Plastic Modular Belt

Ammeraal Beltech
Innovation & Service in Belting

Series **uni Flex ONE**　　　Type **15% Open** (Radius 1.6)

Top view

Bottom view
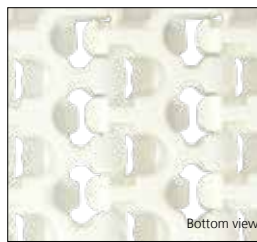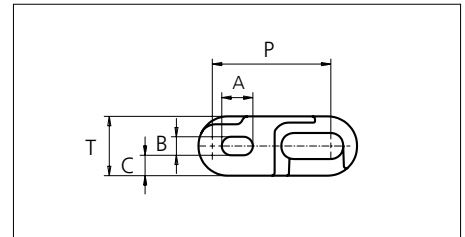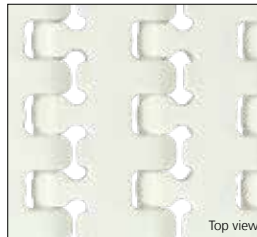
Sideflexing belt
Nominal pitch: 38.1 mm (1.50 in)
Surface type: Flat
Surface opening: 15%
Backflex radius: 50.0 mm (1.97 in)
Min. inside radius R1.6 x belt width

STANDARD

SIDE FLEXING

PITCH 38.1 MM/1.50 IN

Belt material & color	POM-SX W B **

	mm	in		mm	in
P (Nominal)	38.1	1.50	C	6.6	0.26
A	10.0	0.39	T	19.1	0.75
B	5.9	0.23	-	-	-

*uni-chains reccomends this travel direction. However travel in both directions is possible.
**Please note that uni Flex ONE in POM-SX blue is not according to the standard color quality for blue. Small variations may occur.

Belt width			Permissible tensile force Belt material				Belt weight Belt material		*Recommended No. drive sprocket per shaft	Number of wear strips (Min no.)	
			POM-SX				POM-SX			Carry (pcs)	Return (pcs)
			Straight sections		Curve sections						
Size	mm	in	N	lbf	N	lbf	kg/m	lb/ft			
K750	190.5	7.50	2400	540	2000	450	2.6	1.75	2	2	2
K1200	304.8	12.00	4000	899	3400	764	4.1	2.76	3	2	2
K1400**	355.6	14.00	5600	1259	3400	764	4.7	3.16	3	2	2
K1500	381.0	15.00	6400	1439	3500	787	5.0	3.36	3	2	2
K1800	457.2	18.00	8200	1843	3600	809	6.2	4.17	5	2	2
K2400	609.6	24.00	12000	2698	3800	854	8.0	5.38	5	2	2

General belt tolerance is +0/-0.4% at 23°C/73°F.
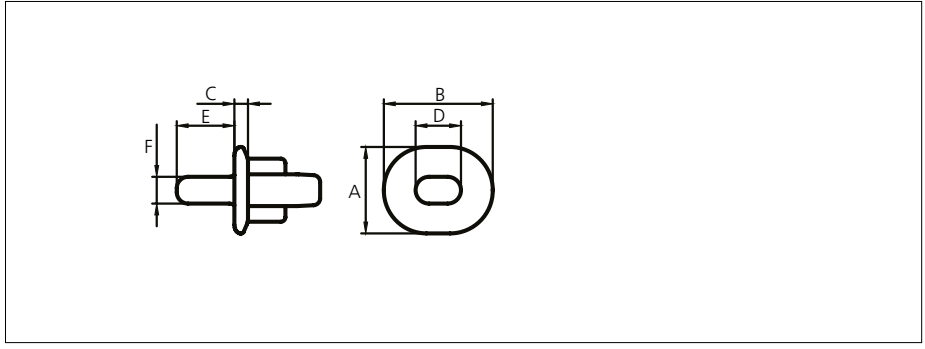*Max. Load per Drive Sprocket. Belt material: POM-SX 2500 N (562 lbf)
**Flex ONE-K1400 is not available with any type of edge accessories

uni chains

Edge Accessories
uni Flex ONE EO Tab (Exchangeable Outer Tab)

Type	EO-Tab material & color	A		B		C		D		E		F	
		mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Exchangeable Outer Tab	POM DK O	19.1	0.75	24.0	0.94	3.0	0.12	10.0	0.39	12.7	0.50	5.9	0.23

When using the EO Tab in both sides, the width of the belt will be the same as the uni Flex ONE 15% open. See page 1.

Edge Accessories
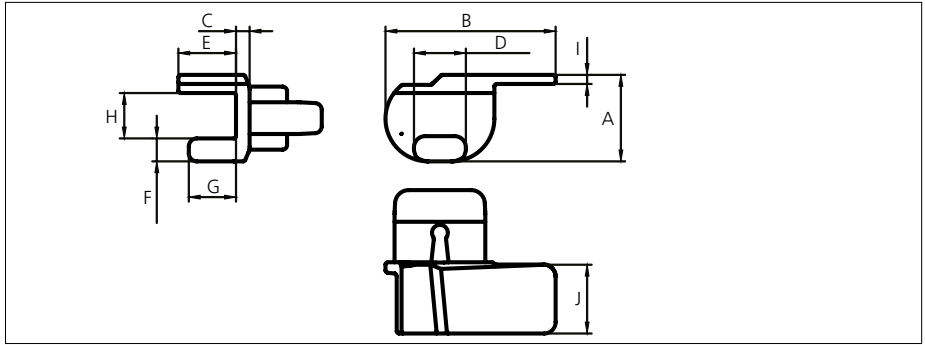**uni Flex ONE EOO Tab (Exchangeable Outer Offset Tab)**
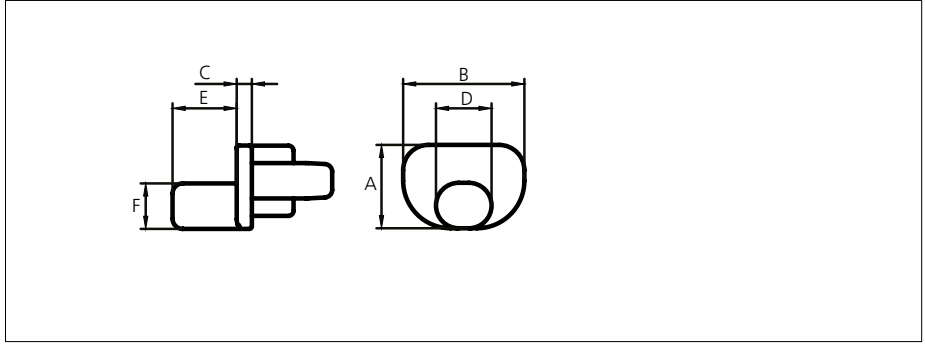
Type	EOO-Tab material & color	A		B		C		D		E		F	
		mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Exchangeable Outer Offset Tab	POM DK O	16.5	0.65	24.0	0.94	3.0	0.12	11.0	0.43	12.7	0.50	9.0	0.35

When using the EOO Tab in both sides, the width of the belt will be the same as the uni Flex ONE 15% open. See page 1.

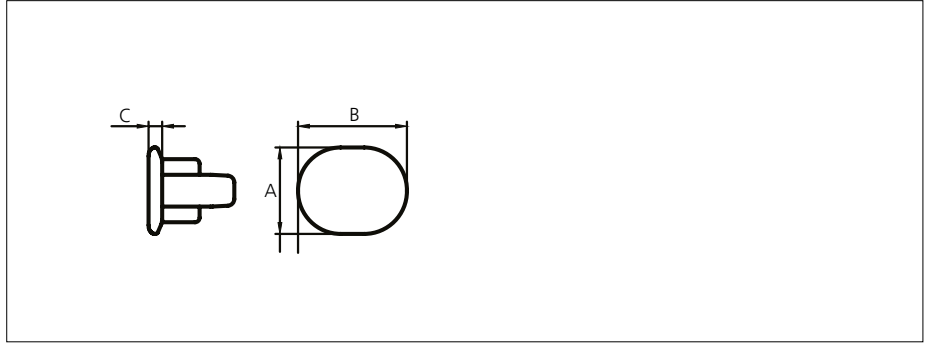## Edge Accessories
uni Flex ONE EC Tab (Exchangeable C-Shape Tab)

Type	EC-Tab material & color	A		B		C		D		E	
		mm	in	mm	in	mm	in	mm	in	mm	in
Exchangeable C-Shape Tab	POM-SX W B	19.1	0.75	37.5	1.48	3.0	0.12	10.5	0.41	12.7	0,50

F		G		H		I		J	
mm	in	mm	in	mm	in	mm	in	mm	in
5.0	0.20	10.4	0.41	10.0	0.39	2.0	0.08	15.2	0,60

When using the EC Tab, the width of both sides of the belt width will increase 1.00 in.

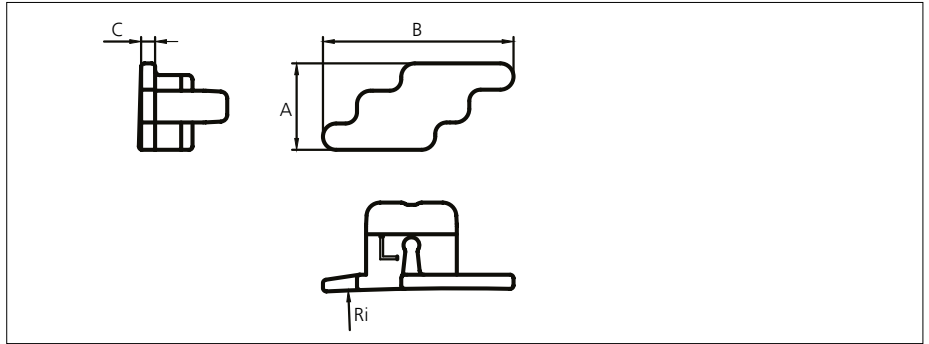## Edge Accessories
uni Flex ONE EW (Exchangeable Wearpart)

Type	EW Wearpart material & color	A		B		C	
		mm	in	mm	in	mm	in
Exchangeable Wearpart	POM DK O	19.1	0.75	24.0	0.94	3.0	0.12

When using the EW in both sides, the width of the belt will be the same as the uni Flex ONE 15% open. See page 1.

Edge Accessories
**uni Flex ONE EWC (Exchangeable Wearpart Closed)**

Type	EWC Wearpart material & color	A		B		C		Ri	
		mm	in	mm	in	mm	in	mm	in
Exchangeable Wearpart Closed	K750: POM DK Y	19.1	0.75	24.0	0.94	3.0	0.12	308.8	12.00
	K1200, K1500, K1800: POM DK O							609.6	24.00
	K2400: POM DK B							975.4	38.40

When using the EWC in both sides, the width of the belt will be the same as the uni Flex ONE 15% open. See page 1.

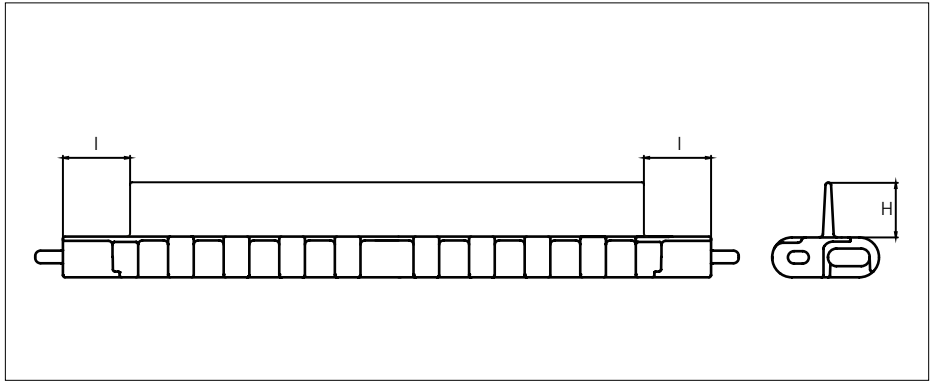## Edge Accessories
uni Flex ONE ER (Exchangeable Roller)
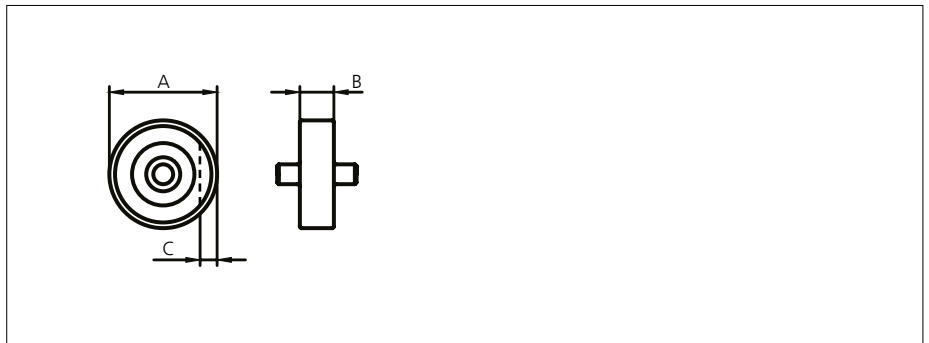
Type	ER material	A		B		C*	
		mm	in	mm	in	mm	in
Exchangeable Roller	SS	19.1	0.75	6.0	0.24	3.0	0.12

When using the ER in both sides, the width of the belt will be the same as the uni Flex ONE 15% open. See page 1.

* Distance from edge of belt to outside ball bearing.

Other accessories
Flight

Type	Standard belt material & color	Height (H)		Indent (I)		Link size	Width	
		mm	in	mm	in		mm	in
Flight	POM-SX W B *	25.4	1.00	32.0	1.26	K1200	304.8	12.00

* Please note that uni Flex ONE in POM-SX blue is not according to the standard color quality for blue. Small variations may occur.
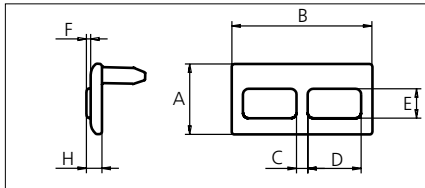Non Standard material and color: See uni Material and Color Overview.
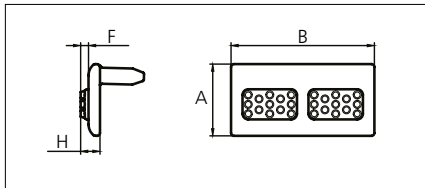
Other accessories
Clip On Flight

Clip On Rubber Flat
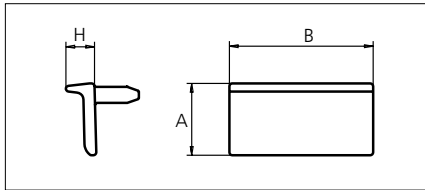
Clip On Rubber Cone

	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	2.8	0.11
H	6.8	0.27

Type	Height (H)		Standard materials & colors
	mm	in	
Clip On Flight	10.0	0.39	POM-D O
Clip On Rubber Flat	5.5	0.22	POM-D O + Rubber 01 K
Clip On Rubber Cone	6.8	0.27	POM-D O + Rubber 01 K

Design Guidelines
uni Flex ONE O and EO
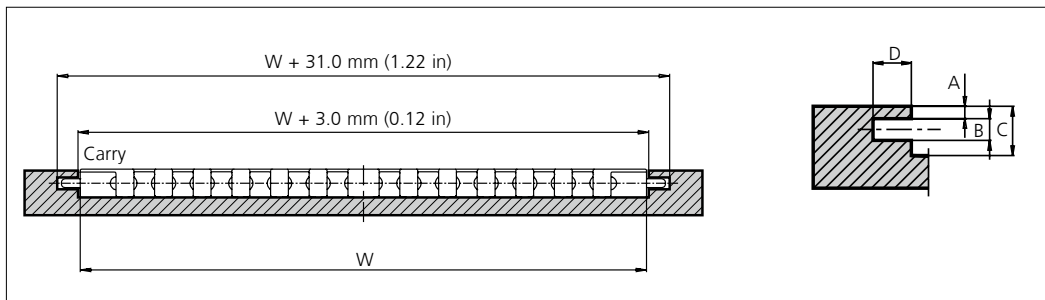
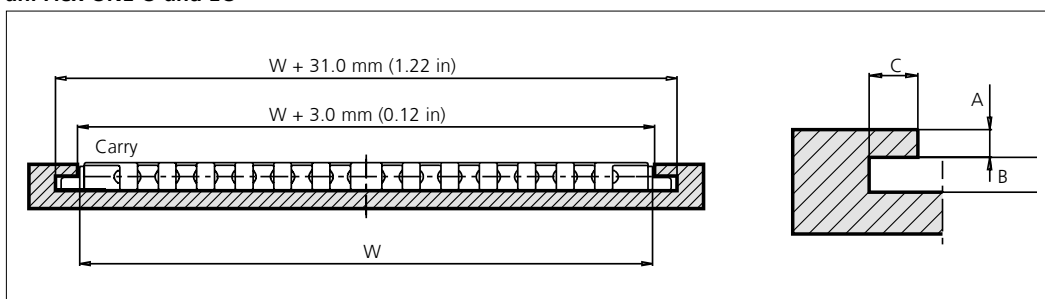|	mm	in
A	4.5	0.18
B	8.0	0.31
C	18.0	0.71
D	14.0	0.55

uni Flex ONE O

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

uni Flex ONE EO (Exchangeable 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.

Design Guidelines
uni Flex ONE O and EO

	mm	in
A	8.0	0.31
B	10.0	0.39
C	14.0	0.55

uni Flex ONE EOO (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.

Design Guidelines
uni Flex ONE EC

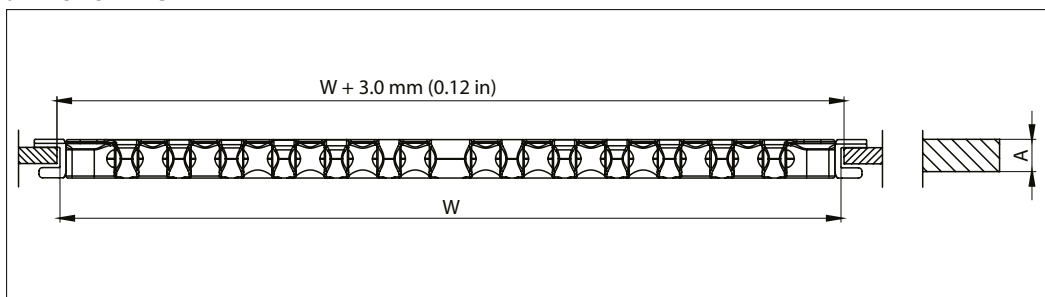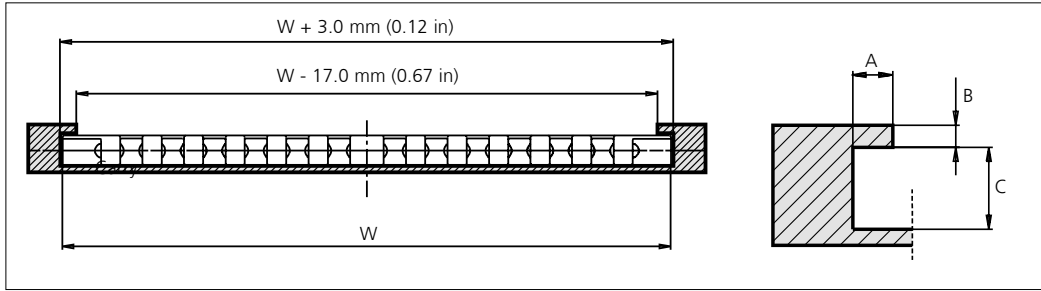|	mm	in
A	8.0	0.31

Design Guidelines
uni Flex ONE EW and ER

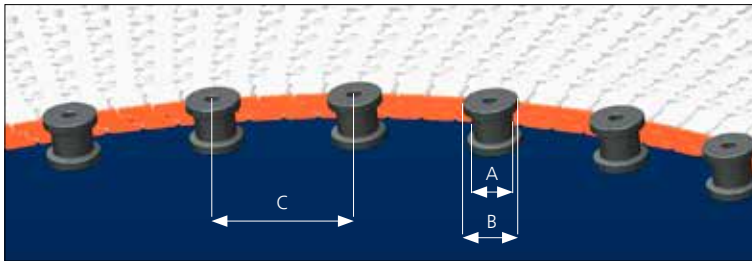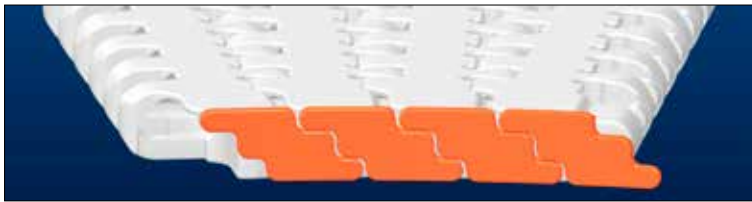|	mm	in
A	10.0	1.39
B	5.5	0.22
C	20.5	0.81

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.
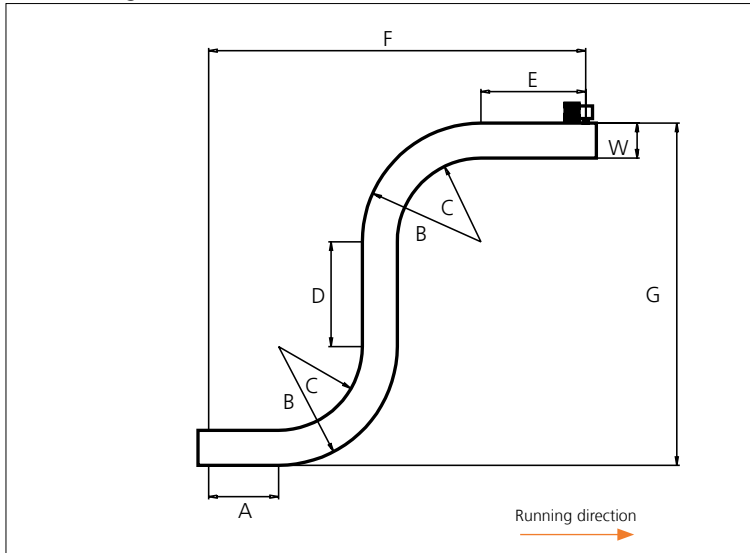
Design Guidelines
uni Flex ONE EWC

	mm	in
A	min ø30	min ø1¼
B	A + min 12	A + min ½
C	100-150	4-6

Overall Design Guidelines

Running direction

	Layout Guidelines
A	min. 1.0 x W
B	min. 2.6 x W
C	min. 1.6 x W
D	min. 2.0 x W
E	min. 1.0 x W
F	min. 6.2 x W
G	min. 7.2 x W

For min. conveyor dimensions please refer to sketch and diagram.

Sprocket

No. of teeth	Bore size							Overall diameter		Pitch diameter		Hub diameter		Dimension A		Dimension B		Single row/One way	PA6 **LG**
	Pilot Bore	in 0.98 / mm 25.0	1.00 / 25.4	1.18 / 30.0	1.25 / 31.8	1.50 / 38.1	1.57 / 40.0	mm	in	mm	in	mm	in	mm	in	mm	in		Molded
Z08	✔	■	● ■	●	●		●	101	3.98	99.6	3.93	60.0	2.36	36.5	1.44	59.0	2.32	✔	✔
Z09	✔		●	●	●		●	113.7	4.48	111.4	4.39	70.0	2.76	42.8	1.69	64.9	2.56	✔	✔
Z09						■	■	113.7	4.48	111.4	4.39	74.0	2.91	42.8	1.69	64.9	2.56	✔	✔
Z11	✔		●	●	●			138.8	5.46	135.2	5.32	70.0	2.76	55.4	2.18	76.9	3.03	✔	✔
Z11						■	■	138.8	5.46	135.2	5.32	74.0	2.91	55.4	2.18	76.9	3.03	✔	✔
Z12	✔			●	●	●	●	151.2	5.95	147.2	5.80	70.0	2.76	61.6	2.43	82.9	3.26	✔	✔
Z12						■	■	151.2	5.95	147.2	5.80	74.0	2.91	61.6	2.43	82.9	3.26	✔	✔
Z13	✔			●	●	●	●	163.6	6.44	159.2	6.27	70.0	2.76	67.8	2.67	88.9	3.50	✔	✔
Z13						■	■	163.6	6.44	159.2	6.27	74.0	2.91	67.8	2.67	88.9	3.50	✔	✔
Z16	✔			●	●	●	●	200.5	7.89	195.3	7.69	70.0	2.76	86.3	3.40	107.0	4.21	✔	✔
Z16						■	■	200.5	7.89	195.3	7.69	74.0	2.91	86.3	3.40	107.0	4.21	✔	✔

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

■ **Molded sprocket** ● **Molded sprocket**
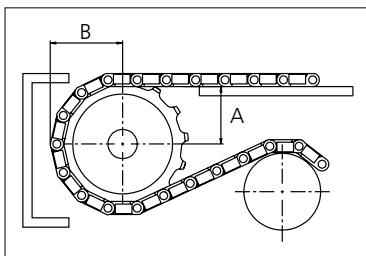
Other sprocket sizes are available upon request
Other bore sizes are available upon request
uni Retainer Rings: See uni Retainer Ring data sheet
Width of tooth = 9.0 mm (0.35 in)
Width of sprocket = 39.0 mm (1.54 in)

Max. load per sprocket shown does not take bore size into account.
Please also ensure that sufficient size shaft is chosen for corresponding load.
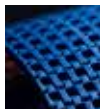
For correct sprocket position: See uni Assembly Instructions for uni Flex ONE.
For more detailed sprocket information, contact Customer Service.
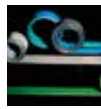
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