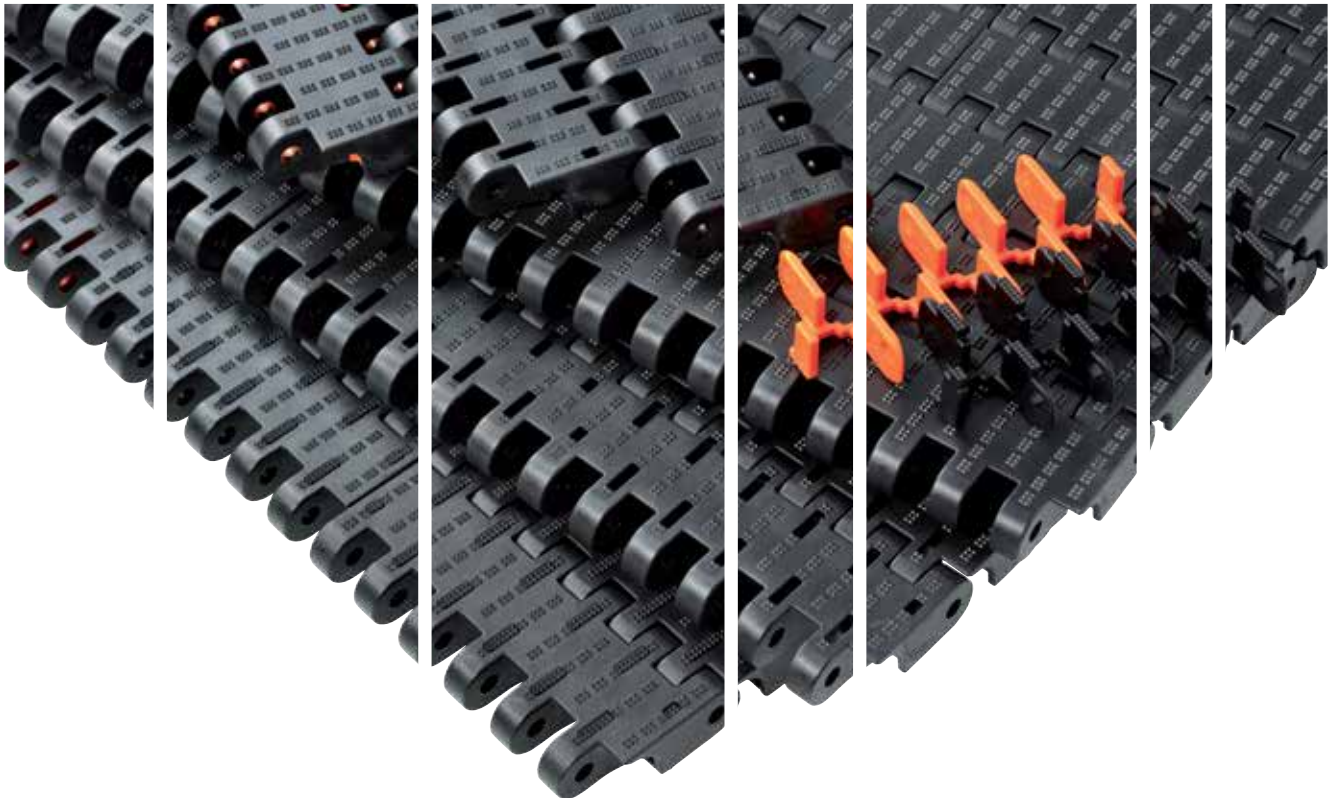
uni CSB



uni CSB

The versatile plastic modular belt for the Automotive Industry

uni chains

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 exisiting 2.5 inch and 3 inch pitch belts.
· Use of Dual Compount 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!



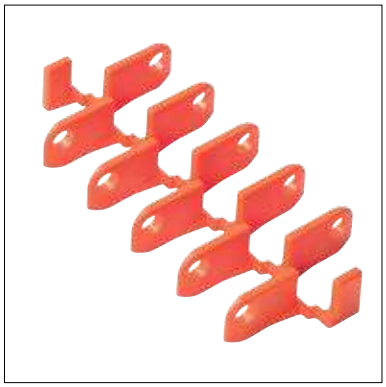



Ammeraal Beltech Modular **uni CSB**	**Stronger belts at lower costs**	· 2 inch pitch means low construction heights and less pit depth required. · Lower belt weight allows for a higher load, a longer center to center distance and less transfers. · Lower belt weight results in less needed drive power, smaller drive motors and smaller gearboxes. · Electrically conductive properties are added to the belt through cost efficient inserts without compromising belt pull as usual. · The belt can be executed in a combination of B1* fire rating and electrically conductive properties.
	Lower total cost of ownership	· Long belt life due to high contact area and innovative belt bottom design. · Less bottom wear at high surface pressure due to wear-resistant wheelplate inserts. · Longer conveyors and higher loads on one conveyor. · Low maintenance costs due to extremely low maintenance requirement. · Lower belt weight results in lower energy consumption.
	Safe Walk	· Appropriate grip in dry and wet conditions. · Low belt profile to avoid injuries and foot discomfort. · Colored edges to visualize moving floors.

*B1: Fire rated material (Flammability Class B1)

Base link open + electrical conductive insert = EC link

Base link closed + WP wear part insert = Wheel Plate



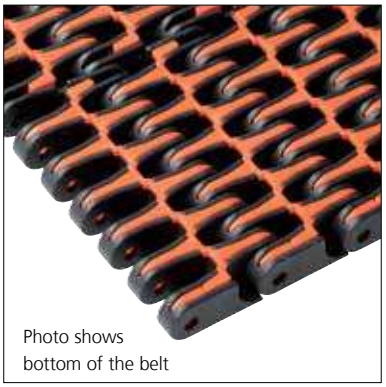


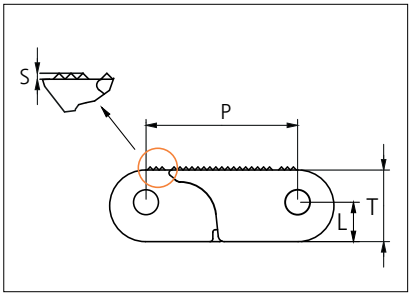
Photo shows bottom of the belt

Dual Compound Technology (DCT):

Combining the best properties of two materials in one belt link

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 mm (3.94 in)
Pin diameter: ø8.0 mm (0.31 in)

STANDARD

Belt material & color	POM NLAS **K**	POX-FR **EG**	PP **DG**
Pin and lock material & color	PA6.6 **N**		

	mm	in		mm	in
P (Nominal)	50.8	2.00	**T**	24.0	0.94
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 edge links mounted on alternating pitches along both belt edges are optional.

Alternative pin and lock materials: SS420 PP **O**

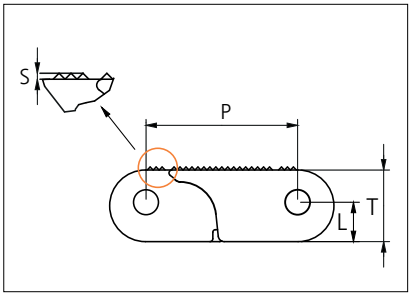
Belt width		Permissible tensile force (Belt/pin material)								***Belt weight (Belt/pin material)				Min No drive sprocket per shaft	Number of wear strips (min no)	
		POM NLAS/PA66 POX-FR/PA66		POM NLAS/SS POX-FR/SS		PP/PA66		PP/SS		POM NLAS/PA66		PP/PA66			**Carry (pcs)	**Return (pcs)
mm	in	N	lbf	N	lbf	N	lbf	N	lbf	Kg/m	lb/ft	Kg/m	lb/ft			
305	12.0	27450	6171	30500	6856	15250	3428	15250	3428	5.7	3.83	3.7	2.48	3	3	2
458	18.0	41220	9266	45800	10296	22900	5148	22900	5148	8.6	5.76	5.5	3.72	4	4	2
610	24.0	54900	12342	61000	13713	30500	6856	30500	6856	11.4	7.67	7.4	4.96	5	5	3
763	30.0	68670	15437	76300	17152	38150	8576	38150	8576	14.3	9.59	9.2	6.20	6	6	3
915	36.0	82350	18512	91500	20569	45750	10285	45750	10285	17.1	11.50	11.1	7.44	7	7	4
1068	42.0	96120	21608	106800	24009	53400	12004	53400	12004	20.0	13.42	12.9	8.68	8	8	4
1220	48.0	109800	24683	122000	27426	61000	13713	61000	13713	22.8	15.33	14.8	9.92	9	9	5
1373	54.1	123570	27779	137300	30865	68650	15433	68650	15433	25.7	17.25	16.6	11.16	10	10	5
1525	60.0	137250	30854	152500	34282	76250	17141	76250	17141	28.5	19.17	18.5	12.40	11	11	6
1677	66.0	150930	33929	167700	37699	83850	18849	83850	18849	31.4	21.08	20.3	13.64	12	12	6
1830	72.0	164700	37025	183000	41138	91500	20569	91500	20569	34.2	23.00	22.1	14.88	13	13	7
1982	78.0	178380	40100	198200	44555	99100	22278	99100	22278	37.1	24.91	24.0	16.12	14	14	7
Additional standard belt widths are available in steps of 152.2 mm (5.99 in). Additional non-standard belt widths are available in steps of 1 in (25.4 mm (1.00 in))																
2897	114.1	260730	58612	289700	65125	144850	32562	144850	32562	54.2	36.41	35.1	23.56	20	20	10
Additional standard belt widths are available in steps of 152.2 mm (5.99 in). Additional non-standard belt widths are available in steps of 1 inch (25.4 mm (1.00 in))																
3964	156.1	356760	80200	396400	89111	198200	44555	198200	44555	74.1	49.82	48.0	32.23	27	27	14

General belt tolerance is +0/-0.4% at 23°C/73°F. For exact belt width contact Customer Service. Non standard belt width on request.
The belt width in POX-FR is 1.0 % wider than in POM NLAS and PP.
*Max. Load per Drive Sprocket. Belt material: POM NLAS 6000 N (1349 lbf). PP 4000 N (899 lbf). POX-FR 6000 N (1349 lbf).
**Max. Spacing between wear strips. Carry: 152 mm (6 in); Return: 304 mm (12 in). We recommend full deck support on carry way section for automotive applications.
***The weight of the belt with SS pins is 6.7 kg/m² (1.38 lb/ft²) higher than with PA66 pins.
***The weight in POX-FR is approximately 12% lower than the weight of POM NLAS.
uni CSB POX-FR is B1 fire rated according to DIN4102.

uni chains

Plastic Modular Belt

Series **uni CSB** Type **8% 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: ø8.0 mm (0.31 in)

STANDARD

Belt material & color	POM NLAS **K**	POX FR **EG**	PP **DG**
Pin and lock material & color	PA6.6 **N**		

	mm	in		mm	in
P (Nominal)	50.8	2.00	**T**	24.0	0.94
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 edge links mounted on alternating pitches along both belt edges are optional.

Alternative pin and lock materials: SS420 PP **O**

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 NLAS/PA66 POX FR/PA66		POM NLAS/SS POX FR/SS		PP/PA66		PP/SS		POM NLAS/PA66		PP/PA66			**Carry (pcs)	**Return (pcs)
mm	in	N	lbf	N	lbf	N	lbf	N	lbf	Kg/m	lb/ft	Kg/m	lb/ft			
305	12.0	27450	6171	30500	6856	15250	3428	15250	3428	5.5	3.71	3.6	2.40	3	3	2
458	18.0	41220	9266	45800	10296	22900	5148	22900	5148	8.3	5.57	5.4	3.60	4	4	2
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1525	60.0	137250	30854	152500	34282	76250	17141	76250	17141	27.6	18.55	17.8	11.99	11	11	6
1677	66.0	150930	33929	167700	37699	83850	18849	83850	18849	30.4	20.40	19.6	13.19	12	12	6
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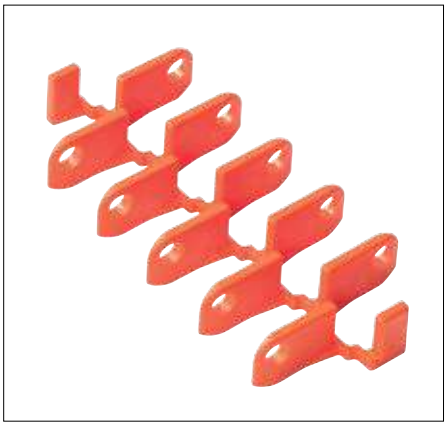
3964	156.1	356760	80200	396400	89111	198200	44555	198200	44555	71.7	48.22	46.4	31.17	27	27	14

General belt tolerance is +0/-0.4% at 23°C/73°F. For exact belt width contact Customer Service. Non standard belt width on request.
The belt width in POX FR is 1.0 % wider than in POM NLAS and PP.
*Max. Load per Drive Sprocket. Belt material: POM NLAS 6000 N (1349 lbf). PP 4000 N (899 lbf). POX FR 6000 N (1349 lbf).
**Max. Spacing between wear strips. Carry: 152 mm (6 in); Return: 304 mm (12 in). We recommend full deck support on carry way section for automotive applications.
***The weight of the belt with SS pins is 6.7 kg/m² (1.38 lb/ft²) higher than with PA66 pins.
***The weight in POX FR is approximately 12% lower than the weight of POM NLAS.
uni CSB POX FR is B1 fire rated according to DIN4102.

uni chains

Accessories

Insert



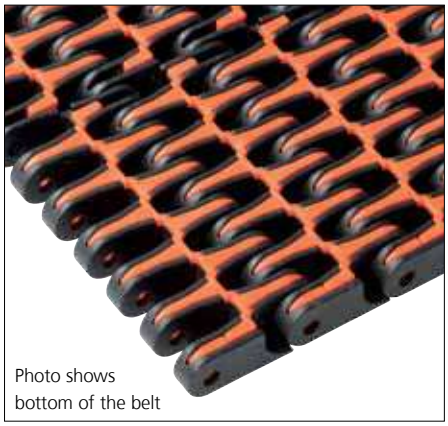


Photo shows
bottom of the belt

Type	Insert material & color	Weight	
		kg/m²	lb/ft²
Wheel plate	POM DK O	4.7	0.97

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

Accessories

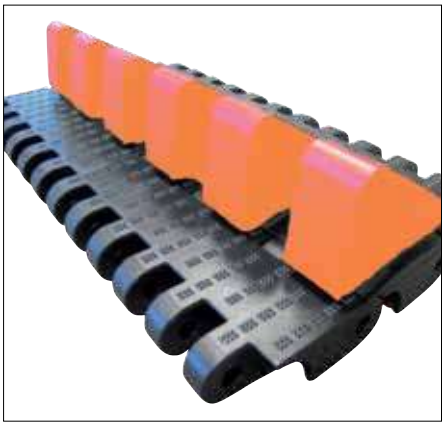
Insert

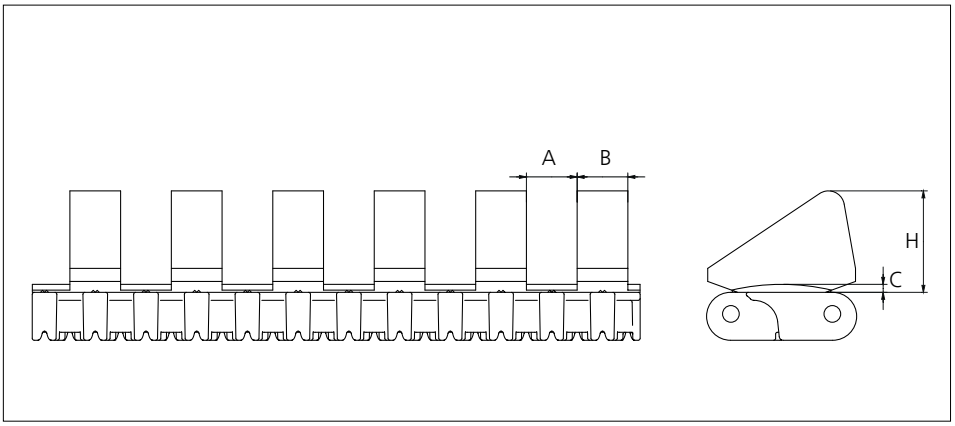
Type	Belt material & color	Weight	
		kg/m²	lb/ft²
EC	POX FREC K	5.3	1.09

Contact area/wear surface of belt will incease from 24% to 47% by the use of inserts.
POX FREC holds a surface resistivity of 1x10³ Ohm according to IEC 60093/ASTM D257.

Accessories

Flight





Type	Material & color	A		B		C		H		Link size	Width	
		mm	in	mm	in	mm	in	mm	in		mm	in
Car pusher	PE O	25.4	1.00	25.4	1.00	4.0	0.16	50.8	2.00	K1200	305.0	12.00

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

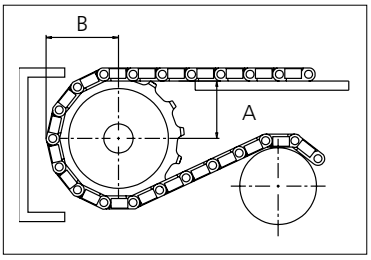
Sprocket

No of teeth	Bore size							Overall diameter		Pitch-diameter		Hub-diameter		*A-dimension		B-dimension		Single row/Two way	Double row/Two way	LG PA6 Molded	N PA6 Machined
	Pilot bore	in	1.57	2.36	**2.50**	3.54	3.54														
		mm	**40.0**	**60.0**	63.5	**90.0**	**120.0**	mm	in	mm	in	mm	in	mm	in	mm	in				
Z12	x			■		■		197.0	7.76	197.3	7.77	150.0	5.91	82.0	3.23	109.4	4.31		x		x
Z16	x			■		■	■	261.4	10.29	263	10.35	200.0	7.87	115.0	4.53	141.5	5.57		x		x

*A-dimension for automotive applications use A = (B-23.0 mm/0.91 in).

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

■ **Machined sprocket**



Other sprocket sizes are available upon request.
Two-part sprockets are available upon request.
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.