Pitch 38.1 mm (1.50 in.)

uni Flex ONE – strong, cleanable and tight radius sideflexing belt

uni Flex ONE 1.5 in. pitch is created to optimize throughput in high volume operations with space limitations. The belt is unique because of its pinless design and a higher tensile strength. No other sideflexing belts in the market may compete with uni Flex ONE on straight.

The uni Flex ONE belt will increase performance in the following industries/applications:

- Meat & poultry applications including tray pack conveyors, box/tote handling, freezers infeed/outfeed and other side flexing applications
- Fruit & vegetable applications including sideflexing and packaging lines
- Bakery applications including cooling lines, pan handling, proofers and oven infeed and takeaway
- Beverage applications including case conveyors and incline/decline applications
- Spiral applications including low and high tension spirals

Product features and operational benefits:

- High speed sideflexing applications
- Tight radius applications providing reduced space requirements
- uni Snap Link® design (pinless) preventing no pin walking
- Unique safety top surface
- Edge Wearparts for higher speed and load
- Edge Roller Bearings for higher speed, load and no lubrication
- Integrated Wearparts for cleanable applications
- Easy maintenance with uni Snap Link® Design (pinless)

Standard Selection

uni Flex ONE O

uni Flex ONE EO

uni Flex ONE EW

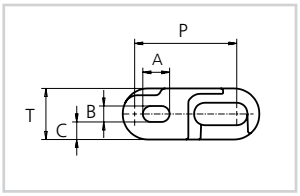
uni Flex ONE ER

uni Flex ONE EOO

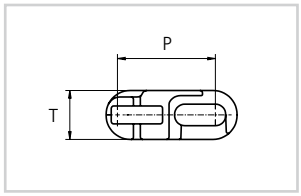
**uni-chains recommends this travel direction. However, travel in both directions is possible.*

Note: uni Flex ONE ER is not available for use in North America.

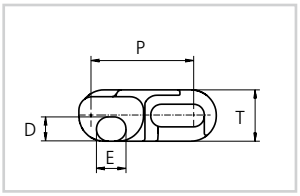
Dimensional Sketches



uni Flex ONE O (EO)



uni Flex ONE for EO | EOO | EW | ER



uni Flex ONE EOO

Exchangeable parts: O-Tabs (EO), Offset O-Tabs (EOO), Wearparts (EW), Edge Rollers (ER).

Dimensions

	mm	in.
A	10.0	0.39
B	5.9	0.23
C	6.6	0.26
D	9.0	0.35
E	11.0	0.43
P	38.1	1.50
T	19.1	0.75

Sideflexing

38.1 mm (1.50 in.)

Patent pending

See page 8

50 mm (1.97 in.)

See pages 64 and 65

See page 172

See page 66

See page 65 and 66

Standard Materials and Colors

Type	Standard materials and colors
uni Flex ONE	**POM-SX** W B *

Exchangeable O-Tab, wearpart in POM-DK: O

** Please note that uni Flex ONE in POM-SX blue is not according to the standard color quality for blue. Small variations may occur.*

uni Flex ONE O (O-Tab):
Using the uni Flex ONE with O-Tab and a slotted wearstrip, the O-Tab will allow the transported products to be wider than the belt. O-Tabs are molded into the belt to ensure cleanability and are preferred for direct food contact.

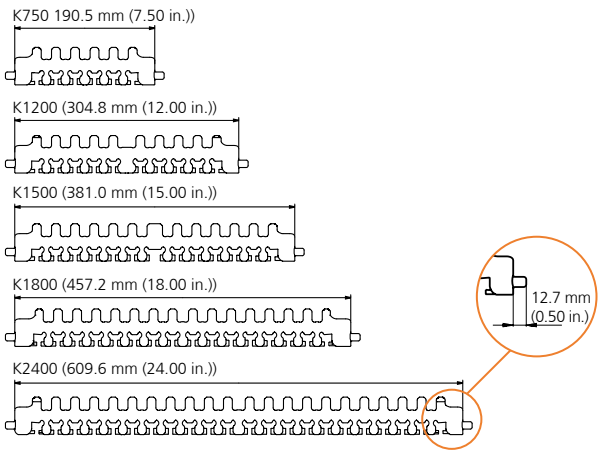
uni Flex ONE EO/EOO (Exchangeable O-Tab/ Exchangeable Offset O-Tab):
Exchangeable O-Tab system is made of heat and wear resistant material to improve performance between the belt edge and the wearstrip. Using a slotted wearstrip the exchangeable O-Tab will track the belt and allow the transported products to be wider than the belt. Resists high curve load at increased speed.

uni Flex ONE EW (Exchangeable Wearpart):
Exchangeable Wearpart system is made of heat and wear resistant material to improve performance between the belt edge and the wearstrip. This Wearpart can easily be replaced. Resists high curve load at increased speed.

uni Flex ONE ER (Exchangeable Edge Roller):
uni Flex ONE with Exchangeable Edge Rollers reduces friction in curves to a minimum making it very suitable for applications with many curves e.g. static spirals (non rotating drum) or high speed sideflexing conveyors.

uni Flex ONE Single Link®

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



uni Flex ONE Single Link® standard materials and colors see page 56.

Standard Single Link® Belt Widths

Belt type and widths	K750	K1200	K1500	K1800	K2400
uni Flex ONE O	X	X	X	X	X
uni Flex ONE EW	X	X	X	X	X
uni Flex ONE EO/EOO	X	X	X	X	X
uni Flex ONE ER L/R*	X	X	X	X	X

** L/R = L (left)/R (right). When ordering, please specify Belt Edge Configuration on opposite side of edge roller (e.g. uni Flex ONE ER/EO = ER on left side and EO on right side - uni Flex ONE EW/ER = EW on left side and ER right side).*

Permissible Tensile Strength

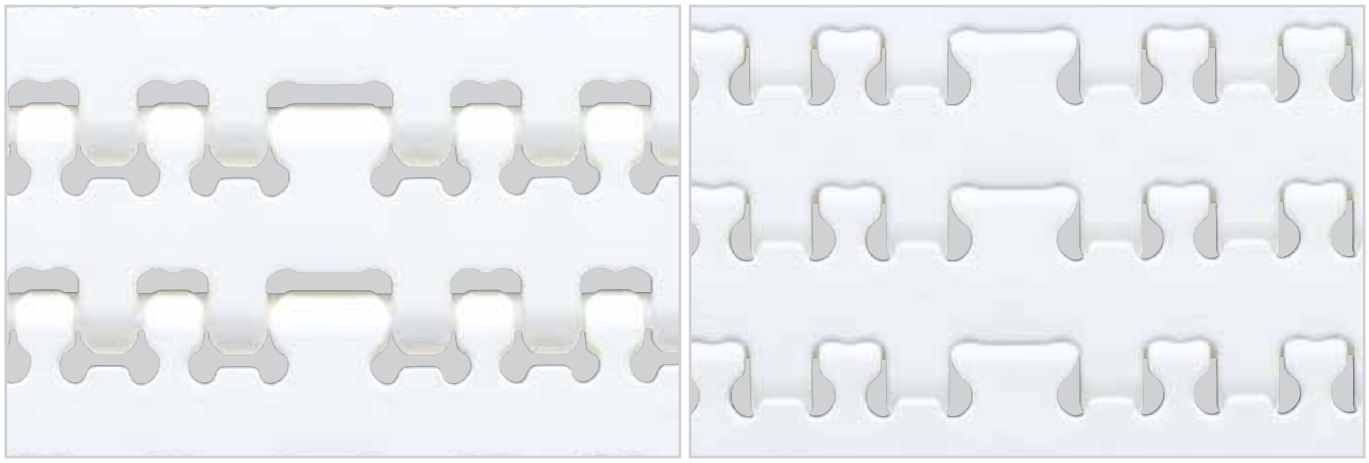
Assortment		Belt width W	Max. permissible load on straight section		Max. permissible load in curves at low speed*			
					UHMW PEHD 1000		Nylatron NSM	
		Size	N	lbf	N	lbf	N	lbf
uni Flex ONE	O	K750	2400	540	1800	405	2000	450
	EW	K750	2400	540	1800	405	2000	450
	EO/EOO	K750	2400	540	1800	405	2000	450
	ER	K750	2400	540	2000	450	2000	450
uni Flex ONE	O	K1200	4000	899	2700	607	3400	764
	EW	K1200	4000	899	2700	607	3400	764
	EO/EOO	K1200	4000	899	2700	607	3400	764
	ER	K1200	4000	899	3400	764	3400	764
uni Flex ONE	O	K1500	6400	1439	2800	629	3500	787
	EW	K1500	6400	1439	2800	629	3500	787
	EO/EOO	K1500	6400	1439	2800	629	3500	787
	ER	K1500	6400	1439	3500	787	3500	787
uni Flex ONE	O	K1800	8200	1843	2900	652	3600	810
	EW	K1800	8200	1843	2900	652	3600	810
	EO/EOO	K1800	8200	1843	2900	652	3600	810
	ER	K1800	8200	1843	2900	652	3600	810
uni Flex ONE	O	K2400	12000	2698	3200	719	3800	854
	EW	K2400	12000	2698	3200	719	3800	854
	EO/EOO	K2400	12000	2698	3200	719	3800	854
	ER	K2400	12000	2698	3800	854	3800	854

** Valid at 20° C (+ 68° F). Material for all types of uni Flex ONE: POM-SX.*

Surface Opening

Belt width	Opening at straight running belt	Opening min. flex ratio = 1.6
K750	13%	12%
K1200	13%	12%
K1500	15%	11%
K1800	16%	11%
K2400	17%	11%

Compression



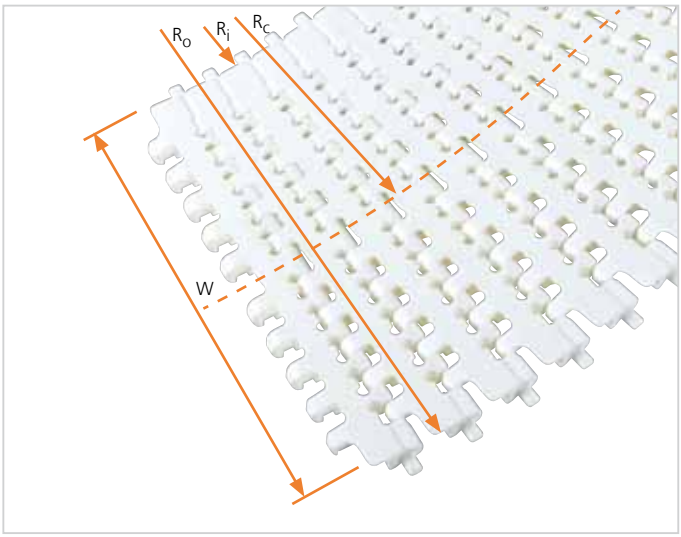
Compression rate is 23% (e.g. 1 meter (3.28 ft) of belt can compress 0.23 m (0.75 ft) to a length of 0.77 m (2.53 ft).

Belt Weights

Assortment	POM-SX				
	Size	mm	in.	kg/m	lb/ft
uni Flex ONE O	K750	190.5	7.50	2.5	1.68
uni Flex ONE EW	K750	190.5	7.50	2.4	1.61
uni Flex ONE EO/EOO	K750	190.5	7.50	2.5	1.68
uni Flex ONE ER-/L/R*	K750	190.5	7.50	2.6	1.75
uni Flex ONE ER/ER	K750	190.5	7.50	2.7	1.81
uni Flex ONE O	K1200	304.8	12.00	4.0	2.69
uni Flex ONE-EW	K1200	304.8	12.00	3.9	2.62
uni Flex ONE-EO/EOO	K1200	304.8	12.00	4.0	2.69
uni Flex ONE ER-/L/R*	K1200	304.8	12.00	4.1	2.76
uni Flex ONE ER/ER	K1200	304.8	12.00	4.2	2.82
uni Flex ONE O	K1500	381.0	15.00	4.9	3.29
uni Flex ONE EW	K1500	381.0	15.00	4.9	3.29
uni Flex ONE EO/EOO	K1500	381.0	15.00	4.9	3.29
uni Flex ONE ER-/L/R*	K1500	381.0	15.00	5.0	3.36
uni Flex ONE ER/ER	K1500	381.0	15.00	5.1	3.43
uni Flex ONE O	K1800	457.2	18.00	6.1	4.1
uni Flex ONE EW	K1800	457.2	18.00	6.1	4.1
uni Flex ONE EO/EOO	K1800	457.2	18.00	6.1	4.1
uni Flex ONE ER-/L/R*	K1800	457.2	18.00	6.2	4.2
uni Flex ONE ER/ER	K1800	457.2	18.00	6.2	4.2
uni Flex ONE O	K2400	609.6	24.00	7.9	5.31
uni Flex ONE EW	K2400	609.6	24.00	7.8	5.24
uni Flex ONE EO/EOO	K2400	609.6	24.00	7.8	5.24
uni Flex ONE ER-/L/R*	K2400	609.6	24.00	7.9	5.31
uni Flex ONE ER/ER	K2400	609.6	24.00	8.1	5.44

** L/R = L (left)/R (right). When ordering, please specify belt edge configuration on opposite side of edge roller (e.g. uni Flex ONE ER/EO = ER on left side and EO on right side - uni Flex ONE EW/ER = EW on left side and ER right side).*

Technical Data



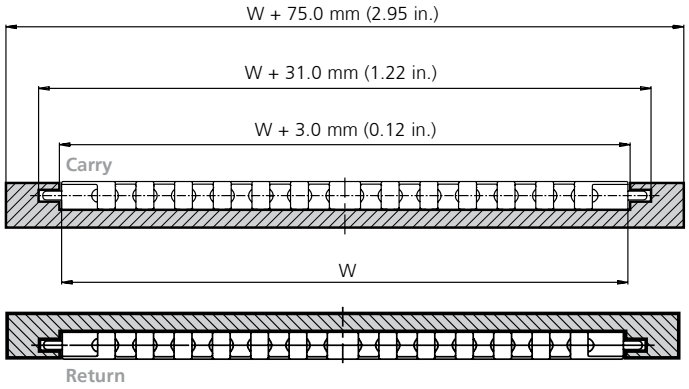
Assortment	POM-SX Belt width W			Min. Center Radius, R_c		Min. Inner Radius, R_i		Flex Ratio (R_i to W)
	Size	mm	in.	mm	in.	mm	in.	
uni Flex ONE O	K750	190.5	7.50	400.1	15.75	304.8	12.00	1.60
uni Flex ONE EW	K750	190.5	7.50	400.1	15.75	304.8	12.00	1.60
uni Flex ONE EO/EOO	K750	190.5	7.50	400.1	15.75	304.8	12.00	1.60
uni Flex ONE ER-/L/R*	K750	190.5	7.50	400.1	15.75	304.8	12.00	1.60
uni Flex ONE ER/ER	K750	190.5	7.50	400.1	15.75	304.8	12.00	1.60
uni Flex ONE O	K1200	304.8	12.00	640.1	25.20	487.7	19.20	1.60
uni Flex ONE EW	K1200	304.8	12.00	640.1	25.20	487.7	19.20	1.60
uni Flex ONE EO/EOO	K1200	304.8	12.00	640.1	25.20	487.7	19.20	1.60
uni Flex ONE ER-/L/R*	K1200	304.8	12.00	640.1	25.20	487.7	19.20	1.60
uni Flex ONE ER/ER	K1200	304.8	12.00	640.1	25.20	487.7	19.20	1.60
uni Flex ONE O	K1500	381.0	15.00	800.1	31.50	609.6	24.00	1.60
uni Flex ONE EW	K1500	381.0	15.00	800.1	31.50	609.6	24.00	1.60
uni Flex ONE EO/EOO	K1500	381.0	15.00	800.1	31.50	609.6	24.00	1.60
uni Flex ONE ER-/L/R*	K1500	381.0	15.00	800.1	31.50	609.6	24.00	1.60
uni Flex ONE ER/ER	K1500	381.0	15.00	800.1	31.50	609.6	24.00	1.60
uni Flex ONE O	K1800	457.2	18.00	960.1	37.80	731.5	28.80	1.60
uni Flex ONE EW	K1800	457.2	18.00	960.1	37.80	731.5	28.80	1.60
uni Flex ONE EO/EOO	K1800	457.2	18.00	960.1	37.80	731.5	28.80	1.60
uni Flex ONE ER-/L/R*	K1800	457.2	18.00	960.1	37.80	731.5	28.80	1.60
uni Flex ONE ER/ER	K1800	457.2	18.00	960.1	37.80	731.5	28.80	1.60
uni Flex ONE O	K2400	609.6	24.00	1280.2	50.40	975.4	38.40	1.60
uni Flex ONE EW	K2400	609.6	24.00	1280.2	50.40	975.4	38.40	1.60
uni Flex ONE EO/EOO	K2400	609.6	24.00	1280.2	50.40	975.4	38.40	1.60
uni Flex ONE ER-/L/R*	K2400	609.6	24.00	1280.2	50.40	975.4	38.40	1.60
uni Flex ONE-ER/ER	K2400	609.6	24.00	1280.2	50.40	975.4	38.40	1.60

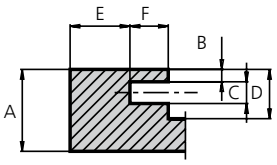
On above belt width values, the belt width tolerance on standard materials is +0/-0.4% at 23°C/73°F.

** L/R = L (left)/R (right). When ordering, please specify Belt Edge Configuration on opposite side of edge roller (e.g. uni Flex ONE ER/EO = ER on left side and EO on right side - uni Flex ONE EW/ER = EW on left side and ER right side).*

Profiles for uni Flex ONE O/EO

Compact Profile Configuration

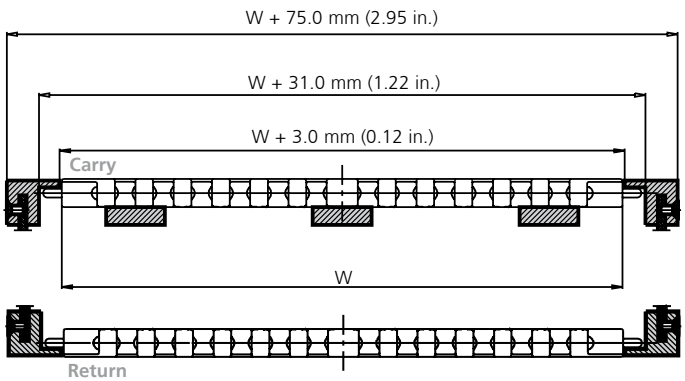


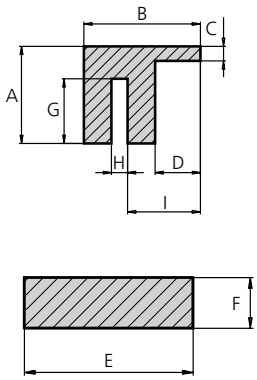


Dimensions

	mm	in.
A	30.0	1.18
B	4.5	0.18
C	8.0	0.31
D	18.0	0.71
E	22.0	0.87
F	14.0	0.55

Slotted Wearstrip Configuration

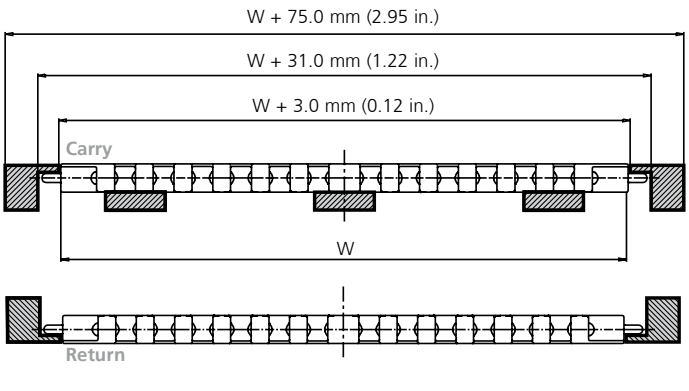


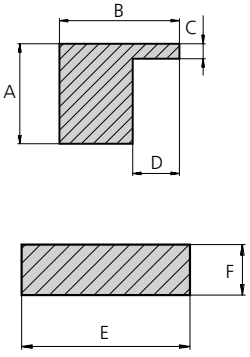


Dimensions

	mm	in.
A	30.0	1.18
B	36.0	1.42
C	4.5	0.18
D	14.0	0.55
E	40.0	1.57
F	12.0	0.47
G	20.0	0.79
H	5.0	0.20
I	22.5	0.89

Solid Wearstrip Configuration



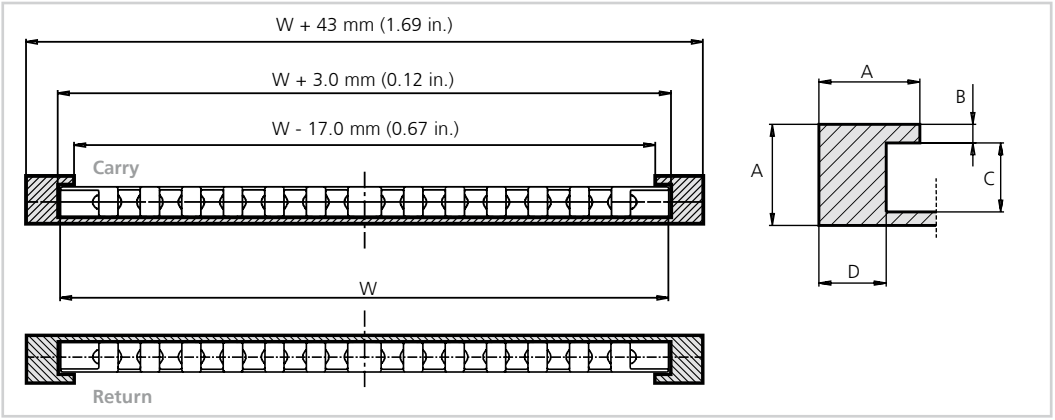


Dimensions

	mm	in.
A	30.0	1.18
B	36.0	1.42
C	4.5	0.18
D	14.0	0.55
E	40.0	1.57
F	12.0	0.47

Profiles for uni Flex ONE EW/ER

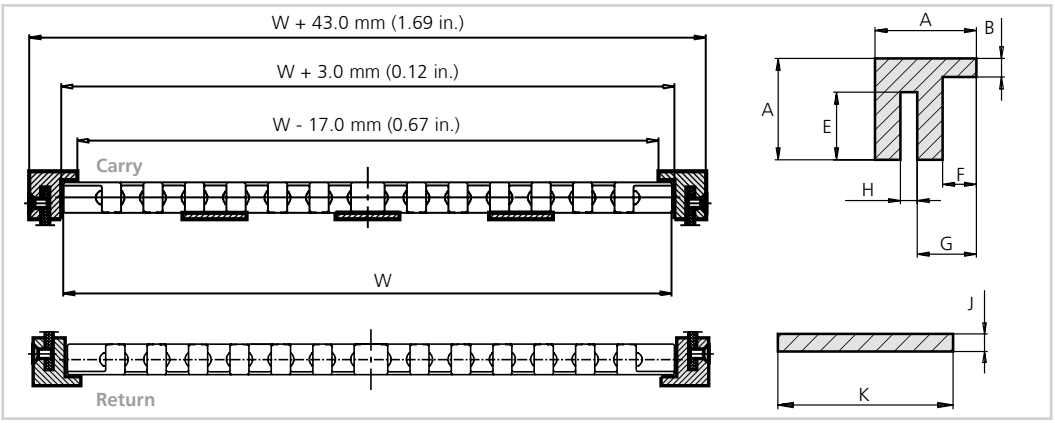
Compact Profile Configuration



Dimensions

	mm	in.
A	30.0	1.18
B	5.5	0.22
C	20.5	0.81
D	20.0	0.79

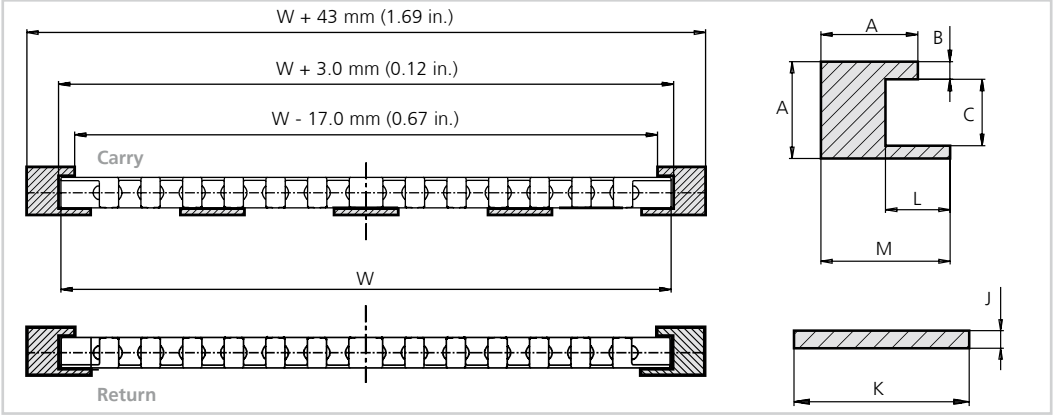
Slotted Wearstrip Configuration



Dimensions

	mm	in.
A	30.0	1.18
B	5.5	0.22
E	20.0	0.79
F	10.0	0.39
G	17.5	0.69
H	5.0	0.20
J	4.0	0.16
K	40.0	1.57

Solid Wearstrip Configuration

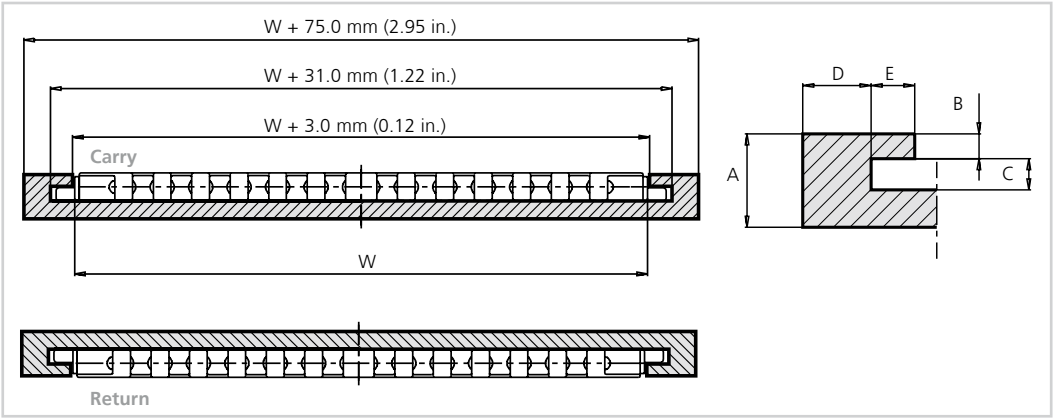


Dimensions

	mm	in.
A	30.0	1.18
B	5.5	0.22
C	20.5	0.81
J	4.0	0.16
K	40.0	1.57
L	20.0	0.79
M	40.0	1.57

Profiles for uni Flex ONE EOO

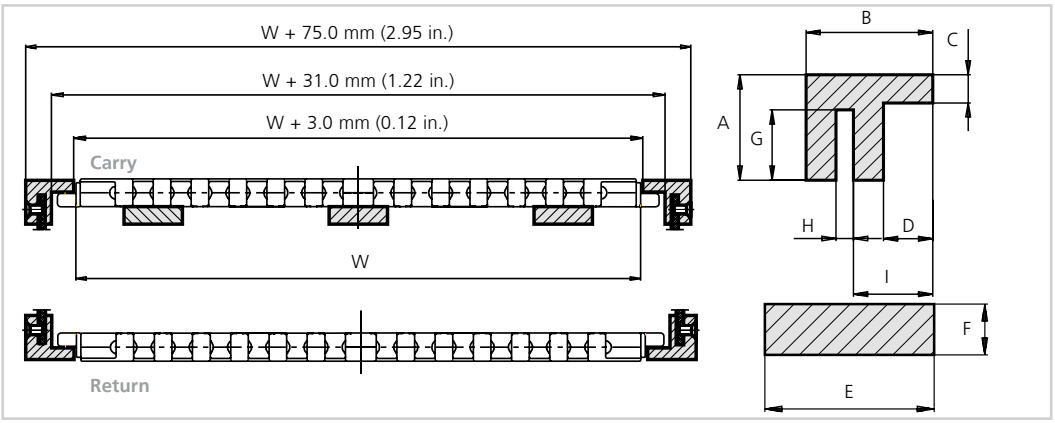
Compact Profile Configuration



Dimensions

	mm	in.
A	30.0	1.18
B	8.0	0.31
C	10.0	0.39
D	22.0	0.87
E	14.0	0.55

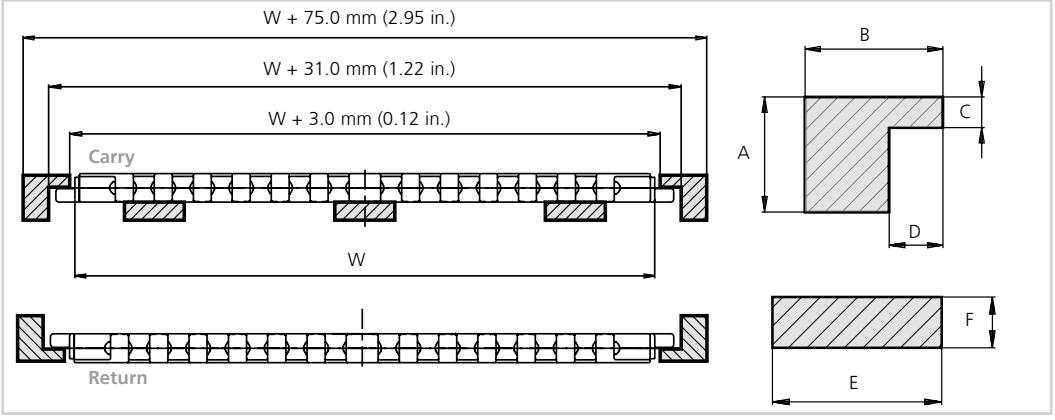
Slotted Wearstrip Configuration



Dimensions

	mm	in.
A	30.0	1.18
B	36.0	1.42
C	8.0	0.79
D	14.0	0.55
E	40.0	1.57
F	12.0	0.47
G	20.0	0.79
H	5.0	0.20
I	22.5	0.89

Solid Wearstrip Configuration



Dimensions

	mm	in.
A	30.0	1.18
B	36.0	1.42
C	8.0	0.31
D	14.0	0.55
E	40.0	1.57
F	12.0	0.47

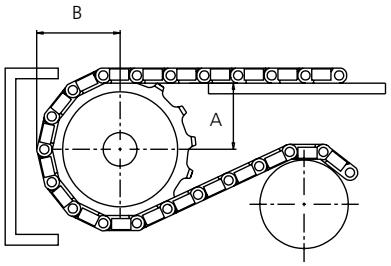
Standard Sprockets

No. of teeth	Pitch diameter		Overall diameter		Hub diameter		Bore		Reference no. plastic
	mm	in.	mm	in.	mm	in.	mm	in.	
8	99.6	3.92	101.0	3.98	60.0	2.36	ø18.0/40.0*	ø0.71/1.57*	823PA6FONE08111LG00
					64.0	2.52	sq 25.4	sq 1.00	823PA6FONE08111LG00I100S
							sq 30.0	sq 1.18	823PA6FONE08111LG00M030S
9	111.4	4.39	113.7	4.48	70.0	2.76	ø18.0/40.0*	ø0.71/1.57*	823PA6FONE09111LG00
					74.0	2.91	sq 38.1	sq 1.50	823PA6FONE09111LG00I150S
							sq 40.0	sq 1.57	823PA6FONE09111LG00M040S
11	135.2	5.32	138.8	5.46	70.0	2.76	ø18.0/40.0*	ø0.71/1.57*	823PA6FONE11111LG00
					74.0	2.91	sq 38.1	sq 1.50	823PA6FONE11111LG00I150S
							sq 40.0	sq 1.57	823PA6FONE11111LG00M040S
					95.0	3.74	ø40.0/ø70.0	ø1.57/2.76	823PA6FONE11111LG01
					100	3.94	sq 50.8	sq 2.00	823PA6FONE11111LG00I200S
							sq 60.0	sq 2.36	823PA6FONE11111LG00M060S
12	147.2	5.80	151.2	5.95	70.0	2.76	ø18.0/40.0*	ø0.71/1.57*	823PA6FONE13111LG00
					74.0	2.91	sq 38.1	sq 1.50	823PA6FONE12111LG00I150S
							sq 40.0	sq 1.57	823PA6FONE12111LG00M040S
					110.0	4.33	ø40.0/ø70.0	ø1.57/2.76	823PA6FONE12111LG01
					114.0	4.49	sq 50.8	sq 2.00	823PA6FONE12111LG00I200S
							sq 60.0	sq 2.36	823PA6FONE12111LG00M060S
							sq 63.5	sq 2.50	823PA6FONE12111LG00I250S
13	159.2	6.27	163.6	6.44	70.0	2.76	ø18.0/40.0*	ø0.71/1.57*	823PA6FONE13111LGI00
					74.0	2.91	sq 38.1	sq 1.50	823PA6FONE13111LG00I150S
							sq 40.0	sq 1.57	823PA6FONE13111LG00M040S
					ø120.0	ø4.72	ø40.0/ø70.0	ø1.57/2.76	823PA6FONE13111LG01
					114.0	4.49	sq 50.8	sq 2.00	823PA6FONE13111LG00I200S
							sq 60.0	sq 2.36	823PA6FONE13111LG00M060S
							sq 63.5	sq 2.50	823PA6FONE13111LG00I250S
16	195.3	7.69	200.5	7.89	70.0	2.76	ø18.0/40.0*	ø0.71/1.57*	823PA6FONE16111LG00
					74.0	2.91	sq 38.1	sq 1.50	823PA6FONE16111LG00I150S
							sq 40.0	sq 1.57	823PA6FONE16111LG00M040S
					120.0	4.72	ø40.0/ø70.0	ø1.57/2.76	823PA6FONE16111LG01
					114.0	4.49	sq 50.8	sq 2.00	823PA6FONE16111LG00I200S
							sq 60.0	sq 2.36	823PA6FONE16111LG00M060S
							sq 63.5	sq 2.50	823PA6FONE16111LG00I250S

** Minimum/maximum round bore.*

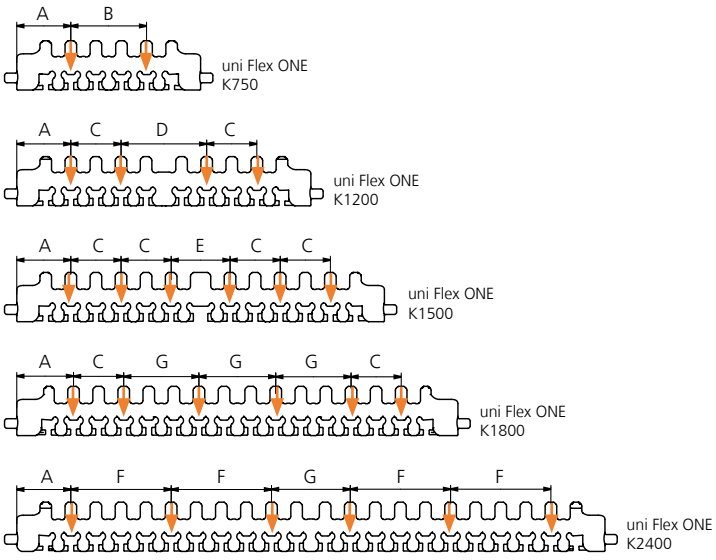
Placement of Wearstrips and Sprockets

No. of teeth	Wearstrip distance A		Minimum B-dimension	
	mm	in.	mm	in.
8	36.5	1.44	58.9	2.32
9	42.8	1.69	64.9	2.56
11	55.3	2.18	76.9	3.03
12	61.6	2.43	82.9	3.26
13	67.8	2.67	88.9	3.50
16	86.2	3.40	107.0	4.21



Width of sprockets: 39.0 mm (1.54 in.)
Tooth width: 9.0 mm (0.35 in.)
Standard material: PA6

Placement and Number of Sprockets



Dimensions

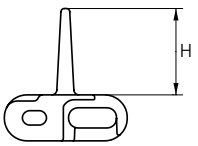
	mm	in.
A	56.0	2.20
B	78.5	3.10
C	52.0	2.05
D	88.8	3.50
E	61.0	2.40
F	104.0	4.10
G	81.6	3.21

Please note, if travel is in both directions, an extra set of sprockets is required.

Accessories | Product Support

uni Flex ONE (All Types)
Product Support

Dimensional Sketch



uni Flex ONE
Product Support

Indent: 32 mm (1.25 in.)

Standard Materials, Colors and Dimensions

Height		Width			Standard materials & colors
mm	in.	Type	mm	in.	POM-SX
25.4	1.00	K1200	304.8	12.0	W B *

** Please note that uni Flex ONE in POM-SX blue is not according to the standard color quality for blue. Small variations may occur.*

Accessories | Idler

Thickness of idler: 20.0 mm (0.79 in.)

No. of teeth	Diameter idler	
	mm	in.
8	72.9	2.87
9	85.6	3.37
11	110.7	4.36
12	123.1	4.85
13	135.5	5.33
16	172.4	6.79

Recommended for use at idler end to ensure smooth and low noise operation.

uni Flex ONE Idler

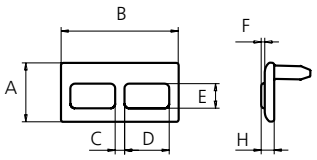
Standard Material and Color

POM-D	N

Accessories | Rubber Clip On

uni Flex ONE
Rubber Clip On

Dimensional Sketch



uni Flex ONE
Rubber Clip On

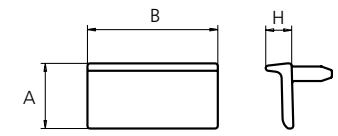
Dimensions

	mm	in.
A	25.0	0.98
B	50.0	1.97
C	4.0	0.16
D	19.0	0.75
E	10.5	0.41
F	1.5	0.06

Accessories | Product Support

uni Flex ONE
Product Support 10 mm

Dimensional Sketch



uni Flex ONE
Product Support 10 mm

Standard Materials, Colors and Dimensions

Style	H		Standard materials & colors
	mm	in.	POM-D
uni Flex ONE Rubber Clip On	5.5	0.22	O + Rubber 01 K
uni Flex ONE Product Support	10.0	0.39	O