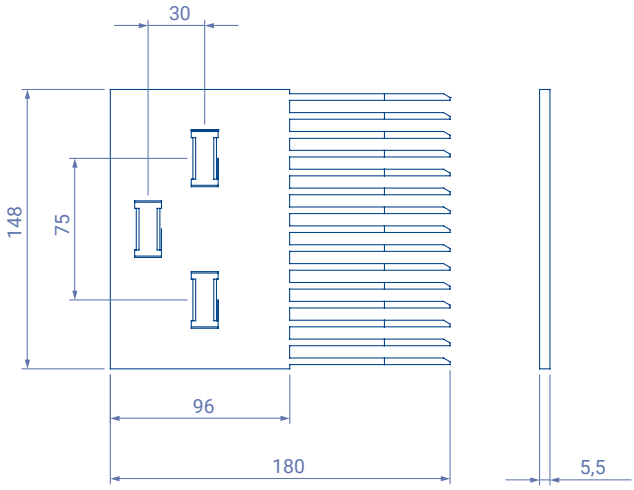
BELT WITH ZIG-ZAG FLIGHTS



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

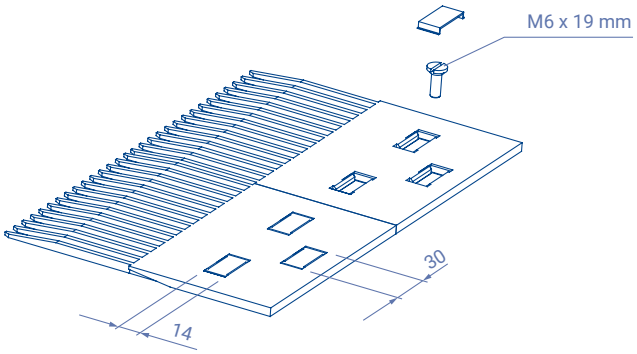
of the belt, allowing the constant flow of product as the belt is engaged. They avoid the use of conventional dead plates and consequently the problems by stumbling and fall of the product.

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	15	3

INSTALLATION



DESIGN DATA