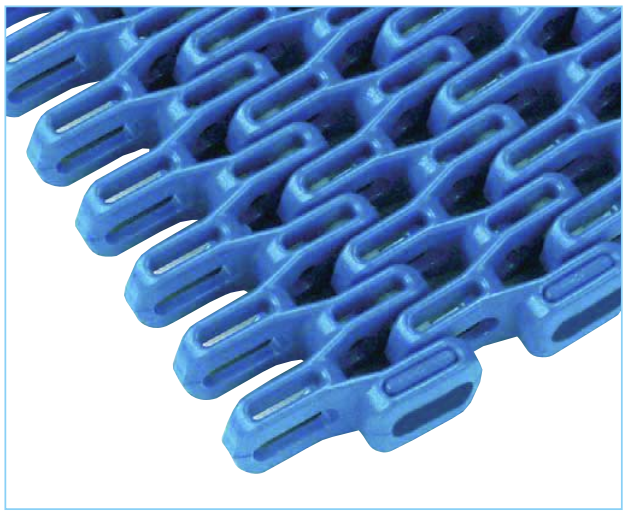
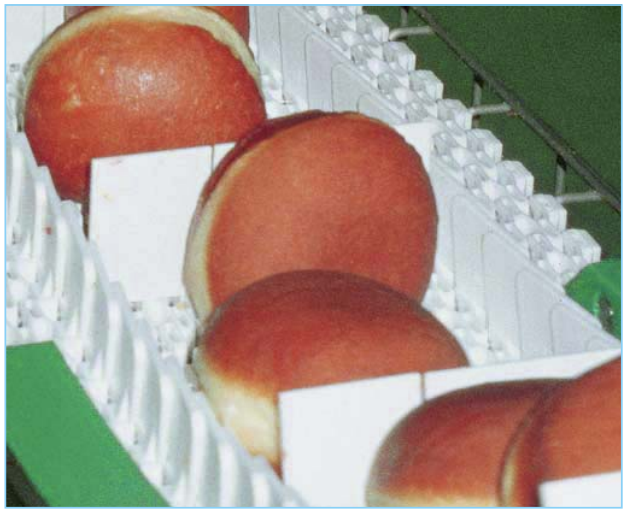
Pitch 25.4 mm (1.00 in.)





uni Flex SNB – strong and tight radius side flexing belt

uni Flex SNB 1 in. pitch was created to optimize throughput in high volume operations with space limitations. The belt has unique strength and side flexing characteristics and is used in many different applications.

The uni Flex SNB belt has increased performance in the following industries/applications:

- Meat & poultry applications including tray pack conveyors, box/tote handling, freezers infeed/outfeed, low tension spirals and other side flexing applications
- Fruit & vegetable applications including filling lines, canning lines and incline/decline applications
- Bakery applications including cooling lines, pan handling, proofers and oven infeed and takeaway
- Beverage applications including case conveyors, shrink tunnels and incline/decline applications
- Can manufacturing applications including mass handling, transfer conveyors and palletizers infeed conveyors.

Product features and operational benefits:

- 180 degree high speed side flexing applications
- High temperature and wear resistance
- Tight radius applications – reduced space requirements
- Unique locking system (no pin walking or pins coming out)
- Unique radius top surface for minimum product contact and less friction
- Reinforced stainless steel links for higher strength, speed or load

Pitch 25.4 mm (1.00 in.)

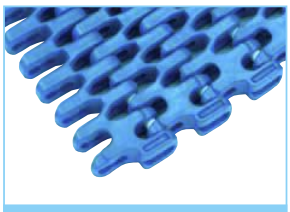
Standard Selection

uni Flex SNB-L

Surface opening 55%

uni Flex SNB-C

Surface opening 47%

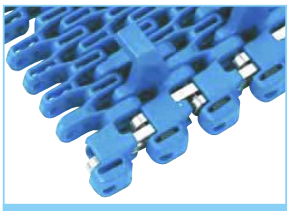


uni Flex SNB-CR

Surface opening 47%

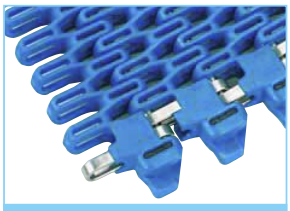
uni Flex SNB-W

Surface opening 55%



uni Flex SNB-WT

Surface opening 55%



uni Flex SNB-WO

Surface opening 55%

uni Flex SNB-CR Rubber Top

Surface opening 47%

uni Flex SNB-C Rubber Top

Surface opening 47%

Indent:
uni Flex SNB-CR Rubber Top is 26.5 mm (1.04 in.)
uni Flex SNB-C Rubber Top is 7.0 mm (0.28 in.).
uni Flex SNB-L Rubber is available without indent.

Side flexing

25.4 mm (1.00 in.)

Patented

See page 7, 8 and 10

50 mm (2.0 in.)

See page 54

See page 129

03 **K** **03** **N**

See page 11

Alternative

PP **W**

SS304 **SS316**

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

uni Flex SNB-C: Standard radius. Min. inside radius 2.3 x belt width. 47% open hygienic solid grid surface.

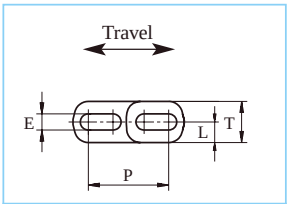
uni Flex SNB-CR: Tight radius. Min. inside radius 1.6 x belt width. 47% open hygienic solid grid surface.

uni Flex SNB-W: Standard radius (2.3 x W) fitted with reinforcement links and steel pins. Integral molded edge wearpart.

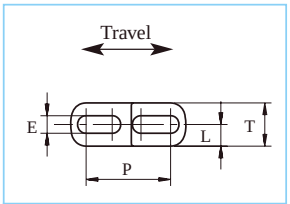
uni Flex SNB-WT: Standard radius (2.3 x W) fitted with cover links and PA6.6 pins or with reinforcement links and steel pins. Integral molded edge wearpart. Integral underside tab (S-Tab).

uni Flex SNB-WO: Standard radius (2.3 x W) fitted with reinforcement links and steel pins. Integral outer edge tab system. Transports products wider than the belt.

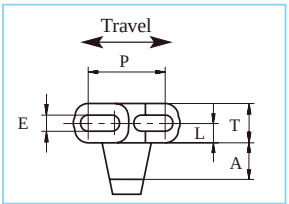
Dimensional Sketches



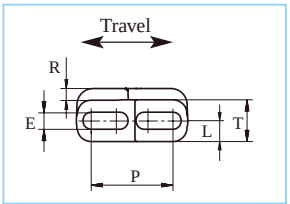
uni Flex SNB-L/W/WO



uni Flex SNB-C/CR



uni Flex SNB-WT



uni Flex SNB Rubber Top

Dimensions

	mm	in.		mm	in		mm	in.
A	12.0	0.48	**L**	6.5	0.26	**R**	3.0	0.12
E	5.1	0.20	**P**	25.4	1.00	**T**	13.0	0.51

Standard Materials and Colors

Type	Standard materials and colors	Standard pins Materials and colors
uni Flex SNB-L	POM-D W	PA6.6 N
	POM-D B	PA6.6 B
	PP W	PA6.6 N
	PP B	PA6.6 B
	PA6.6 B	PA6.6 B
	PA6.6 W	PA6.6 N
uni Flex SNB-C/CR	POM-D W	PA6.6 N
	POM-D B	PA6.6 B
	PP W	PA6.6 N
	PP B	PA6.6 B
	PA6.6 B	PA6.6 B
	PA6.6 W	PA6.6 N
uni Flex SNB-W	POM-D W	SS304
	POM-D B	SS304
	PP W	SS304
	PP B	SS304
	PA6.6 B	SS304
	PA6.6 W	SS304
uni Flex SNB-WT	POM-D W	SS304 or PA6.6 N
	POM-D B	SS304 or PA6.6 B
	PP W	SS304 or PA6.6 N
	PP B	SS304 or PA6.6 B
	PA6.6 B	SS304 or PA6.6 B
	PA6.6 W	SS304 or PA6.6 N
uni Flex SNB-WO	POM-D W	SS304
	POM-D B	SS304
	PP W	SS304
	PP B	SS304
	PA6.6 B	SS304
	PA6.6 W	SS304
uni Flex-SNB Rubber Top	PP B + 03 K	PA6.6 B
	PP W + 03 N	PA6.6 N

For all uni Flex SNB-L: Lockingplate/Wearparts/O-Tab

Lockingplates: PP W B

Wearparts and O-Tabs: PA6.6 W B

For high speed and/or abrasive applications offers:

Wearpart and O-Tab in POM-DK: O

uni Flex SNB cover link

For uni Flex SNB-W/WT/WO: Outer modules are always in PA6.6. On belt widths wider than 235 mm (9 in.) belt may be combined with any of above L or CM links in the middle.

Reinforcement links: SS304

Cover links: PA6.6 W B

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

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

Non standard cut widths are possible in multiples of 12.7 mm (0.50 in.).
To find the belt widths for other uni Flex SNB tracking systems and belt types use formulas to the right.

**** Note:** These belt widths are only available for uni Flex SNB-L and uni Flex SNB-C.*

uni Flex SNB-C/CR:
$W = W_L$

uni Flex SNB-L or C/CR with wearpart both sides:
$W = W_L$ + 2 x 3 mm (0.24 in.)

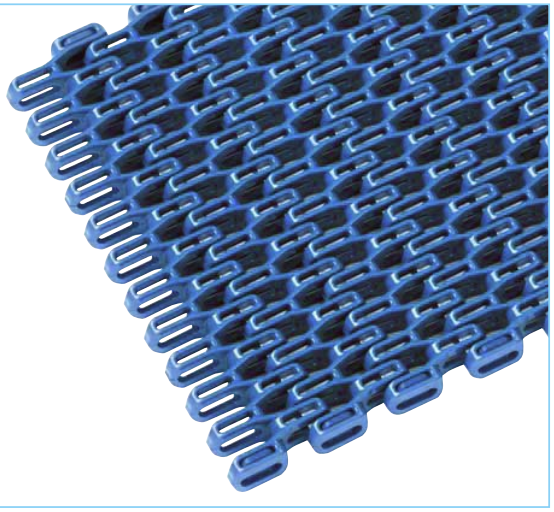
For wearpart /O-Tab one side:
1 x 3 mm (0.12 in.)

uni Flex SNB-L, C/CR with O-Tab both sides:
$W = W_L$ + 2 x 3 mm (0.24 in.)

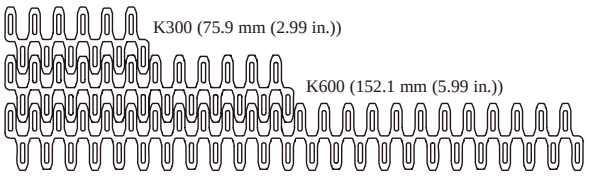
For wearpart /O-Tab one side:
1 x 3 mm (0.12 in.)

uni Flex SNB-W, WO or WT both sides:
$W = W_L$ + 2 x 3 mm (0.24 in)

uni Flex SNB Single Link®



uni Flex SNB is also available as Single Link® in the following standard widths:



See below for specific belt types available in each width.

Standard Single Link® Belt Widths

Belt type and widths	K300 75.9 mm (2.99 in.)	K600 152.1 mm (5.99 in.)	K1200 304.5 mm (11.99 in.)
uni Flex SNB-L	X	X	X
uni Flex SNB-C	X	X	
uni Flex SNB-CR	X	X	
uni Flex SNB-W*	X	X	
uni Flex SNB-WT*		X	
uni Flex SNB-WO*	X	X	

**** Note:** Integrated wearpart, integrated underside tab (S-Tab) and integrated outer edge tab system.*

uni Flex SNB Program

Belt type	Material	Hinge design	Flex ratio
uni Flex SNB-L	all plastic	open hinge	2.3
uni Flex SNB-C	all plastic	closed hinge	2.3*
uni Flex SNB-CR	all plastic	closed hinge	1.6
uni Flex SNB-W	plastic and steel	open hinge	2.3
uni Flex SNB-WT	all plastic or plastic and steel	open hinge	2.3
uni Flex SNB-WO	plastic and steel	open hinge	2.3

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

Inner curve radius = Flex ratio x belt width.

* K300 Single Link® Flex ratio = 1.8 and K600 Single Link® Flex ratio = 1.7.

Max. Permissible Load in Curve

	Belt material	POM/PA6.6		PP	
	Pin material	N	lb	N	lb
uni Flex SNB-L/C/CR	**PP or SS**	600	135	600	135
uni Flex SNB-L/C/CR	**PA6.6**	1000	225	600	135

Max. Permissible Load in Curve

	Belt material	POM/PA6.6		PP	
	Pin material	N	lb	N	lb
uni Flex SNB-W/WO/WT	**PP or SS**	600	135	600	135
uni Flex SNB-W/WO/WT	**PA6.6**	1000	225	600	135
uni Flex SNB-W/WO/WT	**SS + RL***	3300	742	-	-

* RL = Reinforcement link

Max. Permissible Load on Straight Sections

Belt material	POM/PA6.6		PP	
	N/m	lb/ft	N/m	lb/ft
uni Flex SNB-L, C, CR, W, WO, WT	30000	2055	15000	1028

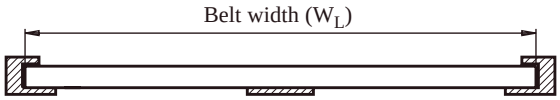
Load Capacity per Reinforcement Link

	N/pcs	lb/pcs
uni Flex SNB	3300	742

The use of uni-chains® belt with the SS reinforcement /Pitch control links in blanchers, cookers and other high temperature applications will reduce belt elongation due to temperature by more than 90%. This will simplify the belt take-up system and reduce maintenance.

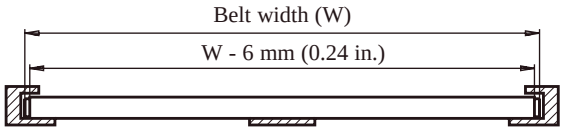
Belt Tracking and Control Systems

uni Flex SNB-L (Standard)



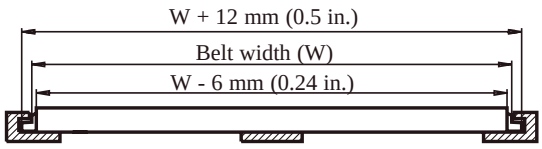
Basic belt types can be combined with the belt tracking and control systems below to enhance performance.

Wearpart



Wearpart system made of heat and wear resistant nylon to reduce the friction between belt edge and wearstrip. Only this part needs to be replaced when it has been worn out, not the whole belt.

O-Tab



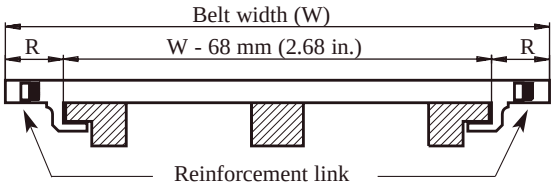
Outer edge tab system made of heat and wear resistant nylon to reduce the friction between belt edge and wearstrip. Using a slotted wearstrip the O-Tab will track the belt and allow the transported products to be wider than the belt.

I-Tab

Please note that the tabs are not always placed in the middle of the belt.

Intermediate tabs are placed on the bottom side of the belt to hold the belt down on incline conveyors. The intermediate tabs will fit anywhere across the belt bottom and at pitch multiples of 12.7 mm (0.50 in.).

S-Tab



Side tab for holding the belt down, normally used for wide belts. With S-Tabs the radial forces in the curve are transferred to the outside radius (uni Flex SNB-WT).

R = 34.0 mm (1.34 in.).

Note: *When using S-Tabs please verify that sufficient clearance to the shaft exists. Max. shaft diameter = Sprocket pitch diameter - 50.8 mm (2.00 in.). When using square shafts verify that the diagonal does not exceed above max. diameter.*
Example: Sprocket z = 10: Max. shaft diameter 82.2 - 50.8 = ø31 mm (3.24 - 2.00 = ø1.2 in.).

Belt type	Belt tracking and control combination			
	Wearpart	O-Tab	S-Tab	I-Tab
uni Flex SNB-L	+	+	-	+
uni Flex SNB-C/CR	+	+	-	-
uni Flex SNB-W	✓	-	-	+
uni Flex SNB-WT	-	-	✓	+
uni Flex SNB-WO	-	✓	-	+

✓ Standard + Optional - Not possible

Belt Weights for uni Flex SNB-L

Belt material	POM		PP		PA6.6	
Pin material	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2
PP	6.7	1.37	4.6	0.94	5.6	1.15
PA6.6	6.9	1.41	4.8	0.98	5.8	1.19
SS	12.1	2.48	10.0	2.05	11.0	2.25

Belt Weights for uni Flex SNB-C/CR

Belt material	POM		PP		PA6.6	
Pin material	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2
PP	7.5	1.54	5.2	0.94	6.2	1.27
PA6.6	7.7	1.58	5.4	0.98	6.4	1.31
SS	12.9	2.64	10.2	2.09	11.6	2.38

Belt Weights for uni Flex SNB-W

Belt material	POM		PP		PA6.6	
Pin material	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2
PP	7.1	1.45	4.9	1.00	5.8	1.19
PA6.6	7.3	1.50	5.1	1.04	6.0	1.23
SS	12.5	2.56	10.3	2.11	11.2	2.29

Belt Weights for uni Flex SNB-WT

Belt material	POM		PP		PA6.6	
Pin material	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2
PP	7.4	1.52	5.1	1.04	6.1	1.25
PA6.6	7.6	1.56	5.3	1.09	6.3	1.29
SS	12.8	2.62	10.5	2.15	11.5	2.36

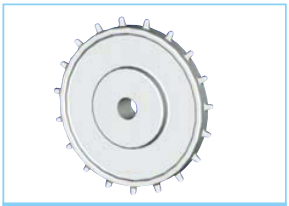
Belt Weights for uni Flex SNB-WO

Belt material	POM		PP		PA6.6	
Pin material	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2	kg/m^2	lb/ft^2
PP	7.3	1.52	5.1	1.04	6.1	1.25
PA6.6	7.5	1.54	5.3	1.09	6.2	1.27
SS	12.7	2.60	10.5	2.15	11.4	2.34

Standard Sprockets

No. of teeth	Pitch diameter		Overall diameter		Hub diameter		Bore		Reference no. plastic
	mm	in.	mm	in.	mm	in.	mm	in.	
9	74.3	2.93	73.8	2.91	56.8	2.24	ø18.0/30.0*	ø0.71/1.18*	2133FSNB09N
							sq 25.4	sq 1.00	2133FSNB0910INSQ
							sq 30.0	sq 1.18	2133FSNB0930MMSQ
10	82.2	3.24	82.2	3.24	65.2	2.57	ø18.0/40.0*	ø0.71/1.57*	2133FSNB10N
							sq 25.4	sq 1.00	2133FSNB10N10INSQ
							sq 30.0	sq 1.18	2133FSNB10N30MMSQ
12	98.2	3.87	98.8	3.89	70.0	2.76	ø18.0/40.0*	ø0.71/1.57*	2133FSNB12N
							sq 38.1	sq 1.50	2133FSNB12N15INSQ
							sq 40.0	sq 1.57	2133FSNB12N40MMSQ
15	122.2	4.81	123.5	4.86	70.0	2.76	ø18.0/40.0*	ø0.71/1.57*	2133FSNB15N
							sq 38.1	sq 1.50	2133FSNB15N15INSQ
							sq 40.0	sq 1.57	2133FSNB15N40MMSQ
18	146.3	5.76	146.1	5.75	70.0	2.76	ø18.0/40.0*	ø0.71/1.57*	2133FSNB18N
							sq 38.1	sq 1.50	2133FSNB18N15INSQ
							sq 40.0	sq 1.57	2133FSNB18N40MMSQ
19	154.3	6.07	156.2	6.15	70.0	2.76	ø18.0/40.0*	ø0.71/1.57*	2133FSNB19N
							sq 38.1	sq 1.50	2133FSNB19N15INSQ
							sq 40.0	sq 1.57	2133FSNB19N40MMSQ

* Minimum/maximum round bore.



uni Flex SNB sprocket

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

Standard Material and Color

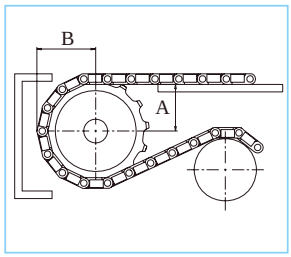
PA6 N

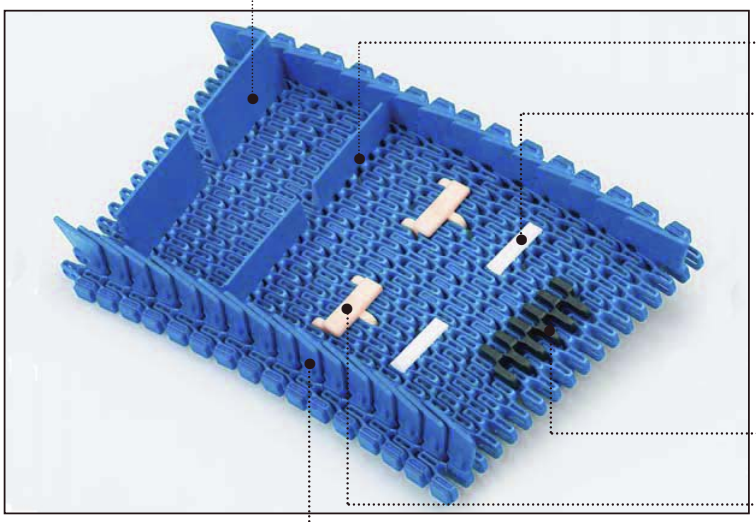
Other sprocket sizes are available upon request. Two-part sprockets available upon request.

Please contact uni-chains® for further information.

Placement of Wearstrips and Sprockets

No. of teeth	Minimum B-dimension		Wearstrip distance A	
	mm	in.	mm	in.
9	43.5	1.71	28.4	1.12
10	47.5	1.87	32.6	1.28
12	55.5	2.19	40.9	1.61
15	67.5	2.66	53.2	2.09
18	79.6	3.13	65.5	2.58
19	83.6	3.29	69.6	2.74





Standard Materials and Colors

Height		Style	Width		Standard materials & colors		
					PA6.6	PP-I	PP
mm	in.		mm	in.			
30.0	1.18	Side guard	-	-		B	
25.4	1.00	Product support	75.9	2.99	B		B
50.8	2.00						

Belt Top Accessories

Belt type	Rubber Top	Side guard	Product support
uni Flex SNB-L	+	+	+
uni Flex SNB-C	+[1/]	-	-
uni Flex SNB-CR	+[2/]	-	-
uni Flex SNB-W	+[3/]	+	+
uni Flex SNB-WT	+[3/]	+	+
uni Flex SNB-WO	+[3/]	+	+

+ = Optional - = Not possible

[1/] Minimum indent from the side of the belt 6.5 mm (0.26 in.).
[2/] Minimum indent from the side of the belt 26.5 mm (1.04 in.).
[3/] Minimum indent from the side of the belt 75.9 mm (2.99 in.).

For build patterns please contact uni-chains®.