

uni-chains Belt Catalogue



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Patents

uni-chains A/S manufactures products under one or more of the following U.S. Patents: 4.754.872, 5.000.312, 5.027.944, 5.127.515, 5.305.869, 5.307.923, 5.379.883, 5.482.156, 5.697.492, 6.073.756, 6.216.854, 6.332.531, 6.390.288, 29/039.113, 29/039.114. Other U.S. and foreign utility and design patents pending. European patents and other patents in Europe: 0480863, 0.652.169, 159544, 152689, 169602, 0439/96, MR09251995, MR09261995, M960477.4, 145290, 170664, 94610049.2, GB2309062, 0680898, G9316589.7, DE431286402. With reservations of printer's error.



The quality assurance system of uni-chains A/S is certified according to ISO 9001.

Probably the most comprehensive belt programme in the industry

In this catalogue you will find a wide range of quality products: Innovative belt systems patented by uni-chains for all kinds of applications, e.g. food processing, packaging, canning, bottling etc. We use both industry standard and special materials with e.g. chemical resistance, antistatic, flame retardant characteristics etc., uni-chains uses F.D.A. approved materials and offer U.S.D.A. Accepted products for food contact.

Competitive prices and quick delivery

We offer quality products at competitive prices. Furthermore, a quick response to your inquiries and on time delivery of your orders can be essential success criteria to get and keep your business.

Our technical experts and employees will always do their utmost to meet your requirements and expectations.

More than just belts

If you need other conveyor components than belts and sprockets, we also offer one of the widest ranges of conveyor chains, and a comprehensive accessories programme.

To learn more about this, please contact us, and we will send you our special chain or accessories catalogues, or send a sales representative to call on you for a discussion of your specific requirements.

www.unichains.com

For a detailed description of our entire product range, sales organisation, and application information please refer to our homepage www.unichains.com.

Thank you for reading this belt catalogue. We hope that it will be useful to you and that we can meet your request for standard and special or custom made products.

Our telephone number can be found on the back page of this catalogue.



Contents

Ordering .	Belt	Systems	
	8	Ordering Belt Systems	
Material 1	Prop	erties	
	9 10 11	Standard Grades Special Grades Approvals	
Belt Speci	ifica	tions - Straight running	
uni M-SN	BM	2 and M3 Pitch 12.7 mm (0.50 inch) ——	- Food - Beverage - Packaging
	12 13	uni M-SNB M2 and M3 Standard Materials Standard Belt Widths Permissible Tensile Strength	
	14	Belt Weights Standard Sprockets Accessories	
uni M-QN	B	Pitch 12.7 mm (0.50 inch)	– Beverage - Packaging
	15 16	uni M-QNB Standard Materials Standard Belt Widths Permissible Tensile Strength	
	17	Belt Weights Standard Sprockets	
uni Light	Pitcl	h 19.1 mm (0.75 inch)	- Food - Beverage - Packaging
	18 19 20	uni Light Standard Materials Standard Belt Widths Permissible Tensile Strength	
	21 22	Belt Weights Standard Sprockets Accessories	

Contents

uni SNB I	M1 25 26 27 28	Pitch 25.4 mm (1.00 inch) uni SNB M1 Standard Materials Standard Belt Widths Permissible Tensile Strength Belt Weights Standard Sprockets Accessories	– Food - Beverage - Packaging
uni SNB I	M2	Pitch 25.4 mm (1.00 inch)	- Food - Beverage - Packaging
	29 30	uni SNB M2 Standard Materials Standard Belt Widths Permissible Tensile Strength Belt Weights Max. Load per Sprocket	
	31	Standard Sprockets Accessories	
uni QNB	Pitc	h 25.4 mm (1.00 inch)	- Beverage - Packaging
	32 33	uni QNB Standard Materials Standard Belt Widths Permissible Tensile Strength Belt Weights May Lond per Sprecket	
	34	Standard Sprockets	
uni CNB	Pitc	h 25.4 mm (1.00 inch)	– Food
	35 36	uni CNB Standard Materials Standard Belt Widths Permissible Tensile Strength	
	37	Max. Load per Sprocket Belt Weights Standard Sprockets	
	38	Accessories	

Contents

uni Ligh	t EP	Pitch 38.1 mm (1.50 inch)	– Food - Beverage - Packaging
	39 40 41 42 43	uni Light EP Standard Materials Standard Belt Widths Permissible Tensile Strength Belt Weights Standard Sprockets Accessories	
uni SSB	Pitch	38.1 mm (1.50 inch) —	– Food - Beverage - Packaging
	45 46	uni SSB Standard Materials Standard Belt Widths	
	47	Permissible Tensile Strength Belt Weights Standard Sprockets	
	48	Accessories	
uni L-SN	B Pi	tch 50.0 mm (1.97 inch) ————	- Food - Beverage - Packaging
	49 50	uni L-SNB Standard Materials Standard Belt Widths	
	51	Permissible Tensile Strength Belt Weights Standard Sprockets	
	52	Accessories	
uni OPB	Pitch	50.0 mm (1.97 inch)	- Food - Beverage - Packaging
	53	uni OPB	
	54 56	Standard Materials Standard Belt Widths Permissible Tensile Strength	
	57	Belt Weights Standard Sprockets	
	58	Accessories	

uni MPB	Pitch	a 50.8 mm (2.00 inch)	- Food - Packaging
	60 61 62 63 64	uni MPB Standard Materials Standard Belt Widths Permissible Tensile Strength Max. Load per Sprocket Max. Load per Roller Belt Weights Standard Sprockets Accessories	
Belt Spec	ifica	tions - Side flexing	
uni Flex S	SNB	Pitch 25.4 mm (1.00 inch)	- Food - Beverage - Packaging
	66 67 68 69 70 71 72	uni Flex SNB Standard Materials Standard Belt Widths Max. Permissible Load in Curve Max. Permissible Load on Straight Section Belt Weights Belt Control and Tracking Systems Standard Sprockets Accessories	
uni Flex I	Belt	Pitch 50.0 mm (1.97 inch)	– Food - Packaging
	73 74	uni Flex Belt Standard Materials Standard Belt Widths Permissible Tensile Strength Belt Weights Standard Sprockets	
Reinforcem	ent d	of Belt Systems	
	75	Reinforcement of Belt Systems	
Disclaimer	and	Warnings	
	77 78	Disclaimer Warnings	

7



uni SSB: See page 46

uni L-SNB: See page 50

uni OPB: See page 54

uni MPB: See page 61

uni Flex SNB: See page 67

uni Flex Belt: See page 74

uni OPB 8, uni OPB 4V, uni OPB 4, uni OPB 8P, uni MPB, uni Flex SNB

and uni Flex Belt

Pin material:

SS = AISI 304 Stainless Steel PP = Polypropylene PE = Polyethylene PA6.6 = Polyamide 6.6GR = Glass Reinforced Polyester



Polyoxymethylen - POM

Colour options: **Colours** are optional on request.

POM is a thermoplastic material with very good mechanical and thermal properties. The material is also characterised by high strength, elasticity and dimensional stability. POM is resistant to a limited selection of chemicals. POM has low coefficient of friction and good resistance to wear.

POM - D

POM polymers with self-lubricating components.

POM - I

POM polymers with self-lubricating components and improved impact resistance.

POM - LF

POM polymers with improved self-lubricating components.

POM - SLF

POM polymers with self-lubricating additives to obtain the lowest possible friction resistance.

Polypropylene - PP



Polypropylene is a thermoplastic material with very good chemical resistance properties. PP is an economical material for applications with high temperatures.

PP - I

PP with improved impact resistance.

Polyethylene - PE

Colour options: **Colour** options: **Colour** options: **Colour** optional **Colour** optional on request.

PE is an economical material for applications with low temperatures.

PE - I

PE with improved impact resistance.

Recommended Temperature Range

	°C	° F
POM (D, I, LF, SLF)	-40 to +90°C	-40 to +194°F
PP & PP-I	+1 to +104°C	+34 to +219°F
PE & PE-I	-50 to + 80°C	-58 to +176°F

9

Standard Grades

Standard pin material

Polypropylene - PP Polyethylene - PE Stainless steel Polyamid PA6.6 Glass Reinforced Polyester - GR

Please note: Regarding standard materials and colours of the individual belt systems, please refer to the "standard materials" boxes under the product photos for each belt type throughout this catalogue.

Glass Reinforced Polyester - GR

Colour options:

Glass reinforced polyester is a material with an extremely high resistance to wear and heat.

Note: For use in hot water: Max. temperature $+60^{\circ}$ C ($+140^{\circ}$ F). For belts operating at high temperatures please note that heavy loads will cause longer permanent elongation.

The dimensions of belts made in GR material can be approx 1.5% larger than POM belts.

Antistatic Material - AS

Colour options:

Electrically conductive POM is used where static electricity buildup must be avoided e.g. in the aerosol and electronics industries. AS is black because of the carbon contents. It has low impact resistance and approx. half the tensile strength of POM.

Flame Retardant Polyamide - FR

Colour options:

Flame retardant polyamide is a fire restricting material used in surroundings with danger of igniting the belts.

Polyvinylidenfluoride - PVDF

Colour options:

Polyvinylidenfluoride is characterised by a very high chemical resistance. PVDF also has high wear resistance and good friction properties.

Polyamide - PA6

Other custom-made colours are optional on request.

Polyamide PA6 is a thermoplastic material. The combination of its mechanical properties and chemical resistance makes this material suitable for many situations. This material is used for our nylon sprockets.

Polyamide - PA6.6

Colour options:

Other custom-made colours are optional on request.

Polyamide PA6.6 is a thermoplastic material with many fine properties. The material has a high resistance to wear and high strength and great stiffness. Polyamide has an extremely wide temperature range. The material features very high impact resistance and toughness.

	Temperat	ure range
	°C	° F
Glass Reinforced Polyester - GR	-40 to +125°C	-40 to +257°F
Antistatic material - AS	-40 to +90°C	-40 to +194°F
Flame Retardant Polyamide - FR	+1 to +104°C	+34 to +219°F
Polyvinylidenfluoride - PVDF	-40 to +100°C	-40 to +212°F
Polyamide - PA6	-40 to +120°C	-40 to +248°F
Polyamide - PA6.6	-40 to +140°C	-40 to +284°F

Special Grades

uni-chains also manufactures plastic belts in Special Grade materials in order to meet customer requirements in applications where the standard materials would be inadequate.

The following Special Grade materials are offered:

Glass reinforced polyester - GR

Antistatic Material - AS

Flame Retardant Polyamide - FR

Polyvinylidenfluoride - PVDF

Polyamide - PA6

Polyamide - PA6.6

For belts operating at high temperatures please note that heavy loads will cause longer permanent elongation.

Approval of Materials

F.D.A. (US Food and Drug Administration)

US Federal Agency that approves materials for use with food contact.

Approval of Products and Equipment

U.S.D.A. (US Department of Agriculture)

U.S.D.A. evaluates and accepts products and equipment for use in the dairy industry and in meat and poultry plants. The uni-chains belting products listed on this page are listed in the U.S.D.A.'s Accepted Meat and Poultry Equipment book as accepted for food contact and packaged goods respectively. In addition, U.S.D.A inspectors accept belt styles on an individual plant basis.

U.S.D.A. Dairy Grading Branch has issued Equipment Acceptance Certificates for the belt types listed on this page under U.S.D.A. Dairy Accepted.

For uni-chains U.S.D.A. accepted chains please refer to the uni-chains Conveyor Chains Catalogue.



uni OPB C

Approvals

F.D.A.

uni-chains uses F.D.A. approved materials of the following types: POM-D, POM-I PP, PP-I PE, PE-I PA6.6 PUR rubber for inserts

U.S.D.A. Accepted Meat and Poultry Equipment (Food Contact):

uni SNB series, uni OPB: uni OPB 4C, uni OPB 4V C, uni OPB 4V 23%, uni OPB 4V 36%, uni OPB 8C and uni OPB 8 25%

U.S.D.A. Accepted Meat and Poultry Equipment (Packaged Product only): All the above plus uni Light

U.S.D.A. Dairy Accepted :

uni MPB, uni MPB-G, uni MPB-GE, uni MPB-N, uni MPB-NE, uni MPB 18%, uni MPB 20%, uni MPB 22%, uni CNB C, uni CNB 18%, uni CNB 22%

uni M-SNB has a pitch of only 12.7 mm (0.50 inch). Combined with the special relieved underside a perfect fit onto nose bars and transfer rollers is possible ensuring a continuous and stable product flow which eliminates can tippage. uni M-SNB is suitable for accumulation systems with back-line pressure. The open surface structure facilitates cleaning and enables drainage and airflow through the belt. uni M-SNB has great strength and resistance to wear.



uni M-SNB M2: Suitable for long conveyors with full cans and bottles. Designed for heavy-duty applications. This belt has solid edges to withstand side wear. Special low contact area belt surface.



uni M-SNB M3: Suitable for upside-down can transport applications, PET bottles, and items with fragile surfaces. It has heavy duty edges to withstand wear. This belt is available with prepolished surface for raw-edge can applications.

uni M-SNB

Pitch: 12.7 mm (0.50 inch)

Straight running

Backflex radius: 20 mm (0.8 inch)

Locking type for uni M-SNB M2 and uni M-SNB M3: Endlock system

Surface opening: 14%

Patents:

U.S.: 5.379.883 EU: 0.652.169

Industries and applications

Bakeries Breweries Canning Can Manufacturing Fish Millboard Packaging Poultry





Standard materials:				
POM-D	PP	PE		



uni M-SNB M3

Standard materials:				
POM-D	POM-LF	PP		

Other available materials: See page 9 and 10 Standard pin materials: AISI 304 SS, PP or PE

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch
76	3.0	836	32.9	1598	62.9	2358	92.8
152	6.0	914	36.0	1674	65.9	2434	95.8
228	9.0	990	39.0	1750	68.9	2510	98.8
304	12.0	1066	42.0	1826	71.9	2586	101.8
379	14.9	1142	45.0	1902	74.9	2662	104.8
456	18.0	1218	48.0	1978	77.9	2738	107.8
531	20.9	1294	50.9	2054	80.9	2814	110.8
608	23.9	1370	53.9	2130	83.9	2890	113.8
685	27.0	1446	56.9	2206	86.9	2966	116.8
760	29.9	1522	59.9	2282	89.8	3042	119.8

Belt widths for uni M-SNB in POM, PP and PE.

Please note that the values in the table are max. values.

The dimensions are valid at $+20^{\circ}$ C ($+68^{\circ}$ F). Belt widths vary with temperature.

Please note that if special material is used, the width might differ from the widths shown in the table.

Belts wider than mentioned in the table can be assembled.

Permissible Tensile Strength

	РОМ		Р	Р	PE	
	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft
uni M-SNB	15000	1028	7500	514	4500	308

The values in the tables are for belts at $+20^{\circ}C$ ($+68^{\circ}F$). Please contact uni-chains for data at other temperatures. Load ratings are the same for SS pins, PE and PP pins.

TRAVEL Р L Т

	mm	inch
E	5.1	0.20
L	4.4	0.17
Р	12.7	0.50
Т	8.8	0.35



ym

uni M-SNB

uni M-SNB

Belt Weights

Belt material		PO	М			Р	Р			Р	E	
Pin material	pla	stic	ste	eel	plastic		steel		plastic		steel	
	kg/m2	lb/ft2	kg/m2	lb_{ft^2}	kg/m2	lb/ft2	kg/m2	lb_{ft^2}	kg/m2	lb_{ft^2}	kg/m2	lb_{ft^2}
uni M-SNB	6.3	1.29	8.6	1.76	4.1	0.84	5.6	1.15	4.4	0.89	5.9	1.21

Standard Sprockets M2 and M3

No. of	pitch d	iameter	overall o	liameter	hub di	ameter	bo	ore	reference no.			
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic			
10	41.8	1.65	41.5	1.63	28.0	1.10	ø 10.0	ø 0.39	2233MSNB210N			
							ø 19.1	ø 0.75	2233MSNB219N			
10	70 5	2.00	70.0	2.11	64.0	2.52	sq 25.4	sq 1.00	2233MSNB219N10SQ			
19	/6.5	5.09	/9.0	5.11	04.0	2.32	sq 38.1	sq 1.50	2233MSNB219N15SQ			
							sq 40.0	sq 1.57	2233MSNB219N40SQ			
							ø 19.1	ø 0.75	2233MSNB228N			
					(5.0	250	sq 25.4	sq 1.00	2233MSNB228N10SQ			
					65.0	2.56	sq 38.1	sq 1.50	2233MSNB228N15SQ			
20	115.4	4.5.4	116.2	4.57			sq 40.0	sq 1.57	2233MSNB228N40SQ			
28	115.4	4.54	110.2	4.57				ø 19.1	ø 0.75	2233MSNB228NBB		
								100.0	2.04	sq 50.8	sq 2.00	2233MSNB228N20SQBB
					100.0	5.94	sq 63.5	sq 2.50	2233MSNB228N25SQBB			
							sq 60.0	sq 2.36	2233MSNB228N60SQBB			
							ø 19.1	ø 0.75	2233MSNB238N			
					75.0	2.05	sq 25.4	sq 1.00	2233MSNB238N10SQ			
					/5.0	2.95	sq 38.1	sq 1.50	2233MSNB238N15SQ			
							sq 40.0	sq 1.57	2233MSNB238N40SQ			
38	156.4	6.16	157.4	6.20			ø 19.1	ø 0.75	2233MSNB238NBB			
							sq 50.8	sq 2.00	2233MSNB238N20SQBB			
					100.0	3.94	sq 63.5	sq 2.50	2233MSNB238N25SQBB			
							sq 50.0	sq 1.97	2233MSNB238N50SQBB			
							sq 60.0	sq 2.36	2233MSNB238N60SQBB			

sq = Square bore.

Standard material: Polyamide. Other sprocket sizes are available upon request. Please contact uni-chains for further information. **Width of sprockets:** 20 mm (0.8 inch). **Tooth width:** 7 mm (0.3 inch).

Rubber Inserts





Standard material: Santoprene

Rubber inserts can be assembled in any pattern on belt surface per customer's request.



uni M-SNB Accessories

	mm	inch
Α	14.0	0.55
В	8.0	0.31
С	3.0	0.12

uni M-QNB is a strong 12.7 mm (0.50 inch) pitch closed surface belt which can achieve a tight transfer. The uni M-QNB features a unique new locking system and has colour coded locks giving increased security of correct locking under assembly. Furthermore the belt has a low noise level and is capable of bi-directional travel. This, together with the optional placement of sprockets across the entire width of the belt gives you a belt that is very versatile.



uni M-QNB offers good support of the transported products. In the corrugated industry e.g. the small transfers eliminate sheet creep.



The special tight transfer feature eliminates can tippage. The bottom design allows tight transfer without use of dead plates when using a 19.1 mm (0.75 inch) nosebar and no vibration even with high speed applications.

uni M-QNB

Pitch: 12.7 mm (0.50 inch)

Straight running

Backflex radius: 20 mm (0.8 inch)

Locking type for uni M-QNB: Lockpin

Surface opening: Closed

Patent pending

Industries and applications

Bakery Bottling Breweries Canning Can Manufacturing Corrugated and cardboard



uni M-QNB

Standard materials:POM-SLFPPPP

Other available materials: See page 9 and 10 Standard pin materials: PA6.6 red and natural

Standard Belt Widths

mm	inch	mm	inch	mm	inch
76	3.0	683	26.9	1292	50.9
152	6.0	759	29.9	1368	53.9
228	9.0	835	32.9	1443	56.8
304	12.0	912	35.9	1519	59.8
380	15.0	988	38.9	1595	62.8
456	18.0	1063	41.9	1670	65.7
531	20.9	1139	44.8	-	-
607	23.9	1216	47.9	-	-

Belt widths for uni M-QNB in POM, PP and PE.

Please note the tolerance is 0.2% of the belt width.

The dimensions are valid at $+20^{\circ}$ C ($+68^{\circ}$ F). Belt widths vary with temperature.

Please note that if special material is used, the width might differ from the widths shown in the table.

Belts wider than mentioned in the table can be assembled upon request.

Permissible Tensile Strength

Belt material	PC	OM	РР		
Pin material	PA	.6.6	PA	6.6	
	N/m	lbf/ft	N/m	lbf/ft	
uni M-QNB	19000	1302	13000	891	

The values in the tables are for belts at $+20^{\circ}C$ ($+68^{\circ}F$). Please contact uni-chains for data at other temperatures.

uni M-QNB



	mm	inch
E	5.2	0.20
L	4.4	0.17
Р	12.7	0.50
Т	8.8	0.35

16

uni M-QNB

Belt Weights

ym

Belt material	PC	OM	Р	P
Pin material	PA	.6.6	PA	6.6
	kg/m2	lb/ft ²	kg/m ²	lb/ft ²
uni M-QNB	7.5	1.54	4.8	0.98

Max. Load per Sprocket

POM	I belt	PP	belt
Ν	lbf	Ν	lbf
1000	225	800	180

Standard Sprockets

No. of	pitch d	iameter	overall o	diameter	hub di	ameter	bo	ore	reference no.				
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic				
10	41.8	1.65	41.5	1.63	28.0	1.10	ø 10.0	ø 0.39	2233MSNB210N				
							ø 19.1	ø 0.75	2233MSNB219N				
10	70 5	2.00	70.0	2.11	(10	2.52	sq 25.4	sq 1.00	2233MSNB219N10SQ				
19	/8.5	5.09	79.0	5.11	04.0	2.52	sq 38.1	sg 1.50	2233MSNB219N15SQ				
							sq 40.0	sq 1.57	2233MSNB219N40SQ				
							ø 19.1	ø 0.75	2233MSNB228N				
					65	250	sq 25.4	sq 1.00	2233MSNB228N10SQ				
					05	2.30	sq 38.1	sq 1.50	2233MSNB228N15SQ				
29	115 4	4.5.4	116.2	4.57			sq 40.0	sq 1.57	2233MSNB228N40SQ				
28	115.4	4.54	110.2	4.57			ø 19.1	ø 0.75	2233MSNB228NBB				
									100	2.04	sq 50.8	sq 2.00	2233MSNB228N20SQBB
					100	5.94	sq 63.5	sq 2.50	2233MSNB228N25SQBB				
							sq 60.0	sq 2.36	2233MSNB228N60SQBB				
							ø 19.1	ø 0.75	2233MSNB238N				
					75	2.05	sq 25.4	sq 1.00	2233MSNB238N10SQ				
					15	2.95	sq 38.1	sq 1.50	2233MSNB238N15SQ				
							sq 40.0	sq 1.57	2233MSNB238N40SQ				
38	156.4	6.16	157.4	6.20			ø 19.1	ø 0.75	2233MSNB238NBB				
							sq 50.8	sq 2.00	2233MSNB238N20SQBB				
					100	3.94	sq 63.5	sq 2.50	2233MSNB238N25SQBB				
							sq 50.0	sq 1.97	2233MSNB238N50SQBB				
							sq 60.0	sq 2.36	2233MSNB238N60SQBB				

sq = Square bore.

Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 20 mm (0.8 inch). Tooth width: 7 mm (0.3 inch).



uni Light is suitable for transport of various kinds of light products. A pitch of 19.1 mm (0.75 inch) enables smooth transfer between belts.

uni Light is available in 10 different versions, including closed, open, vacuum, rough and rubber surfaces.

It is a strong belt with secure pin locking options.



The open surface versions of uni Light are used e.g. where drainage or airflow through the belt is required.



uni Light is available with a moulded rubber surface in a rough and a flat version for increased friction between belt and conveyed items. The uni Light Rough Rubber and Flat Rubber links are supplied in two different material combinations: Black PP with black rubber and white PP with natural colour rubber for direct food contact.



Small juts on the uni Light 10% open belt surface provide a space between belt and conveyed product e.g. wooden mouldings being sprayed with a stained finish.

uni Light

Pitch: 19.1 mm (0.75 inch)

Straight running

Backflex radius: 25 mm (1.0 inch) Backflex radius, rib: 50 mm (2.0 inch)

Locking types for uni Light: uni Light endlocks uni Light rodlocks Lockpin

Surface opening: Please see page 19

Patents: US: 5.305.869

Industries and applications

Automotive industry Bakeries Beverage Can Manufacturing Food processing Fruits Packing PET bottles Tissue Vegetables ym

Belt Specifications



uni Light C





uni Light 10% SR: With "juts" to provide a space between the conveyed product and the belt.

Moulded to order



uni Light CR: Has a granulated surface for higher friction.

Moulded to order



uni Light 18%

Standard material: POM-D



uni Light Flat Rubber: Available with indented side 15 mm (0.6 inch).





uni Light Rough Rubber: For inclined transport. Available with indented side 15 mm (0.6 inch).

Moulded to order

Materials for uni Light with rough and flat rubber:

Food industry: White PP-belt with Thermolast K natural rubber (approved for food contact)

Non food industry: Black PP-belt with Thermolast K black rubber

uni Light



uni Light 10%

Standard material: POM-LF



uni Light 22%

Standard materials:POM-LFPPPP



uni Light Rib: For accumulation applications. Finger plates are available for this type.

Moulded to order



uni Light Vacuum: 4 different holes sizes from Ø3.2 mm (0.12 inch) to Ø5.6 mm (0.22 inch).

Moulded to order

uni Light standard programme: See materials and colours on page 19

Other available materials: See page 9 and 10

Standard pin materials: AISI 304 SS, PP or PE

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch
76	3.0	840	33.1	1604	63.2	2369	93.3
153	6.0	917	36.1	1681	66.2	2445	96.3
229	9.0	993	39.1	1757	69.2	2522	99.3
306	12.0	1070	42.1	1834	72.2	2598	102.3
382	15.0	1146	45.1	1910	75.2	2674	105.3
458	18.0	1223	48.1	1987	78.2	2751	108.3
535	21.1	1299	51.1	2063	81.2	2827	111.3
611	24.1	1375	54.1	2139	84.2	2904	114.3
687	27.0	1451	57.1	2216	87.2	2980	117.3
764	30.1	1528	60.2	2292	90.2	3057	120.3

Belt widths for uni Light in POM, PP and PE.

Please note the tolerance is 0.2% of the belt width.

The dimensions are valid at $+20^{\circ}$ C ($+68^{\circ}$ F). Belt widths vary with temperature.

Please note that if special material is used, the width might differ from the widths shown in the table.

Belts wider than mentioned in the table can be assembled.

Max. recommended temperature for uni Light Rib in PE is $+40^{\circ}C$ ($+104^{\circ}F$). For higher temperatures uni-chains recommends PP or POM.

uni Light



uni Light







uni Light 10% SR



uni Light Rough Rubber



uni Light Flat Rubber

	-	
	mm	inch
Α	2.0	0.08
В	3.0	0.12
E	5.0	0.20
L	4.3	0.17
Р	19.1	0.75
R	7.3	0.29
Т	8.5	0.34

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uni Light

Permissible Tensile Strength

	РОМ		Р	Р	PE	
	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft
uni Light	10250	702	5125	351	3075	211
uni Light Rough Rubber/Flat Rubber	-	-	5125	351	-	-

The values in the tables are for belts at $+20^{\circ}$ C ($+68^{\circ}$ F). Please contact uni-chains for data at other temperatures. Load ratings are the same for SS and PP pins in POM and PP belts. Load ratings for PE belts are with PE pins.

Belt Weights

Belt material		РОМ				PP				PE			
Pin material	plastic		steel		plastic		steel		plastic		steel		
	kg/m2	lb/ft2	kg/m2	lb/ft2	kg/m2	lb_{ft^2}	kg/m2	lb_{ft^2}	kg/m2	lb_{ft^2}	kg/m2	lb/ft2	
uni Light C/10%/10% SR	6.9	1.41	13.9	2.85	5.1	1.04	12.0	2.46	5.1	1.04	12.1	2.48	
uni Light 18%/22%	5.9	1.21	12.9	2.64	4.4	0.90	13.4	2.74	4.5	0.92	11.5	2.36	
uni Light Rib	9.3	1.90	16.5	3.37	6.3	1.29	13.5	2.76	6.5	1.33	14.0	2.87	
uni Light vac. 6%/7.5%	6.8	1.39	13.8	2.83	5.3	1.09	12.1	2.48	5.4	1.10	12.2	2.50	
uni Light Ro. Rub./Fl.Rub.	-	-	-	-	5.3	1.09	10.7	2.19	-	-	-	-	

Standard Sprockets

No. of	pitch d	iameter	overall	diameter	hub diameter		bore		reference no.
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic
7	43.9	1.73	42.6	1.68	31.0	1.22	ø 19.1	ø 0.75	2833UL07N
10	61.7	2.43	61.7	2.43	45.0	1.77	ø 19.1	ø 0.75	2833UL10N
17	103.7	4.08	105.0	4.13	65.0	2.56	ø 19.1	ø 0.75	2833UL17N
					70.0	2.76	ø 19.1	ø 0.75	2833UL24N
24	146.0	5.75	147.3	5.80	70.0	2.76	sq 38.1	sq 1.50	2833UL24N15SQ
					120.0	4.72	ø 19.1	ø 0.75	2833UL24NBB
					70.0	2.76	ø 19.1	ø 0.75	2833UL25N
25	152.0	5.98	153.3	6.04	70.0	2.76	sq 38.1	sq 1.50	2833UL25N15SQ
					120.0	4.72	ø 19.1	ø 0.75	2833UL25NBB

sq = Square bore.

Standard material: Polyamide.

Other sprocket sizes are available upon request.

Please contact uni-chains for further information.

Width of sprockets: 25.0 mm (0.98 inch). **Tooth width:** 4.8 mm (0.19 inch).



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Tabs





Standard materials:								
POM-LF	POM-D							

Note: uni Light with tabs can be used with sprocket size min. z = 24.

Note: In belt systems with tabs the temperature of the conveyor should be constant.

Product Supports





Standard materials:POM-LFPP-IPE

Side Guards



Standard materials:

PP-I

PP-I



uni Light Accessories

When the belt goes from horizontal to inclining travel it is an advantage to provide the belt with tabs in order to hold it down. The tabs can be placed in the entire width of the belt as required.

	mm	inch
G	3.5	0.14
Н	15.9	0.63
J	20.0	0.79
K	11.9	0.47

If the products are separated into portions or are transported on inclined conveyors it is an advantage to use product supports.

	mm	inch
S	25.4	1.00
S	50.8	2.00
S	76.2	3.00

Side guards can be very suitable in many cases where they can secure that the products do not fall off the belt during operation.

	mm	inch
A	31.4	1.23
В	15.0	0.59
С	25.0	0.98
Р	19.1	0.75

Finger Plates 75.4 mm (2.97 inch)



uni Light Accessories

All uni-chains belt systems that are available in a raised rib version can be supplied with matching finger plates, also called combs.

The finger plates can be installed with plastic screws.

The finger plates are supplied with cover caps which can be attached when the finger plate has been installed. The cover caps can be removed by using a screwdriver that can be inserted between the cover and finger plate.



	mm	inch
A	3.8	0.15
В	132.9	5.23
C	80.0	3.15
D	14.9	0.59
E	75.4	3.00
F	40.0	1.57
G	12.0	0.47
Н	10.0	0.39
I	197.1	7.76
J	90.3	3.56
K	40.0	1.57
L	54.5	2.15
М	98.9	3.89
Ν	20.0	0.79
0	45.2	1.78

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Finger Plates 151.5 mm (5.96 inch)



Cover Caps



Snap-On Cover Caps



uni Light Accessories

All uni-chains belt systems that are available in a raised rib version can be supplied with matching finger plates, also called combs.

The finger plates can be installed with plastic screws.

The finger plates are supplied with cover caps which can be attached when the finger plate has been installed. The cover caps can be removed by using a screwdriver that can be inserted between the cover and finger plate.



	mm	inch
A	3.8	0.15
В	132.9	5.23
C	80.0	3.15
D	14.9	0.59
E	151.5	6.00
F	100.0	3.94
G	12.0	0.47
Н	10.0	0.39
Ι	197.1	7.76
J	90.3	3.56
K	40.0	1.57
L	54.5	2.15
М	98.9	3.89
Ν	20.0	0.79
0	45.2	1.78

uni SNB M1 is a 35% open surface belt system with a pitch of 25.4 mm (1.00 inch) and considerable strength.



Products are very stable on the uni SNB M1 belt due to a very tight surface pattern.



uni SNB M1 is also available with ribs which, together with finger plates, ensure product transfer without any products tipping over.

uni SNB M1

Pitch: 25.4 mm (1.00 inch)

Straight running

Backflex radius: 30 mm (1.2 inch) Backflex radius, rib: 60 mm (2.4 inch)

Locking type for uni SNB M1: Endlock

Surface opening: 35%

Patents U.S.: 5.379.883, 5.482.156 EU: 0.652.169

Industries and applications

Breweries Canning Food processing



The very smooth surface makes uni SNB M1 well suited for accumulation systems with back line pressure.



uni SNB M1







Other available materials: See page 9 and 10 Standard pin materials: AISI 304 SS, PP or PE

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch
76	3.0	838	33.0	1600	63.0	2362	93.0
152	6.0	914	36.0	1676	66.0	2438	96.0
229	9.0	991	39.0	1753	69.0	2515	99.0
305	12.0	1067	42.0	1829	72.0	2591	102.0
381	15.0	1143	45.0	1905	75.0	2667	105.0
457	18.0	1219	48.0	1981	78.0	2743	108.0
533	21.0	1295	51.0	2057	81.0	2819	111.0
610	24.0	1372	54.0	2134	84.0	2896	114.0
686	27.0	1448	57.0	2210	87.0	2972	117.0
762	30.0	1524	60.0	2286	90.0	3048	120.0

Belt widths for uni SNB M1 in POM, PP and PE.

Please note the tolerance is 0.2% of the belt width.

The dimensions are valid at +20°C (+68°F). Belt widths vary with temperature.

Please note that if special material is used, the width might differ from the widths shown in the table. Belts wider than mentioned in the table can be assembled.

Max. recommended temperature for uni SNB M1 Rib in PE is $+40^{\circ}$ C ($+104^{\circ}$ F). For higher temperatures uni-chains recommends PP or POM.

Permissible Tensile Strength

	PO	М	P	Р	PE		
	N/m lbf/ft		N/m	lbf/ft	N/m	lbf/ft	
uni SNB M1	30000	2055	15000	1028	9000	617	

The values in the tables are for belts at $+20^{\circ}$ C ($+68^{\circ}$ F). Please contact uni-chains for data at other temperatures.

Load ratings are the same for SS and PP pins in POM and PP belts. Load ratings for PE belts are with PE pins.

uni SNB M1





uni SNB M1 Rib

	mm	inch
Е	5.1	0.20
L	4.4	0.17
Р	25.4	1.00
R	5.5	0.22
Т	8.8	0.35

uni SNB M1

Belt Weights

Belt material	РОМ				РР				PE			
Pin material	plastic		steel		plastic		steel		plastic		steel	
	kg/m2	lb_{ft^2}	kg/m2	lb/ft2	kg/m2	lb/ft^2	kg/m2	lb/ft2	kg/m2	lb_{ft^2}	kg/m2	lb/ft2
uni SNB M1	5.7	1.17	10.7	2.19	4.0	0.82	8.9	1.82	4.4	0.90	9.2	1.88
uni SNB M1 Rib	8.9	1.80	14.0	2.90	5.8	1.20	9.1	1.90	6.2	1.30	9.6	2.00

Standard Sprockets

No. of	pitch d	iameter	overall	liameter	hub di	ameter	bore		reference no.													
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic													
							ø 19.1	ø 0.75	2333SNB10N													
10	82.2	3.24	82.6	3.25	65.0	65.0	65.0	2.56	sq 38.1	sq 1.50	2333SNB10N15SQ											
							sq 40.0	sq 1.57	2333SNB10N40SQ													
							ø 19.1	ø 0.75	2333SNB12N													
12	98.1	3.86	99.3	3.91	65.0	2.56	sq 38.1	sq 1.50	2333SNB12N15SQ													
							sq 40.0	sq 1.57	2333SNB12N40SQ													
							ø 19.1	ø 0.75	2333SNB18NBB													
							sq 38.1	sq 1.50	2333SNB18N15SQBB													
18	146.3	5.76	148.7	5.85	110.0	4.33	sq 63.5	sq 2.50	2333SNB18N25SQBB													
							sq 40.0	sq 1.57	2333SNB18N40SQBB													
							sq 60.0	sq 2.36	2333SNB18N60SQBB													
							ø 19.1	ø 0.75	2333SNB19N													
					65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	2.56	sq 38.1	sq 1.50	2333SNB19N15SQ
19	154.3	6.07	156.6	6.17			sq 40.0	sq 1.57	2333SNB19N40SQ													
					110.0	110.0 4.32	sq 63.5	sq 2.50	2333SNB19N25SQBB													
					110.0	4.55	sq 60.0	sq 2.36	2333SNB19N60SQBB													
							ø 19.1	ø 0.75	2333SNB20NBB													
							sq 38.1	sq 1.50	2333SNB20N15SQBB													
20	162.4	6.39	165.0	6.50	110.0	4.33	sq 63.5	sq 2.50	2333SNB20N25SQBB													
							sq 40.0	sq 1.57	2333SNB20N40SQBB													
							sq 60.0	sq 2.36	2333SNB20N60SQBB													

sq = Square bore.

Standard material: Polyamide. Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 25.0 mm (0.98 inch). Tooth width: 3.3 mm (0.13 inch).

The sprocket positions are determined by the bottom design. An application running in both directions must therefore have two sets of sprockets - one for each direction.



Finger Plates





- **JPC -**5

Standard material: POM-SLF

uni SNB M1 Accessories

All uni-chains belt systems that are available in a raised rib version can be supplied with matching finger plates, also called combs.

The finger plates can be installed with plastic screws.

The finger plates are supplied with cover caps which can be attached when the finger plate has been installed. The cover caps can be removed by using a screwdriver that can be inserted between the cover and finger plate.



	mm	inch
A	2.5	0.10
В	165.0	6.50
С	95.0	3.74
D	51.0	2.01
Е	152.1	5.99
F	100.0	3.94
G	12.0	0.47
Н	10.3	0.41
Ι	76.0	3.00
J	6.0	0.24
М	135.0	5.31
N	23.0	0.91
0	57.0	2.24

uni SNB M2, 25.4 mm (1.00 inch) is a heavy duty belt for the can industry.

The open structure facilitates cleaning. uni SNB M2 has chamfered edges for easy sideways transfer. The belt has solid edges to withstand side wear. The placement of the sprockets is optional over the entire width of the belt. uni SNB M2 can travel in both directions. This requires the installation of two sets of sprockets.

The secure locking system makes assembly and disassembly easy.



The patented surface pattern reduces the friction as well as the dirt and the aluminium oxide remnants on the belt.



uni SNB M2 provides great stability and support as well as a smooth flow. Compared to roller installations the belt is safe for personnel to walk on.

Solid edges to withstand side wear

 Chamfered edges for easy sideways transfer

> Large teeth ensure optimum transfer of the force from the sprockets to the belt

Placement of sprockets optional over the entire belt width

uni SNB M2

Pitch: 25.4 mm (1.00 inch)

Straight running

Backflex radius: 30 mm (1.2 inch)

Locking type for uni SNB M2: Endlock

Surface opening: 34%

Patents U.S.: 5.379.883, 6.073.756 EU: 0.652.169

Industries and applications

Bakery Can manufacturing Canning Can palletizing Cooling conveyors Can accumulation conveyors Millboard Newspaper PET bottles Tires

For uni SNB M2A Multi Hinge chains for single liners see the uni Conveyor Chains Catalogue.

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Secure locking system



uni SNB M2

Standard materials:

 POM-D
 PP
 PE

Other available materials: See page 9 and 10 Standard pin materials: PP or PE

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch
76	3.0	836	32.9	1596	62.8	2356	92.8
152	6.0	912	35.9	1672	65.8	2432	95.7
228	9.0	988	38.9	1748	68.8	2508	98.7
304	12.0	1064	41.9	1824	71.8	2584	101.7
379	14.9	1140	44.9	1900	74.8	2660	104.7
456	18.0	1216	47.9	1976	77.8	2736	107.7
532	20.9	1292	50.9	2052	80.8	2812	110.7
608	23.9	1368	53.9	2128	83.8	2888	113.7
684	26.9	1444	56.8	2204	86.8	2964	116.7
760	29.9	1520	59.8	2280	89.8	3040	119.7

Permissible Tensile Strength

Belt material	PC	М	Р	Р	PE		
Pin material	PP ar	nd PE	Р	Р	PE		
	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	
uni SNB M2	23500	1610	15000	1028	10000	685	

Belt Weights

Belt material	PC	DM	Р	Р	Р	E
Pin material	Р	P	Р	P	PE	
	kg/m ²	lb/ft ²	kg/m ²	lb/ft2	kg/m ²	lb/ft2
uni SNB M2	6.3	1.29	4.3	0.88	4.4	0.90

uni SNB M2



	mm	inch
Е	5.2	0.20
L	4.4	0.17
Р	25.4	1.00
Т	8.8	0.35

Belt widths for uni SNB M2 in POM, PP and PE.

Please note the tolerance is 0.2% of the belt width. The dimensions are valid at $+20^{\circ}C$ (+68°F). Belt widths vary with temperature. Please note that if special material is used, the width might differ from the widths shown in the table. Belts wider than mentioned in the table can be assembled.

For higher temperatures uni-chains recommends PP or POM.

The values in the tables are for belts at +20°C (+68°F). Please contact uni-chains for data at other temperatures.

Max. Load per Sprocket

uni SNB M2	N	lbf
РОМ	1400	315
PP and PE	1100	247

Max. load for two-part double rowed sprockets: Multiply above values by two.

uni SNB M2

Standard Sprockets

No. of	pitch di	iameter	overall o	liameter	hub di	ameter	bo	ore	reference no.	reference no.
teeth	mm	inch	mm	inch	mm	inch	mm	inch	one-part	two-part
							ø 19.1	ø 0.75	75332SNB10N	-
10	82.2	3.24	86.5	3.41	65.0	2.56	sq 38.1	sq 1.50	75332SNB10N15SQ	-
							sq 40.0	sq 1.57	75332SNB10N40SQ	-
							ø 19.1	ø 0.75	75332SNB12N	-
12	98.1	3.86	103.2	4.06	65.0	2.56	sq 38.1	sq 1.50	75332SNB12N15SQ	-
							sq 40.0	sq 1.57	75332SNB12N40SQ	-
							ø 19.1	ø 0.75	75332SNB18N	-
					65.0	2.56	sq 38.1	sq 1.50	75332SNB18N15SQ	-
							sq 40.0	sq 1.57	75332SNB18N40SQ	-
					120.0	4 72	ø 19.1	ø 0.75	75332SNB18NBB	-
					120.0	4.72	sq 60.0	sq 2.36	75332SNB18N60SQBB	-
18	146.3	5.76	152.7	52.7 6.01	40.0	1.57	ø 19.1	ø 0.75	-	75332SNB18NT
					50.0	1.97	ø 25.0	ø 0.98	-	75332SNB18NT25
					60.0	2.36	ø 30.0	ø 1.18	-	75332SNB18NT30
							sq 38.1	sq 1.50	-	75332SNB18NT15SQ
					-	-	sq 40.0	sq 1.57	-	75332SNB18NT40SQ
							sq 60.0	sq 2.36	-	75332SNB18NT60SQ
							ø 19.1	ø 0.75	75332SNB20N	-
					65.0	2.56	sq 38.1	sq 1.50	75332SNB20N15SQ	-
							sq 40.0	sq 1.57	75332SNB20N40SQ	-
					120.0	4 72	ø 19.1	ø 0.75	75332SNB20NBB	-
					120.0	4.72	sq 60.0	sq 2.36	75332SNB20N60SQBB	-
20	162.4	6.39	169.1	6.66	40.0	1.57	ø 19.1	ø 0.75	-	75332SNB20NT
					50.0	1.97	ø 25.0	ø 0.98	-	75332SNB20NT25
					60.0	2.36	ø 30.0	ø 1.18	-	75332SNB20NT30
							sq 38.1	sq 1.50	-	75332SNB20NT15SQ
					-	-	sq 40.0	sq 1.57	-	75332SNB20NT40SQ
							sq 60.0	sq 2.36	-	75332SNB20NT60SQ

sq = Square bore. Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

One-part sprockets Width of sprockets: 25 mm (1.0 inch). Tooth width: 6 mm (0.2 inch).

Two-part sprockets

Width of two-part sprockets: 50.8 mm (2.00 inch). Note: For heavy wear applications the toothed rim can be supplied in stainless steel.

Product Supports







One-part sprockets

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Two-part double row sprockets

uni SNB M2 Accessories

	mm	inch
S	25.4	1.00
S	50.8	2.00
Т	76.2	3.00

uni QNB is a strong 25.4 mm (1.00 inch) pitch all purpose belt.

The uni QNB has chamfered edges allowing easy side transfer and symmetrical edges making assembly and disassembly simple. Furthermore uni QNB has a colour identification of the lock which assures correct locking during assembly. The belt's bi-directional travel feature and the optional placement of sprockets allow uni QNB to be used in many different applications.



uni QNB has become very popular in the corrugated and cardboard industry. Its flat, solid, smooth and even surface increases safety for the workers and eliminates sheet warp, pressure damage and marks on the lower sheets. A steady run eliminates stack tippage.



uni QNB is the strong 1 inch pitch belt for heavy duty applications, e.g. in the canning industry.



uni QNB with rubber moulded into the links ensures a steady work flow and good friction. The rubber pattern allows space for return wearstrips.

uni QNB

Pitch: 25.4 mm (1.00 inch)

Straight running

Backflex radius: 40 mm (1.6 inch)

Locking types for uni QNB: Endlock system Lockpin



Surface opening: Closed

Patent pending

Industries and applications

Breweries Bulk packs Cardboard Corrugated Industrial conveyance Laundry Luggage Tire







uni QNB with rubber

Standard n	naterials:
POM-SLF	PP

Standard material:							
PP	Rubber material: Thermolast K, black						

Other available materials: See page 8 and 9 Standard pin materials: PP, white and PA6.6, blue or red

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
76	3.0	683	26.9	1290	50.8	1898	74.7	2505	98.6
152	6.0	759	29.9	1366	53.8	1973	77.7	2581	101.6
228	9.0	835	32.9	1442	56.8	2049	80.7	2657	104.6
304	12.0	911	35.9	1518	59.8	2125	83.7	2732	107.6
379	14.9	987	38.8	1594	62.8	2201	86.7	2808	110.6
455	17.9	1063	41.8	1670	65.7	2277	89.6	2884	113.6
531	20.9	1139	44.8	1746	68.7	2353	92.6	2960	116.5
607	23.9	1214	47.8	1822	71.7	2429	95.6	3036	119.5

Belt widths for uni QNB in POM and PP.

Please note the tolerance is 0.2% of the belt width.

The dimensions are valid at $+20^{\circ}$ C ($+68^{\circ}$ F). Belt widths vary with temperature. Please note that if special material is used, the width might differ from the widths shown in the table.

Belts wider than mentioned in the table can be assembled upon request.

Permissible Tensile Strength

Belt material	РОМ				PP			
Pin material	PA6.6		РР		PA6.6		PP	
	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft
uni QNB	35000	2398	35000	2398	20000	1370	20000	1370
uni QNB with rubber	-	-	-	-	-	-	20000	1370

Belt Weights

Belt material		PC	OM		РР			
Pin material	РР		PA6.6		PP		PA6.6	
	kg/m2	lb/ft ²	kg/m ²	lb/ft2	kg/m2	lb/ft ²	kg/m2	lb/ft2
uni QNB	8.3	1.70	8.4	1.72	5.3	1.09	5.4	1.11
uni QNB with rubber	-	-	-	-	6.9	1.41	-	-

uni QNB



	mm	inch
E	5.2	0.20
L	4.4	0.17
Р	25.4	1.00
Т	8.8	0.35



uni QNB with rubber

	mm	inch
В	4.5	0.18
E	5.2	0.20
L	4.4	0.17
Р	25.4	1.00
Т	8.8	0.35

The values in the tables are for belts at +20°C (+68°F). Please contact uni-chains for data at other temperatures.

Max. Load per Sprocket

POM	I belt	PP	belt
Ν	lbf	Ν	lbf
2300	517	1300	292

uni

uni QNB

Standard Sprockets

No. of	pitch di	iameter	overall o	liameter	hub diameter		bo	re	reference no.	
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic	
							ø 19.1	ø 0.75	1433QNB10N	
10	87.7	2.24	80.2	2.16	65.0	2.56	sq 25.4	sq 1.00	1433QNB10N10SQ	
10	02.2	5.24	80.5	5.10	03.0	65.0 2.56		sq 1.50	1433QNB10N15SQ	
							sq 40.0	sq 1.57	1433QNB10N40SQ	
							ø 19.1	ø 0.75	1433QNB12N	
12	08.1	3.86	06.8	3.81	70.0	2.76	sq 25.4	sq 1.00	1433QNB12N10SQ	
12	90.1	5.00	90.0	5.01	/0.0 2.76		sq 38.1	sq 1.50	1433QNB12N15SQ	
							sq 40.0	sq 1.57	1433QNB12N40SQ	
							ø 19.1	ø 0.75	1433QNB15N	
					70.0	2.76	sq 25.4	sq 1.00	1433QNB15N10SQ	
					70.0	2.70	sq 38.1	sq 1.50	1433QNB15N15SQ	
15	122.2	1 81	121.5	4.78		sq 40.0	sq 1.57	1433QNB15N40SQ		
15	122.2	4.01	121.3		100.0		ø 19.1	ø 0.75	1433QNB15NBB	
						3.94	sq 50.8	sq 2.00	1433QNB15N20SQBB	
							sq 63.5	sq 2.50	1433QNB15N25SQBB	
							sq 60.0	sq 2.36	1433QNB15N60SQBB	
							ø 19.1	ø 0.75	1433QNB18N	
				70	70.0	2.76	sq 25.4	sq 1.00	1433QNB18N10SQ	
						70.0	70.0	2.70	sq 38.1	sq 1.50
18	1/63	5.76	146.1	5 75			sq 40.0	sq 1.57	1433QNB18N40SQ	
10	140.5	5.70	140.1	5.75			ø 19.1	ø 0.75	1433QNB18NBB	
					100.0	3.94	sq 50.8	sq 2.00	1433QNB18N20SQBB	
					100.0	5.74	sq 63.5	sq 2.50	1433QNB18N25SQBB	
							sq 60.0	sq 2.36	1433QNB18N60SQBB	
							ø 19.1	ø 0.75	1433QNB19N	
					70.0	2.76	sq 25.4	sq 1.00	1433QNB19N10SQ	
					70.0	2.70	sq 38.1	sq 1.50	1433QNB19N15SQ	
19	154.3	.54.3 6.07	6.07 154.2	6.07			sq 40.0	sq 1.57	1433QNB19N40SQ	
17	154.5		154.2	0.07			ø 19.1	ø 0.75	1433QNB19NBB	
					100.0	3.94	sq 50.8	sq 2.00	1433QNB19N20SQBB	
			100.0	5.74	sq 63.5	sq 2.50	1433QNB19N25SQBB			
							sq 60.0	sq 2.36	1433QNB19N60SQBB	

sq = Square bore.

Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 25 mm (1.0 inch). Tooth width: 10 mm (0.4 inch).



The hygienic 25.4 mm (1.00 inch) pitch belt for light food products.

Due to the unique hinge and sprocket design the uni CNB is very easy to clean. The hinges are closed when the belt runs flat. (When passing over the sprockets the hinges open wide and any



dirt can be rinsed off). The hinge-driven sprocket design prevents particles from clustering between belt and sprockets.

uni CNB is locked with the reliable rodlock or lockpin system which will not disengage and mix with the conveyed items.





uni CNB with closed surface is suitable for light food applications.



uni CNB 18% open is used for applications requiring draining, air flow, e.g. for drying or thawing of products. Max. hole size is $5 \times 5 \text{ mm}$ (0.2 x 0.2 inch).



uni CNB 22% open has a max. hole size of 5 x 10 mm $(0.2 \times 0.4 \text{ inch})$ and can be used in applications requiring draining or air flow.

uni CNB

Pitch: 25.4 mm (1.00 inch)

Straight running

Backflex radius: 40 mm (1.6 inch)

Locking types for uni CNB: uni CNB Rodlocks Lockpin

Surface opening: Please see page 36

Patents: GB2309062

Industries and applications

Accumulation tables Cookie and roll conveyors Depanning conveyors Dough depositing conveyors Draining processes Food processing Incline transport Infeed/discharge to trimming and filleting Metal detectors Ready meals conveyors Salad baggers Surge conveyors Thawing of frozen food









uni CNB 18%

Standard material:	
PP	

uni CNB



uni CNB 22%

Standard material:

PP

Other available materials: See page 9 and 10 Standard pin materials: AISI 304 SS, PP or PE

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch
76	3.0	835	32.9	1594	62.8	2353	92.6
152	6.0	911	35.9	1670	65.7	2429	95.6
228	9.0	987	38.8	1746	68.7	2505	98.6
304	12.0	1063	41.8	1822	71.7	2581	101.6
379	14.9	1139	44.8	1898	74.7	2657	104.6
455	17.9	1214	47.8	1973	77.7	2732	107.6
531	20.9	1290	50.8	2049	80.7	2808	110.6
607	23.9	1366	53.8	2125	83.7	2884	113.6
683	26.9	1442	56.8	2201	86.7	2960	116.5
759	29.9	1518	59.8	2277	89.6	3036	119.5

Belt widths for uni CNB in POM, PP and PE.

Please note the tolerance is 0.2% of the belt width.

The dimensions are valid at $+20^{\circ}$ C ($+68^{\circ}$ F). Belt widths vary with temperature.

Please note that if special material is used, the width might differ from the widths shown in the table.

Belts wider than mentioned in the table can be assembled upon request.

Permissible Tensile Strength

Belt material	РОМ		Р	P	PE	
	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft
uni CNB with steel pins	15700	1076	7500	514	5800	397
uni CNB with plastic pins	13500	925	7500	514	6200	425



	mm	inch
E	5.2	0.20
L	4.4	0.17
Р	25.4	1.00
R	3.0	0.12
Т	8.8	0.35

The values in the tables are for belts at +20°C (+68°F). Please contact uni-chains for data at other temperatures.
uni CNB

Max. Load per Sprocket

POM	I belt	PP/PE belt			
N	lbf	N	lbf		
600	135	500	112		

Belt Weights

um

Belt material	PC	ОМ	Р	Р	PE		
Pin material	pla	plastic		stic	plastic		
	kg/m ² lb/ft ²		kg/m ² lb/ft ²		kg/m2	lb/ft ²	
uni CNB C	5.8	1.19	3.9	0.80	4.0	0.82	
uni CNB 18%	5.0	1.02	3.5	0.72	3.6	0.74	
uni CNB 22%	4.8	4.8 0.98		3.4 0.70		0.72	

Standard Sprockets

No. of	pitch di	iameter	overall o	liameter	hub di	ameter	bo	ore	reference no.	
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic	
							ø 19.1	ø 0.75	1933CNB10N	
10	82.2	3.24	80.6	3.17	70.0	2.76	sq 38.1	sq 1.50	1933CNB10N15SQ	
							sq 40.0	sq 1.57	1933CNB10N40SQ	
							ø 19.1	ø 0.75	1933CNB12N	
12	98.1	3.86	96.8	3.81	70.0	2.76	sq 38.1	sq 1.50	1933CNB12N15SQ	
							sq 40.0	sq 1.57	1933CNB12N40SQ	
							ø 19.1	ø 0.75	1933CNB15N	
					70.0	2.76	sq 38.1	sq 1.50	1933CNB15N15SQ	
15	122.2	4.81	121.5	4.78			sq 40.0	sq 1.57	1933CNB15N40SQ	
					06.0	2 79	sq 63.5	sq 2.50	1933CNB15N25SQBB	
					20.0	70.0	5.70	sq 60.0	sq 2.36	1933CNB15N60SQBB
							ø 19.05	ø 0.75	1933CNB18N	
					70.0	2.76	sq 38.1	sq 1.50	1933CNB18N15SQ	
18	146.3	5.76	146.1	5 75			sq 40.0	sq 1.57	1933CNB1840SQ	
10	140.5	5.70	140.1	5.75			ø 19.1	ø 0.75	1933CNB18NBB	
					96.0	3.78	sq 63.5	sq 2.50	1933CNB18N25SQBB	
							sq 60.0	sq 2.36	1933CNB18N60SQBB	
							ø 19.1	ø 0.75	1933CNB19N	
					70.0	2.76	sq 38.1	sq 1.50	1933CNB19N15SQ	
10	154.3	6.07	154.2	6.07			sq 40.0	sq 1.57	1933CNB1940SQ	
17	154.5	0.07	134.2	0.07			ø 19.1	ø 0.75	1933CNB19NBB	
					96.0	3.78	sq 63.5	sq 2.50	1933CNB19N25SQBB	
							sq 60.0	sq 2.36	1933CNB19N60SQBB	

sq = Square bore.

Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 25 mm (1.0 inch). Tooth width: 12 mm (0.5 inch).



Product Supports



uni CNB product supports are available with moulded indents. Thus, machining of links is avoided, and optimum cleanability assured.



uni CNB Product Support RI (Right Indent) uni CNB Product Support LI (Left Indent) uni CNB Product Support DI indents in both sides (Double Indents)

Standard indent is 27 mm (1.1 inch)

uni CNB Accessories

If the products are separated into portions or are transported on inclined conveyors it is an advantage to use product supports.



Height						
mm	inch					
25.4	1.00					
50.8	2.00					
76.2	3.00					

Side Guards



Standard material: PP-I Side guards can be very suitable in many cases where they can secure that the products do not fall off the belt during operation.

	mm	inch
A	25.4	1.00
В	50.8	2.00
С	76.2	3.00
Р	25.4	1.00

uni Light EP is the belt system with the widest range of designs and surface openings (closed to 46% open). uni Light EP has a pitch of 38.1 mm (1.50 inch). It is suitable for transport of light products.

uni Light EP has a very good price/strength ratio. For increased strength it can be supplied with reinforcement links.



uni Light EP 28% open

uni Light EP 8.5% open





uni Light EP 8.5% open

uni Light EP

Pitch: 38.1 mm (1.50 inch)

Straight running

Backflex radius: 75 mm (3.0 inch) Backflex radius, rib: 150 mm (5.9 inch)

Locking types for uni Light EP: uni Light EP endlocks uni Light EP rodlocks

Surface opening: Please see page 40

Patents U.S.: 5.305.869, 5.000.312

Please note: uni Light EP can be supplied with steel reinforcement links. See page 76.

For uni Light EP Multi Hinge chains: Please see the uni Conveyor Chains Catalogue.

Industries and applications

Automotive Bakeries Fruit Manufacturing of plastic bottles Packing Pharmaceutical Vegetable



uni Light EP C

Standard materials:							
POM-D	POM-D POM-LF						
PP	PP]	PE				



uni Light EP 8.5%

Standard material:

uni Light EP



uni Light EP 18% Standard material: PE



uni Light EP 22%

Standard material:



uni Light EP 22% fine meshed Standard material:



uni Light EP 28% Standard material: PE



uni Light EP 33%

Moulded to order



uni Light EP 46% Standard material:



uni Light EP Rib C Standard material: PP



uni Light EP Rib 33% Standard materials: POM-LF



uni Light EP Vacuum

Moulded to order

40

uni Light EP standard programme: See materials and colours on page 40

Other available materials: See page 9 and 10

Standard pin materials: AISI 304 SS, PP or PE

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
102	4.0	661	26.0	1170	46.0	1678	66.0	2186	86.0
152	6.0	712	28.0	1220	48.0	1728	68.0	2236	88.0
254	10.0	763	30.0	1271	50.0	1779	70.0	2287	90.0
305	12.0	814	32.0	1322	52.0	1830	72.0	2338	92.0
355	14.0	865	34.0	1373	54.0	1881	74.0	2389	94.0
406	16.0	916	36.0	1424	56.0	1932	76.0	2389	94.4
458	18.0	966	38.0	1474	58.0	1982	78.0	2440	96.0
509	20.0	1017	40.0	1525	60.0	2033	80.0	-	-
559	22.0	1068	42.0	1576	62.0	2084	82.0	-	-
610	24.0	1119	44.0	1627	64.0	2135	84.0	-	-

Belt widths for uni Light EP in POM, PP and PE.

Please note the tolerance is 0.2% of the belt width.

The dimensions are valid at +20°C (+68°F). Belt widths vary with temperature.

Please note that if special material is used, the width might differ from the widths shown in the table. Belts wider than mentioned in the table can be assembled.

Max. recommended temperature for uni Light EP Rib in PE is

 $+40^{\circ}C$ ($+104^{\circ}F$). For higher temperatures uni-chains recommends PP or POM.

Permissible Tensile Strength

	POM N/m lbf/ft		P	Р	PE		
			N/m lbf/ft		N/m	lbf/ft	
uni Light EP	10250	702	5125	351	3075	211	

The values in the tables are for belts at $+20^{\circ}C$ ($+68^{\circ}F$).

Please contact uni-chains for data at other temperatures. Load ratings are the same for SS and PP pins in POM and PP belts. Load ratings for PE belts are with PE pins.

uni Light EP







uni Light EP Rib

* uni-chains recommends this travel direction. However, travel in both directions is possible.

	mm	inch
E	5.0	0.20
L	4.3	0.17
Р	38.1	1.50
R	7.3	0.29
Т	8.5	0.34

Belt Weights

Belt material		РОМ			РР				PE				
Pin material	pla	stic	ste	steel		plastic		steel		plastic		steel	
	kg/m2	lb/ft2	kg/m2	lb/ft ²	kg/m ²	lb/ft ²	kg/m2	lb/ft2	kg/m ²	lb/ft ²	kg/m2	lb/ft ²	
uni Light EP C/8.5%/vac.	5.7	1.16	9.3	1.90	3.7	0.76	7.3	1.50	4.0	0.82	7.6	1.56	
uni Light EP 18%/22%/28%	4.8	0.98	8.4	1.72	3.4	0.70	7.0	1.43	3.6	0.74	7.2	1.48	
uni Light EP 33%/46%	4.4	0.90	8.0	1.64	3.1	0.63	6.7	1.37	3.3	0.68	6.9	1.41	
uni Light EP Rib	7.1	1.45	10.7	2.19	4.6	0.94	8.2	1.68	5.0	1.0	8.6	1.76	

Standard Sprockets

No. of	pitch d	iameter	overall o	liameter	hub di	ameter	bo	ore	reference no.
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic
7	87.8	3.46	86.0	3 30	65.0	2.56	ø 19.1	ø 0.75	2533EP07N
/	07.0	5.40	00.0	5.57	05.0	2.50	sq 38.1	sq 1.50	2533EP07N15SQ
0	111.4	4 30	110.6	1 35	90.0	3 54	ø 19.1	ø 0.75	2533EP09N
2	111.4	4.39	110.0	4.55	90.0	5.54	sq 38.1	sq 1.50	2533EP09N15SQ
10	123.3	4.85	122.7	1.83	100.0	3.9/	ø 19.1	ø 0.75	2533EP10N
10	123.5	4.05	122.7	4.05	100.0	5.74	sq 38.1	sq 1.50	2533EP10N15SQ
11	135.2	5 32	13/1.9	5 31	110.0	1 33	ø 19.1	ø 0.75	2533EP11N
11	133.2	5.52	154.7	5.51	110.0	4.55	sq 38.1	sq 1.50	2533EP11N15SQ
12	147.2	5.80	147.1	5 79	120.0	1 72	ø 19.1	ø 0.75	2533EP12N
12	147.2	5.00	147.1	5.17	120.0	4.72	sq 38.1	sq 1.50	2533EP12N15SQ
15	183.3	7.22	183.6	7 23	120.0	1 72	ø 19.1	ø 0.75	2533EP15N
15	103.5	1.22	105.0	1.23	120.0	4.72	sq 38.1	sq 1.50	2533EP15N15SQ

sq = Square bore.

Standard material: Polyamide.

Other sprocket sizes are available upon request Please contact uni-chains for further information.

Width of sprockets: 23.2 mm (0.91 inch). Tooth width: 11.8 mm (0.46 inch).



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Tabs



uni Light EP with tabs can be used with sprocket size min. z = 11.

Note: In belt systems with tabs the temperature of the conveyor should be constant.

Product Supports



The product support is also available with drain holes in various versions. Please contact uni-chains for further information.

Side Guards





uni Light EP Accessories

When the belt goes from horizontal to inclining travel it is an advantage to provide the belt with tabs in order to hold it down. The tabs can be placed in the entire width of the belt as required.

	mm	inch
G	3.5	0.14
Н	15.9	0.63
J	26.0	1.02
K	11.9	0.47

If the products are separated into portions or are transported on inclined conveyors it is an advantage to use product supports.

	mm	inch
S	25.4	1.00
S	50.8	2.00
S	76.2	3.00

Side guards can be very suitable in many cases where they can secure that the products do not fall off the belt during operation.

	mm	inch
A	31.7	1.25
В	15.0	0.59
С	23.0	0.91
Р	38.1	1.50

Finger Plates

Type 2



Standard material: POM-LF

uni Light EP Accessories

All uni-chains belt systems that are available in a raised rib version can be supplied with matching finger plates, also called combs.

The finger plates can be installed with plastic screws.

The finger plates are supplied with cover caps which can be attached when the finger plate has been installed. The cover caps can be removed by using a screwdriver that can be inserted between the cover and finger plate.



	mm	inch
A	3.3	0.13
E	152.4	6.00
F	101.6	4.00
G	12.0	0.47
Н	10.3	0.41
М	135.0	5.31
N	23.0	0.91
0	57.0	2.24

uni SSB, 38.1 mm (1.50 inch) pitch, has been designed specifically to meet the demands for conveying of filled and empty cans or plastic bottles but with its closed and open designs it is also suitable for many other applications. For easy side transfer uni SSB is made with chamfered edges.

uni SSB is a very strong belt assembled with the solid uni Endlock system.



uni SSB has a proven chain/sprocket interaction.



The closed version of uni SSB is suitable for heavy duty applications.



uni SSB is available in two open versions, 29% and 32%, which are used in applications requiring air flow or drainage.



For easy side transfer uni SSB is made with chamfered edges.

uni SSB

Pitch: 38.1 mm (1.50 inch)

Straight running

Backflex radius: 45 mm (1.8 inch)

Locking type for uni SSB: uni SSB endlocks

Surface opening: Please see page 46

For uni SSB Multi Hinge chains: Please see the uni Conveyor Chains Catalogue

Industries and applications

Bakeries Breweries Canning Heavy load/duty Glass manufacturing









uni SSB 29%

Standard material: POM-LF



uni SSB 32%

uni SSB

Standard materials: POM-LF PP

Other available materials: See page 9 and 10 Standard pin materials: AISI 304 SS, PP or GR

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch
76	3.0	835	32.9	1595	62.8	2355	92.7
152	6.0	911	35.9	1671	65.8	2431	95.7
228	9.0	987	38.9	1747	68.8	2507	98.7
304	12.0	1063	41.9	1823	71.8	2583	101.7
380	15.0	1139	44.9	1899	74.8	2659	104.7
456	18.0	1216	47.9	1975	77.8	2735	107.7
532	20.9	1291	50.8	2051	80.8	2811	110.7
607	23.9	1367	53.8	2127	83.7	2887	113.7
683	26.9	1443	56.8	2203	86.7	2963	116.6
759	29.9	1519	59.8	2279	89.7	3039	119.6

Belt widths for uni SSB in POM, PP and PE.

Please note that the values in the table are max. values. The dimensions are valid at $+20^{\circ}C$ ($+68^{\circ}F$). Belt widths vary with temperature.

Please note that if special material is used, the width might differ from the widths shown in the table.

Belts wider than mentioned in the table can be assembled.

TRAVEL

	mm	inch
Е	6.5	0.26
L	6.4	0.25
Р	38.1	1.50
Т	12.7	0.50

Links K300 and K600:

Closed and open versions can be combined to different belt widths.

uni SSB

ym

Permissible Tensile Strength

uni SSB	PC)M	PP			
	N/m	lbf/ft	N/m	lbf/ft		
uni SSB with steel pins	36000	2467	18000	1233		
uni SSB with GR pins	19400	1329	13000	891		
uni SSB with PP pins	9300	637	11000	754		

The values in the tables are for belts at +20°C (+68°F). Please contact uni-chains for data at other temperatures.

Belt Weights

Belt material		РОМ						РР				
Pin material	GR		PP steel		GR		РР		steel			
	kg/m2	lb/ft ²	kg/m2	lb/ft ²	kg/m2	lb_{ft^2}	kg_{m^2}	lb_{ft^2}	kg_{m^2}	lb_{ft^2}	kg/m2	lb/ft2
uni SSB	11.3	2.31	11.1	2.27	13.6	2.79	7.4	1.52	7.2	1.47	9.9	2.03

Standard Sprockets

uni SSB single row

No. of	pitch d	iameter	overall o	liameter	hub diameter		bore		reference no.	
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic	steel
19	117.3	4.62	117.1	4.61	63.0	2.48	ø 19.1	ø 0.75	1633SSB19N	1631SSB19S
21	129.3	5.09	130.0	5.12	63.0	2.48	ø 19.1	ø 0.75	1633SSB21N	1631SSB21S
23	141.2	5.56	142.0	5.59	63.0	2.48	ø 19.1	ø 0.75	1633SSB23N	1631SSB23S
25	153.2	6.03	154.2	6.07	63.0	2.48	ø 19.1	ø 0.75	1633SSB25N	1631SSB25S
27	165.2	6.50	166.6	6.56	63.0	2.48	ø 19.1	ø 0.75	1633SSB27N	1631SSB27S
29	177.2	6.98	179.0	7.05	63.0	2.48	ø 19.1	ø 0.75	1633SSB29N	1631SSB29S
31	189.3	7.45	191.3	7.53	63.0	2.48	ø 19.1	ø 0.75	1633SSB31N	1631SSB31S

Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 42.3 mm (1.67 inch). Tooth width: 15.0 mm (0.59 inch).

Two part uni SSB single row



No of	pitch d	iameter	overall o	liameter	hub di	ameter	bore		reference no.
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic
19	117.3	4.62	117.1	4.61	58.0	2.28	ø 19.1	ø 0.75	1633SSB19NT
21	129.3	5.09	130.0	5.12	58.0	2.28	ø 19.1	ø 0.75	1633SSB21NT
23	141.2	5.56	142.0	5.59	58.0	2.28	ø 19.1	ø 0.75	1633SSB23NT
25	153.2	6.03	154.2	6.07	58.0	2.28	ø 19.1	ø 0.75	1633SSB25NT

Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 42.3 mm (1.67 inch). Tooth width: 15.0 mm (0.59 inch).



uni SSB

uni SSB double row

No. of	pitch d	iameter	overall o	liameter	hub diameter		bore		reference no.	
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic	steel
19	117.3	4.62	117.1	4.61	63.0	2.48	ø 19.1	ø 0.75	303382019N	303182019S
21	129.3	5.09	130.0	5.12	63.0	2.48	ø 19.1	ø 0.75	303382021N	303182021S
23	141.2	5.56	142.0	5.59	63.0	2.48	ø 19.1	ø 0.75	303382023N	303182023S
25	153.2	6.03	154.2	6.07	63.0	2.48	ø 19.1	ø 0.75	303382025N	303182025S
27	165.2	6.50	166.6	6.56	63.0	2.48	ø 19.1	ø 0.75	303382027N	303182027S
29	177.2	6.98	179.0	7.05	63.0	2.48	ø 19.1	ø 0.75	303382029N	303182029S
31	189.3	7.45	191.3	7.53	63.0	2.48	ø 19.1	ø 0.75	303382031N	303182031S

Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 42.3 mm (1.67 inch). Tooth width each row: 15.0 mm (0.59 inch).

Two part uni SSB double row



No. of	pitch d	iameter	overall o	liameter	hub di	ameter	bore		reference no.	
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic	
19	117.3	4.62	117.1	4.61	58.0	2.28	ø 19.05	ø 0.75	303382019NT	
21	129.3	5.09	130.0	5.12	58.0	2.28	ø 19.05	ø 0.75	303382021NT	
23	141.2	5.56	142.0	5.59	58.0	2.28	ø 19.05	ø 0.75	303382023NT	
25	153.2	6.03	154.2	6.07	58.0	2.28	ø 19.05	ø 0.75	303382025NT	

Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 42.3 mm (1.67 inch). Tooth width each row: 15.0 mm (0.59 inch).



Product Supports







uni SSB Accessories

	mm	inch
S	76.1	3.00

Can be machined to other heights on request.

uni L-SNB, 50.0 mm (1.97 inch) pitch, is designed for heavy-duty applications, such as mass handling, palletizers or pasteurizers where the different heat zones demand a strong belt system.



The special surface profile of the belt is designed to give minimum resistance against products and wearstrips. The open design is easy-to-clean.





uni L-SNB is also available in a rib version that can be used with finger plates and thus is suitable for product transfer applications.

uni L-SNB

Pitch: 50.0 mm (1.97 inch).

Straight running

Backflex radius: 70 mm (2.8 inch) Backflex radius, rib: 140 mm (5.5 inch)

Locking type for uni L-SNB: uni L-SNB Endlock

Surface opening: 36%

Patents U.S.: 5.482.156, 5.379.883 EU: 0.652.169

Please note: uni L-SNB can be supplied with reinforcement links

Industries and applications

Bakeries Cooling tunnels Depalletisers Fruit and vegetable industry Mass handling Meat and fish industry Microwave Packaging Pasteurizers Poultry industry





uni L-SNB

Standard m	aterials	:	
POM-LF	PP	PP	PE

uni L-SNB Rib

	Standard 1	naterials:
PP PE	POM-LF	PP

Other available materials: See page 9 and 10 Standard pin materials: AISI 304 SS, PP or PE

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch
152	6.0	912	35.9	65.9	1673	2433	95.8
228	9.0	988	38.9	68.8	1749	2509	98.8
304	12.0	1064	41.9	71.8	1825	2585	101.8
380	15.0	1140	44.9	74.8	1901	2661	104.8
456	18.0	1217	47.9	77.8	1977	2737	107.8
532	21.0	1293	50.9	80.8	2053	2813	110.8
608	23.9	1369	53.9	83.8	2129	2889	113.8
684	26.9	1445	56.9	86.8	2205	2965	116.7
760	29.9	1521	59.9	89.8	2281	3041	119.7
836	32.9	1597	62.9	92.8	2357	3117	122.7

Belt widths for uni L-SNB in POM, PP and PE.

Please note that the tolerance is 0.2% of the belt width.

The dimensions are valid at $+20^{\circ}$ C ($+68^{\circ}$ F). Belt widths vary with temperature.

Please note that if special material is used, the widths might differ from widths shown in the table.

Belts wider than mentioned can be assembled.

Max. recommended temperature for uni L-SNB Rib in PE is $+40^{\circ}$ C ($+104^{\circ}$ F). For higher temperatures uni-chains recommends PP or POM.

TRAVEL P T LE







ĺ		mm	inch
	Е	8.3	0.33
	L	8.0	0.31
	Р	50.0	1.97
	R	6.0	0.23
	Т	16.0	0.63

uni L-SNB

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uni L-SNB

Permissible Tensile Strength

	РОМ		Р	Р	PE	
	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft
uni L-SNB	35000	2398	17500	1199	10500	719
uni L-SNB Rib	(55000)	3768	29800	2042	17800	1220

The values in the tables are for belt widths 1 m (3.3 ft) at +20 $^\circ C$ (+68 $^\circ F).$

Please contact uni-chains for data at other temperatures. Load ratings are the same for SS pins, PP and PE pins. () = with PA6 pins only.

Belt Weights

Belt material	РОМ			PP				PE				
Pin material	plastic		ste	eel	pla	stic	ste	el	pla	stic	ste	el
	kg/m2	lb/ft2	kg_{m^2}	lb/ft2	kg/m2	lb_{ft^2}	kg/m2	lb/ft2	kg/m2	lb/ft ²	kg/m2	lb/ft2
uni L-SNB	10.2	2.09	16.7	3.42	6.7	1.37	13.2	2.70	7.3	1.50	13.8	2.83
uni L-SNB Rib	14.8	3.03	21.3	4.36	9.6	1.97	16.1	3.30	10.6	2.17	17.6	3.61

Standard Sprockets

No of	pitch d	iameter	overall o	liameter	hub di	ameter	bore		reference no.	
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic	
6	100.0	3.94	92.5	3.64	70.0	2.76	ø 19.1	ø 0.75	2033LSNB06N	
。 。	120.7	5.15	129.6	5.06	70.0	2.76	ø 19.1	ø 0.75	2033LSNB08N	
0	130.7	5.15	120.0	5.00	85.0	3.35	ø 19.1	ø 0.75	2033LSNB08NBB	
10	161.8	6 37	150.8	6 20	70.0	2.76	ø 19.1	ø 0.75	2033LSNB10N	
10	101.0	0.57	139.0	0.29	117.0	4.60	ø 19.1	ø 0.75	2033LSNB10NBB	
12	103.2	7.61	102.5	7 58	70.0	2.76	ø 19.1	ø 0.75	2033LSNB12N	
12	193.2	7.01	192.5	192.5	192.5 7.58	117.0	4.60	ø 19.1	ø 0.75	2033LSNB12NBB

Standard material: Polyamide.

Sprockets in steel and split sprockets are available. Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 42.3 mm (1.67 inch). Tooth width: 7.0 mm (0.28 inch).



Finger Plates



uni L-SNB Accessories

All uni-chains belt systems that are available in a raised rib version can be supplied with matching finger plates, also called combs.

The finger plates can be installed with plastic screws.

The finger plates are supplied with cover caps which can be attached when the finger plate has been installed. The cover caps can be removed by using a screwdriver that can be inserted between the cover and finger plate.



	mm	inch
A	2.5	0.10
E	152.1	5.99
F	100.3	3.95
G	12.0	0.48
Н	10.0	0.39
I	80.0	3.15
J	114.0	4.49
K	192.0	7.56
М	135.0	5.31
N	23.0	0.91
0	57.0	2.24

The uni OPB series, 50.0 mm (1.97 inch) pitch, with its many variants and combination possibilities is the most versatile straight running belt in the uni-chains range of belt systems.

15 combinations of top and bottom surfaces and a wide range of accessories makes it suitable for almost any application from direct food contact to the transport of people.

uni OPB is a very strong and easy-to-clean belt. It is available in two thicknesses and in closed and many different open versions.



Product supports and side guards in different heights enable e.g inclined transport. Various open versions are suitable for applications with drainage or air flow.



uni OPB 8 20% open and 25% open are very popular in the fish industry, providing a solid basis for the transport in wet surroundings.



uni OPB with a rough non-skid surface is used for transport of junior skiers and also for personnel in the auto-mobile industry.

uni OPB

Pitch: 50.0 mm (1.97 inch)

Straight running

Backflex radius: 75 mm (3.0 inch) Backflex radius, rib: 300 mm (11.8 inch) Backflex radius, side guards: 200 mm (7.9 inch)

Locking types for uni OPB: uni OPB endlocks uni OPB rodlocks

Surface opening: Please see page 54

Patents: U.S.: 5.305.869, 5.000.312

Please note: uni OPB can be supplied with steel reinforcement links. See page 76.

Industries and applications

Automotive Bakeries Car wash Dairies Fish processing Food processing Fruit Snack food Ski industry Vegetable



uni OPB 4-C uni OPB 4V-C

Standard materials:PPPE



uni OPB 8-C

Standard materials:							
PP		PP		PE		PE	



uni OPB 8-20%

Moulded to order



uni OPB 4V-23%: E.g. washing of vegetables.

Standard materials:

 PP
 PP



uni OPB 8-25%: E.g.conveying of fish.

Standard materials:PPPE



uni OPB 4V Vacuum

Standard material: PE



uni OPB 4V-36%: For maximum airflow through the belt.

Standard material:



uni OPB with rubber inserts

Moulded to order

uni OPB



uni OPB 4V and 8-C rough: Rough with improved non-skid surface.

Moulded to order



uni OPB 4V-23% fine meshed: E.g. for rice in a boiling process.

Standard materials:



uni OPB 4V-Rib 23%: Can be used with finger plates.

Standard material:

uni OPB standard programme: See materials and colours on page 54

Other available materials: See page 9 and 10 Standard pin materials: AISI 304 SS, PP or PE



uni OPB 4/OPB 8M Thickness 4.0 mm (0.16 inch) and 7.8 mm (0.31 inch).







uni OPB 4V With reinforcement ribs on the bottom of 4.0 mm (0.16 inch) thickness belt.



uni OPB 8P Thickness 7.8 mm (0.31 inch).

Combinations of top and bottom surface:

	uni OPB 4	uni OPB 8M	uni OPB 4V	uni OPB 8	uni OPB 8P
uni OPB C	X*	Х	X*	X*	Х
uni OPB C rough			Х	Х	
uni OPB 20%				Х	
uni OPB 23%			X*		
uni OPB 23% fine-meshed			Х		
uni OPB 25%				X*	
uni OPB 36%			X*		
uni OPB Rib 23%			X*		
uni OPB Vacuum	Х		Х		

* Note: These types are listed in the U.S.D.A "Accepted Meat and Poultry Equipment" publication as accepted for food contact.

uni OPB











* uni-chains recommends this travel direction. However, travel in both directions is possible.

	mm	inch
Е	8.3	0.33
L	8.0	0.31
Р	50.0	1.97
R	10.0	0.93
S	7.8	0.31
Т	4.0	0.16
V	16.0	0.31

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch
151	5.9	503	19.8	905	35.6	1960	77.2
185	7.3	536	21.1	938	36.9	2111	83.1
268	10.6	570	22.4	988	38.9	2262	89.1
302	11.9	603	23.7	1022	40.2	2413	95.0
335	13.2	636	25.0	1055	41.5	2564	100.9
386	15.2	703	27.7	1206	47.5	2714	106.9
403	15.9	754	29.7	1357	53.4	2865	112.8
418	16.5	788	31.0	1508	59.4	3016	118.7
452	17.8	804	31.7	1659	65.3	3167	124.7
486	19.1	872	34.3	1810	71.2	3318	130.6

Belt widths for uni OPB in POM, PP and PE.

Please note the tolerance is 0.2% of the belt width.

For belt widths for 23% fine-meshed add 0.35% to above values.

Please note that if a special material is used, the widths might differ from the width shown in the table. Belts wider than the mentioned can be assembled.

The dimensions are valid at $+20^{\circ}$ C ($+68^{\circ}$ F). Belt widths vary with temperature.

Max. recommended temperature for uni OPB Rib in PE is $+40^{\circ}C$ ($+104^{\circ}F$). For higher temperatures uni-chains recommends PP or POM.

Permissible Tensile Strength

	РОМ		Р	Р	PE		
	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	
uni OPB 8 and uni OPB 4V	22000	1507	11000	754	6600	452	
uni OPB 4	11000	754	5500	377	3300	226	
uni OPB 8P and uni OPB 8M	8900	610	8900	610	6600	452	

The values in the tables are for belts at +20°C (+68°F).

Please contact uni-chains for data at other temperatures.

Load ratings are the same for SS and PP pins in POM and PP belts.

Load ratings for PE belts are with PE pins.

uni OPB

Belt Weights

Belt material	РОМ				РР				PE			
Pin material	plastic		steel		plastic		steel		plastic		steel	
	kg/m2	lb/ _{ft²}	kg/m2	lb/ _{ft²}	kg/m ²	lb/ _{ft²}	kg/m2	lb/ _{ft²}	kg/m2	lb_{ft^2}	kg/m2	lb/ft ²
uni OPB C/C rough/ vac.	11.7	2.40	18.3	3.75	7.5	1.54	14.0	2.87	8.1	1.66	14.6	2.99
uni OPB 20%/23%/25%	10.1	2.07	16.1	3.30	6.9	1.41	13.4	2.74	7.3	1.50	13.8	2.83
uni OPB 36%	9.5	1.95	15.3	3.13	6.3	1.29	12.8	2.62	6.7	1.37	13.2	2.70
uni OPB Rib	14.6	3.00	21.1	4.32	9.3	1.91	15.7	3.22	10.1	2.07	16.5	3.37

Standard Sprockets

No. of	pitch diameter		overall diameter		hub di	hub diameter		ore	reference no.
teeth	mm	inch	mm	inch	mm	mm inch		inch	plastic
							ø 19.1	ø 0.75	2433OPBS06N
6	100.0	3.94	94.5	3.72	65.0	2.56	sq 38.1	sq 1.50	2433OPBS06N15SQ
							sq 40.0	sq 1.57	2433OPBS06N40SQ
	8 130.7	5.15			5.08 65.0	65.0 2.56	ø 19.1	ø 0.75	2433OPBS08N
8			129.0	5.08			sq 38.1	sq 1.50	2433OPBS08N15SQ
							sq 40.0	sq 1.57	2433OPBS08N40SQ
		()7		6.20		65.0 2.56	ø 19.1	ø 0.75	2433OPBS10N
10	161.9		160 1		65.0		sq 38.1	sq 1.50	2433OPBS10N15SQ
10	101.0	0.37	100.1	0.30			sq 40.0	sq 1.57	2433OPBS10N40SQ
					120	4.72	ø 19.1	ø 0.75	2433OPBS10NBB
					65.0	2.56	ø 19.1	ø 0.75	2433OPBS12N
12	193.2	7.61	191.5	7.54	03.0	2.50	sq 38.1	sq 1.50	2433OPBS12N15SQ
					120.0	4.72	sq 40.0	sq 1.57	2433OPBS12N40SQBB

sq = Square bore.

Standard materials: Polyamide, stainless steel and carbon steel.

Split sprockets are available.

Square bore in steel sprockets and other teeth numbers are available upon request.

Please contact uni-chains for further information.

Width of sprockets: 42.3 mm (1.67 inch). Tooth width: 11.0 mm (0.43 inch).

Please note: For uni OPB 8M and uni OPB 8P it is necessary to use special sprockets.

Standard Sprockets for uni OPB 8M and uni OPB 8P







Note: When using a belt system with tabs, the temperature should be constant.



uni OPB product support without reinforcement ribs



Side Guards





TRAVEL

uni OPB Accessories

When the belt goes from horizontal to inclining travel it is an advantage to provide the belt with tabs in order to hold it down. The tabs can be placed in the entire width of the belt as required.

	mm	inch
G	4.2	0.17
Н	22.0	0.87
J	23.2	0.92
K	17.0	0.67

If the products are separated into portions or are transported on inclined conveyors it is an advantage to use product supports.

uni OPB product supports without reinforcement ribs are also available in bent versions. Please contact uni-chains for further information.

	mm	inch
S	50.7	2.00
S	76.1	3.00
S	101.5	4.00

	mm	inch
Т	50.7	2.00
Т	76.1	3.00
Т	101.5	4.00
Т	152.6	6.00

Side guards can be very suitable in many cases where they can secure that the products do not fall off the belt during operation.

	mm	inch
A	102.6	4.04
B	77.2	3.04
C	51.8	2.04
D	29.0	1.14
E	42.0	1.65
G	38.1	1.50
Р	50.0	1.97

A special side guard (160 mm (6.3 inch)) is also available. Please contact uni-chains for further information.

Finger Plates



Snap-On Cover Caps

Type 2



Type 3



POM-D

uni OPB Accessories

All uni-chains belt systems that are available in a raised rib version can be supplied with matching finger plates, also called combs.

The finger plates can be installed with plastic screws.

The finger plates are supplied with cover caps which can be attached when the finger plate has been installed. The cover caps can be removed by using a screwdriver that can be inserted between the cover and finger plate.



	mm	inch
A	2.8	0.11
В	220.0	8.66
С	150.0	5.91
D	75.0	2.95
Е	149.0	5.87
F	100.0	3.94
G	12.0	0.47
н	9.0	0.35
I	259.0	10.20
J	120.0	4.72
K	60.0	2.36
L	119.0	4.69
М	123.0	4.84
Ν	22.0	0.87
0	53.0	2.09

The 50.8 mm (2.00 inch) pitch uni MPB is designed for hygienic and heavy duty transport in the food industry, mainly in the meat industry. The strength lies in the reinforced underside, the sprocket design and the ø8 mm (ø0.3 inch) pins locked with hygienic locks. The hinge and sprocket designs enable fast and effective cleaning and prevent particles from clustering between belt and sprockets. All planes are angled for water and dirt to run off easily. The smooth surface prevents the growth of bacteria.





uni MPB is available with 7 different surface designs: Closed, Grip top, Non Stick, 18%, 20%, 22% open and with rollers. The uni MPB Grip Top has a special grip surface for holding products on inclined conveyor sections.



uni MPB 22% open enables drainage and/or air flow in the food processing industry.



The uni MPB Closed is used for meat chopping and cutting operations. It has a smooth surface preventing dirt from getting caught between the hinges. A very smooth surface means optimum cleanability.

uni MPB

Pitch: 50.8 mm (2.00 inch)

Straight running

Backflex radius: 65 mm (2.6 inch)

Backflex radius with sideguards: 200 mm (7.9 inch)

Locking type for uni MPB: Hygienic locking system

Patents GB2309062 U.S.: 6.332.531, 6.390.288

Surface opening: Please see page 61

Industries and applications

Accumulation tables Deboning lines Deheading lines Draining processes Fish processing General transport Incline transport Inspection/grading tables Packaging conveyors Poultry and meat processing Transfers (breading, cooking, freezing, etc.)



uni MPB: Closed top belt.

Standard materials:								
POM-I	POM-I							
PP PP	PE-I	PE-I						



uni MPB-G: Grip surface.

Standard material: POM-I

uni MPB



uni MPB-GE: Grip surface with indent 35 mm (1.4 inch).

Standard material: POM-I



uni MPB-N: Non stick surface.



uni MPB-NE: Non stick surface with indent 35 mm (1.4 inch).

Standard material: PE-I Standard material: PE-I



uni MPB 20%: Max. hole size is 2.5 x 15.0 mm (0.10 x 0.59 inch).





uni MPB 22%: Max. hole size is 8.0 x 12.0 mm (0.31 x 0.47 inch).

Standard materials: PE-I PE-I



uni MPB 18%: Max. hole size is 2.0 x 11.5 mm (0.08 x 0.45 inch).

Standard materials:						
POM-I		POM-I				
PP	PP	PE-I				



uni MPB PRR: Up to 6 PRR kits per 6 inch module in travel direction or up to 3 PRR kits transversely.

Standard material: POM-I

uni MPB standard programme: See materials and colours on page 61.

Please note: All uni MPB belts in POM are supplied in a special impact resistant POM-I.

Please note: All uni MPB belts in PE are supplied in a special impact resistant PE-I.

uni MPB PRR: As standard the base link is supplied in POM and the rollers are supplied in white PA6, the roller bed in white POM and the roller pin in stainless steel.

Other available materials: See page 9 and 10

Standard pin materials: AISI 304 SS, PP and PE.

Standard Belt Widths

mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
151	5.9	637	25.1	1106	43.5	1608	63.3	2077	81.8
184	7.2	653	25.7	1156	45.5	1625	64.0	2110	83.1
200	7.9	704	27.7	1173	46.2	1658	65.3	2144	84.4
251	9.9	720	28.3	1206	47.5	1692	66.6	2161	85.1
268	10.6	754	29.7	1240	48.8	1709	67.3	2211	87.0
302	11.9	787	31.0	1256	49.4	1759	69.3	2228	87.7
335	13.2	804	31.7	1307	51.5	1776	69.9	2261	89.0
351	13.8	854	33.6	1323	52.1	1809	71.2	2295	90.4
402	15.8	871	34.3	1357	53.4	1842	72.5	2312	91.0
418	16.5	905	35.6	1390	54.7	1859	73.2	2362	93.0
452	17.8	938	36.9	1407	55.4	1909	75.2	2379	93.7
486	19.1	955	37.6	1457	57.4	1926	75.8	2412	95.0
503	19.8	1005	39.6	1474	58.0	1960	77.2	2446	96.3
553	21.8	1022	40.2	1507	59.3	1993	78.5	2462	96.9
569	22.4	1055	41.5	1541	60.7	2010	79.1	2512	98.9
603	23.7	1089	42.9	1558	61.3	2060	81.1	-	-

Belt widths for uni MPB in POM, PP and PE.

Please note that the values in the table are max. values. The dimensions are valid at $+20^{\circ}$ C ($+68^{\circ}$ F). Belt widths vary with tempera-

The dimensions are valid at $\pm 20^{\circ}$ C ($\pm 00^{\circ}$ T). Bett widths vary with temperature.

Please note that if special material is used, the width might differ from the widths shown in the table. Belts wider than mentioned in the table can be assembled.

Permissible Tensile Strength

Belt material	РОМ		PP		PE	
	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft
uni MPB	27500	1884	16000	1096	13000	891

uni MPB

P P



uni MPB, 18%, 20% and 22%







uni MPB-N



uni MPB PRR

	mm	inch
E	8.3	0.33
L	8.0	0.31
Р	50.8	2.00
R	3.2	0.13
S	2.0	0.08
Т	16.0	0.63
V	15.3	0.60

The values in the tables are for belts at +20°C (+68°F). Please contact uni-chains for data at other temperatures. Load ratings are the same for SS pins, PE and PP pins.

Max. Load per Sprocket

uni MPB	N	lbf
With snub roller	2000	450
Without snub roller	1250	281

Max. Load per Roller

uni MPB PRR	N	lbf
Max. permissible static load	2000	450
Max. permissible dynamic load (accumulation)	300	68

Belt Weights

Belt material	РОМ		PP		PE	
Pin material	plastic		plastic		plastic	
	kg/m2	lb/ft2	kg/m ²	lb/ft2	kg/m2	lb/ft2
uni MPB/G/GE/N/NE	11.9	2.44	8.3	1.70	8.8	1.80
uni MPB 18%	11.1	2.27	7.5	1.54	8.0	1.64
uni MPB 20%	11.2	2.29	7.4	1.52	7.9	1.62
uni MPB 22%	10.8	2.21	7.2	1.47	7.6	1.56
uni MPB PRR Base*	9.3	1.91	-	-	-	-

Standard Sprockets

No of	pitch d	iameter	overall o	liameter	hub di	hub diameter bor		ore	reference no.			
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic			
6	101.6	4.00	00.5	2.02	65.0	2.56	ø 19.1	ø 0.75	1833MPB06N			
0	101.0	4.00	99.5	3.92	05.0	2.30	sq 38.1	sq 1.50	1833MPB06N15SQ			
							ø 19.1	ø 0.75	1833MPB08N			
8	132.8	5.23	132.9	5.23	65.0	2.56	sq 38.1	sq 1.50	1833MPB08N15SQ			
							sq 40.0	sq 1.57	1833MPB0840SQ			
							ø 19.1	ø 0.75	1833MPB10N			
					65.0	2.56	sq 38.1	sq 1.50	1833MPB10N15SQ			
								sq 40.0	sq 1.57	1833MPB1040SQ		
							ø 19.1	ø 0.75	1833MPB10NBB			
10	164.4 6.47	6.47	6.47 165.8	6.47 165.8 6.53	6.53	165.8 6.53			sq 38.1	sq 1.50	1833MPB10N15SQBB	
								120.0	120.0	120.0 4.72	sq 50.8	sq 2.00
		120.0 4.72 sq 63.5 sq 40.0					120.0	sq 63.5	sq 2.50	1833MPB10N25SQBB		
							sq 40.0	sq 1.57	1833MPB10N40SQBB			
								sq 60.0	sq 2.36	1833MPB10N60SQBB		
		196.3 7.73 198.6 7.82 120.0 4.72	198.6				ø 19.1	ø 0.75	1833MPB12NBB			
				7.82			sq 38.1	sq 1.50	1833MPB12N15SQBB			
12	196.3				0.0 4.72	sq 50.8	sq 2.00	1833MPB12N2SQBB				
12	170.5				120.0	4.72	sq 63.5	sq 2.50	1833MPB12N25SQBB			
							sq 40.0	sq 1.57	1833MPB12N40SQBB			
							sq 60.0	sq 2.36	1833MPB12N60SQBB			

sq = Square bore.

Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

Width of sprockets: 42.3 mm (1.67 inch). Tooth width: 10.0 mm (0.39 inch).

uni MPB

Recommended minimum number of sprockets: 1 per 150 mm (6 inch) across shaft. Contact uni-chains for details about use of snub rollers.

* For total belt weights add 0.011 kg (0.024 lb) x no. of roller kits



Product Supports



uni MPB Accessories

If the products are separated into portions or are transported on inclined conveyors it is an advantage to use product supports.



Bent, Cupped and Perforated Product Supports

Height			
mm	inch		
76.2	3.00		
101.5	4.00		
152.6	6.00		

Standard Product Support S-types

Height			
mm	inch		
25.4	1.00		
50.7	2.00		
76.2	3.00		
101.5	4.00		
152.6	6.00		

No Cling Product Support

Height				
mm	inch			
50.7	2.00*			
76.2	3.00			
101.5	4.00			

* Only available with drain.

Micro Product Support M-types

Height				
mm	inch			
5.0	0.20			
10.0	0.39			

Micro Product Support 22%

Height		
mm inch		
3.0	0.12	

Tabs



Note: When using a belt system with tabs, the temperature should be constant.

Side Guards



uni MPB Accessories

When the belt goes from horizontal to inclining travel it is an advantage to provide the belt with tabs in order to hold it down. The tabs can be placed in the entire width of the belt as required.

	mm	inch
G	4.2	0.17
Н	22.0	0.87
J	23.2	0.91
K	17.0	0.67

Side guards can be very suitable in many cases where they can secure that the products do not fall off the belt during operation.

Note: Backflex radius when side guards are used: 200 mm (7.9 inch).

	mm	inch
A	101.7	4.00
В	76.4	3.00
C	50.9	2.00
D	32.0	1.26
E	16.0	0.63
Р	50.8	2.00

uni Flex SNB, the 25.4 mm (1.00 inch) pitch side flexing modular belt.

uni Flex SNB can flex in all directions allowing it to be used in countless different applications. The many accessories such as product supports, rubber supports and side guards as well as numerous belt tracking and control systems give uni Flex SNB an outstanding versatility.



The "closed" version for hygienic transport.

uni Flex SNB-W with reinforcement links and rubber supports.



Conveying shrink-wrapped products.

uni Flex SNB

Pitch: 25.4 mm (1.00 inch)

Side flexing

Backflex radius: 50 mm (2.0 inch)

Locking types for uni Flex SNB: Lockingplate Wearpart lock Pinlock

Surface opening: Please see page 67

Patents U.S.: 5.379.883, 6.073.756, 6.216.854

Further patents pending

Applications

Breweries Food processing Various manufacturing plants

Please contact us to get our special uni Flex SNB documentation. See contact nos. on the back.





uni Flex SNB-L: Standard radius. Min. inside radius 2.3 x belt width, 55% open area for max. airflow/ cooling.





uni Flex SNB-WT: Standard radius fitted with reinforcement links and steel pins.

Integral moulded edge wearpart. Integral underside tab (S-Tab.)





uni Flex SNB-CR: Tight radius. Min. inside radius from 1.5 x belt width. 47% open hygienic solid grid surface.

Standard materials:							
POM-D	POM-D						
PP PP							



uni Flex SNB-WO: Standard radius fitted with reinforcement links and steel pins. Integral outer edge tab system. Transports products wider than the belt.



67

uni Flex SNB Programme

Refer to this diagram for the material combinations, surface openings and turning radii of the five different uni Flex SNB types.

Belt type	Material	Hinge design	Flex ratio
uni Flex SNB-L	all plastic	open hinge	2.3
uni Flex SNB-CR	all plastic	closed hinge	1.5*
uni Flex SNB-W	plastic/steel	open hinge	2.3
uni Flex SNB-WT	plastic/steel	open hinge	2.3
uni Flex SNB-WO	plastic/steel	open hinge	2.3

Inner curve radius = Flex ratio x belt width.

* For widths W \leq 229 mm (9.0 inch), when W > 229 mm (9.0 inch) flex radius is 1.6 x W-18 mm (0.7 inch).

uni Flex SNB



uni Flex SNB-W: Standard radius fitted with reinforcement links and steel pins. Integral moulded edge wearpart.

Standar	Standard materials:								
POM-D									
PP	PP	PA6.6	PA6.6						



uni Flex SNB Open hinge (55% open area)



uni Flex SNB Closed hinge (47% open area)

uni Flex SNB standard programme: See materials and colours on page 67

Standard pin materials: PA6.6, PP, AISI 304 SS or AISI 316 SS (acid resistant)

Standard Belt Widths for uni Flex SNB-L (W_L)

mm	inch	mm	inch
76	3.0	608	23.9
152	5.9	684	26.9
228	9.0	760	29.9
304	12.0	836	32.9
379	14.9	912	35.9
456	18.0	988	38.9
532	20.9	1065	41.9

Non standard cut widths are possible in multiples of 12.7 mm (0.50 inch).

To find the belt widths for other uni Flex SNB tracking systems and belt types use formulas below.

uni Flex SNB-CR: $W = W_L$

uni Flex SNB-L or CR with wearpart: $W = W_L + 2 \times 3 \text{ mm} (0.1 \text{ inch})$

uni Flex SNB-L or CR with O-Tab: W = W_L + 2 x 3 mm (0.1 inch)

uni Flex SNB-W, WO or WT: W = W_L + 2 x 3 mm (0.1 inch) uni Flex SNB



uni Flex SNB-L, W, WO



uni Flex CR



uni Flex SNB-WT

	mm	inch
Α	12.0	0.48
E	5.1	0.20
L	6.5	0.26
Р	25.4	1.00
Т	13.0	0.51

uni Flex SNB

Max. Permissible Load in Curve

	Belt material	Selt material POM-D/PA6.6			Р	PE	
	Pin material	N	lbf	N	lbf	N	lbf
uni Flex SNB-L/CR	PP, PE or SS	600	135	600	135	400	90
uni Flex SNB-L/CR	PA6.6	1000	225	600	135	400	90

Max. Permissible Load in Curve

	Belt material	POM-I	D/PA6.6	Р	Р	PE	
	Pin material	N	lbf	N	lbf	Ν	lbf
uni Flex SNB-W/WO/WT	PP or PE	600	135	600	135	400	90
uni Flex SNB-W/WO/WT	PA6.6	1000	225	600	135	400	90
uni Flex SNB-W/WO/WT	SS + rl*	3300	742	3300	742	3300	742

* rl = Reinforcement links

Max. Permissible Load on Straight Sections

Belt material	POM-D or PA6.6		Р	P	PE	
	N/m lbf/ft		N/m lbf/ft		N/m	lbf/ft
uni Flex SNB-L/CR/W/WO/WT	30000	2055	15000	1028	9000	617

Belt Weights for uni Flex SNB-L

Belt material	POM-D		Р	Р	PE		PA6.6	
Pin material	kg/m ²	lb/ft ²						
PP	6.7	1.37	4.6	0.94	4.8	0.98	5.6	1.15
PA6	6.9	1.41	4.8	0.98	5.0	1.02	5.8	1.19
SS	12.1	2.48	10.0	2.05	10.2	2.09	11.0	2.25

Belt Weights for uni Flex SNB-CR

Belt material	POM-D		Р	PP		PE		PA6.6	
Pin material	kg/m2	lb/ft2	kg/m2	lb/ft ²	kg/m2	lb/ft ²	kg/m2	lb/ft ²	
PP	7.5	1.54	5.2	1.07	5.3	1.09	6.2	1.27	
PA6	7.7	1.58	5.4	1.11	5.5	1.13	6.4	1.31	
SS	12.9	2.64	10.2	2.09	10.7	2.19	11.6	2.38	

Belt Weights for uni Flex SNB-W

Belt material	POM-D		Р	PP		PE		PA6.6	
Pin material	kg/m ²	lb/ft2	kg/m ²	lb/ft2	kg/m ²	lb/ft2	kg/m ²	lb/ft ²	
PP	7.1	1.45	4.9	1.00	5.0	1.02	5.8	1.19	
PA6	7.3	1.50	5.1	1.04	5.2	1.07	6.0	1.23	
SS	12.5	2.56	10.3	2.11	10.4	2.13	11.2	2.29	

Belt Weights for uni Flex SNB-WO

Belt material	POM-D		PP		PE		PA6.6	
Pin material	kg/m ²	lb/ft ²						
PP	7.3	1.52	5.1	1.04	5.2	1.07	6.1	1.25
PA6	7.5	1.54	5.3	1.09	5.4	1.11	6.2	1.27
SS	12.7	2.60	10.5	2.15	10.6	2.17	11.4	2.34

Belt Weights for uni Flex SNB-WT

Belt material	POM-D		PP		PE		PA6.6	
Pin material	kg/m ²	lb/ft ²						
PP	7.4	1.52	5.1	1.04	5.2	1.07	6.1	1.25
PA6	7.6	1.56	5.3	1.09	5.4	1.11	6.3	1.29
SS	12.8	2.62	10.5	2.15	10.6	2.17	11.5	2.36

The values in the tables are for belts at $+20^{\circ}$ C ($+68^{\circ}$ F). For relations between speed and load refer to uni Flex SNB technical manual or contact uni-chains.





uni Flex SNB

Belt Tracking and Control Systems



In below diagram you will find the options for tracking the different types of uni Flex SNB.

	Belt tracking and control combinations							
Belt type	Wear- part	O-Tab	S-Tab	I-Tab				
uni Flex SNB-L	+	+	-	+				
uni Flex SNB-CR	+	+	-	-				
uni Flex SNB-W	~	-	-	+				
uni Flex SNB-WT	-	-	~	+				
uni Flex SNB-WO	-	~	-	+				

✓ Standard + Optional - Not possible

uni Flex SNB

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Standard Sprockets

No. of	pitch di	iameter	overall o	liameter	hub di	ameter	bo	ore	refere	nce no.
teeth	mm	inch	mm	inch	mm	inch	mm	inch	one-part	two-part double row
	74.3			2.91	56.8	2.24	ø 19.1	ø 0.75	2133FSNB09N	-
9		2.93	73.8				sq 25.4	sq 1.00	2133FSNB09N10SQ	-
							sq 30.0	sq 1.18	2133FSNB09N30SQ	-
							ø 19.1	ø 0.75	2133FSNB10N	-
10	82.2	3.24	82.2	3.24	65.2	2.57	sq 25.4	sq 1.00	2133FSNB10N10SQ	-
							sq 30.0	sq 1.18	2133FSNB10N30SQ	-
10		3.87	98.8	3.89	70.0	2.76	ø 19.1	ø 0.75	2133FSNB12N	-
	00.0						sq 25.4	sq 1.00	2133FSNB12N10SQ	-
12	98.2						sq 38.1	sq 1.50	2133FSNB12N15SQ	-
							sq 40.0	sq 1.57	2133FSNB12N40SQ	-
							ø 19.1	ø 0.75	2133FSNB15N	-
		4.81	123.5	4.86	70.0	2.76	sq 25.4	sq 1.00	2133FSNB15N10SQ	-
15	100.0						sq 38.1	sq 1.50	2133FSNB15N15SQ	-
15	122.2						sq 40.0	sq 1.57	2133FSNB15N40SQ	-
					96.0	3.78	sq 60.0	sq 2.36	2133FSNB15N60SQBB	-
							sq 63.5	sq 2.50	2133FSNB15N25SQBB	-
		5.76	146.1	5.75	70.0	2.76	ø 19.1	ø 0.75	2133FSNB18N	-
	146.3						sq 25.4	sq 1.00	2133FSNB18N10SQ	-
							sq 38.1	sq 1.50	2133FSNB18N15SQ	-
							sq 40.0	sq 1.57	2133FSNB18N40SQ	-
					96.0	3.78	sq 60.0	sq 2.36	2133FSNB18N60SQBB	-
10							sq 63.5	sq 2.50	2133FSNB18N25SQBB	-
18					40.0	1.57	ø 19.1	ø 0.75	-	2133FSNB18NT
					50.0	1.97	ø25.0	ø 0.98	-	2133FSNB18NT25
					60.0	2.36	ø 30.0	ø 1.18	-	2133FSNB18NT30
					-		sq 38.1	sq 1.50	-	2133FSNB18NT15SQ
						-	sq 40.0	sq 1.57	-	2133FSNB18NT40SQ
							sq 60.0	sq 2.36	-	2133FSNB18NT60SQ
19 15		6.07	156.2	6.15	70.0	2.76	ø 19.1	ø 0.75	2133FSNB19N	-
							sq 25.4	sq 1.00	2133FSNB19N10SQ	-
							sq 38.1	sq 1.50	2133FSNB19N15SQ	-
							sq 40.0	sq 1.57	2133FSNB19N40SQ	-
	154.3				96.0	2.70	sq 60.0	sq 2.36	2133FSNB19N60SQBB	-
						5.78	sq 63.5	sq 2.50	2133FSNB19N25SQBB	-
					40.0	1.57	ø 19.1	ø 0.75	-	2133FSNB19NT
					50.0	1.97	ø 25.0	ø 0.98	-	2133FSNB19NT25
					60.0	2.36	ø 30.0	ø 1.18	-	2133FSNB19NT30
							sq 38.1	sq 1.50	-	2133FSNB19NT15SQ
					-	-	sq 40.0	sq 1.57	-	2133FSNB19NT40SQ
							sq 60.0	sq 2.36	-	2133FSNB19NT60SQ

sq = Square bore.

Standard material: Polyamide.

Other sprocket sizes are available upon request. Please contact uni-chains for further information.

One-part sprockets

Width of sprockets: 25.0 mm (0.98 inch). Tooth width: 6.4 mm (0.25 inch).

Two-part sprockets

Width of two-part sprockets: 50.8 mm (2.00 inch).

For heavy wear applications one-part sprockets or the toothed rim for two-part sprockets can be supplied in stainless steel.





Two-part double row sprockets

uni Flex SNB Accessories

Product Support 51 mm (2.0 inch)

Product Support 25 mm (1.0 inch)



Rubber Supports

Rubber supports are 4 mm (0.2 inch) high with a width of 43 mm (1.7 inch) and a length of 14 mm (0.6 inch).

Side Guards 30 mm (1.2 inch) high

Used to prevent the products from falling off the belt.

Product Supports 25 mm (1.0 inch) and

51 mm (2.0 inch) high

These product supports have a width of 76 mm (3.0 inch). They can be placed in a line over the total width of the belt.

Product Support low

A 4 mm (0.2 inch) high POM support with a width of 42 mm (1.7 inch) and a length of 10.5 mm (0.41 inch).

Note: Side guards and product supports cannot be mounted in the CR type, but can be incorporated on standard radius systems using uni Flex SNB-L links.

Rubber Tops

Used to prevent products sliding on inclined conveyor sections. High friction rubber pads 3 mm (0.1 inch) tall are moulded directly onto the top surface of standard 76 mm (3.0 inch) and 152 mm (6.0 inch) wide polypropylene links.

	Belt top accessories								
Belt type	Rubber top	Rubber supports	Side guards	Product supports					
uni Flex SNB-L	+	+	+	+					
uni Flex SNB-CR	+ *	+	-	-					
uni Flex SNB-W	+ *	+	+	+					
uni Flex SNB-WT	+ *	+	+	+					
uni Flex SNB-WO	+ *	+	+	+					

Not possible Optional +

* Minimum indent from the side of the belt 38 mm (1.5 inch). For build patterns please contact uni-chains.

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uni Flex Belt is a side flexing belt. A wide surface opening of 75% ensures an optimum flow of air or water through the belt.







uni Flex Belt

Pitch: 50.0 mm (1.97 inch)

Side flexing

Backflex radius, tab: 125 mm (4.9 inch)

Backflex radius, tab and side guards: 140 mm (5.5 inch)

Locking type for uni Flex Belt: uni Flex Belt endlock

Surface opening: 75%

Please note: uni Flex Belt can be supplied with reinforcement links

Industries and applications

Bakeries Dairies Fruit and vegetable Pasta Snack food

73



Standard material:

POM-D

Other available materials: See page 9 and 10

Standard pin materials: AISI 304 SS

Standard Belt Widths

mm	inch	mm	inch
417	16.4	1222	48.1
618	24.3	1434	56.5
819	32.2	1625	64.0
1021	40.2	1827	71.9

Other widths can be supplied upon request. For further details, please, contact uni-chains. All dimensions are subject to changes.

Permissible Tensile Strength

	N	lbf
uni Flex Belt	1000	225
uni Flex Belt with reinforcement links	2500	562

Belt Weights

	kg/m ²	lb/ft2
uni Flex Belt with tab	8.7	1.78
uni Flex Belt with tab and side guards	9.4	1.93

Standard Sprockets

No. of pitch diameter		overall diameter		hub diameter		bore		reference no.	
teeth	mm	inch	mm	inch	mm	inch	mm	inch	plastic
11	179.2	7.06	184.0	7.24	45.0	1.77	30.0	1.18	2733FB11A

Width of sprockets: 42.3 mm (1.67 inch). Tooth width: 7 mm (0.28 inch).

uni Flex Belt





	mm	inch			
В	11.5	0.45			
С	18.0	0.71			
D	5.75	0.23			
Е	15.0	0.59			
F	11.3	0.44			
G	24.0	0.94			
Н	12.7	0.50			
I	35.7	1.41			
P min.	50.0	1.97			
P max.	50.4	1.98			

Center radius for uni Flex Belt and uni Flex Belt with tab and side guards: Min. 2.2 x belt width.



Reinforcement of Belt Systems

By including reinforcement links it is possible to:

- reduce elongation caused by temperature changes.
- reduce the permanent elongation which occurs in all belts.

Use of stainless steel pins is required for construction with reinforcement links.

Reinforcement links are available in stainless steel and acid resistant stainless steel.



Belts, pins and reinforcement links

Reinforcement links can be used with the following belt systems:

uni OPB uni Light EP uni L-SNB uni Flex SNB uni Flex Belt

Reinforcement and Pitch Control of Belt Systems



Reinforced uni OPB



Reinforced uni Light EP



Reinforced uni L-SNB

On long conveyors used in applications with high temperature variations changes in the length of the plastic modular belt calls for large takeup systems.

uni-chains can offer a solution that reduces the change in the belt length to only 10% of traditional modular plastic belts. If steel pins and the uni stainless steel reinforcement links are installed in the belt the demands of the take-up system will be reduced.

It is optional for the following belt systems:

- uni Light EP
- uni OPB
- uni L-SNB

Load Capacity per Reinforcement Link

	N/pcs	lbf/pcs
uni Light EP	1000	225
uni OPB & uni L-SNB	2500	247

uni-chains recommends max. 3 reinforcement links per module (152 mm (6.0 inch)) for uni OPB and uni Light EP.

For uni L-SNB it is recommended to use max. 3 reinforcement links per 2 modules (304 mm (12.0 inch)).

Disclaimer

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uni-chains does not guarantee that the design and/or operational function of any equipment that incorporates uni-chains products, conforms to local, state, and/or federal regulations. Nor does uni-chains warrant that standards relating to safety aspects such as public and worker safety, safety guards, fire and sanitation safety, or any other safety regulations are met by such equipment or products.

All users should read our "Warnings" and "Design Safety Guidelines" before using our products.

Warnings

Fire

uni-chains plastic products are, unless clearly specified, made from materials which support open flame.

Products made from POM material (D, I, LF and SLF), when so exposed, will emit toxic fumes. uni-chains plastic products should therefore not be exposed to extreme temperatures or open flame. Special care should be taken when undertaking repair work particularly when welding at a conveyor if the conveyor is fitted with plastic chains or belts.

Personal Protection

Always use safety glasses when mounting or repairing chains and belts and while securing or removing pins.

Use only suitable tools in good condition.

The weight of some products calls for the use of safety shoes. When installing/removing or repairing chains or belts on a conveyor, the motor must be turned off.

Design Safety Guidelines

Most plastic products will lose their mechanical properties if exposed to the sun or ultra violet beams, which can lead to chain or belt breakage. This can also happen if the products are exposed to strong chemicals. Generally, this is a problem with pH values lower than 4.5 or higher than 9.

Always make sure that there is enough space in the conveyor frame to allow chains and belts to retract or expand when exposed to temperature variations.

Never exceed the maximum or minimum temperatures given by uni-chains.

Note: The different materials have different temperature limits.

Care should be taken with high chain/belt speeds with which friction can lead to heating and subsequently melting of chain/belt as well as wearstrips. Do not exceed speeds recommended by uni-chains.

Use only original uni-chains sprockets with uni-chains belts and chains.

When constructing conveyors it is important to always include sufficient cover around the moving parts to prevent fingers and clothing from being caught in the machinery. uni-chains can also supply safety chains and side flexing belts which leave minimal gaps when turning through curves making them incredibly safe.



Headquarters Denmark



uni-chains Manufacturing Inc. USA



Tooling department, R/D department Denmark



uni-chains A/S Great Britain



Steel production Denmark



uni-chains Deutschland GmbH Germany



Plastic production Denmark

Global Sales Organisation



Head Office, Denmark uni-chains A/S Englandsvej 12, DK-7100 Vejle Tel: +45 75 72 31 00, Fax: +45 75 72 33 48 e-mail: admin@unichains.dk



Germany

www.unichains.com

uni-chains Deutschland GmbH Postfach 2129, DE-48411 Rheine Münsterstraße 57a, DE-48431 Rheine Tel: 05971/91437-0, Fax: 05971/915475 e-mail: admin@unichains.de



Great Britain uni-chains A/S Coombs Wood Business Park Coombs Wood Way Halesowen West Midlands B62 8BH Tel: 0121-559-0377, Fax: 0121-559-0373 e-mail: admin@unichains.co.uk



Ireland uni-chains Ireland Limited

Unit E6, Centrepoint Business Park Oak Drive Dublin 12 Tel: 01-450 1922, Fax: 01-450 1909 e-mail: unichains@eircom.net



Italv uni-chains Italia s.r.l. Via Umbria 16 42100 Reggio Emilia Tel: 0522 • 922470, Fax: 0522 • 922508 e-mail: unichains@unichains.it



Singapore

uni conveyor chains Asia Pte Ltd. 57 Ubi Avenue 1 # 07-06 Ubi Centre Singapore 408 936 Tel: 67498513/4, Fax: 67498515 e-mail: unichains@pacific.net.sg



USA uni-chains Manufacturing Inc. 500 Brentwood Drive, Reading, PA 19611, USA Tel: (610)-372-1800, Tel: (800)-937-2864 Fax: (610)-372-3590 e-mail: sales@unichains.com

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Switzerland Plüss (01) 824 88 00 Renold (01) 824 84 84

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