### Pitch 25.4 mm (1.00 in.)



# uni Flex SNB – strong and tight radius sideflexing belt

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

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

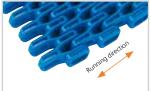
 Meat & poultry applications including tray pack conveyors, box/tote handling, freezers infeed/ outfeed, low tension spirals and other sideflexing applications

- 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 sideflexing applications
- High temperature and wear resistance
- Tight radius applications with 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

### **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 CI Rubber Top Surface opening 47%



uni Flex SNB C Rubber Top Surface opening 47%

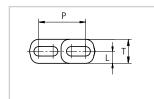
uni Flex SNB CR Rubber Top is

uni Flex SNB C Rubber Top is available without indent.

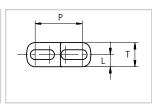
26.5 mm (1.04 in.). uni Flex SNB CI Rubber Top is 7.0 mm (0.28 in.).

Indent

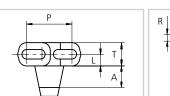
### **Dimensional Sketches**



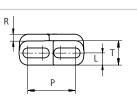
uni Flex SNB L uni Flex SNB W uni Flex SNB WO



uni Flex SNB C uni Flex SNB CR



uni Flex SNB WT



uni Flex SNB Rubber Top



Sideflexing



25.4 mm (1.00 in.)



ø5 mm (0.20 in.)



Patented



See page 8



25 mm (1.0 in.)



See page 140



See page 172



03 K

03 N

See page 12

### **Alternatives**



PP W

SS304

SS316

### Accessories



See page 141



See page 141

### **Dimensions**

	mm	in.
Α	12.0	0.47
L	6.5	0.26
P	25.4	1.00
R	3.0	0.12
T	13.0	0.51

**uni Flex SNB L:** Standard radius. Min. inside radius 2.3 x belt width. 55% open area for optimal 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 PBT 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. Enables transportation of products wider than the belt.

### **Standard Materials and Colors**

Туре	Standard materials and colors	Standard pin materials and colors
uni Flex SNB L	POM-D W	/ PBT LG
	POM-D B	// PBT LG
	PP W	/ PBT LG
	PP B	/ PBT LG
	PA6.6 B	// PBT LG
	PA6.6 W	// PBT LG
uni Flex SNB C   CR	POM-D W	// PBT LG
	POM-D B	// PBT LG
	PP W	// PBT LG
	PP B	/ PBT LG
	PA6.6 B	// PBT LG
	PA6.6 W	/ PBT LG
uni Flex SNB W	PA6.6 W	// SS304
	PA6.6 B	// SS304
uni Flex SNB WT	PA6.6 B	// SS304 or PBT LG
	PA6.6 W	// SS304 or PBT LG
uni Flex SNB WO	PA6.6 B	// SS304
	PA6.6 W	// SS304
uni Flex SNB Rubber Top (C   CI   CR)	PP B + 03 K	// PBT LG
	PP W + 03 N	/ PBT LG

Alternative pin materials and colours: See page 134.

### For all uni Flex SNB L types: Lockingplate | Wearparts | O-Tab

# Standard materials and colors Lockingplates PP W B Wearparts and O-Tab PA6.6 W B For high speed and/or abrasive applications: Wearpart and O-Tab POM-DK N For uni Flex SNB | uni Flex SNB W | uni Flex SNB WT | uni Flex SNB 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

### uni Flex SNB Cover Link



### Standard Modular Widths for uni Flex SNB L (WL)

mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
76*	3.0*	304	12.0	532	20.9	760	29.9	988	38.9
152*	5.9*	379	14.9	608	23.9	836	32.9	1065	41.9
228**	9.0	456	18.0	684	26.9	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, please use formulas below. On above belt width values, the belt width tolerance on standard materials is +0/-0.4% at 23°C (73° F).

uni Flex SNB C | uni Flex SNB CR:  $\mathbf{W} = \mathbf{W_L}$ 

uni Flex SNB L or uni Flex SNB C | uni Flex SNB C with wearpart both sides:  $W = W_L + 2 \times 3 \text{ mm}$  (2 x 0.12 in.)

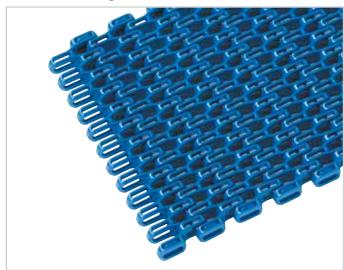
For wearpart /O-Tab one side: 1 x 3 mm (1 x 0.12 in.)

uni Flex SNB L uni Flex SNB C | uni Flex SNB CR with O-Tab both sides:  $W = W_L + 2 \times 3 \text{ mm}$  (2 x 0.24 in.)

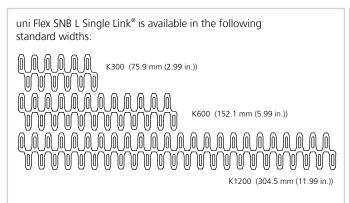
For wearpart /O-Tab one side: 1 x 3 mm (1 x 0.12 in.)

uni Flex SNB W | uni Flex SNB WO or uni Flex SNB WT both sides:  $W = W_L + 2 \times 3 \text{ mm}$  (2 x 0.12 in.)

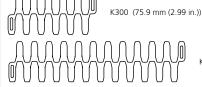
### uni Flex SNB Single Link®



uni Flex SNB Single Link® standard materials and colors see page 134.



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

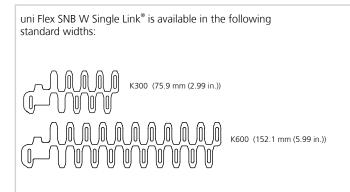


K600 (152.1 mm (5.99 in.))

<sup>\*</sup> Note: These belt widths are only available for uni Flex SNB L and uni Flex SNB C.

<sup>\*\*</sup> uni Flex SNB W, uni Flex SNB WO, uni FLex SNB WT are only standard in PA6.6 material. uni Flex SNB C, uni FLex SNB CR, uni FLex SNB L are closed with lopcking plates in both sides: W = WL.

### uni Flex SNB Link®



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

K300 (75.9 mm (2.99 in.))

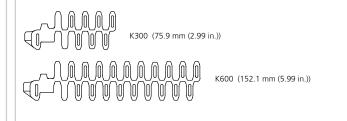
K500 (126.9 mm (5.00 in.))

K600 (152.1 mm (5.99 in.))

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



uni Flex SNB WO Single Link  $\!\!^{\text{@}}$  is available in the following standard widths:



# uni Flex SNB Single Link® Widths

Belt type and widths	<b>K300</b> 75.9 mm (2.99 in.)	<b>K500</b> 126.9 mm (5.00 in.)	<b>K600</b> 152.1 mm (5.99 in.)	<b>K1200</b> 304.5 mm 11.99 in.)
uni Flex SNB L	X		X	Χ
uni Flex SNB C	X		X	
uni Flex SNB C Rubber Top	X		X	
uni Flex SNB CR*	X	X	X	
uni Flex SNB W**	X		X	
uni Flex SNB WT***			X	
uni Flex SNB WO****	X		X	

<sup>\*</sup> Not available as Single Link.

<sup>\*\*</sup> Has integrated wearpart.

<sup>\*\*\*</sup> Has integrated underside tab (S-Tab).

<sup>\*\*\*\*</sup> Has integrated outer edge tab system (O-Tab).



### uni Flex SNB Program

Belt type	Material	Hinge design	Flex ratio/min inside radius
uni Flex SNB L	all plastic	open hinge	2.3
uni Flex SNB C	all plastic	closed hinge	See below
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

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

Minimum straight section from idler end and first curve 1.5 x belt width (W).

Minimum straight section between left and right curves: 2.0 x belt width (W).

 $Inner curve \ radius = Flex \ ratio \ x \ belt \ width.$ 

Minimum straight section from last curve to drive section 2.0 x belt width (W). \* K300 Single Link® Flex ratio = 1.9 and K600 Single Link® Flex ratio = 1.8.

### Max. Permissible Load in Curve

	Belt material	POM/PA6.6		PP	
	Pin material	N	lbf	N	lbf
uni Flex SNB L   uni Flex SNB C   uni Flex SNB CR	SS	600	135	600	135
uni Flex SNB L   uni Flex SNB C   uni Flex SNB CR	PBT	1000	225	600	135

### Max. Permissible Load in Curve

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

<sup>\*</sup> RL = Reinforcement link

### Max. Permissible Load in Straight Sections

	Belt material	erial POM/PA6.6		PP	
	Pin material	N/m	lbf/ft	N/m	lbf/ft
uni Flex SNB L   uni Flex SNB C   uni Flex SNB CR uni Flex SNB W   uni Flex SNB WO   uni Flex SNB WT	PBT or SS	30000	2055	15000	1028

### Load Capacity per Reinforcement Link

	N/pcs	lbf/pcs
uni Flex SNB	3300	742

The use of belts 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.

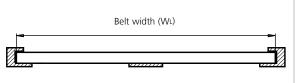
Note: Reinforcement links require the use of SS pins.

<sup>\*\*</sup> Widths below 9 in. (228 mm): 1.5

<sup>\*\*</sup> Only standard in uni FLex SNB WT.

### **Belt Tracking og Control Systems**

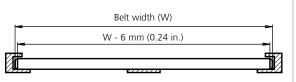




Basic belt types can be combined with the belt tracking and control systems below to enhance performance. Basic belt types can be combined with the belt tracking and control systems below to enhance performance.

uni Flex SNB L Standard

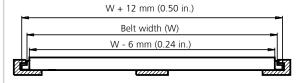




Wearpart system made of heat and wear resistant nylon to reduce the friction between belt edge and wearstrip. Only this part needs to be replaced when it has been worn out, not the entire belt.

Wearpart

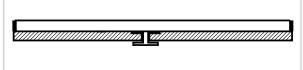




Outer edge tab system made of heat and wear resistant nylon to reduce the friction between belt edge and wearstrip. Using a slotted wearstrip, the O-Tab will track the belt and allow the conveyed products to be wider than the belt. Height of O-Tab: 6.4 mm (0.25 in.) Height of slot: 8.0 mm (0.32 in.)

O-Tab

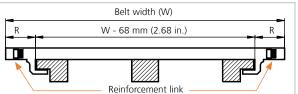




Intermediate tabs are placed on the bottom side of the belt to hold it down on incline conveyors. The intermediate tabs will fit anywhere across the belt bottom and at pitch multiples of 12.7 mm (0.50 in.).

I-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.).

S-Tab

Note: When using S Tabs, please verify sufficient clearance to the shaft. Max. shaft diameter = Sprocket pitch diameter - 50.8 mm (2.00 in.). When using square shafts, please verify that the diagonal does not exceed max. diameter. Example: Sprocket z = 10: Max. shaft diameter 82.2 - 50.8 =  $\emptyset$ 31 mm (3.24 - 2.00 =  $\emptyset$ 1.2 in.).

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

Standard

- Optional
- Unavailable



### Belt Weights for uni Flex SNB L

Belt material	PC	М	PP		PA6.6	
Pin material	kg/m²	lb/ft²	kg/m²	lb/ft²	kg/m²	lb/ft²
PBT	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 | uni Flex SNB CR

Belt material	PC	РОМ		PP		PA6.6	
Pin material	kg/m²	lb/ft²	kg/m²	lb/ft²	kg/m²	lb/ft <sup>2</sup>	
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		P	P	PA6.6	
Pin material	kg/m <sup>2</sup> lb/ft <sup>2</sup>		kg/m²	lb/ft²	kg/m²	lb/ft <sup>2</sup>
PBT	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		P	P	PA6.6	
Pin material	kg/m²	lb/ft²	kg/m²	lb/ft²	kg/m²	lb/ft²
PBT	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	РОМ		P	P	PA6.6	
Pin material	kg/m²	lb/ft²	kg/m²	lb/ft²	kg/m²	lb/ft²
PBT	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

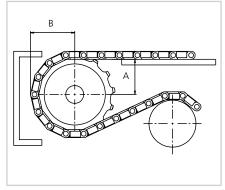
### **Standard Sprockets**

No. of	Pitch di	iameter Overall diameter Hub diameter		Вс	ore	Reference no.																				
teeth	mm	in.	mm	in.	mm	in.	mm	in.	plastic																	
							ø18.0/30.0*	ø0.71/1.18*	213PA6FSNB09211LG00																	
9	74.3	2.93	73.8	2.91	56.8	2.24	sq 25.4	sq 1.00	213PA6FSNB09211N001100S																	
							sq 30.0	sq 1.18	213PA6FSNB09211N00M030S																	
							ø18.0/40.0*	ø0.71/1.57*	213PA6FSNB10211N00																	
10	82.2	3.24	82.2	3.24	65.2	2.57	sq 25.4	sq 1.00	213PA6FSNB10211N00I100S																	
							sq 30.0	sq 1.18	213PA6FSNB10211N00M030S																	
				8 3.89					ø18.0/40.0*	ø0.71/1.57*	213PA6FSNB12211N00															
12	98.2	3.87	98.8		3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0 2.76	sq 38.1	sq 1.50
																							sq 40.0	sq 1.57	213PA6FSNB12211N00M040S	
						70.0	70.0	70.0	70.0	4.86 70.0		ø18.0/40.0*	ø0.71/1.57*	213PA6FSNB15211N00												
15	122.2	4.81	123.5	4.86	70.0						70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	2.76	sq 38.1	sq 1.50	213PA6FSNB15211N00I150S	
							sq 40.0	sq 1.57	213PA6FSNB15211N00M040S																	
							ø18.0/40.0*	ø0.71/1.57*	213PA6FSNB18211N00																	
18	146.3	5.76	146.1	5.75	70.0	2.76	sq 38.1	sq 1.50	213PA6FSNB18211N00I150S																	
							sq 40.0	sq 1.57	213PA6FSNB18211N00M040S																	
							ø18.0/40.0*	ø0.71/1.57*	213PA6FSNB19211N00																	
19	154.3	6.07	156.2	6.15	70.0	2.76	sq 38.1	sq 1.50	213PA6FSNB19211N00I150S																	
							sq 40.0	sq 1.57	213PA6FSNB19211N00M040S																	

<sup>\*</sup> Minimum/maximum round bore.

## **Placement of Wearstrips and Sprockets**

No. of	Mini B-dime				
teeth	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	





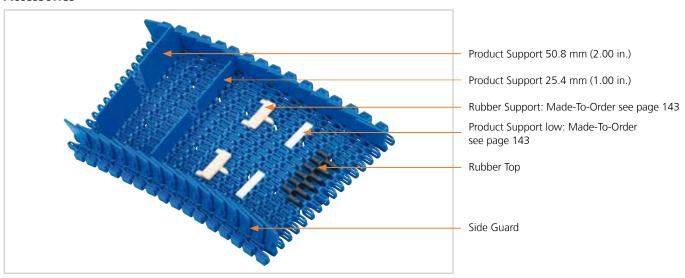
Width of sprockets: 25.0 mm (0.98 in.) Tooth width: 6.4 mm (0.25 in.) Standard material: PA6

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

### Max. Load per Sprocket

Belt material	POM or	r PA6.6	PP		
	N	lbf	N	lbf	
uni Flex SNB	1000	225	850	191	

### **Accessories**



### **Standard Materials and Colors**

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

### **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/	+	+

<sup>+ =</sup> Optional - = Unavailable

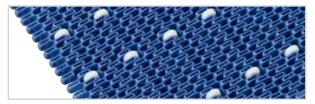
1/ Minimum indent from the side of the belt is 6.5 mm (0.26 in.).

For buildings patterns, please contact uni-chains.

<sup>2/</sup> Minimum indent from the side of the belt is 26.5 mm (1.04 in.).

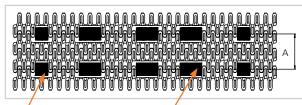
<sup>3/</sup> Minimum indent from the side of the belt is 75.9 mm (2.99 in.).

### **Made-To-Order Selection**



uni Flex SNB with Rollers ø17 x 5.5 mm (ø0.67 x 0.22 in.)

### **Dimensional Sketch**



Rollers are available in widths: 5.5, 17 and 30 mm (0.22, 0.67 and 1.18 in.)

Roller

ø17 x 17 mm (ø0.67 x 0.67 in.)

Roller

ø17 x 30 mm (ø0.67 x 1.18 in.)

### **Dimensions**

	mm	in.
A min.	50.8	2.00

**Made-To-Order Materials** 



Sideflexing



12.7 mm (0.50 in.)



ø5 mm (0.20 in.)



Patented



See page 8



50 mm (2.0 in.)



See page 140



See page 172





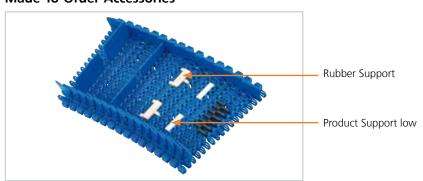
SS304



\$\$316

### POM-D, PP, PA6.6 and Roller Material POM-D

### **Made-To-Order Accessories**



### **Dimensions**

Style	Н		Width		Length	
	mm	in.	mm	in.	mm	in.
Rubber Support	4.0	0.16	43.0	1.69	14.0	0.55
Product Support low	4.0	0.16	42.0	1.65	10.5	0.41

### **Made-To-Order Materials**

Roller: POM-D and Rubber 01N