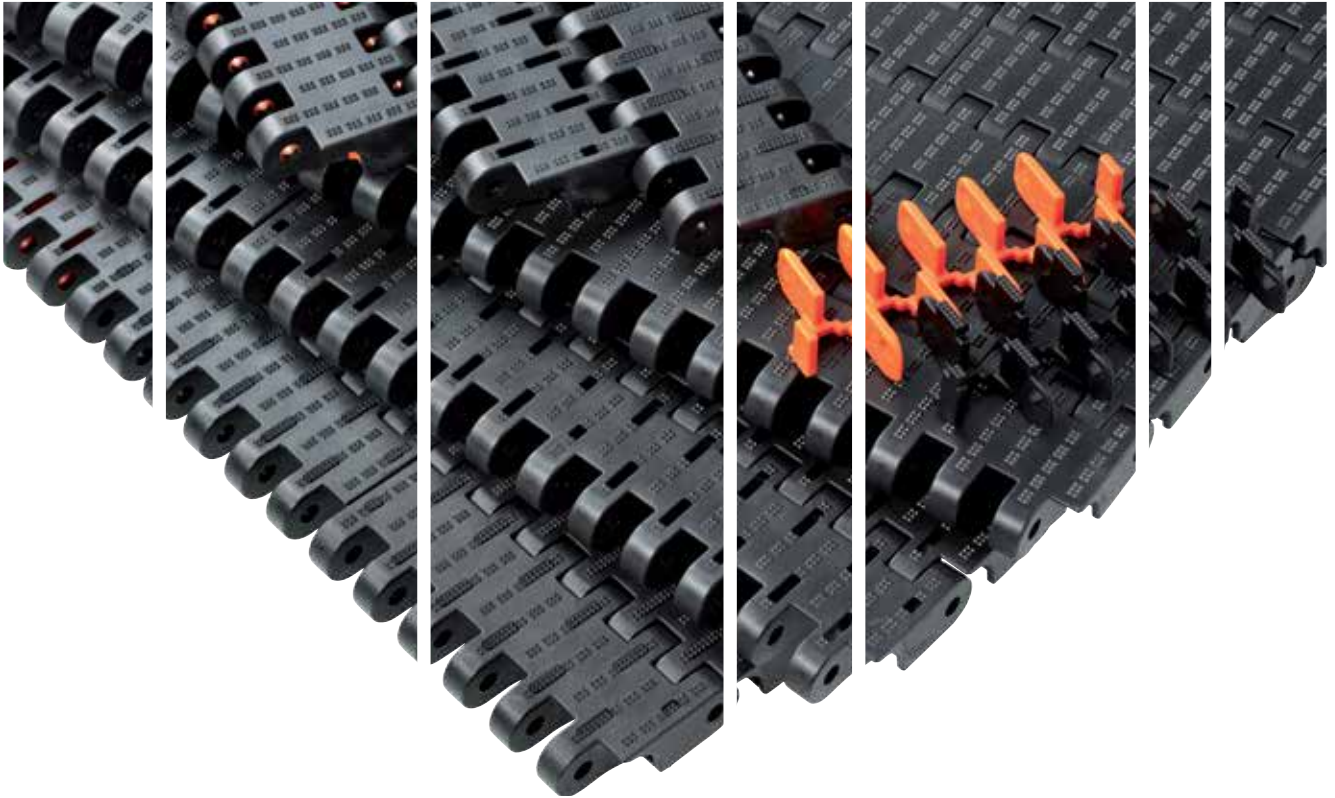


# uni CSB



# uni CSB

The versatile plastic modular belt  
for the Automotive Industry



The next generation of plastic modular belts for Automotive

## Introduction of a new innovative product: uni CSB

**Ammeraal Beltech is globally recognized as the leading company for plastic modular belt conveying in the automotive industry.**

After more than 10 years of success in the industry, many customers indicated that they wanted more out of a plastic modular belt.

- Lower energy consumption
- Longer conveyor lengths and less transfers
- Higher load capacity
- Lower construction heights (less pit depth)
- Electrically conductive without compromising belt pull
- Flame retardant without compromising belt pull
- Good ergonomics and worker safety

The result of these customer's wishes is our new uni CSB. uni CSB is specially designed with and for the automotive

industry, "heavy load" conveying and people moving industry.

This approach has resulted in a two unique belt features:

- 2 inch pitch belt rated at 100.000 N/m comparable to existing 2.5 inch and 3 inch pitch belts.
- Use of Dual Compound Technology (DCT) resulting in the world's first plastic "real modular" modular link.

Dual Compound Technology provides the uni CSB with a high versatility. This allows for a combination of different materials within one conveyor belt to meet customer demands without compromising any of the belts remarkable features such as high allowable belt pull.

**uni CSB: The 2 inch pitch modular belt that can do what all other 2.5 inch pitch and 3 inch pitch belts can do... and more!**



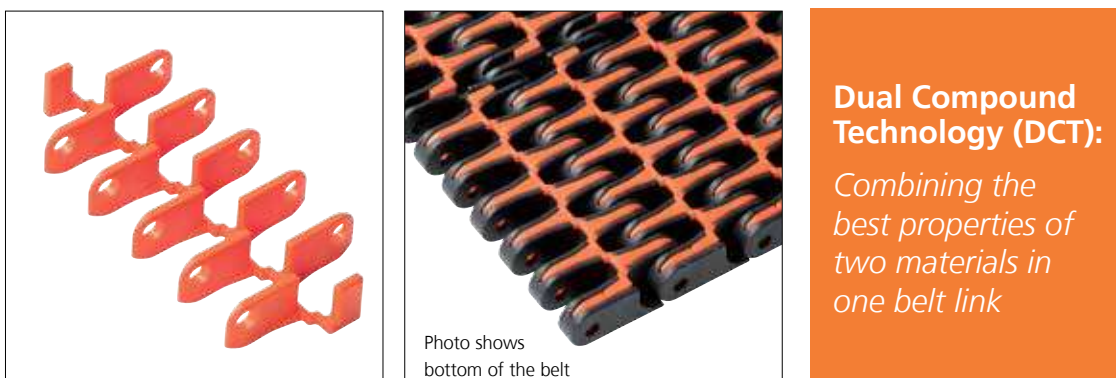
<b>Ammeraal Beltech Modular uni CSB</b>	<b>Stronger belts at lower costs</b>	<ul style="list-style-type: none"> <li>· 2 inch pitch means low construction heights and less pit depth required.</li> <li>· Lower belt weight allows for a higher load, a longer center to center distance and less transfers.</li> <li>· Lower belt weight results in less needed drive power, smaller drive motors and smaller gearboxes.</li> <li>· Electrically conductive properties are added to the belt through cost efficient inserts without compromising belt pull as usual.</li> <li>· The belt can be executed in a combination of B1* fire rating and electrically conductive properties.</li> </ul>
	<b>Lower total cost of ownership</b>	<ul style="list-style-type: none"> <li>· Long belt life due to high contact area and innovative belt bottom design.</li> <li>· Less bottom wear at high surface pressure due to wear-resistant wheelplate inserts.</li> <li>· Longer conveyors and higher loads on one conveyor.</li> <li>· Low maintenance costs due to extremely low maintenance requirement.</li> <li>· Lower belt weight results in lower energy consumption.</li> </ul>
	<b>Safe Walk</b>	<ul style="list-style-type: none"> <li>· Appropriate grip in dry and wet conditions.</li> <li>· Low belt profile to avoid injuries and foot discomfort.</li> <li>· Colored edges to visualize moving floors.</li> </ul>

\*B1: Fire rated material (Flammability Class B1)

Base link open + electrical conductive insert = EC link



Base link closed + WP wear part insert = Wheel Plate

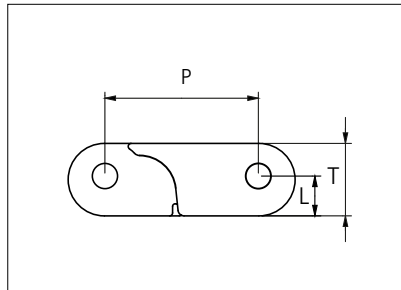


### Dual Compound Technology (DCT):

*Combining the best properties of two materials in one belt link*

# Plastic Modular Belt

Series **uni CSB** Type **Closed**



Straight running belt  
Nominal pitch: 50.8 mm (2.00 in)  
Surface type: Flat  
Surface opening: Closed  
Backflex radius: 100.0 mm (3.94 in)  
Pin diameter: 8.0 mm (0.31 in)

Belt material & color	POM NL <b>K</b>		POX-FR <b>EG</b>			mm	in		mm	in
Pin and lock material & color	PA6.6 <b>N</b>	SS <b>G</b>	PBT <b>LG</b>	SS <b>G</b>	<b>P</b> (Nominal)	50.8	2.00	<b>T</b>	24.0	0.94
	PP <b>O</b>	PP <b>O</b>	PP <b>E</b>	PP <b>E</b>	<b>L</b>	13.2	0.52	-	-	-

Non standard material and color: See uni Material and Color Overview.

Safety edges with orange or yellow edge links mounted on alternating pitches along both belt edges are optional.

Alternative pin and lock systems and materials: Contact Customer Service.

Belt width		Permissible tensile force (Belt/pin material)				***Belt weight (Belt/pin material)		Min No drive sprocket per shaft	Number of wear strips (min no)	
		POM NL/PA6.6 POX-FR/PBT		POM NL/SS POX-FR/SS		POM NL/PA6.6			**Carry (pcs)	**Return (pcs)
mm	in	N	lbf	N	lbf	Kg/m	lb/ft			
153	6.0	13725	3085	15250	3428	2.9	1.92	2	2	2
305	12.0	27450	6171	30500	6856	5.7	3.83	3	3	2
458	18.0	41177	9257	45753	10285	8.6	5.75	4	4	2
610	24.0	54905	12343	61005	13714	11.4	7.67	5	5	3
763	30.0	68632	15429	76258	17143	14.3	9.58	6	6	3
915	36.0	82360	18514	91511	20572	17.1	11.50	7	7	4
1068	42.0	96087	21600	106764	24000	20.0	13.42	8	8	4
1220	48.0	109815	24686	122016	27429	22.8	15.33	9	9	5
1373	54.0	123542	27772	137269	30858	25.7	17.25	10	10	5
1525	60.0	137269	30858	152522	34287	28.5	19.17	11	11	6
1678	66.1	150997	33944	167774	37716	31.4	21.08	12	12	6
1830	72.1	164724	37030	183027	41144	34.2	23.00	13	13	7

Additional standard belt widths are available in steps of 152.5 mm (6.00 in). Additional non-standard belt widths are available in steps of 25.4 mm (1.00 in).

2898	114.1	260820	58632	289800	65147	54.2	36.42	20	20	10
------	-------	--------	-------	--------	-------	------	-------	----	----	----

Additional standard belt widths are available in steps of 152.5 mm (6.00 in). Additional non-standard belt widths are available in steps of 25.4 mm (1.00 in).

3965	156.1	356850	80220	396500	89133	74.1	49.83	27	27	14
------	-------	--------	-------	--------	-------	------	-------	----	----	----

General belt tolerance is +0/-0.4% at 23°C/73°F and 50% RH. For exact belt width contact Customer Service. Non standard belt width on request.

The belt width in POX FR is 1.0% wider than the belt width in the table.

\*Max. Load per Drive Sprocket. Belt material: NL 6000 N (1349 lbf). PP 4000 N (899 lbf). POX FR 6000 N (1349 lbf).

\*\*Max. Spacing between wear strips. Carry: 152.0 mm (6.00 in); Return: 304.0 mm (12.00 in).

\*\*\*The weight of the belt with SS pins is 6.7 kg/m<sup>2</sup> (0.42 lb/ft<sup>2</sup>) higher than with PA66 pins.

\*\*\*The weight in POX FR is approximately 12% lower than the weight of NL.

= Single Link



STANDARD

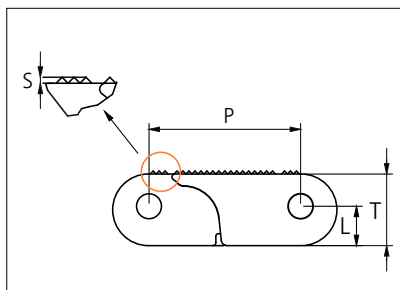
STRAIGHT RUNNING

PITCH 50.8 MM/2.00 IN



# Plastic Modular Belt

Series **uni CSB** Type **Rough**



Straight running belt  
Nominal pitch: 50.8 mm (2.00 in)  
Surface type: Rough (R11)  
Surface opening: Closed  
Backflex radius: 100.0 mm (3.94 in)  
Pin diameter: 8.0 mm (0.31 in)

Belt material & color	POM NL <b>K</b>		POX-FR <b>EG</b>			mm	in		mm	in
Pin and lock material & color	PA6.6 <b>N</b>	SS <b>G</b>	PBT <b>LG</b>	SS <b>G</b>	P	50.8	2.00	T	24.0	0.94
	PP <b>O</b>	PP <b>O</b>	PP <b>E</b>	PP <b>E</b>	L	13.2	0.52	S	1.0	0.04

Non standard material and color: See uni Material and Color Overview.

Safety edges with orange or yellow edge links mounted on alternating pitches along both belt edges are optional.

Alternative pin and lock systems and materials: Contact Customer Service.

Belt width		Permissible tensile force (Belt/pin material)				***Belt weight (Belt/pin material)		Min No drive sprocket per shaft	Number of wear strips (min no)	
		POM NL/PA66 POX-FR/PBT		POM NL/SS POX-FR/SS		POM NL/PA66			**Carry (pcs)	**Return (pcs)
mm	in	N	lbf	N	lbf	Kg/m	lb/ft			
153	6.0	13725	3085	15250	3428	2.9	1.92	2	2	2
305	12.0	27450	6171	30500	6856	5.7	3.83	3	3	2
458	18.0	41177	9257	45753	10285	8.6	5.75	4	4	2
610	24.0	54905	12343	61005	13714	11.4	7.67	5	5	3
763	30.0	68632	15429	76258	17143	14.3	9.58	6	6	3
915	36.0	82360	18514	91511	20572	17.1	11.50	7	7	4
1068	42.0	96087	21600	106764	24000	20.0	13.42	8	8	4
1220	48.0	109815	24686	122016	27429	22.8	15.33	9	9	5
1373	54.0	123542	27772	137269	30858	25.7	17.25	10	10	5
1525	60.0	137269	30858	152522	34287	28.5	19.17	11	11	6
1678	66.1	150997	33944	167774	37716	31.4	21.08	12	12	6
1830	72.1	164724	37030	183027	41144	34.2	23.00	13	13	7

Additional standard belt widths are available in steps of 152.5 mm (6.00 in.) Additional non-standard belt widths are available in steps of 25.4 mm (1.00 in)

2898	114.1	260820	58632	289800	65147	54.2	36.42	20	20	10
------	-------	--------	-------	--------	-------	------	-------	----	----	----

Additional standard belt widths are available in steps of 152.5 mm (6.00 in.) Additional non-standard belt widths are available in steps of 25.4 mm (1.00 in)

3965	156.1	356850	80220	396500	89133	74.1	49.83	27	27	14
------	-------	--------	-------	--------	-------	------	-------	----	----	----

General belt tolerance is +0/-0.4% at 23°C/73°F and 50% RH. For exact belt width contact Customer Service. Non standard belt width on request.

Belt widths in POX FR is 1.0 % wider than the belt widths in the table above.

\*Max. Load per Drive Sprocket. Belt material: NL 6000 N (1349 lbf). PP 4000 N (899 lbf). POX FR 6000 N (1349 lbf).

\*\*Max. Spacing between wear strips. Carry: 152.0 mm (6.00 in); Return: 304.0 mm (12.00 in).

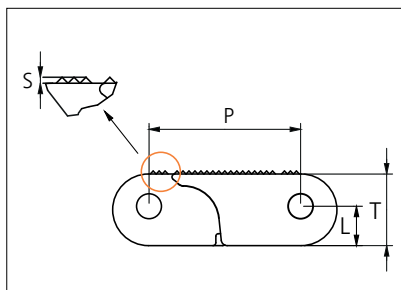
\*\*\*The weight of the belt with SS pins is 6.7 kg/m<sup>2</sup> (0.42 lb/ft<sup>2</sup>) higher than with PA66 pins.

\*\*\*The weight in POX FR is approximately 12% lower than the weight of NL.

= Single Link

# Plastic Modular Belt

Series **uni CSB** Type **8% Open Rough**



Straight running belt  
Nominal pitch: 50.8 mm (2.00 in)  
Surface type: Rough (R11)  
Surface opening: 8%  
Backflex radius: 100 mm (3.94 in)  
Pin diameter: 8.0 mm (0.31 in)

Belt material & color	POM NL <b>K</b>		POX-FR <b>EG</b>			mm	in		mm	in
Pin and lock material & color	PA6.6 <b>N</b> PP <b>O</b>	SS <b>G</b> PP <b>O</b>	PBT <b>LG</b> PP <b>E</b>	SS <b>G</b> PP <b>E</b>	<b>P</b> (Nominal)	50.8	2.00	<b>T</b>	24.0	0.94
					<b>L</b>	13.2	0.52	<b>S</b>	1.0	0.04

Non standard material and color: See uni Material and Color Overview.

Safety edges with orange or yellow edge links mounted on alternating pitches along both belt edges are optional.

Alternative pin and lock systems and materials: Contact Customer Service.

Belt width		Permissible tensile force (Belt/pin material)				***Belt weight (Belt/pin material)		Min No drive sprocket per shaft	Number of wear strips (min no)	
		POM NL/PA66 POX-FR/PBT		POM NL/SS POX-FR/SS		POM NL/PA66			**Carry (pcs)	**Return (pcs)
mm	in	N	lbf	N	lbf	Kg/m	lb/ft			
153	6.0	13725	3085	15250	3428	2.9	1.92	2	2	2
305	12.0	27450	6171	30500	6856	5.7	3.83	3	3	2
458	18.0	41177	9257	45753	10285	8.6	5.75	4	4	2
610	24.0	54905	12343	61005	13714	11.4	7.67	5	5	3
763	30.0	68632	15429	76258	17143	14.3	9.58	6	6	3
915	36.0	82360	18514	91511	20572	17.1	11.50	7	7	4
1068	42.0	96087	21600	106764	24000	20.0	13.42	8	8	4
1220	48.0	109815	24686	122016	27429	22.8	15.33	9	9	5
1373	54.0	123542	27772	137269	30858	25.7	17.25	10	10	5
1525	60.0	137269	30858	152522	34287	28.5	19.17	11	11	6
1678	66.1	150997	33944	167774	37716	31.4	21.08	12	12	6
1830	72.1	164724	37030	183027	41144	34.2	23.00	13	13	7

Additional standard belt widths are available in steps of 152.5 mm (6.00 in). Additional non-standard belt widths are available in steps of 25.4 mm (1.00 in).

2898	114.1	260820	58632	289800	65147	54.2	36.42	20	20	10
------	-------	--------	-------	--------	-------	------	-------	----	----	----

Additional standard belt widths are available in steps of 152.5 mm (6.00 in). Additional non-standard belt widths are available in steps of 25.4 mm (1.00 in).

3965	156.1	356850	80220	396500	89133	74.1	49.83	27	27	14
------	-------	--------	-------	--------	-------	------	-------	----	----	----

General belt tolerance is +0/-0.4% at 23°C/73°F and 50% RH. For exact belt width contact Customer Service. Non standard belt width on request.

The belt width in POX FR is 1.0 % wider than the belt width in the table

\*Max. Load per Drive Sprocket. Belt material: NL 6000 N (1349 lbf). PP 4000 N (899 lbf). POX FR 6000 N (1349 lbf)

\*\*Max. Spacing between wear strips. Carry: 152.0 mm (6.00 in); Return: 304.0 mm (12.00 in)

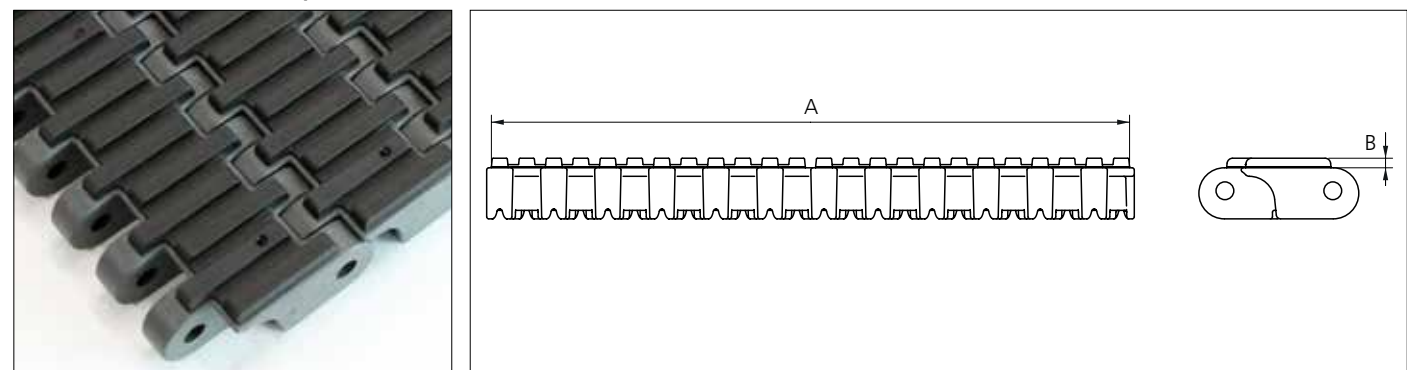
\*\*\*The weight of the belt with SS pins is 6.7 kg/m<sup>2</sup> (0.42 lb/ft<sup>2</sup>) higher than with PA66 pins

\*\*\*The weight in POX FR is approximately 12 % lower than the weight of NL

= Single Link

## Accessories

### NON STANDARD – Rubber Top

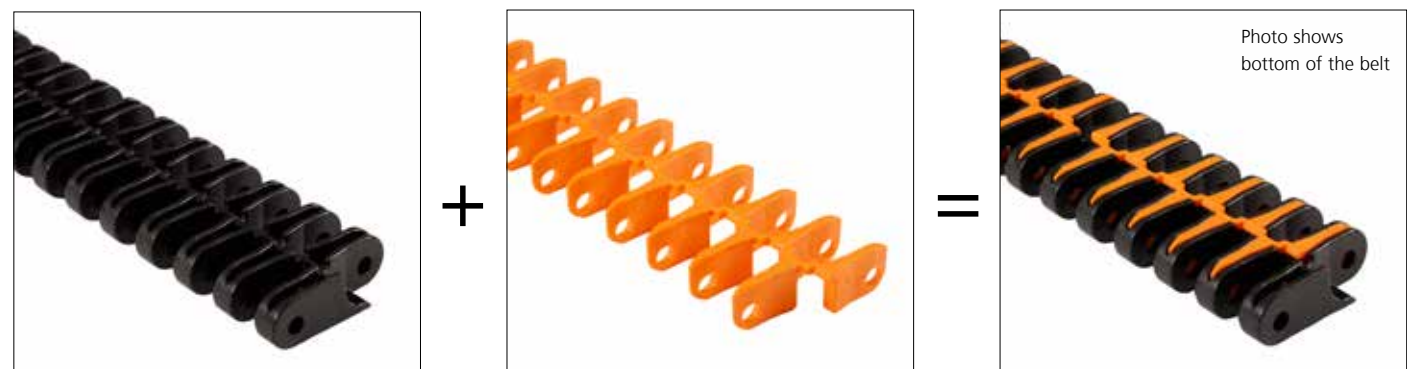


Type	Recommended belt material & color	Recommended rubber material & color	A		B		Link size	Width	
			mm	in	mm	in		mm	in
Flat Rib	PP <b>DG</b>	03 <b>K</b>	300.0	11.81	4.5	0.18	K1200	304.8	12.00

Backflex radius when flights are used: 200 mm (7.87 in).

## Accessories

### Top/Bottom Insert



Type	Insert material & color	Weight	
		kg/m <sup>2</sup>	lb/ft <sup>2</sup>
Wheel Plate	POM-DK <b>O</b> POM-NL <b>Y</b> PEI <b>G</b> PA6 <b>D</b>	4.7	0.97

Contact area/wear surface of belt will incease from 24% to 47% by the use of inserts.

## Accessories

### Top/Bottom Insert

EC insert in uni CSB 8% Rough type can be build in to uni CSB Closed Rough to create an electrical conductive belt.

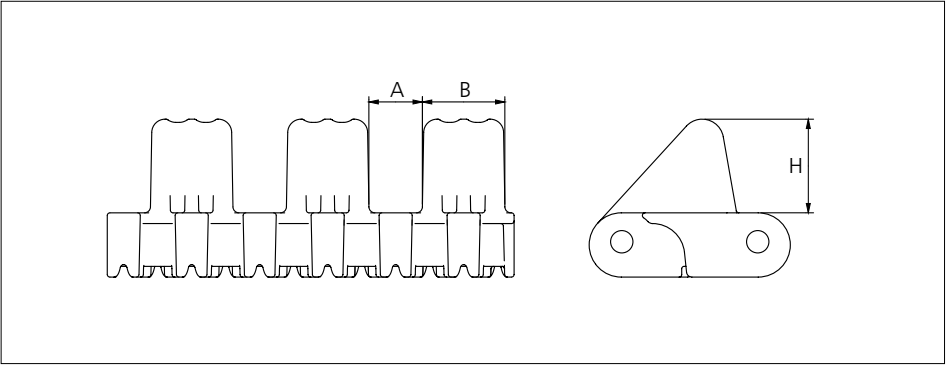



Type	Insert material & color	Weight	
		kg/m <sup>2</sup>	lb/ft <sup>2</sup>
Electrical Conductive	POX-FREC, POM-EC <b>K</b>	5.3	1.09

Contact area/wear surface of belt will incease from 24% to 47% by the use of inserts.  
POX-FREC holds a surface resistivity of 1x10<sup>3</sup> Ohm according to IEC 60093/ASTM D257.

Accessories

Flight

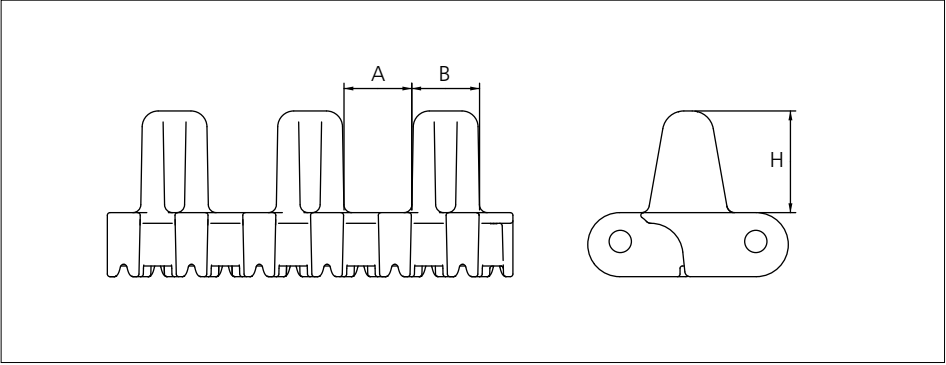






Type	Flight material & color	A		B		H		Link size	Width	
		mm	in	mm	in	mm	in		mm	in
Car Pusher	POM-NL   K POX-FR   EG	20.0	0.79	31.0	1.22	35.0	1.38	K600	152.4	6.00

Backflex radius when flights are used: 200.0 mm (7.87 in).

Accessories

Flight

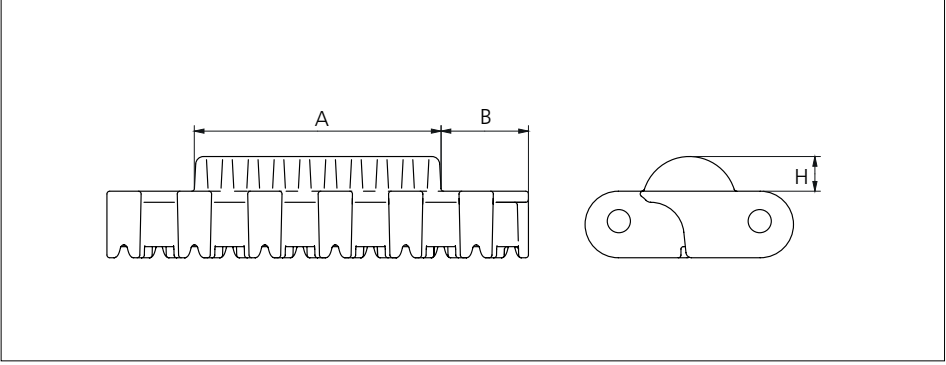



Type	Flight material & color	A		B		H		Link size	Width	
		mm	in	mm	in	mm	in		mm	in
Car Pusher	POM-NL   K POX-FR   EG	25.4	1.00	25.4	1.00	38.1	1.50	K600	152.4	6.00

Backflex radius when flights are used: 200.0 mm (7.87 in).

Accessories

Flight

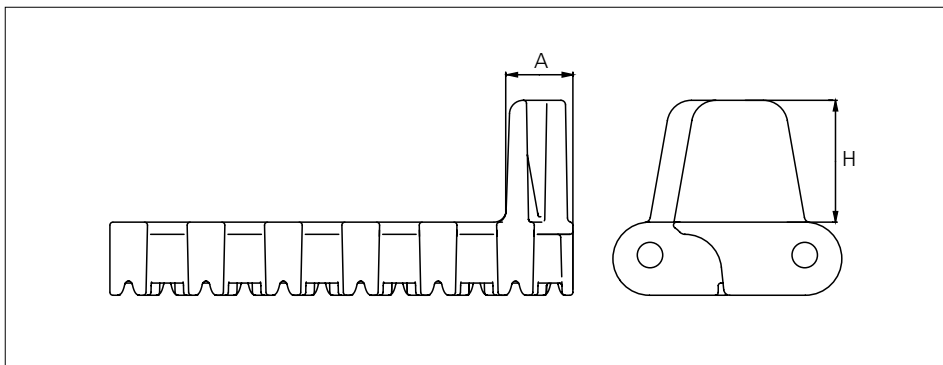


Type	Flight material & color	A		B		H		Link size	Width	
		mm	in	mm	in	mm	in		mm	in
Curved Flight	POM-NL 	89.0	3.50	31.5	1.24	12.5	0.49	K600	152.4	6.00



## Accessories

### Side Guard



Type	Flight material & color	A		H		Link size	Width	
		mm	in	mm	in		mm	in
Side Guard	POM-NL <span style="background-color: orange; color: black;">O</span> <span style="background-color: black; color: white;">K</span> POX-FR <span style="background-color: orange; color: black;">O</span> <span style="background-color: black; color: white;">EG</span>	23.0	0.91	40.0	1.57	K600	152.4	6.00

Backflex radius when side guards are used: 115.0 mm (4.53 in).

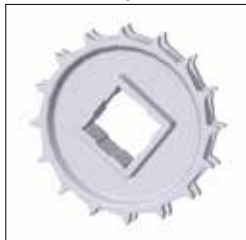
### Sprocket

No of teeth	Bore size								Overall diameter		Pitch-diameter		Hub-diameter		Dimension A*		Dimension B		Double row/One way	Double row/Two way	Molded LG PA6	Machined PA6
	Pilot bore	in	2.36	2.53	3.03	3.54	4.08	4.72														
		mm	60.0	64.0	77.0	90.0	102.0	120.0	mm	in	mm	in	mm	in	mm	in	mm	in				
Z12	✓		■			■			197.3	7.77	197.0	7.76	150.0	5.91	82.0	3.23	109.4	4.31		✓	✓	
Z16	✓		■			■		■	263.0	10.35	261.4	10.29	200.0	7.87	115.0	4.53	141.5	5.57		✓	✓	✓
Z16				■	■		■		263.0	10.35	261.4	10.29	200.0	7.87	115.0	4.53	141.5	5.57	✓		✓	

\*A-dimension for automotive applications use  $A = (B - 23.0 \text{ mm}) / 0.91 \text{ in}$ .

Non standard material and color: See uni Material and Color Overview.

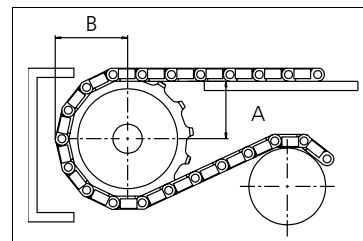
#### ■ Molded sprocket



#### ■ Molded sprocket



#### ■ Machined sprocket



Other sprocket sizes are available upon request.

Two-part sprockets are available upon request.

Round bores are always delivered with keyway.

Other bore sizes are available upon request.

uni Retainer Rings: See uni Retainer Ring data sheet

Width of single tooth = 10.0 mm (0.39 in)

Width of sprocket = 50.0 mm (1.98 in)

Max load per sprocket shown does not take bore size into account.

Please also ensure that sufficient size shaft is chosen for corresponding load.

For correct sprocket position: See uni Assembly Instructions for uni CSB.

For more detailed sprocket information, contact Customer Service.