

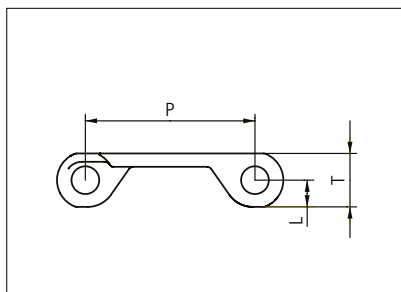
uni UCB – UltraClean Belt



Setting new cleanability standards
for plastic modular belts

Plastic Modular Belt

Series **uni UCB** Type **Closed**



Straight running belt
 Nominal pitch: 50.8 mm (2.00 in)
 Surface type: Flat
 Surface opening: Closed
 Backflex radius: 65.0 mm (2.6 in)
 Pin diameter: 8.0 mm (0.31 in)

Belt material & color	POM-D W B	PP-I W B	PE-I N B	P (Nominal)	mm	in	T	mm	in	
					50.8	2.00		16.0	0.63	
Pin material & color	PP W			PE W			L	mm	in	
								8.0	0.31	-

Non standard material and color: See uni Material and Color Overview.
 Alternative pin and lock systems and materials: Contact Customer Service.

Belt width		Permissible tensile force (Belt/pin material)						Belt weight (Belt/pin material)						*Min. No. drive sprocket per shaft	Number of wear strips (Min. No.)	
		POM-D/PP		PP-I/PP		PE-I/PE		POM-D/PP		PP-I/PP		PE-I/PE			**Carry (pcs)	**Return (pcs)
mm	in	N	lbf	N	lbf	N	lbf	kg/m	lb/ft	kg/m	lb/ft	kg/m	lb/ft			
152	6.0	1596	359	958	215	365	82	1.2	0.80	0.8	0.55	0.8	0.57	2	2	2
203	8.0	2132	479	1279	287	487	110	1.6	1.07	1.1	0.73	1.1	0.76	3	3	2
253	10.0	2657	597	1594	358	607	136	2.0	1.33	1.4	0.91	1.4	0.95	3	3	2
304	12.0	3192	718	1915	431	730	164	2.4	1.60	1.6	1.10	1.7	1.14	4	4	2
354	13.9	3717	836	2230	501	850	191	2.8	1.86	1.9	1.28	2.0	1.33	4	4	3
405	15.9	4253	956	2552	574	972	219	3.2	2.13	2.2	1.46	2.3	1.52	5	5	3
455	17.9	4778	1074	2867	644	1092	245	3.6	2.39	2.4	1.64	2.5	1.71	5	5	3
506	19.9	5313	1194	3188	717	1214	273	4.0	2.66	2.7	1.83	2.8	1.90	6	6	4
556	21.9	5838	1312	3503	787	1334	300	4.3	2.92	3.0	2.01	3.1	2.09	6	6	4
607	23.9	6374	1433	3824	860	1457	327	4.7	3.19	3.3	2.19	3.4	2.28	7	7	4
657	25.9	6899	1551	4139	930	1577	354	5.1	3.45	3.5	2.37	3.7	2.46	7	7	5
708	27.9	7434	1671	4460	1003	1699	382	5.5	3.72	3.8	2.56	4.0	2.66	8	8	5
758	29.8	7959	1789	4775	1074	1819	409	5.9	3.98	4.1	2.74	4.2	2.84	8	8	5
809	31.9	8495	1910	5097	1146	1942	436	6.3	4.25	4.3	2.92	4.5	3.03	9	9	6
859	33.8	9020	2028	5412	1217	2062	463	6.7	4.51	4.6	3.10	4.8	3.22	9	9	6
910	35.8	9555	2148	5733	1289	2184	491	7.1	4.78	4.9	3.28	5.1	3.41	10	10	6
960	37.8	10080	2266	6048	1360	2304	518	7.5	5.05	5.2	3.46	5.4	3.60	10	10	7
1011	39.8	10616	2386	6369	1432	2426	545	7.9	5.31	5.4	3.65	5.6	3.79	11	11	7
1971	77.6	20696	4652	12417	2791	4730	1063	15.4	10.36	10.6	7.11	11.0	7.39	20	20	13
2981	117.4	31301	7036	18780	4222	7154	1608	23.3	15.67	16.0	10.76	16.6	11.18	30	30	20

Additional standard belt widths are available in steps of 50.4 mm (2.00 in).

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General belt tolerance is +0/-0.4% at 23°C/73°F. For exact belt width contact Customer Service.

Additional non-standard belt widths are available in steps of 16.8 mm (0.66 in).

*Max. Load per Drive Sprocket. Belt material: POM-DI 1000 N (225 lbf), PPI 660 N (149 lbf), PEI 170 N (38 lbf).

**Max. Spacing between wear strips, Carry: 101.0 mm (4.00 in); Return: 152.0 mm (6.00 in).

= Single Link

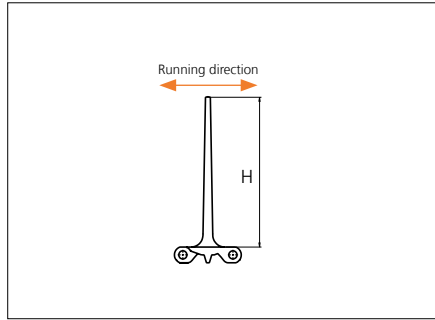
STANDARD

STRAIGHT RUNNING

PITCH 50.8 MM/2.00 IN

Accessories

Flight



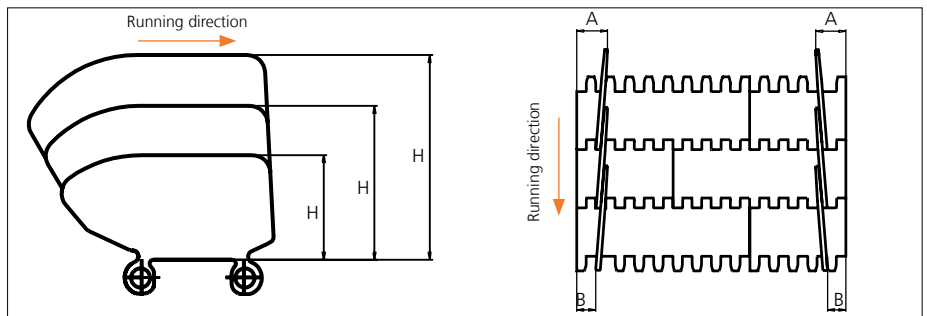
Type	Material & color	H		Link size	Width		Indent both sides	
		mm	in		mm	in	mm	in
Flat	POM-D W B PP-I W B PE-I N B	5.0	0.20	K600	151.0	5.94	3.0	0.12
		10.0	0.39					
		25.4	1.00					
		50.8	2.00				0.0	0.0
		76.2	3.00					
		101.6	4.00					
		101.6	4.00					
152.4	6.00	34.0*	1.34					
		0.0	0.00					

*Indent only in one side.

Depending on height and spacing the use of product supports may influence the backflex radius.
Other flights are available: see uni MPB Flights datasheet.

Accessories

Side Guard



Type	Side Guard Material & color	H		A		B	
		mm	in	mm	in	mm	in
Closed	PP-I W B PE-I N B	50.8	2.00	32.0	1.26	16.0	0.63
		76.2	3.00				
		101.6	4.00				

*34.0 mm (1.34 in) combined with flight. Increment: 8.4 mm (0.33 in).

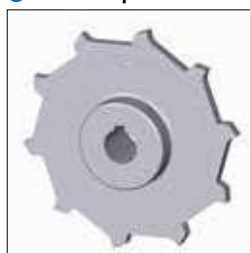
Note: Backflex radius when Side Guards are used: 200.0 mm (7.90 in)

Sprocket

No. of teeth	Bore size									Overall diameter		Pitch-diameter		Hub-diameter		Dimension A		Dimension B		Single row/One way	Molded PA6 LG	Machined PA6
	Pilot bore		1.00			1.18			1.25													
	mm	in	25.4	30.0	31.8	38.1	40.0	60.0	63.5	mm	in	mm	in	mm	in	mm	in	mm	in			
Z08	✓		●	●	●	■	■			132.9	5.23	132.8	5.23	65.0	2.56	53.3	2.10	74.9	2.94	✓	✓	
Z10	✓			●	●	●	■	■		166.3	6.55	164.4	6.47	65.0	2.56	70.2	2.76	90.7	3.57	✓	✓	
Z10								■	■	166.3	6.55	164.4	6.47	120.0	4.72	70.2	2.76	90.7	3.57	✓	✓	
Z12	✓			●	●	●	■	■		198.6	7.82	196.3	7.73	65.0	2.56	86.8	3.42	106.6	4.19	✓	✓	
Z12								■	■	198.6	7.82	196.3	7.73	120.0	4.72	86.8	3.42	106.6	4.19	✓	✓	
Z16	✓			●	●	●	■	■	■	263.8	10.39	260.4	10.25	150.0	5.90	119.7	4.71	138.7	5.46	✓		✓

● Molded sprocket

■ Machined sprocket



Other sprocket sizes are available upon request.

Other bore sizes on sprockets are available upon request.

Max. load per sprocket shown does not take bore size into account.

Please also ensure that sufficient size shaft is chosen for corresponding load.

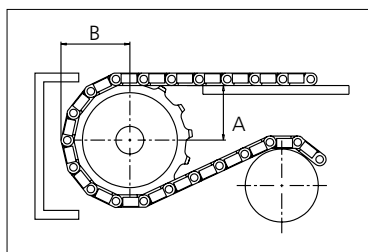
Width of tooth = Single row 9.5 mm (0.37 in)

Width of One-part sprocket = Single row: 42.3 mm (1.67 in)

uni UltraClean Two-Part Sprocket

No. of teeth	Bore size				Overall diameter		Pitch-diameter		Hub-diameter		Dimension A		Dimension B		Single row/One way	Moulded PA6 W
	in	1.50	1.57	2.36												
	mm	38.1	40.0	60.0	mm	in	mm	in	mm	in	mm	in	mm	in		
Z8		■	■		132.9	5.23	132.8	5.23	80.0	3.15	53.3	2.10	74.9	2.94	✓	✓
Z10		1 ■	1 ■	2 ■	166.3	6.55	164.4	6.47	¹ 126.0 ² 118.0	¹ 4.96 ² 4.65	70.2	2.76	90.7	3.57	✓	✓
Z12		1 ■	1 ■	2 ■	198.6	7.82	196.3	7.73	¹ 126.0 ² 118.0	¹ 4.96 ² 4.65	86.8	3.42	106.6	4.19	✓	✓

■ Moulded uni UltraClean TwoPart Sprocket



Width of UltraClean Two-part sprocket = Single row: 44.0 mm (1.73 in)

Width of UltraClean Two-part sprocket, tooth = Single row: 9.5 mm (0.37 in)

uni Retainer Rings: See uni Retainer Ring data sheet.

For correct sprocket position: See uni Assembly Instructions for uni UCB.

For more detailed sprocket information. contact Customer Service.

Setting new cleanability standards for Plastic Modular Belts

The demands for food safety and hygiene are getting increasingly higher. This means that hygienic and cleanable equipment is more important than ever. Ammeraal Beltech has developed a revolutionary new belt: the uni UCB or UltraClean Belt. The best performing Plastic Modular Belt on hygiene and cleanability in the industry.

The uni UCB offers unparalleled food safety. Together with our UltraClean Two-Part Sprockets, the uni UltraClean Belt truly defines hygiene and cleanability efficiency in the food industry.



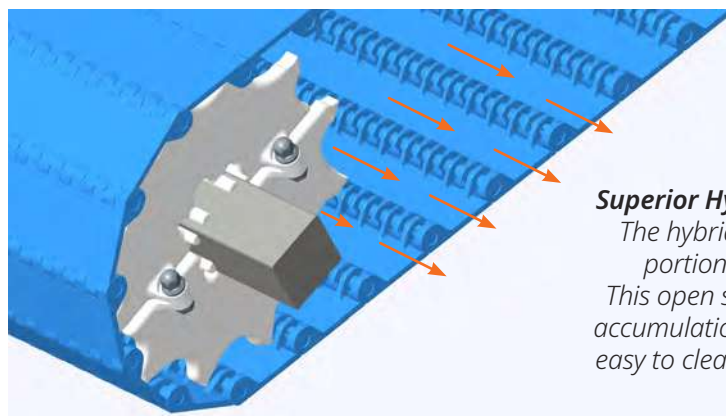
Ammeraal Beltech is member of European Hygienic Engineering & Design Group.



Food Grade belts comply with EC 1935/2004, FDA and USDA standards.

KEY ADVANTAGES

- Clean ability = **Clean Belt**
- Hybrid hinges
- Superior Hygienic Performance
- Lightweight
- Unique lock-pin system
- Hinge driven
- UltraClean Two-Part sprocket compatible
- **Low cost of ownership**



Superior Hygienic Performance

The hybrid hinges expose large portions of the uni UCB's pin. This open structure prevents dirt accumulation and makes the belt easy to clean. It also allows water to flow off the belt.

LOW COST OF OWNERSHIP

- Simple cleaning & short cleaning times
- Reduces volume of cleaning water
- Simple to mount and dismount belting when needed = reduces manpower
- Easy to lift up during cleaning
- Economical: lower belt weight, lighter drive system = energy savings up to 40%
- Reduces volume of cleaning chemicals

All features add up to outstanding cleaning performance and food safety.



Superior
food safety



Less
detergent



Less
water
consumption



Faster
cleaning



Less
downtime



Reduced
costs

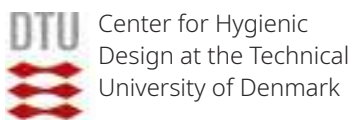
Hygienic Score DTU Cleanability Test

Independently Proven

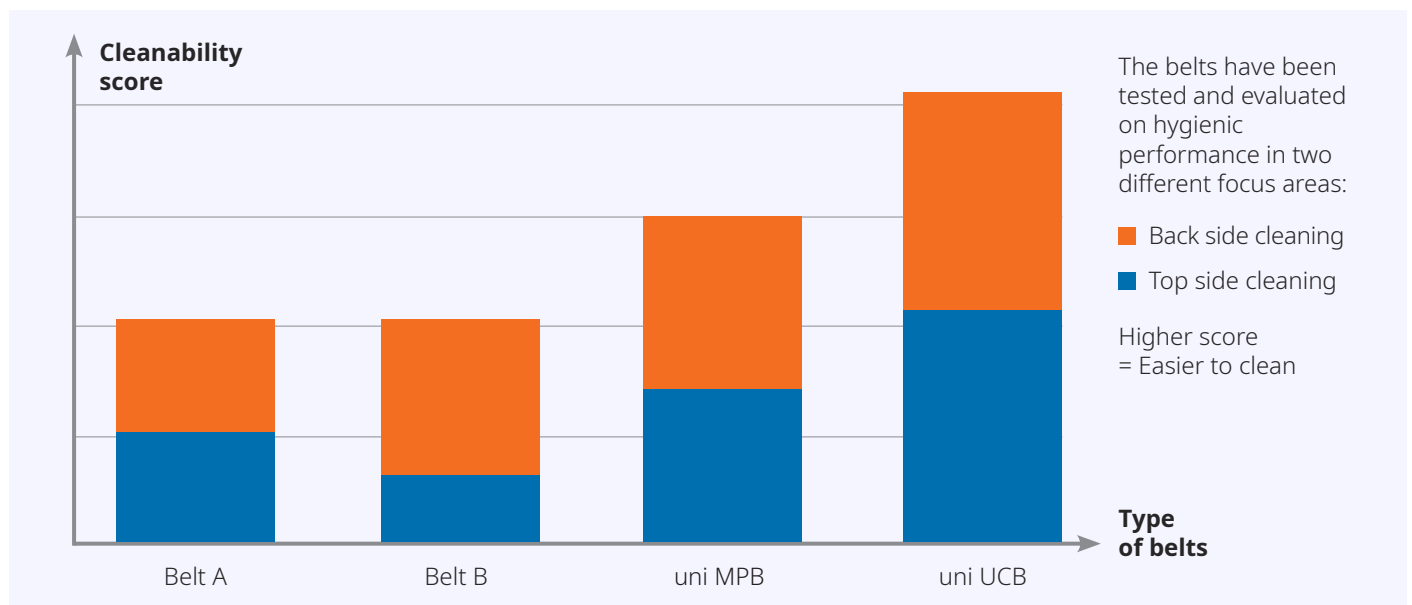
Upon request of Ammeraal Beltech, washdown testing has been performed on four different belt designs to test the hygienic performance and specifically the cleanability of each of these. A procedure suitable for objective soiling, cleaning and evaluation of the belts of different generic designs has been developed. The soiling of the belts were performed on the topside and backside in separate experiments.

uni UCB performed better than three other belt designs:

uni UCB which had the best hygienic performance of all four belts no matter the soiling side. uni UCB had the shortest cleaning time no matter which side the soil was applied to and which side was cleaned.



Testing the hygienic performance



The uni UltraClean Two-Part Sprocket

– Superior in food safety!

With unique features that combine all the benefits of a traditional two-part sprocket system – ease of installation and replacement, less downtime and lower maintenance costs – with unparalleled advantages in hygiene and cleaning, this innovative belt sprocket is delivering outstanding hygienic performance in demanding applications across the food industry.

