

ROUND PROFILES



ROUND PROFILES



			2	3	4	5	6	6.3	7	8	9	9.5	10	12	12.5	15	18	20	
Reinforced	Smooth	DEL/ROC «DRW» Polyester-reinforced	63 ShD									○		○					
		DEL/ROC Polyester-reinforced	100 ShA 55 ShD										○	○		○	○	○	
		DEL/ROC Steel or Stainless reinforced	100 ShA 55 ShD										●			●			
		DEL/SAN Reinforced Aramid	95 ShA								●			●		●	●	●	
		POLY/FLEX Reinforced Aramid	85 ShA					●			●			●	●		●	●	
	Rough	POLY/FLEX Rough Aramid-Reinforced	85 ShA									●	●		●				
Standard	Smooth	DEL/ROC	100 ShA 55 ShD			●	●	●		●		○	●						
		DEL/FLEX	90 ShA		●	●	●	●		●	●		●			●	●	●	●*
		DEL/FLEX	90 ShA	●	●	●	●	●			●								
		DEL/FLEX Metal detectable**	90 ShA			●	●	●			●								
			SOUPLEX	85 ShA		●	●	●	●		●		●			●	●	●	●*
			SOUPLEX	85 ShA		○	○	○	○		○								
			SOUPLEX Antistatic	85 ShA			●	●	●										
		Rough	POLY/FLEX Rough	85 ShA	●	●	●	●	●		●	●	●		●	●		●	●
	Rough	POLY/FLEX Rough	85 ShA		●	●	●	●		●			●	●		●			
	Smooth	SOUPLEX	80 ShA				●		●			●							
Tubular		DEL/FLEX Tubular	90 ShA				○	○			○			○	○		○	○*	
		SOUPLEX Tubular	85 ShA										○						

*Manufacturing on demand dependent upon quantity.

* Mafdel recommends that products intended for use are first tested in your environment to validate compliance with the desired detection level.

REINFORCED ROUND PROFILES



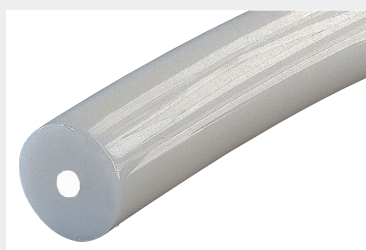
DEL/ROC DRW ivory polyester-reinforced



Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
DRWRIAP9.5	9.5	67	2%	180	160
DRWRIAP12	12	120	2%	260	220

Food	CE - FDA	Coefficient of friction	PEHD : 0.15 - 0.2	Temperature extremes	-30°C / +90°C
Hardness	63 ShD		Acier : 0.35 - 0.4		
Pretension	1 - 2%		Inox : 0.5		

DEL/ROC ivory polyester-reinforced



Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
DRRIAP9.5	9.5	54	2%	160	140
DRRIAP10	10	56	2%	180	160
DRRIAP12.5	12.5	98	2%	250	200
DRRIAP15	15	140	2%	300	250
DRRIAP18	18	200	2%	360	300

Food	CE - FDA	Coefficient of friction	PEHD : 0.15 - 0.2	Temperature extremes	-30°C / +90°C
Hardness	100 ShA - 55 ShD		Acier : 0.35 - 0.4		
Pretension	1 - 2%		Inox : 0.5		

DEL/ROC blue steel or stainless steel reinforced



Reference	Section (ϕ in mm)	Cable	Traction strength (daN)	Pulley ϕ (mm)	
				Advised	Minimum
DRRBST9.5	9.5	Steel ϕ 1.8mm	166	250	
DRRBST9.5001	9.5	Steel ϕ 2.36mm	200	270	
DRRBIN12.5	12.5	Stainless ϕ 2.5mm	200	350	

Joint by overlap or mechanical. Consult us.

Food	CE - FDA	Coefficient of friction	HDPE: 0.15 0.2	Temperature extremes	-30°C / +90°C
Hardness	100 ShA - 55 ShD		Steel: 0.35 - 0.4		
Pretension	-		Stainless steel: 0.5		

*The profiles can be delivered in a single length on a wooden drum:

500m in ϕ 9.5-10mm / 400m in ϕ 12-12.5mm / 300m in ϕ 15 mm / 200m in ϕ 18mm



REINFORCED ROUND PROFILES

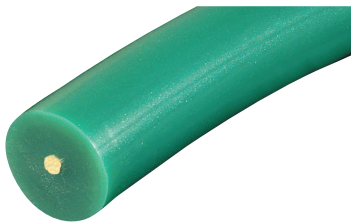
DEL/SAN blue Aramid-reinforced



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
DSRBAR08	8	20	1%	120	100
DSRBAR10	10	40	1.5%	140	120
DSRBAR12.5	12.5	65	1.5%	160	140
DSRBAR15	15	93	1.5%	220	180
DSRBAR18	18	125	1.5%	250	210

Food Hardness Pretension	CE - FDA 95 ShA See table	Coefficient of friction	HDPE: 0.2 Steel: 0.4 Stainless steel: 0.5	Temperature extremes Packaging	-20°C / +70°C 50m
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POLY/FLEX green Aramid-reinforced



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
PFRGAR06	6	7	0.5%	60	50
PFRGAR08	8	12	0.5%	90	75
PFRGAR10	10	23	1%	110	90
PFRGAR12	12	33	1.5%	130	110
PFRGAR15	15	50	1.5%	150	130
PFRGAR18	18	68	1.5%	220	180

Food Hardness Pretension	CE - FDA 85 ShA See table	Coefficient of friction	HDPE: 0.35 Steel: 0.6 Stainless steel: 0.7	Temperature extremes Packaging	-20°C / +60°C 30m
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POLY/FLEX rough green Aramid-reinforced



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
PFRGAR10RU	10	23	1%	110	90
PFRGAR12RU	12	33	1.5%	130	110
PFRGAR15RU	15	50	1.5%	150	130

Food Hardness Pretension	CE - FDA 85 ShA See table	Coefficient of friction	HDPE: 0.25 Steel: 0.45 Stainless steel: 0.55	Temperature extremes Packaging	-20°C / +60°C 30m
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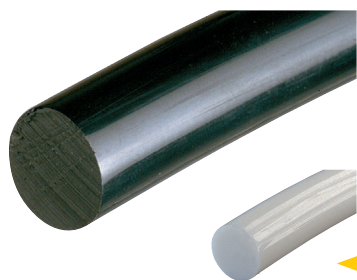


The recommended and minimum diameters are given for end-to-end joints. The life of the belt is reduced on minimum diameters depending on the operating conditions (load, accumulation, stop/start operation, tension etc.). In the case of overlap joints, use the recommended diameters for an optimal lifespan.

ROUND PROFILES



DEL/ROC black



Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
DRRN04	4	6.3	2%	50	40
DRRN05	5	9	2%	60	50
DRRN06	6	13	2%	80	70
DRRN08	8	25	2%	100	90
DRRW9.5	9.5	35	2%	140	120
DRRN10	10	39	2%	160	140

Food	CE - FDA	Coefficient of friction	HDPE: 0.15 - 0.2	Temperature extremes	-30°C / +90°C
Hardness	100 ShA - 55 ShD		Steel: 0.35 - 0.4	Packaging	30 m
Pretension	1 - 2%		Stainless steel: 0.5		

DEL/FLEX red



Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
DFRR03	3	1.7	5%	30	20
DFRR04	4	2.5	5%	40	30
DFRR05	5	4	5%	50	40
DFRR06	6	6.5	5%	60	50
DFRR07	7	9.6	5%	70	55
DFRR08	8	12	5%	80	65
DFRR9.5	9.5	17	5%	100	85
DFRR12.5	12.5	30	5%	140	120
DFRR15	15	43	5%	170	140
DFRR18	18	63	5%	220	180
DFRR20*	20	78	5%	280	250

* Manufacturing on demand by quantity.

Food : CE - FDA

DEL/FLEX blue



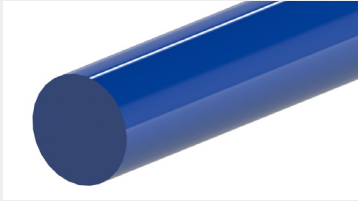
Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
DFRB02	2	0.77	5%	20	12
DFRB03	3	1.7	5%	30	20
DFRB04	4	2.5	5%	40	30
DFRB05	5	4	5%	50	40
DFRB06	6	6.5	5%	60	50
DFRB08	8	12	5%	80	65

Food	CE - FDA	Coefficient of friction	HDPE: 0.25	Temperature extremes	-20°C / +70°C
Hardness	90 ShA		Steel: 0.5	Packaging	30 m
Pretension	3 - 6%		Stainless steel: 0.6		

ROUND PROFILES



DEL/FLEX blue metal detectable

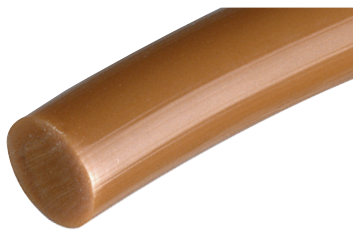


Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
DFRB03MD	3	1.5	5%	40	30
DFRB04MD	4	2.2	5%	40	30
DFRB05MD	5	3.5	5%	50	40
DFRB06MD	6	5.8	5%	60	50
DFRB08MD	8	11	5%	80	65

Food : CE

Hardness	90 ShA	Coefficient of frottement	HDPE : 0.25	Temperature extremes	-20°C / +70°C
Pretension	3 - 6%		Steel : 0.5		
			Stainless steel : 0.6		

SOUPLEX brown



*Manufacturing on demand
dependent upon quantity.

Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
SXRM03	3	0.9	8%	20	15
SXRM04	4	1.5	8%	35	25
SXRM05	5	2.5	8%	40	30
SXRM06	6	4	8%	50	40
SXRM08	8	7	8%	70	55
SXRM9.5	9.5	10	8%	80	65
SXRM12.5	12.5	18	8%	110	95
SXRM15	15	25	8%	140	120
SXRM18	18	38	8%	200	150
*SXRM20	20	47	8%	240	190

Food : CE - FDA

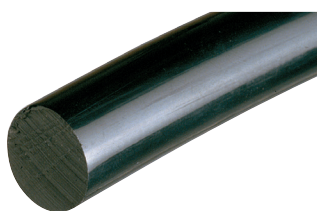
SOUPLEX translucent



Food : CE - FDA

Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
SXRT03	3	0.9	8%	20	15
SXRT04	4	1.5	8%	35	25
SXRT05	5	2.5	8%	40	30
SXRT06	6	4	8%	50	40
SXRT08	8	7	8%	70	55

SOUPLEX antistatic



Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
SXRN04AS	4	1.5	8%	45	35
SXRN05AS0001	5	2.5	8%	50	40
SXRN06AS	6	4	8%	60	50

Food	No	Coefficient of friction	HDPE : 0.35	Temperature extremes	-20°C / +60°C		
Hardness	85 ShA		Steel : 0.6			Packaging	30 m
Pretension	5 - 8%		Stainless steel : 0.7				

ROUND PROFILES



POLY/FLEX rough green



Food : no

Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
PFRG02	2	0.47	8%	15	10
PFRG03	3	1	8%	20	15
PFRG04	4	1.9	8%	35	25
PFRG05	5	2.9	8%	40	30
PFRG06	6	4.2	8%	50	40
PFRG07	7	5.7	8%	60	50
PFRG08	8	7.5	8%	70	55
PFRG09	9	9.5	8%	80	65
PFRG10	10	11.8	8%	90	75
PFRG12	12	17	8%	100	90
PFRG15	15	26.5	8%	140	120
PFRG18	18	38.1	8%	190	150
PFRG20	20	47	8%	240	190

POLY/FLEX rough blue



Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
PFRB03	3	1	8%	20	15
PFRB04	4	1.9	8%	35	25
PFRB05	5	2.9	8%	40	30
PFRB06	6	4.2	8%	50	40
PFRB08	8	7.5	8%	70	55
PFRB10	10	11.8	8%	90	75
PFRB12	12	17	8%	100	90
PFRB15	15	26.5	8%	140	120

Food	CE - FDA	Coefficient of friction	HDPE: 0.25	Temperature extremes	-20°C / +60°C
Hardness	85 ShA		Steel: 0.45		
Pretension	5 - 8%		Stainless steel: 0.55		

SOUPLEX blue



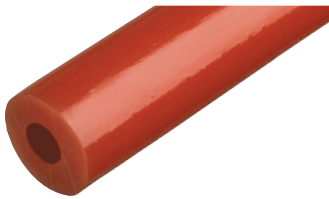
Reference	Section (ϕ in mm)	Traction strength (daN)	Tension	Pulley ϕ (mm)	
				Advised	Minimum
SXRB05-0001	5	2.3	10%	35	25
SXRB6.3-0001	6.3	3.7	10%	40	35
SXRB08-0001	8	6	10%	55	50
SXRB9.5-0001	9.5	7.1	10%	65	55

Food	CE - FDA	Coefficient of friction	HDPE: 0.35	Temperature extremes	-20°C / +60°C
Hardness	80 ShA		Steel: 0.6		
Pretension	6 - 10%		Stainless steel: 0.7		

ROUND PROFILES



DEL/FLEX tubular red



*Manufacturing on demand by quantity.

Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
DFTR05	5/2.5	3	5%	60	50
DFTR06	6/2.5	5	5%	70	60
DFTR08	8/3	10	5%	90	70
DFTR10	10/4	16	5%	100	85
DFTR12	12/4	22	5%	140	125
DFTR15	15/5	35	5%	170	140
*DFTR18	18/5	50	5%	220	190

Food	CE - FDA	Coefficient of friction	HDPE: 0.25	Temperature extremes	-20°C / +70°C
Hardness	90 ShA		Steel: 0.5		
Pretension	3 - 6%		Stainless steel: 0.6		

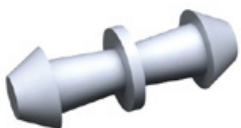
SOUPLEX tubular brown



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
SXTM10	10/4	9	8%	80	70

Food	CE - FDA	Coefficient of friction	HDPE: 0.35	Temperature extremes	-20°C / +60°C
Hardness	85 ShA		Steel: 0.6		
Pretension	5 - 8%		Stainless steel: 0.7		

JOINING PLUGS (ALUMINIUM)



Ten plugs per packet.

Reference	For diameter belt (mm)	Reference	For diameter belt (mm)
AGR4	5 and 6 mm	AGR7	10 and 12 mm
AGR6	8 mm	AGR9	15 and 18 mm

DEGLAZED PROFILES



Patent n° 9912595

All-round profiles with a diameter of between 6 and 18 mm can be frosted (deglazed).

Frosting lowers the friction Coefficient of friction between the profile and the conveyor bed and facilitates the accumulation of transported products:

- On steel and stainless steel: reduces the coefficients of smooth profiles by **0.1**.
- On HDPE: reduces the coefficients of smooth profiles by **0.05**.

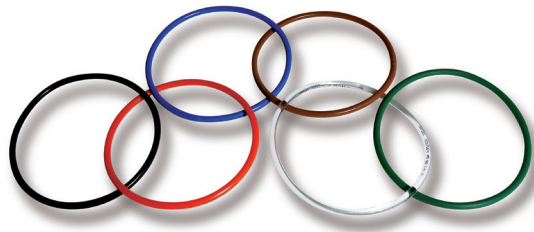
Reference: Complete the item code of the profile with **DE**.

ENDLESS ROUND BELTS



ENDLESS-MADE BELTS

Manufacturing of small, endless round belts on demand for small, medium and large productions in the following qualities:

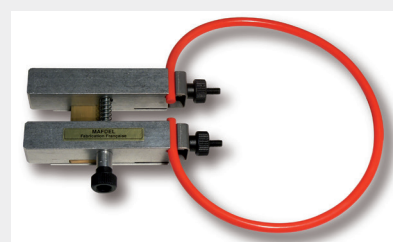
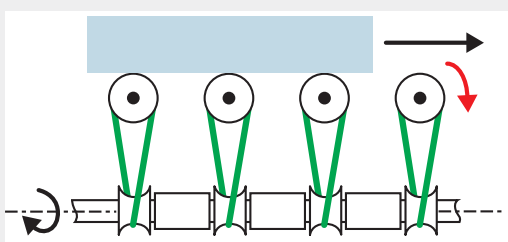


DEL/ROC
DEL/FLEX
POLY/FLEX
SOUPLEX

- Great flexibility in the choice of length.
- It's also possible to manufacture moulded belts for very large productions (Please enquire to discuss).

LINE SHAFT DRIVEN ROLLER CONVEYORS

- Direct transmission of power to individual rollers, using SOUPLEX, POLY/FLEX or DEL/FLEX drive belts.
- Silent, maintenance-free systems.
- Accumulation and full-load starts can be made possible by adjusting the tension (length) of the belts on the pulleys.
- Fast welding of a belt during installation using the J15 clamp.
- It is advisable to keep the pulleys positioned under the rollers.
- Minimum tension recommended: - SOUPLEX or POLY/FLEX : 8%
- DEL/FLEX : 6%

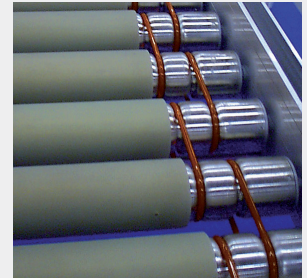
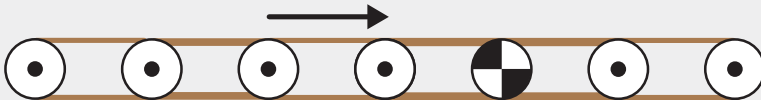




ENDLESS ROUND BELTS

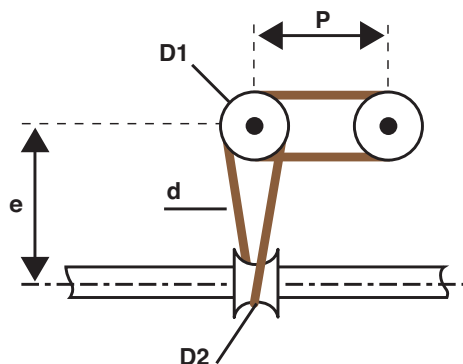
ROLLER TO ROLLER DRIVES

- A group of several rollers driven by round belts from a motorised roller.



- It is advisable not to drive more than 6 rollers: 4 behind and 2 ahead of the motor roller.
- Minimum tension recommended:
 - 8% for SOUPLEX or POLY/FLEX
 - 6% for DEL/FLEX.

BELT LENGTH CALCULATION



- D1:** diameter of driven portion of roller
- D2:** pulley inner diameter
- d:** belt diameter
- e:** centre distance
- p:** roller centres

EXAMPLE: SOUPLEX belt - \varnothing 5 mm

D1 = 38 mm

D2 = 28 mm

d = 5 mm

e = 120 mm

p = 100 mm

Roller-to-roller driving

$$L_{\text{theoretical}} = (D1 + d) \times \pi + 2 \times p$$

$$L_{\text{real}} = L_{\text{theoretical}} - \text{tension}$$

$$L_{\text{Theoretical}} = (38 + 5) \times 3.14 + 2 \times 100 = 335 \text{ mm}$$

$$L_{\text{Real}} = 335 - 8\% = 308 \text{ mm}$$

Twisted belt drive

$$L_{\text{theoretical}} = [(D1 + d) + (D2 + d)] \times \pi / 2 + 2 \times \sqrt{[(D1+d)^2/4 + e^2]}$$

$$L_{\text{theoretical}} = [(38+5)+(28+5)] \times 3.14/2 + 2 \times \sqrt{[(38+5)^2/4 + 120^2]} = 363 \text{ mm}$$

$$L_{\text{real}} = L_{\text{theoretical}} - \text{tension}$$

$$L_{\text{real}} = 363 - 8\% = 334 \text{ mm}$$