ROUND PROFILES

ROUND PROFILES

				2	3	4	5	6	6.3	7	8	9	9.5	10	12	12.5	15	18
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	●	●	●	●	●			●							
		SOUPLEX	85 ShA		●	●	●	●			●		●			●	●	●
		SOUPLEX	85 ShA		○	○	○	○			○							
		SOUPLEX Antistatic	85 ShA			●	●	●										
	Rough	**POLY/FLEX** Rough	85 ShA	●	●	●	●	●		●	●	●		●	●		●	●
		POLY/FLEX Rough	85 ShA		●	●	●	●			●			●	●		●	
	Smooth	**SOUPLEX**	80 ShA				●		●		●		●					
Tubular		**DEL/FLEX** Tubular	90 ShA				○	○			○			○	○		○	○
		SOUPLEX Tubular	85 ShA											○				

Patent n°9912595

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

Frosting lowers the friction Coefficient 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**.

REINFORCED ROUND PROFILES

DEL/ROC DRW ivory polyester-reinforced

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

Food Hardness Pretension	CE - FDA 63 ShD 1 - 2%	Coefficient of friction	HDPE: 0.15 - 0.2 Steel: 0.35 - 0.4 Stainless steel: 0.5	Temperature extremes Packaging	-30°C / +90°C 100 m or drum*

DEL/ROC ivory polyester-reinforced

Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (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 Hardness Pretension	CE - FDA 100 ShA - 55 ShD 1 - 2%	Coefficient of friction	PEHD : 0.15 - 0.2 Acier : 0.35 - 0.4 Inox : 0.5	Temperature extremes Packaging	-30°C / +90°C 100 m or drum*

DEL/ROC blue steel or stainless steel reinforced

Reference	Section (ø in mm)	Cable	Traction strength (daN)	Pulley Ø (mm)	
				Advised	Minimum
DRRBST9.5	9.5	Steel ø1.8mm	166	250	
DRRBST9.5001	9.5	Steel ø2.36mm	200	270	
DRRBIN12.5	12.5	Stainless ø2.5mm	200	350	

Joint by overlap or mechanical. Consult us.

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

*The profiles can be delivered in a single length on a wooden drum:
500m in ø9.5-10mm 400m in ø12-12.5mm 300m in ø15-18mm

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

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

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

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 (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (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 Steel: 0.35 - 0.4 Stainless steel: 0.5	Temperature extremes	-30°C / +90°C
Hardness	100 ShA - 55 ShD			Packaging	30 m
Pretension	1 - 2%				

DEL/FLEX red

* Manufacturing on demand by quantity.

Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
DFRR02*	2	0.77	5%	20	12
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

DEL/FLEX blue

Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (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 Steel: 0.5 Stainless steel: 0.6	Temperature extremes	-20°C / +70°C
Hardness	90 ShA			Packaging	30 m
Pretension	3 - 6%				

ROUND PROFILES

SOUPLEX brown

*Manufacturing on demand dependent upon quantity.

Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (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

SOUPLEX translucent

Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (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

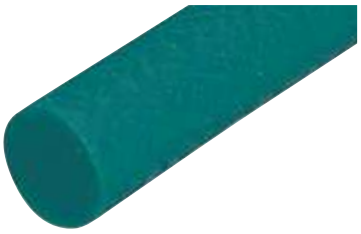
SOUPLEX antistatic

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

Food	CE - FDA	Coefficient of friction	HDPE: 0.35 Steel: 0.6 Stainless steel: 0.7	Temperature extremes	-20°C / +60°C
Hardness	85 ShA			Packaging	30 m
Pretension	5 - 8%				

ROUND PROFILES

POLY/FLEX rough green



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (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

Food	No	Coefficient of friction	HDPE: 0.25 Steel: 0.45 Stainless steel: 0.55	Temperature extremes	-20°C / +60°C
Hardness	85 ShA			Packaging	ø 2 to 10mm: 100m ø 12 to 18mm: 50m
Pretension	5 - 8%				

POLY/FLEX rough blue

Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (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 Steel: 0.45 Stainless steel: 0.55	Temperature extremes	-20°C / +60°C
Hardness	85 ShA			Packaging	ø 2 to 10mm: 100m ø 12 to 18mm : 50m
Pretension	5 - 8%				

SOUPLEX blue

Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (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 Steel: 0.6 Stainless steel: 0.7	Temperature extremes	-20°C / +60°C
Hardness	80 ShA			Packaging	ø 5mm: 50m ø 6.3 to 9.5mm: 30m
Pretension	6 - 10%				

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 Steel: 0.5 Stainless steel: 0.6	Temperature extremes	-20°C / +70°C
Hardness	90 ShA			Packaging	30m
Pretension	3 - 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 Steel: 0.6 Stainless steel: 0.7	Temperature extremes	-20°C / +60°C
Hardness	85 ShA			Packaging	30m
Pretension	5 - 8%				

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

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 by **DE**.

ENDLESS ROUND BELTS

ENDLESS-MADE BELTS

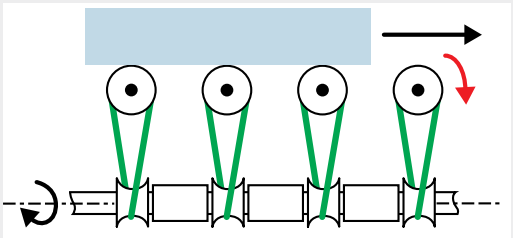
Manufacturing of small, endless round belts on demand for small, medium and large productions in the following qualities:

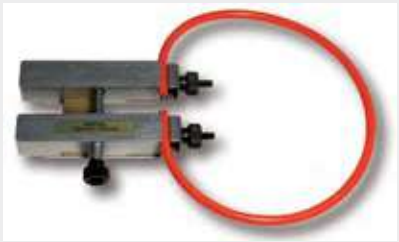
DEL/ROC
DEL/FLEX
POLY/FLEX
SOUPLEX

- 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%

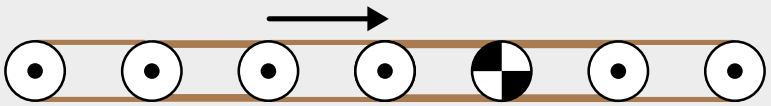


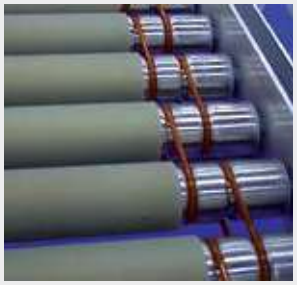


ENDLESS ROUND BELTS

ROLLER TO ROLLER DRIVES

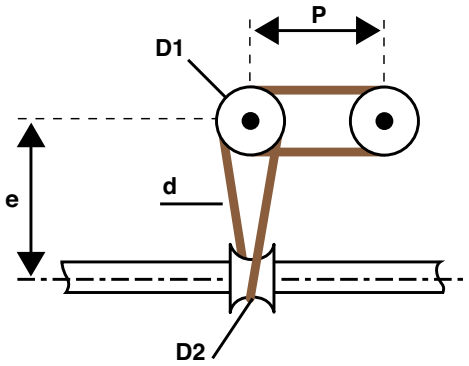
• A group of several rollers driven by round belts from a motorised roller.





• 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 - ø 5 mm

D1 = 38 mm **D2 = 28 mm** **d = 5 mm** **e = 120 mm** **p = 100 mm**

Roller-to-roller driving

L theoretical= (D1 + d) x pi + 2 x p
L real= L theoretical - tension

L Theoretical= (38 + 5) x 3.14 + 2 x 100 = 335 mm
L Real= 335 - 8% = 308 mm

Twisted belt drive

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

L theoretical = $[(38+5)+(28+5)]x3.14/2+2\sqrt{[(38+5)^2/4+120^2]}$ = 363 mm

L real = L theoretical - tension
L real = 363 - 8% = 334 mm