BEHAbelt® USA

Made in Germany

DELIVERY PROGRAM

Weldable conveyor belting made of Polyurethane and Polyester as well as welding instruments and joining tools

The specifications
in this catalogue are based on our current knowledge and experience. They do not acquit the processor from testing our products at its own due to the plenty of possible effects during processing application of our products. The legally binding confirmation of certain properties or of the qualification for a certain purpose can not be derived from our specifications. Possible trade mark rights as well as existing laws and regulations are to be followed by recipient of our products at his own responsibility.

Changes
For the benefit of technical enhancements respectively adoption to modified standards or provisions are provided.

Pictures
In this catalogue are examples of types and are not binding for the type at the time of delivery.

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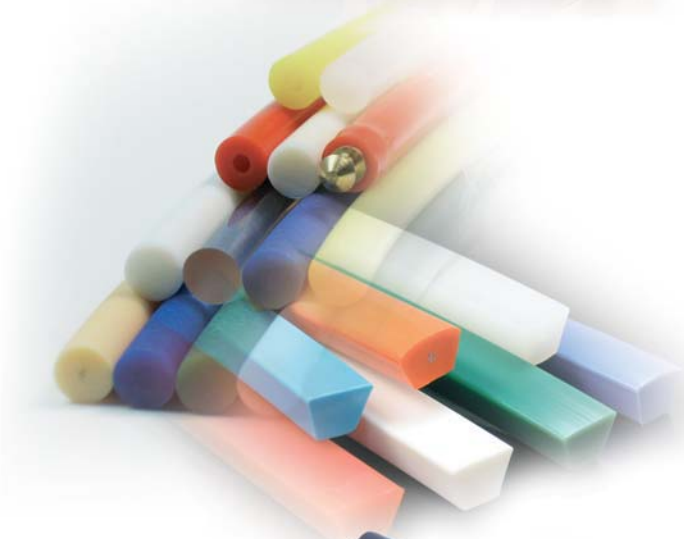
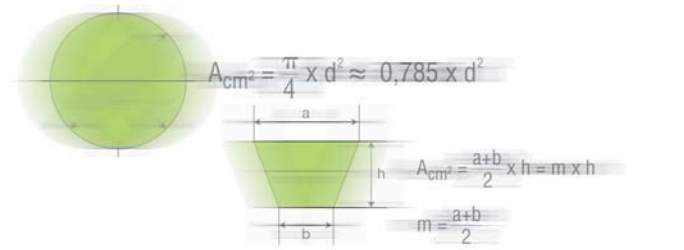
BEHAbelt
Made in Germany





Delivery program/Belts

Delivery program/Tools

Know-How

We focus on our customers

"We put innovative ideas into practice, to provide solutions to everyday problems."

Company

Beha Innovation GmbH is a German company based in the heart of Europe. We extrude a complete line of the highest quality Polyurethane and Polyester profiles for transport and drive applications. With over 30 years of experience with the market, we know our customer's needs.
We provide quick and accurate service through our main factory in Glottertal Germany and our subsidiary located in the USA.

We focus on our customers

Our success is based on knowledge of the market and serving our customers with a broad line of profiles. Our strategy is to provide the best extrusion profiles in the market today and lead the industry in new innovative products in the future. Our in house tool shop allows us to react quickly to changing demands in the market. This strategy has resulted in a complete range of high quality products where we hold International trade mark rights and patents.

**"Our people make the difference.
The combination of motivated people at Beha and our distributor partners world wide, we provide the right product and services for our customers."**

Quality is our target

"We comply with the requirements of the standard DIN EN ISO 9001:2008"

Quality is our target

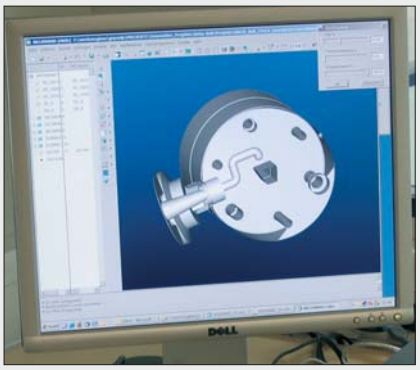
Our customer service people are linked closely with our customers in the market and work together with them to provide the fastest and most accurate handling of inquiries and orders.

We employ a sophisticated logistic process that ensures highest quality of service - World Wide.

All procedures and activities are conducted with the highest possible commitment to quality. We comply with the specification of the standard DIN EN ISO 9001:2008.

Our people make the difference

We combine technical expertise and practical experience with excellent social skills to provide the best support available in the industry to our customers. We listen to our customers and encourage them to tell us what they need to be successful. Our corporate philosophy and corporate policy are based on the principal of ethics. We hire employees with good training from the practical side of business. We teach them to work closely with our customers to fill the needs of the market place.



Conveyor belts made of Polyurethane and Polyester

Our mission

For more than three decades, BEHA has produced high quality thermoplastic weldable belts made of Polyurethane and Polyester for drive belts and the conveying industry.

We use only the very best raw materials and combine them with our experience in the extrusion field to provide time tested and proven products. New products are added to the line only after they have been tested in the laboratory and in the field.

Our mission is to supply our customers with the highest level of quality and innovation in the thermoplastic extrusion industry World Wide.

In the following pages, you will find all the important information about material properties, purposes, technical data and joining methods.

Material qualities

BEHAbelt Round- and V-belts are produced in ten different compounds. The selection of materials should be based on application requirements. In order to be able to distinguish their hardness the following colors have been chosen:

Shore-Hardness	Color
PU 65 A (approx. 72° Shore A)	transparent
PU 70 A (approx. 76° Shore A)	transparent
PU 75 A (approx. 80° Shore A)	red/sky blue
PU 80 A (approx. 84° Shore A)	transparent/orange/ultramarine blue
PU 85 A (approx. 88° Shore A)	green/yellow/ultramarine blue/ sapphire blue/emerald green
PU 90 A (approx. 92° Shore A)	white
PU 95 A (approx. 98° Shore A)	red
Polyester TPE 40 D (approx. 92° Shore A)	beige
Polyester TPE 55 D (approx. 100° Shore A)	sky blue/beige/yellow
Polyester TPE 63 D (approx. >100° Shore A)	silver/beige

MATERIAL PROPERTIES:

- **can be welded using heat**
- **high tensile strength**
- **excellent wear and abrasion resistance**
- **resistance to oil, grease, dirt and most chemicals**
- **temperature resistance from -30°C to +80°C (dynamic)**
- **high resilience, low level of belt stretching**
- **high coefficient of friction and therewith excellent non-slip characteristics even at load variations**
- **silent running, high flexibility**
- **drive and deviation via belt head possible**
- **profiles are weldable among each other provided the same basic material has been used**

Very good properties

The excellent melting ability of the material enables easy welding in order to obtain endless belts. Not only does this result in simplified mounting but also allows for reduced inventory as it is no longer necessary to store belts of different lengths.

In the majority of cases when a common drive belt has to be changed, machine and conveyor systems have to be disassembled for the belt drive replacement. This is not the case if you use BEHAbelt products. BEHAbelt drive and conveyor belts can be installed and endlessly finished without the need of disassembly and in a short period. of time. BEHA Innovation GmbH develops and manufactures handy joining tools which can be used for this purpose. Upon careful completion of a welded junction it is of the same resistance and quality as any other parts of the belt.

Product overview Belts

BEHAbelt® Made in Germany

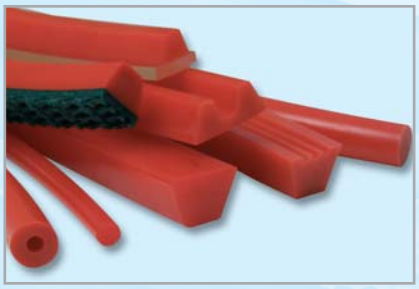
Profile	Diameter in mm (inch)	PU 65 A (approx. 72° Shore A)	PU 70 A (approx. 76° Shore A)	PU 75 A (approx. 80° Shore A)	PU 80 A (approx. 84° Shore A)	PU 85 A (approx. 88° Shore A)	PU 90 A (approx. 92° Shore A)	PU 95 A (approx. 98° Shore A)	TPE 40 D (approx. 92° Shore A)	TPE 55 D (approx. 100° Shore A)	TPE 63 D (approx. >100° Shore A)	Profiles for food industry
Round belts smooth	2 - 20 (5/64- 25/32)			P. 18	P. 18	P. 19	P. 20		P. 20	P. 21		P. 12-13
Round belts roughened	2 - 20 (5/64- 25/32)					P. 19						P. 13
Round belt smooth, reinforced	6 - 20 (7/32- 25/32)				P. 22	P. 22	P. 23	P. 24		P. 24	P. 24	P. 14
Round belts roughened, reinforced	6 - 20 (7/32- 25/32)					P. 22-23						
Hollow Round belts smooth	4.8 - 15 (3/16- 19/32)			P. 25		P. 25	P. 25					P. 13
Hollow Round belts roughened	4.8 - 15 (3/16- 19/32)					P. 25						
V-belts smooth	6 x 4 (Y) - 32 x 20 (D)			P. 26	P. 26	P. 26	P. 27		P. 27	P. 27		P. 15
V-belts smooth, reinforced	6 x 4 (Y) - 32 x 20 (D)			P. 28	P. 28	P. 28-29	P. 29			P. 29		
Parallel V-belts	(Z, A)			P. 30	P. 30							
Parallel V-belts reinforced	(A)					P. 30						
Ridge-top-V-belts smooth	(A, B, C)				P. 32	P. 33	P. 35		P. 35			
Ridge-top-V-belts reinforced	(B, C)				P. 32	P. 33-34						
V-belts with vaulted surface	8 x 5.5 8 x 6.5 17.0 x 11.5					P. 36				P. 27		P. 15
U-Profile Square-Profile	11.8 x 18.0 11.8 x 11.8				P. 15 & 37							
T-Profiles	20 x 8 25 x 5 x 5				P. 15 & 37							P. 15
3-grooved V-Belts	17 x 11 (B) 22 x 14 (C)				P. 26 & 36	P. 36						
Flat belts	Width: 150 Thickness: 1.0 - 5	P. 38		P. 38		P. 38						P. 38
V-belts (as V-guide for PU belts)	6 x 4 (Y) - 32 x 20 (D)		P. 38									
Cleats	20 - 40 (0.78-1.57)					P. 39						
Sidewalls	20 - 120 (0.78-4.86)					P. 39						

Reinforcement available with Polyester, Aramid and Glass fiber. Steel reinforcement on request.

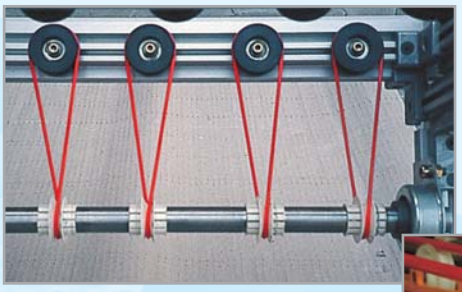
Materials and application areas

Polyurethane type PU 75 A red (approx. 80° Shore A)

Our flexible belts



This quality is very elastic and is particularly suitable for lead-in conveyors as well as units with small deflection pulleys. This grade is especially effective in the transportation of frozen goods. The major strengths of this belting are its energy transfer and load handling abilities. Material available with rough and smooth surface.



Transport system with drive via vertical shaft BEHAbelt round belt PU 75 A, 4 mm, 5/32 inch ∅

Enamelling line with BEHAbelt PU 75 A round belts, 12.5 mm, 1/2 inch ∅

Polyurethane type PU 80 A transparent/orange (approx. 84° Shore A)

Our dynamic belts

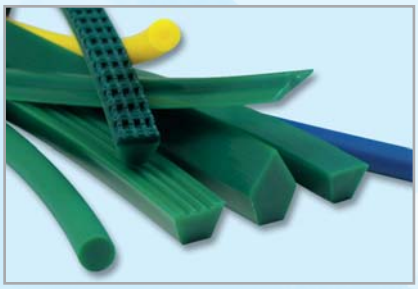
The BEHAbelt- material PU 80 A is available in transparent or orange color. The soft shore-hardness of this PU material is reflected within a high resilience. The smooth surface offers good adhesion.

Transport systems for shingles with BEHAbelt V-belt PU 80 A orange

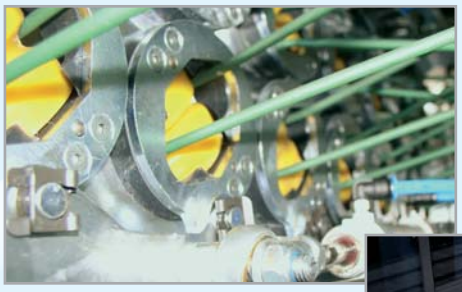
Transport systems with BEHAbelt Round belt PU 80 A orange

Polyurethane type PU 85 A green/yellow/ ultramarine blue (approx. 88° Shore A)

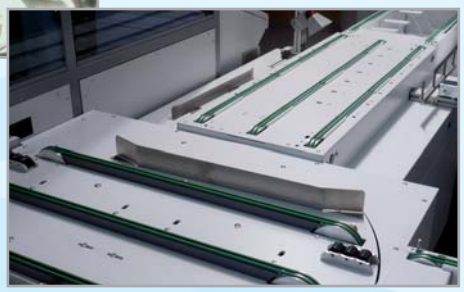
Our all around belts



Our BEHABElt PU 85 A material is medium hard and therefore ideally suited for power transfer in machines, devices, metal engineering, as well as for conveyors of many types. Round belts are available with **smooth** and **roughened** surface, hollow round belts are available in yellow with smooth surface and in green with roughened surface.



Lock out with BEHAbelt Round belt PU 85 A green, 5 mm, 2/10 inch ∅

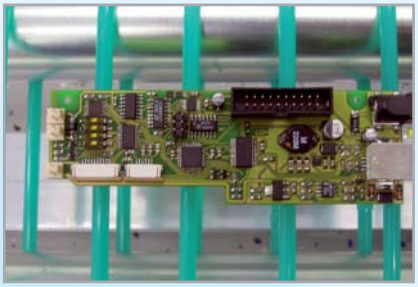


Transport system pre-press process via BEHAbelt Round belt PU 85 A green roughened

Polyurethane type PU 85 A emerald-green (approx. 88° Shore A)

Our antistatic-dissipative belts

Our material PU 85 A emerald-green is antistatic-dissipative. For the first time a belt with excellent mechanical characteristics and weldability is available. With this belt electrostatic charging is diverted from the surface, time of discharge < 1 second.

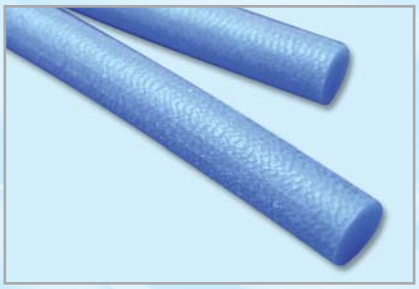


Circuit board transport system via BEHAbelt Round belt PU 85 A emerald-green, 10 mm, 7/16 inch ∅

Materials and application areas

Polyurethan Typ PU 85 A *PLUS* blue smooth/roughened (approx. 88° Shore A)

Our *PLUS*-quality



Our newest patented PU 85 A *PLUS* belts within our delivery program. This material is characterised by good tensile strenth and abrasion resistance, low elongation and good welding properties. This belts are suitable for tough applications with highest loads in roller conveyors and vertical shafts.

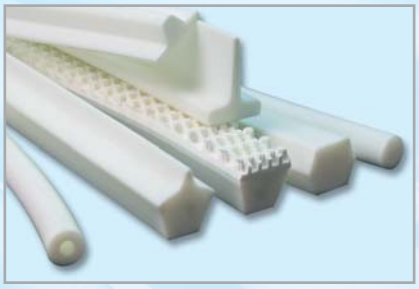
For small pulleys PU 75 A *PLUS* in orange available.

PATENT

Roller conveyors with
BEHAbelt Round belts PU 85 A PLUS

Polyurethane type PU 90 A white (approx. 92° Shore A)

Our reliable belts



This PU material incorporates excellent elasticity and damping characteristics. This grade is well matched to applications that require medium and heavy loading. These belts often replace the conventional rubber V-belts for conveying systems.

Transport system with drive
via BEHAbelt V-belt PU 90 A,
profile C, 22 x 14 mm

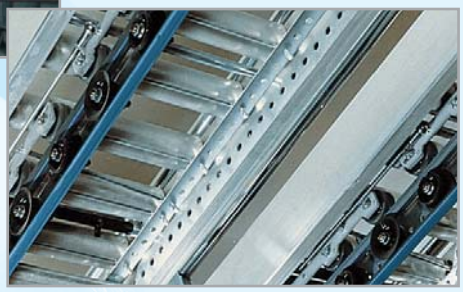
Tile conveying via BEHAbelt
pointed V-belts PU 90 A,
profile C, 22 x 24 mm

Polyester TPE Typ 40 D (approx. 92° Shore A) beige
Polyester TPE Typ 55 D (approx. 100° Shore A) blue/yellow/beige

Our high-performance belts

This very hard grade is specially designed for high loading and temperatures from -30°C to +100°C. Applications include roller conveyors and accumulators, in glass and tile manufacturing plants, block machines and stone crushers (in the field of frozen goods, the Polyester TPE 40 D is well suited).

Curve system with BEHAbelt V-belt Polyester TPE 55 D Bluepower, profile B



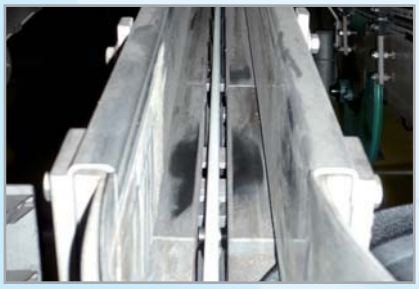
Accumulating roller conveyer, rolling drive via belt heads with BEHAbelt V-belts Polyester TPE 55 D, profile B, 17 x 11 mm

Polyester TPE type 63 D (approx. >100° Shore A) beige/silber

Our can cables

Our reinforced TPE 63 D is made of a very hard Polyester material that is highly suitable for can line applications. It has excellent wear characteristics and low elongation even with heavy loads.

Available with steel reinforcement on inquiry.



This belt is also characterised by his excellent cut and abrasion resistance. This material has best gliding properties compared to PU belts and softer Polyester belts.

With UV-protection, color silver.

Alternative: PU 95 A (approx. 98° Shore A) red smooth, Aramid reinforcement with very good welding characeristics.

Can cable transport system with BEHAbelt Round belt Polyester TPE 63 D, 9.5 mm, 3/8 inch ∅

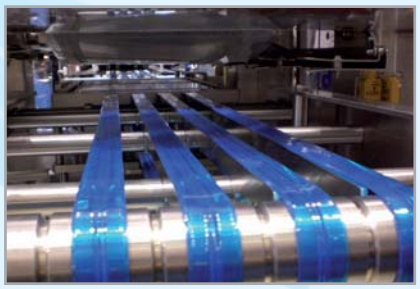
Conveyor belts for the food industry

Our food industry belts

- **FDA/EC/BfR- compliant**
- Especially high durability in wet areas
- Very good hydrolysis resistance and stability against microbes
- PU 75 A (approx. 80° Shore A)
  Color: sky blue
  PU 80 A (approx. 84° Shore A)
  Color: ultramarine blue
  PU 85 A (approx. 88° Shore A)
  Color: sapphire blue

- All Round- and V-Belts also available with reinforcement on request
- Special profiles on request

Information: All BEHAbelt belts in PU 80 A transparent/orange and TPE Polyester of the standard delivery program are also suitable for the application within the food industry.



Transportsystem for the food industry with BEHAbelt T-Profile PU 85 A sapphire blue, 5 x 5 x 25 mm

GOOD TO KNOW

General directives for plastics with direct food contact

There are several country-specific and global directives for the application of food contact materials. In general, all food contact materials have to be produced by the principles of Good Manufacturing Practice (excluding the occurrence of a health hazard or any other unacceptable change in the composition of the food during its intended use).

FDA Directive "Title 21: Code of Federal Regulations

The Food and Drug Administration of the Public Health Service of America is the world's best-known authority involved in consumer protection in respect of potential detrimental influences. The FDA has prepared a review "Title 21: Code of Federal Regulations" in respect of their approval of the raw materials in a processed or finished state, and also specified the conditions under which the approval is valid.

EC Directive 1935/2004

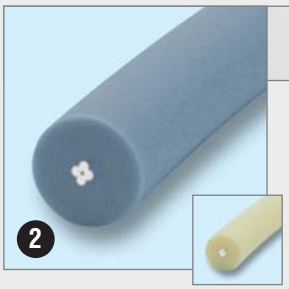
The framework Regulation EC 1935/2004 Food Contact and belonging specific Directive 2002/72/EC Monomers Additives of the European Parliament regulates plastics intended to come into contact with foodstuffs. The EU legislation for food contact materials is based on positive lists of the substances and maximum limits of migration into food. Only substance on these positive lists may be used for manufacturing plastics that are designated to have food contact.

BfR "Plastics Recommendations" for use within the food industry

The German Federal Institute for Risk Assessment (BfR, formerly BgVV) was founded to strengthen the customer health protection and frames scientific opinions on possible health risks of substances which have food contact. Those recommendations are listed in the framework of the Food and Feed Code (LFGB), known as the "Plastics Recommendations".

BEHAbelt Made in Germany

General explanation of the product chart



Polyester TPE 63 D silver/beige smooth, reinforced Polyester (1)

Diameter ∅ inch (7)		Cross section (8)	Weight (9)	Standard Roll (10)		Recommended pulley ∅ (11)		Working Load/Belt* (12)	
Belt	Core	cm^2	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
1/4	1/8	0.310	3.8	150	500	100	3.9	20.2	44.4
3/8	1/8	0.710	8.5	150	500	150	5.9	46.2	101.6
1/2	1/8	1.230	14.8	150	500	200	7.8	80.0	176.0

* = coefficient of friction µ:1

(2) Color illustration

(3) **63° Shore D**
approx. >100° Shore A

(4) • Recommended pretension 1 - 2 %

(5) • Working tension approx. 65 daN/cm^2

(6) **Coefficient of Friction µ**

• Steel	approx. 0.35
• PE	approx. 0.15
• HDPE	approx. 0.10

FDA/EC/BfR- conform

This material is also listed on page 24

CAPTION

(1) BEHAbelt material type

(2) Color illustration (Note: Original belt color can departure from the picture)

(3) Approx. Shore-hardness (Note: PU/TPE profile name is not consistent to the proper Shore-hardness of the belt)

(4) Recommended pretension to tension the belt within the machinery (%)

(5) Approx. working tension of the PU-TPE material (daN/cm^2) 1 daN ≈ 1 kg weight

(6) Coefficient of Friction µ on Steel, PE and HDPE background (see coefficient of Friction on page 49)

(7) Diameter ∅ of profile and reinforcement (in mm/inch) for the corresponding profile

(8) Cross section of the profile (for further information and calculation see page 52)

(9) Approx. weight in kg per 100 m of the corresponding diameter

(10) Standard Roll (smaller quantities available on surcharge)

(11) Recommended minimum pulley ∅ (mm and inch)
(Smaller pulleys shorten the durability of the belts)

(12) Approx. working load of the profile for coefficient of friction µ:1 (daN/Belt and lbs/Belt)
Approx. working tension (5) x cross section (8)

PU 75 A sky blue smooth

approx. 80° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 12.35 daN/cm²

Coefficient of Friction µ

- Steel approx. 0.70
- PE approx. 0.40
- HDPE approx. 0.35

FDA/EC/BfR- conform

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/ Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	10	0.4	0.4	0.9
1/8	3.0	0.071	0.9	200	656	20	0.8	0.9	1.9
5/32	4.0	0.126	1.6	200	656	30	1.2	1.6	3.4
3/16	4.8	0.181	2.2	200	656	35	1.4	2.2	4.9
	5.0	0.197	2.4	100	328	40	1.6	2.4	5.4
7/32	6.0	0.283	3.4	100	328	50	2.0	3.5	7.7
1/4	6.3	0.310	3.8	100	328	55	2.2	3.8	8.4
9/32	7.0	0.385	4.7	100	328	60	2.4	4.8	10.5
5/16	8.0	0.500	6	100	328	65	2.6	6.2	13.6
3/8	9.5	0.710	8.5	100	328	75	3.0	8.8	19.3
7/16	10.0	0.785	9.4	50	164	80	3.2	9.7	21.3
15/32	12.0	1.130	13.5	50	164	90	3.5	14.0	30.7
1/2	12.5	1.230	14.8	50	164	100	3.9	15.2	33.4
19/32	15.0	1.770	21.5	50	164	120	4.7	21.9	48.1

* = coefficient of friction µ:1

PU 80 A ultramarine blue smooth

approx. 84° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 14.25 daN/cm²

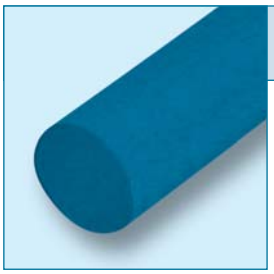
Coefficient of Friction µ

- Steel approx. 0.65
- PE approx. 0.35
- HDPE approx. 0.30

FDA/EC/BfR- conform

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/ Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	15	0.6	0.5	1.0
1/8	3.0	0.071	0.9	200	656	25	1.0	1.0	2.2
5/32	4.0	0.126	1.6	200	656	30	1.2	1.8	4.0
3/16	4.8	0.181	2.2	200	656	40	1.6	2.6	5.7
	5.0	0.197	2.4	100	328	45	1.8	2.8	6.2
7/32	6.0	0.283	3.4	100	328	55	2.2	4.0	8.9
1/4	6.3	0.310	3.8	100	328	60	2.4	4.4	9.7
9/32	7.0	0.385	4.7	100	328	65	2.6	5.5	12.1
5/16	8.0	0.500	6	100	328	75	3.0	7.1	15.7
3/8	9.5	0.710	8.5	100	328	90	3.5	10.1	22.3
7/16	10.0	0.785	9.4	50	164	95	3.7	11.2	24.6
15/32	12.0	1.130	13.5	50	164	110	4.3	16.1	35.4
1/2	12.5	1.230	14.8	50	164	115	4.5	17.5	38.6
19/32	15.0	1.770	21.5	50	164	140	5.5	25.2	55.5

* = coefficient of friction µ:1



PU 85 A sapphire blue smooth/textured

approx. 88° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 17.1 daN/cm²

Coefficient of Friction µ

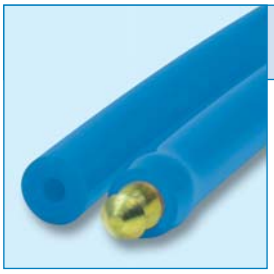
- Steel approx. 0.60
- PE approx. 0.30
- HDPE approx. 0.25

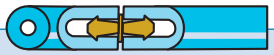
FDA/EC/BfR- conform

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/ Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	15	0.6	0.5	1.2
1/8	3.0	0.071	0.9	200	656	25	1.0	1.2	2.7
5/32	4.0	0.126	1.6	200	656	30	1.2	2.2	4.7
3/16	4.8	0.181	2.2	200	656	40	1.6	3.1	6.8
	5.0	0.197	2.4	100	328	45	1.8	3.4	7.4
7/32	6.0	0.283	3.4	100	328	55	2.2	4.8	10.6
1/4	6.3	0.310	3.8	100	328	60	2.4	5.3	11.7
9/32	7.0	0.385	4.7	100	328	65	2.6	6.6	14.5
5/16	8.0	0.500	6	100	328	75	3.0	8.6	18.8
3/8	9.5	0.710	8.5	100	328	90	3.5	12.1	26.7
7/16	10.0	0.785	9.4	50	164	95	3.7	13.4	29.5
15/32	12.0	1.130	13.5	50	164	110	4.3	19.3	42.5
1/2	12.5	1.230	14.8	50	164	115	4.5	21.0	46.3
19/32	15.0	1.770	21.5	50	164	140	5.5	30.3	66.6

BEHAbelt PU 90 A available on request.

* = coefficient of friction µ:1





PU 75 A sky blue smooth Hollow round belts

approx. 80° Shore A

- Recommended pretension: weldable 6 - 8 %, Fitting connector max. 4 - 6 %
- Working tension approx. 12.35 daN/cm²

Coefficient of Friction µ

- Steel approx. 0.70
- PE approx. 0.40
- HDPE approx. 0.35

FDA/EC/BfR- conform

Diameter ∅ inch		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/ Belt*	
Ext. ∅	In. ∅	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
3/16	9/128	0.147	1.8	200	656	30	1.2	1.8	4.0
1/4	13/128	0.261	3.2	100	328	45	1.8	3.2	7.1
5/16	17/128	0.420	5.1	100	328	55	2.2	5.2	11.4
3/8	19/128	0.600	7.2	100	328	65	2.6	7.4	16.3
1/2	13/64	1.020	12.4	50	164	85	3.4	12.6	27.7
19/32	13/64	1.560	19	50	164	100	4.0	19.3	42.4

* = coefficient of friction µ:1

PU 85 A sapphire blue smooth, reinforced Polyester

approx. 88° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 28.5 daN/cm²

Coefficient of Friction μ

- Steel approx. 0.60
- PE approx. 0.30
- HDPE approx. 0.25

FDA/EC/BfR- conform

Diameter ∅ inch		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/ Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
7/32	7/128	0.283	3.4	100	328	60	2.4	8.1	17.7
1/4	7/128	0.310	3.8	100	328	65	2.6	8.8	19.4
9/32	7/128	0.385	4.7	100	328	70	2.8	11.0	24.1
5/16	5/64	0.500	6	100	328	80	3.2	14.3	31.4
3/8	5/64	0.710	8.5	100	328	95	3.7	20.2	44.5
7/16	5/64	0.785	9.4	50	164	100	3.9	22.4	49.2
15/32	5/64	1.130	13.5	50	164	120	4.7	32.2	70.9
1/2	5/64	1.230	14.8	50	164	125	4.9	35.1	77.1
19/32	1/8	1.770	21.5	50	164	150	5.9	50.4	111.0

* = coefficient of friction μ:1

REINFORCEMENT:

All BEHAbelt Round- and V-belts available with reinforcement (Aramid, Polyester, Glass fiber, Steel) on request.

SPECIAL PROFILES:

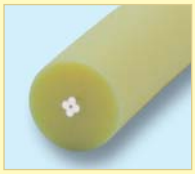
All BEHAbelt Special profiles can be produced with special design in various Shore-hardnesses for the application within the food industry on request. Feel free to contact us!

TPE-POLYESTER-PROFILES FOR THE FOOD INDUSTRY:

All TPE Polyester belts in the standard delivery program are also suitable for the application within the food industry:

ROUND BELTS

Polyester TPE 40 D/ 55 D beige smooth
page 20-21



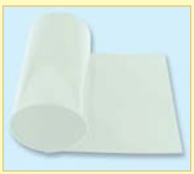
Polyester TPE 55 D beige smooth, reinforced Polyester
page 24

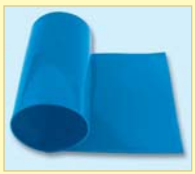
V-BELTS

Polyester TPE 40 D/ 55 D beige smooth
page 27

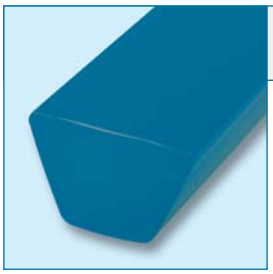
Polyester TPE 55 D beige smooth, reinforced Polyester
page 29

FLAT BELTS

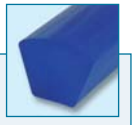




Flat belts for the application within the food industry are listed on page 38.



PU 85 A sapphire blue smooth



available with vaulted surface – 8 x 6.5 mm

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6 x 4 (Y)	0.19	2.3	100	328	45	1.8	3.2	7.1
8 x 5 (M)	0.32	4	100	328	50	2.0	5.5	12.0
10 x 6 (Z)	0.48	6	50	164	70	2.8	8.2	18.1
13 x 8 (A)	0.82	10	50	164	90	3.5	14.0	30.8
17 x 11 (B)	1.46	18	50	164	120	4.7	25.0	54.9
22 x 14 (C)	2.40	29	50	164	160	6.3	41.0	90.3

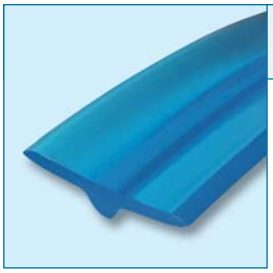
* = coefficient of friction μ:1

approx. 88° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 17.1 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.60 | PE: approx. 0.30 | HDPE: approx. 0.25 | **FDA/EC/BfR- conform**

V-belts with reinforcement available on request.



T-Profile PU 85 A sapphire blue smooth

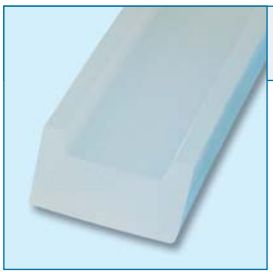
Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
25 x 5 x 5	0.59	7.3	30	100	50	3.2	10.1	22.2
20 x 8	0.83	10.0	30	100	80	2.0	14.2	31.2

* = coefficient of friction μ:1

approx. 88° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 17.1 daN/cm²

Coefficient of Friction μ: Steel: ca. 0.60 | PE: ca. 0.30 | HDPE: ca. 0.25 | **FDA/EC/BfR- conform**



U-Profile PU 85 A transparent smooth

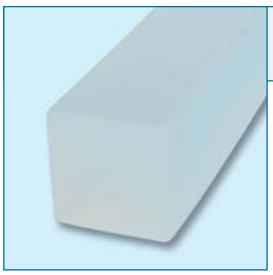
Profile dimension	Cross section	Weight	Standard Roll	Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m		mm	inch	daN/Belt	lbs
11.8 x 18	1.70	20	30ft 5inch/piece	120	4.7	29.1	64.0

* = coefficient of friction μ:1

approx. 88° Shore A

- Recommended pretension 4 - 6 %
- Working tension approx. 17.1 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.60 | PE: approx. 0.30 | HDPE: approx. 0.25 | **FDA/EC/BfR- conform**



Square-Profile PU 85 A transparent smooth

Profile dimension	Cross section	Weight	Standard Roll	Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m		mm	inch	daN/Belt	lbs
11.8 x 11.8	1.39	16.7	30ft 5inch/piece	120	4.7	23.8	52.3

* = coefficient of friction μ:1

approx. 88° Shore A

- Recommended pretension 4 - 6 %
- Working tension approx. 17.1 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.60 | PE: approx. 0.30 | HDPE: approx. 0.25 | **FDA/EC/BfR- conform**

PU 75 A PLUS orange roughened

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/ Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	10	0.4	0.6	1.2
1/8	3.0	0.071	0.9	200	656	20	0.8	1.2	2.7
5/32	4.0	0.126	1.6	200	656	30	1.2	2.2	4.9
3/16	4.8	0.181	2.2	200	656	35	1.4	3.2	7.0
	5.0	0.197	2.4	100	328	40	1.6	3.5	7.6
7/32	6.0	0.283	3.4	100	328	50	2.0	5.0	10.9
1/4	6.3	0.310	3.8	100	328	55	2.2	5.4	12.0
9/32	7.0	0.385	4.7	100	328	60	2.4	6.8	14.9
5/16	8.0	0.500	6	100	328	65	2.6	8.8	19.3
3/8	9.5	0.710	8.5	100	328	75	3.0	12.5	27.4
7/16	10.0	0.785	9.4	50	164	80	3.2	13.8	30.3
15/32	12.0	1.130	13.5	50	164	90	3.5	19.8	43.6
1/2	12.5	1.230	14.8	50	164	100	3.9	21.6	47.5
19/32	15.0	1.770	21.5	50	164	120	4.7	31.1	68.3
3/4	18.0	2.54	31	50	164	150	5.9	44.6	98.1
25/32	20.0	3.14	40	50	164	170	6.7	55.1	121.2

* = coefficient of friction µ:1

approx. 80° Shore A

- Recommended pretension 4 - 6 %
- Working tension* approx. 17.55 daN/cm²

Coefficient of Friction µ

• Steel	approx. 0.70
• PE	approx. 0.40
• HDPE	approx. 0.35

PU 85 A PLUS blue roughened

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	15	0.6	0.8	1.7
1/8	3.0	0.071	0.9	200	656	25	1.0	1.7	3.8
5/32	4.0	0.126	1.6	200	656	30	1.2	3.1	6.7
3/16	4.8	0.181	2.2	200	656	40	1.6	4.4	9.7
	5.0	0.197	2.4	100	328	45	1.8	4.8	10.5
7/32	6.0	0.283	3.4	100	328	55	2.2	6.9	15.1
1/4	6.3	0.310	3.8	100	328	60	2.4	7.5	16.6
9/32	7.0	0.385	4.7	100	328	65	2.6	9.4	20.6
5/16	8.0	0.500	6	100	328	75	3.0	12.2	26.7
3/8	9.5	0.710	8.5	100	328	90	3.5	17.3	38.0
7/16	10.0	0.785	9.4	50	164	95	3.7	19.1	42.0
15/32	12.0	1.130	13.5	50	164	110	4.3	27.5	60.4
1/2	12.5	1.230	14.8	50	164	115	4.5	29.9	65.8
19/32	15.0	1.770	21.5	50	164	140	5.5	43.0	94.6
3/4	18.0	2.54	31	50	164	170	6.7	61.7	135.8
25/32	20.0	3.14	40	50	164	180	7.1	76.3	167.9

* = coefficient of friction µ:1

approx. 88° Shore A

- Recommended pretension 2 - 4 %
- Working tension approx. 24.3 daN/cm²

Coefficient of Friction µ

• Steel	approx. 0.60
• PE	approx. 0.30
• HDPE	approx. 0.25

Available with roughened surface on request.

PU 75 A red smooth

Brown upon request

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/ Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	10	0.4	0.4	0.9
1/8	3.0	0.071	0.9	200	656	20	0.8	0.9	2.0
5/32	4.0	0.126	1.6	200	656	30	1.2	1.6	3.5
3/16	4.8	0.181	2.2	200	656	35	1.4	2.3	5.1
	5.0	0.197	2.4	100	328	40	1.6	2.5	5.5
7/32	6.0	0.283	3.4	100	328	50	2.0	3.7	8.1
1/4	6.3	0.310	3.8	100	328	55	2.2	4.1	9.0
9/32	7.0	0.385	4.7	100	328	60	2.4	5.0	11.0
5/16	8.0	0.500	6	100	328	65	2.6	6.6	14.5
3/8	9.5	0.710	8.5	100	328	75	3.0	9.2	20.2
7/16	10.0	0.785	9.4	50	164	80	3.2	10.0	22.0
15/32	12.0	1.130	13.5	50	164	90	3.5	15.0	33.0
1/2	12.5	1.230	14.8	50	164	100	3.9	16.0	35.2
19/32	15.0	1.770	21.5	50	164	120	4.7	23.0	50.6
3/4	18.0	2.54	31	50	164	150	5.9	33.0	72.6
25/32	20.0	3.14	40	50	164	170	6.7	41.0	90.2

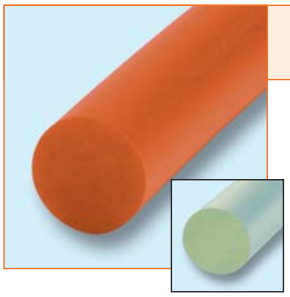
* = coefficient of friction μ:1

approx. 80° Shore A

- Recommended pretension 6 - 8 %
- Working tension* approx. 13 daN/cm²

Coefficient of Friction μ red smooth

• Steel	approx. 0.70
• PE	approx. 0.40
• HDPE	approx. 0.35



PU 80 A orange/transparent smooth

Diameter ∅		Cross section	Weight	Standard Roll orange/transp.		Min. Pulley ∅		Working Load/ Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	30/200	100/656	15	0.6	0.5	1.1
1/8	3.0	0.071	0.9	30/200	100/656	25	1.0	1.0	2.2
5/32	4.0	0.126	1.6	30/200	100/656	30	1.2	1.9	4.2
3/16	4.8	0.181	2.2	30/200	100/656	40	1.6	2.7	5.9
	5.0	0.197	2.4	30/100	100/328	45	1.8	2.9	6.4
7/32	6.0	0.283	3.4	30/100	100/328	55	2.2	4.2	9.2
1/4	6.3	0.310	3.8	30/100	100/328	60	2.4	4.7	10.3
9/32	7.0	0.385	4.7	30/100	100/328	65	2.6	5.8	12.8
5/16	8.0	0.500	6	30/100	100/328	75	3.0	7.5	16.5
3/8	9.5	0.710	8.5	30/100	100/328	90	3.5	10.6	23.3
7/16	10.0	0.785	9.4	30/50	100/164	95	3.7	11.8	26.0
15/32	12.0	1.130	13.5	30/50	100/164	110	4.3	17.0	37.4
1/2	12.5	1.230	14.8	30/50	100/164	115	4.5	18.4	40.5
9/16	14.3	1.605	21	30/50	100/164	130	5.1	23.1	53.0
6/8	15.9	1.985	22.5	30/50	100/164	150	5.9	30.0	66.0
3/4	19.0	2.83	31.0	30/50	100/164	170	6.7	42.5	93.5

* = coefficient of friction μ:1

approx. 84° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 15 daN/cm²

Coefficient of Friction μ

• Steel	approx. 0.65
• PE	approx. 0.35
• HDPE	approx. 0.30

FDA/EC/BfR- conform

PU 85 A green smooth/roughened

approx. 88° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 18 daN/cm²

Coefficient of Friction µ PU green smooth

• Steel	approx. 0.60
• PE	approx. 0.30
• HDPE	approx. 0.25

Coefficient of Friction µ PU green roughened

• Steel	approx. 0.45
• PE	approx. 0.30
• HDPE	approx. 0.25

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	15	0.6	0.6	1.3
1/8	3.0	0.071	0.9	200	656	25	1.0	1.3	2.9
5/32	4.0	0.126	1.6	200	656	30	1.2	2.3	5.1
3/16	4.8	0.181	2.2	200	656	40	1.6	3.3	7.2
	5.0	0.197	2.4	100	328	45	1.8	3.5	7.7
7/32	6.0	0.283	3.4	100	328	55	2.2	5.1	11.2
1/4	6.3	0.310	3.8	100	328	60	2.4	5.6	12.3
9/32	7.0	0.385	4.7	100	328	65	2.6	6.9	15.2
5/16	8.0	0.500	6	100	328	75	3.0	9.0	19.8
3/8	9.5	0.710	8.5	100	328	90	3.5	12.7	27.9
7/16	10.0	0.785	9.4	50	164	95	3.7	14.0	30.8
15/32	12.0	1.130	13.5	50	164	110	4.3	20.0	44.0
1/2	12.5	1.230	14.8	50	164	115	4.5	22.0	48.4
19/32	15.0	1.770	21.5	50	164	140	5.5	31.8	70.0
3/4	18.0	2.54	31	50	164	170	6.7	45.5	100.1
25/32	20.0	3.14	40	50	164	180	7.1	56.5	124.3

* = coefficient of friction µ:1

Belts for electrostatic discharge

PU 85 A emeraldgreen smooth, antistatic dissipative

With this belt electrostatic charging is diverted from the surface, time of discharge < 1 second

approx. 88° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 18 daN/cm²

Conductivity approx. 10^9 Ω per cm

Coefficient of Friction µ

• Steel	approx. 0.60
• PE	approx. 0.30
• HDPE	approx. 0.25

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	15	0.6	0.6	1.3
1/8	3.0	0.071	0.9	200	656	25	1.0	1.3	2.8
5/32	4.0	0.126	1.6	200	656	30	1.2	2.3	5.1
3/16	4.8	0.181	2.2	200	656	40	1.6	3.3	7.3
	5.0	0.197	2.4	100	328	45	1.8	3.5	7.7
7/32	6.0	0.283	3.4	100	328	55	2.2	5.1	11.2
1/4	6.3	0.310	3.8	100	328	60	2.4	5.6	12.3
9/32	7.0	0.385	4.7	100	328	65	2.6	6.9	15.2
5/16	8.0	0.500	6	100	328	75	3.0	9.0	19.8
3/8	9.5	0.710	8.5	100	328	90	3.5	12.7	27.9
7/16	10.0	0.785	9.4	50	164	95	3.7	14.0	30.8
15/32	12.0	1.130	13.5	50	164	110	4.3	20.0	44.0
1/2	12.5	1.230	14.8	50	164	115	4.5	22.0	48.4
19/32	15.0	1.770	21.5	50	164	140	5.5	31.8	70.0
3/4	18.0	2.54	31	50	164	170	6.7	45.5	100.1
25/32	20.0	3.14	40	50	164	180	7.1	56.5	124.3

* = coefficient of friction µ:1

PU 90 A white smooth

Red upon request

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	20	0.8	0.8	1.8
1/8	3.0	0.071	0.9	200	656	30	1.2	1.8	4.0
5/32	4.0	0.126	1.6	200	656	40	1.6	3.1	6.8
3/16	4.8	0.181	2.2	200	656	50	2.0	4.5	9.9
	5.0	0.197	2.4	100	328	55	2.2	4.9	10.8
7/32	6.0	0.283	3.4	100	328	60	2.4	7.0	15.4
1/4	6.3	0.310	3.8	100	328	65	2.6	7.7	16.9
9/32	7.0	0.385	4.7	100	328	70	2.8	9.6	21.1
5/16	8.0	0.500	6	100	328	80	3.2	12.5	27.5
3/8	9.5	0.710	8.5	100	328	95	3.7	17.5	38.5
7/16	10.0	0.785	9.4	50	164	100	3.9	19.6	43.1
15/32	12.0	1.130	13.5	50	164	120	4.7	28.0	61.2
1/2	12.5	1.23	14.8	50	164	125	4.9	30.5	67.1
19/32	15.0	1.770	21.5	50	164	150	5.9	44.0	96.8
3/4	18.0	2.54	31	50	164	170	6.7	63.0	138.6
25/32	20.0	3.14	40	50	164	180	7.1	78.0	171.6

* = coefficient of friction μ:1

approx. 92° Shore A

- Recommended pretension 4 - 6 %
- Working tension approx. 25 daN/cm²

Coefficient of Friction μ

• Steel	approx. 0.50
• PE	approx. 0.30
• HDPE	approx. 0.25

Polyester TPE 40 D beige smooth

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/Belt*	
inch	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	20	0.8	1.1	2.4
1/8	3.0	0.071	0.9	200	656	30	1.2	2.4	5.3
5/32	4.0	0.126	1.6	200	656	40	1.6	4.4	9.7
3/16	4.8	0.181	2.2	200	656	50	2.0	6.3	13.9
	5.0	0.197	2.4	100	328	55	2.2	6.8	15.0
7/32	6.0	0.283	3.4	100	328	60	2.4	9.9	21.8
1/4	6.3	0.310	3.8	100	328	65	2.6	10.9	24.5
9/32	7.0	0.385	4.7	100	328	70	2.8	13.4	29.5
5/16	8.0	0.500	6	100	328	80	3.2	17.5	38.5
3/8	9.5	0.710	8.5	100	328	95	3.7	24.9	54.8
7/16	10.0	0.785	9.4	50	164	100	4.0	27.4	60.3
15/32	12.0	1.130	13.5	50	164	120	4.7	39.5	86.9
1/2	12.5	1.230	14.8	50	164	125	4.9	43.0	94.6
19/32	15.0	1.770	21.5	50	164	150	5.9	61.9	136.2
3/4	18.0	2.54	31	50	164	170	6.7	88.0	193.6
25/32	20.0	3.14	40	50	164	180	7.1	109.4	240.7

* = coefficient of friction μ:1

approx. 40° Shore D / 92° Shore A

- Recommended pretension 2 % - max. 4 %
- Working tension approx. 35 daN/cm²

Coefficient of Friction μ

• Steel	approx. 0.50
• PE	approx. 0.30
• HDPE	approx. 0.25

FDA/EC/BfR- conform

Polyester TPE 55 D beige smooth

Diameter ∅		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/Belt*	
inch	mm	cm^2	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/64	2.0	0.032	0.5	200	656	30	1.2	1.5	3.3
1/8	3.0	0.071	0.9	200	656	35	1.4	3.5	7.7
5/32	4.0	0.126	1.6	200	656	50	2.0	6.2	13.6
3/16	4.8	0.181	2.2	200	656	60	2.4	9.0	19.8
	5.0	0.197	2.4	100	328	60	2.4	9.8	21.6
7/32	6.0	0.283	3.4	100	328	75	3.0	14.0	30.8
1/4	6.3	0.310	3.8	100	328	80	3.2	15.5	34.1
9/32	7.0	0.385	4.7	100	328	90	3.6	19.0	41.8
5/16	8.0	0.500	6	100	328	100	3.9	25.0	55.0
3/8	9.5	0.710	8.5	100	328	120	4.7	35.0	77.0
7/16	10.0	0.785	9.4	50	164	125	4.9	39.3	86.5
15/32	12.0	1.130	13.5	50	164	150	5.9	56.6	124.5
1/2	12.5	1.230	14.8	50	164	160	6.3	61.0	134.2
19/32	15.0	1.770	21.5	50	164	180	7.0	88.0	193.6
3/4	18.0	2.54	31	50	164	240	9.5	127.0	279.4
25/32	20.0	3.14	40	50	164	300	11.8	157.0	345.4

* = coefficient of friction µ:1

approx. 55° Shore D / 100° Shore A

- Recommended pretension 2 % - max. 4 %
- Working tension approx. 50 daN/cm^2

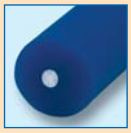
Coefficient of Friction µ

- Steel approx. 0.35
- PE approx. 0.15
- HDPE approx. 0.10

FDA/EC/BfR- conform

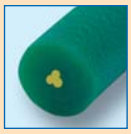
Options for reinforced belting

Our standard delivery program includes four types of reinforcements:



Reinforcement glass fiber PU, weldable

PATENT



Reinforcement aramid fiber, extra strong and low working tension < 1.5%

Reinforcement Polyester, extra strong, working tension <10%

Reinforcement steel, extra strong

Reinforcement Breaking tension: daN

Diameter mm (inch)	Glass fiber PU working load max. 10 %	Aramid working load < 1.5 % Breaking tension 4%	Polyester working load < 10 % Breaking tension 12%	Steel
1.5 (7/128)	–	approx. 180 daN	approx. 100 daN	–
2.0 (5/64)	–	approx. 300 daN	approx. 140 daN	–
2.5 (1/10)	–	–	–	approx. 355 daN
3.0 (1/8)	approx. 40 daN	approx. 560 daN	approx. 390 daN	–
4.0 (5/32)	approx. 69 daN	–	approx. 500 daN	–
Note	**„PATENT" - weldable** Recommendation: Butt welding	not weldable Recommendation: Overlap welding	not weldable Recommendation: Overlap welding	Recommendation: Crimping

PU 80 A orange, reinforced Polyester

Diameter ∅ inch		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
7/32	7/128	0.283	3.4	30	100	55	2.1	7.4	16.2
1/4	7/128	0.310	3.8	30	100	60	2.3	8.1	17.7
9/32	7/128	0.385	4.7	30	100	65	2.5	10.0	22.0
5/16	5/64	0.500	6	30	100	75	2.9	13.0	28.6
3/8	5/64	0.710	8.5	30	100	90	3.5	18.5	40.6
7/16	5/64	0.785	9.4	30	100	95	3.7	20.4	44.9
15/32	1/8	1.130	13.5	30	100	110	4.3	29.4	64.6
1/2	1/8	1.230	14.8	30	100	115	4.5	32.0	70.4
19/32	5/32	1.770	21.5	30	100	140	5.5	46.0	101.2
3/4	5/32	2.54	31	30	100	170	6.6	66.0	145.3
25/32	5/32	3.14	40	30	100	180	7.0	81.6	179.6

* = coefficient of friction μ:1

approx. 84° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 26 daN/cm²

Coefficient of Friction μ

- Steel approx. 0.65
- PE approx. 0.35
- HDPE approx. 0.30

FDA/EC/BfR- conform

reinforcement weldable

PU 85 A ultramarine blue smooth/roughened, reinforced glass fiber PU

Diameter ∅ inch		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
5/16	1/8	0.500	6	100	328	80	3.2	15.0	33.0
3/8	1/8	0.710	8.5	100	328	95	3.7	21.3	46.9
7/16	1/8	0.785	9.4	50	164	100	3.9	23.6	51.9
15/32	5/32	1.130	13.5	50	164	120	4.7	33.9	74.6
1/2	5/32	1.230	14.8	50	164	125	4.9	36.9	81.2
19/32	5/32	1.770	21.5	50	164	150	5.9	53.1	116.8
3/4	★	2.54	31	50	164	190	7.5	★	★
25/32	★	3.14	40	50	164	200	7.9	★	★

★ = stronger carrier materials upon request

* = coefficient of friction μ:1

approx. 88° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 30 daN/cm²

Coefficient of Friction μ ultramarine blue smooth

- Steel approx. 0.60
- PE approx. 0.30
- HDPE approx. 0.25

Coefficient of Friction μ ultramarine blue roughened

- Steel approx. 0.45
- PE approx. 0.30
- HDPE approx. 0.25

PATENT DE19900551C1
US Patent No. 6,468,656

PU 85 A green roughened, reinforced aramid fiber

approx. 88° Shore A

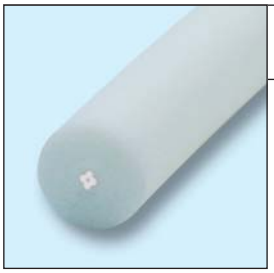
- Recommended pretension 1 - 2 %
- Working tension 1.5 approx. 28 daN/cm²
- Working tension 2.1 approx. 30 daN/cm²
- Working tension 3.0 approx. 32 daN/cm²

Coefficient of Friction µ

• Steel	approx. 0.45
• PE	approx. 0.30
• HDPE	approx. 0.25

Diameter ∅ inch		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
7/32	7/128 ∅	0.283	3.4	100	328	60	2.4	7.9	17.4
1/4	7/128 ∅	0.310	3.8	100	328	65	2.6	8.7	19.1
9/32	7/128 ∅	0.385	4.7	100	328	70	2.8	10.8	23.8
5/16	11/128 ∅	0.500	6	100	328	80	3.2	15.1	33.2
3/8	11/128 ∅	0.710	8.5	100	328	95	3.7	21.3	46.9
7/16	11/128 ∅	0.785	9.4	50	164	100	3.9	23.6	51.9
15/32	11/128 ∅	1.130	13.5	50	164	120	4.7	33.9	74.6
1/2	11/128 ∅	1.230	14.8	50	164	125	4.9	36.8	81.0
	1/8 ∅	1.616	19.3	50	164	145		51.4	113.1
19/32	1/8 ∅	1.77	21.5	50	164	150	5.9	56.5	124.3
3/4	1/8 ∅	2.54	31	50	164	190	7.5	81.4	179.1
25/32	1/8 ∅	3.14	40	50	164	200	7.9	100.5	221.1

* = coefficient of friction µ:1



PU 90 A white smooth, reinforced Polyester

approx. 92° Shore A

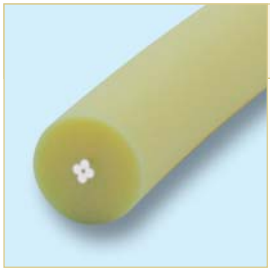
- Recommended pretension 1 - 2 %
- Working tension approx. 40 daN/cm²

Coefficient of Friction µ

• Steel	approx. 0.50
• PE	approx. 0.30
• HDPE	approx. 0.25

Diameter ∅ inch		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
7/32	7/128	0.283	3.4	100	328	65	2.6	11.3	24.9
1/4	7/128	0.310	3.8	100	328	70	2.8	12.4	27.3
9/32	7/128	0.385	4.7	100	328	75	3.0	15.4	33.9
5/16	5/64	0.500	6	100	328	85	3.4	20.0	44.0
3/8	5/64	0.710	8.5	100	328	100	3.9	28.4	62.5
7/16	5/64	0.785	9.4	50	164	105	4.1	31.4	69.1
15/32	1/8	1.130	13.5	50	164	125	4.9	45.2	99.4
1/2	1/8	1.230	14.8	50	164	130	5.1	49.2	108.2
19/32	5/32	1.770	21.5	50	164	155	6.1	70.8	155.8
3/4	5/32	2.54	31	50	164	175	6.9	101.6	223.5
25/32	5/32	3.14	40	50	164	185	7.3	125.6	276.3

* = coefficient of friction µ:1



55° Shore D ·
approx. 100° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 65 daN/cm²

Coefficient of Friction μ

- Steel approx. 0.35
- PE approx. 0.15
- HDPE approx. 0.10

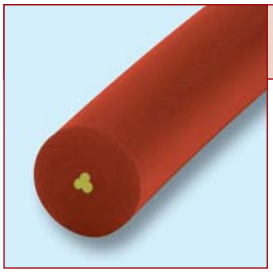
FDA/EC/BfR- conform

Polyester TPE 55 D beige smooth, reinforced Polyester

Diameter ∅ inch		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
7/32	7/128	0.283	3.4	100	328	75	3.0	18.4	40.5
1/4	7/128	0.310	3.8	100	328	80	3.2	20.1	44.2
9/32	7/128	0.385	4.7	100	328	90	3.5	25.0	55.0
5/16	5/64	0.500	6	100	328	100	3.9	32.5	71.5
3/8	5/64	0.771	8.5	100	328	120	4.7	50.1	110.2
7/16	5/64	0.785	9.4	50	164	125	4.9	51.0	112.2
15/32	1/8	1.130	13.5	50	164	150	5.9	73.4	161.5
1/2	1/8	1.230	14.8	50	164	160	6.3	80.0	176.0
19/32	5/32	1.770	21.5	50	164	180	7.1	115.0	253.0
3/4	5/32	2.54	31	50	164	240	9.5	165.0	363.0
25/32	5/32	3.14	40	50	164	300	11.8	204.0	448.8

* = coefficient of friction μ:1

Can Cable



approx. 98° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 50 daN/cm²

PU 95 A red matt, reinforced Aramid fiber

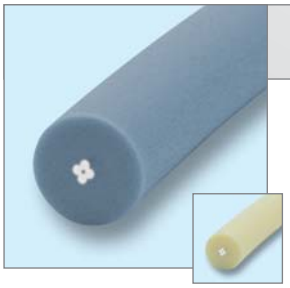
Diameter ∅ inch		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
3/8	5/64	0.710	8.5	150	500	120	4.7	35.5	78.1

* = coefficient of friction μ:1

Coefficient of Friction μ: Steel: approx. 0.35 | PE: approx. 0.15 | HDPE: approx. 0.10

with additional UV protection (silver)

Can Cable



63° Shore D · approx. >100° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 65 daN/cm²

Polyester TPE 63 D silver/beige smooth, reinforced Polyester

Diameter ∅ inch		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
1/4	1/8	0.310	3.8	150	500	100	3.9	20.2	44.4
3/8	1/8	0.710	8.5	150	500	150	5.9	46.2	101.6
1/2	1/8	1.230	14.8	150	500	200	7.8	80.0	176.0

* = coefficient of friction μ:1

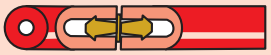
Coefficient of Friction μ: Steel: approx. 0.35 | PE: approx. 0.15 | HDPE: approx. 0.10 | **FDA/EC/BfR- conform**

BEHAbelt Made in Germany

Recommendation

Hollow Round belts should be welded just like solid belts. In the case of a breakdown, fitting connectors can be used for a quick repair, until the belt can be welded once again. Another advantage is the flexibility of the belt for little pulley diameters. Mostly fitting connectors are sufficient for light tranport applications and are often used in practice.

PU 75 A red smooth Hollow round belt



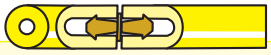
Diameter ∅ inch		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/Belt*	
Ext. ∅	In. ∅	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
3/16	9/128	0.147	1.8	200	656	30	1.2	1.9	4.2
1/4	13/128	0.261	3.2	100	328	45	1.8	3.4	7.5
5/16	17/128	0.420	5.1	100	328	55	2.2	5.5	12.1
3/8	19/128	0.600	7.2	100	328	65	2.6	7.8	17.2
1/2	13/64	1.020	12.4	50	164	85	3.4	13.3	29.3
19/32	13/64	1.560	19	50	164	100	4.0	20.2	44.4

- Recommended pretension: weldable 6 - 8 % Fitting connector max. 4 - 6 %
- Working tension* approx. 13 daN/cm²

Coefficient of Friction μ

- Steel approx. 0.70
- PE approx. 0.40
- HDPE approx. 0.35

Hollow round belt PU 75 A sky blue for food industry on page 13.



PU 85 A yellow smooth and green roughened Hollow round belt

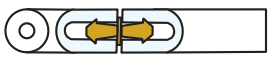
Diameter ∅ inch		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/Belt*	
Ext. ∅	In. ∅	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
3/16	9/128	0.147	1.8	200	656	35	1.4	2.6	5.7
1/4	13/128	0.261	3.2	100	328	55	2.2	4.6	10.1
5/16	17/128	0.420	5.1	100	328	65	2.6	7.5	16.5
3/8	19/128	0.600	7.2	100	328	75	3.0	10.0	22.0
1/2	13/64	1.020	12.4	50	164	100	3.9	18.0	39.6
19/32	13/64	1.560	19	50	164	120	4.7	28.0	61.6

- Recommended pretension: weldable 6 - 8 % Fitting connector max. 4 - 6 %
- Working tension* approx. 18 daN/cm²

Coefficient of Friction μ PU yellow smooth: Steel approx. 0.60 | PE approx. 0.30 | HDPE approx. 0.25

Coefficient of Friction μ PU green roughened: Steel approx. 0.45 | PE approx. 0.30 | HDPE approx. 0.25

PU 90 A white smooth Hollow round belt



Diameter ∅ inch		Cross section	Weight	Standard Roll		Min. Pulley ∅		Working Load/Belt*	
Ext. ∅	In. ∅	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
3/16	9/128	0.147	1.8	200	656	45	1.8	3.6	7.9
1/4	13/128	0.261	3.2	100	328	60	2.4	6.5	14.3
5/16	17/128	0.420	5.1	100	328	75	3.0	10.0	22.0
3/8	19/128	0.600	7.2	100	328	85	3.4	15.0	33.0
1/2	13/64	1.020	12.4	50	164	115	4.5	25.0	55.0
19/32	13/64	1.560	19	50	164	140	5.5	38.0	83.6

- Recommended pretension: weldable 4 - 6 % Fitting connector max. 2 - 4 %
- Working tension* approx. 25 daN/cm²

Coefficient of Friction μ: Steel approx. 0.50 | PE approx. 0.30 | HDPE approx. 0.25

Corresponding fasteners for diameter 3/16, 1/4, 5/16, 3/8, 1/2, 19/32 inch available.

PU 75 A red smooth

Brown upon request

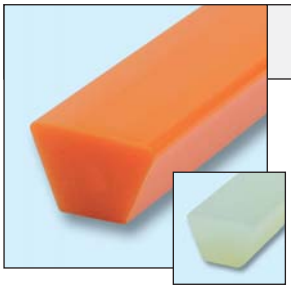
Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6 x 4 (Y)	0.19	2.3	100	328	35	1.4	2.5	5.5
8 x 5 (M)	0.32	4	100	328	40	1.6	4.2	9.2
10 x 6 (Z)	0.48	6	50	164	50	2.0	6.2	13.6
13 x 8 (A)	0.82	10	50	164	80	3.2	10.5	23.1
17 x 11 (B)	1.46	18	50	164	100	3.9	19.0	41.8
22 x 14 (C)	2.40	29	50	164	145	5.7	31.0	68.2
32 x 20 (D)	5.00	62	25	82	210	8.3	65.0	143.0

* = coefficient of friction μ:1

approx. 80° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 13 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.70 | PE: approx. 0.40 | HDPE: approx. 0.35



PU 80 A orange/transparent smooth

available as 3-grooved V-Belt 17 x 11 and 22 x 14 mm

Profile dimension	Cross section	Weight	Standard Roll orange/transp.		Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6 x 4 (Y)	0.19	2.3	30/100	100/328	40	1.6	2.9	6.4
8 x 5 (M)	0.32	4	30/100	100/328	45	1.8	4.8	10.6
10 x 6 (Z)	0.48	6	30/50	100/164	55	2.2	7.2	15.8
13 x 8 (A)	0.82	10	30/50	100/164	85	3.3	12.3	27.1
17 x 11 (B)	1.46	18	30/50	100/164	110	4.3	21.9	48.2
22 x 14 (C)	2.40	29	30/50	100/164	150	5.9	36.0	79.2
32 x 20 (D)	5.00	62	30/25	100/82	220	8.7	75.0	165.0

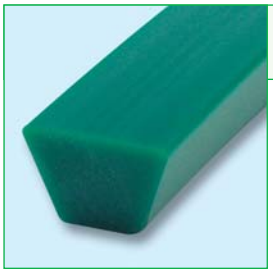
* = coefficient of friction μ:1

approx. 84° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 15 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.65 | PE: approx. 0.35 | HDPE: approx. 0.30 | **FDA/EC/BfR- conform**

PU 85 A PLUS patented on request (see page 8).



PU 85 A green smooth

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6 x 4 (Y)	0.19	2.3	100	328	45	1.8	3.4	7.5
8 x 5 (M)	0.32	4	100	328	50	2.0	5.7	12.5
10 x 6 (Z)	0.48	6	50	164	70	2.8	8.6	18.9
13 x 8 (A)	0.82	10	50	164	90	3.5	14.7	32.3
17 x 11 (B)	1.46	18	50	164	120	4.7	26.0	57.2
22 x 14 (C)	2.40	29	50	164	160	6.3	43.0	94.6
32 x 20 (D)	5.00	62	25	82	230	9.1	96.0	211.2

* = coefficient of friction μ:1

approx. 88° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 18 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.60 | PE: approx. 0.30 | HDPE: approx. 0.25

PU 90 A white smooth

Available with cogged bottom on request.**

Red upon request

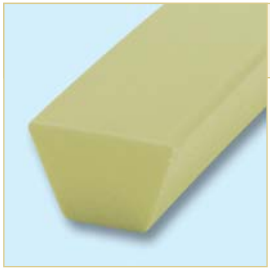
approx. 92° Shore A

- Recommended pretension 4 - 6 %
- Working tension approx. 25 daN/cm²

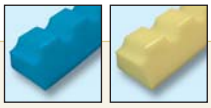
Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
8 x 5 (M)	0.32	4	100	328	60	2.4	8.0	17.6
10 x 6 (Z)	0.48	6	50	164	80	3.2	12.0	26.4
13 x 8 (A)	0.82	10	50	164	100	3.9	20.0	44.0
17 x 11 (B)	1.46	18	50	164	140	5.5	36.0	79.2
22 x 14 (C)	2.40	29	50	164	200	7.9	60.0	132.0
32 x 20 (D)	5.00	62	25	82	280	11.0	125.0	275.0

* = coefficient of friction µ:1

Coefficient of Friction µ: Steel: approx. 0.50 | PE: approx. 0.30 | HDPE: approx. 0.25



Polyester TPE 40 D beige smooth



Available with cogged bottom on request.**

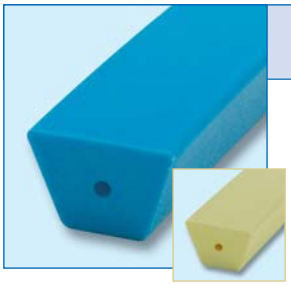
40° Shore D · approx. 92° Shore A

- Recommended pretension 2 - 4 %
- Working tension approx. 35 daN/cm²

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
8 x 5 (M)	0.32	4	100	328	60	2.4	11.2	24.6
10 x 6 (Z)	0.48	6	50	164	80	3.2	16.8	37.0
13 x 8 (A)	0.82	10	50	164	100	3.9	28.7	63.1
17 x 11 (B)	1.46	18	50	164	140	5.5	51.0	112.2
22 x 14 (C)	2.40	29	50	164	200	7.9	84.0	184.8

* = coefficient of friction µ:1

Coefficient of Friction µ: Steel: approx. 0.50 | PE: approx. 0.30 | HDPE: approx. 0.25 | **FDA/EC/BfR- conform**



Polyester TPE 55 D blue/beige smooth

Available with cogged bottom on request.**

55° Shore D · approx. 100° Shore A

- Recommended pretension 2 - 4 %
- Working tension approx. 50 daN/cm²

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
8 x 5 (M)	0.32	4	100	328	80	3.2	16.0	35.2
10 x 6 (Z)	0.48	6	50	164	100	3.9	24.0	52.8
13 x 8 (A)	0.82	10	50	164	120	4.7	40.0	88.0
17 x 11 (B)	1.46	18	50	164	160	6.3	73.0	160.6
22 x 14 (C)	2.40	29	50	164	230	9.1	120.0	264.0

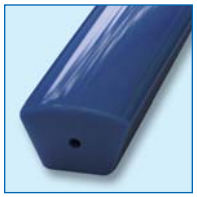
* = coefficient of friction µ:1

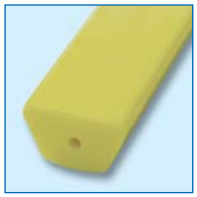
Coefficient of Friction µ

• Steel	approx. 0.35
• PE	approx. 0.15
• HDPE	approx. 0.10

FDA/EC/BfR- conform

bluepower





Special V-belt with chamfer yellow/ beige 17x11.5

** The cogged bottom enables the run over smaller pulleys but also decreases the maximum working tension.
Cogged V-belts can not be used as timing belts.

Weldable reinforcement

PU 75 A orange, reinforced glass fiber PU

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
Z	10 x 6	1/8	0.48	6	50	164	80	3.2	10.5	22.0
A	13 x 8	1/8	0.82	10	50	164	100	3.9	18.0	39.6
B	17 x 11	5/32	1.46	18	50	164	140	5.5	32.0	70.4
C	22 x 14	5/32★	2.40	29	50	164	180	7.1	★	★

* = coefficient of friction μ:1

approx. 80° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 22 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.70 | PE: approx. 0.40 | HDPE: approx. 0.35

★ = stronger carrier materials upon request

PATENT

DE19900551C1
US Patent No. 6,468,656

PU 80 A orange, reinforced Polyester

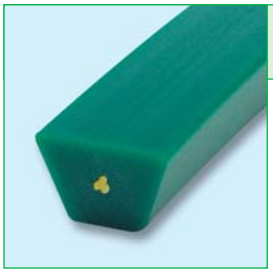
	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
M	8 x 5	7/128	0.32	4	30	100	45	1.8	9.6	21.1
Z	10 x 6	5/64	0.48	6	30	100	55	2.2	14.4	31.7
A	13 x 8	5/64	0.82	10	30	100	85	3.3	24.6	54.1
B	17 x 11	1/8	1.46	18	30	100	110	4.3	43.8	96.4
C	22 x 14	5/32	2.40	29	30	100	150	5.9	72.0	158.4

* = coefficient of friction μ:1

approx. 84° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 30 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.65 | PE: approx. 0.35 | HDPE: approx. 0.30 | **FDA/EC/BfR- conform**



PU 85 A green, reinforced aramid fiber

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
M	8 x 5	7/128	0.32	4	50	164	60	2.4	9.0	19.8
Z	10 x 6	7/128	0.48	6	50	164	70	2.8	13.4	29.5
A	13 x 8	11/128	0.82	10	50	164	100	3.9	24.6	54.1
B	17 x 11	11/128	1.46	18	50	164	140	5.5	43.8	96.4
C	22 x 14	1/8	2.40	29	50	164	180	7.1	76.8	169.0

* = coefficient of friction μ:1

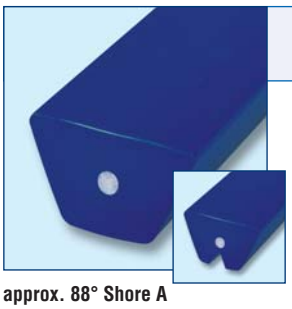
approx. 88° Shore A

- Recommended pretension 1 - 2 %
- Working tension 1.5 approx. 28 daN/cm²
- Working tension 2.1 approx. 30 daN/cm²
- Working tension 3.0 approx. 32 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.60 | PE: approx. 0.30 | HDPE: approx. 0.25

Weldable reinforcement

PU 85 A ultramarine blue, reinforced glass fiber PU



approx. 88° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 30 daN/cm²

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
Z	10 x 6	1/8	0.48	6	50	164	100	3.9	14.4	31.7
A	13 x 8	1/8	0.82	10	50	164	140	5.5	24.6	54.1
B	17 x 11	5/32	1.46	18	50	164	180	7.1	43.0	96.4
C	22 x 14	5/32★	2.40	29	50	164	220	8.7	★	★

* = coefficient of friction μ:1

Coefficient of Friction μ: Steel: approx. 0.60 | PE: approx. 0.30 | HDPE: approx. 0.25

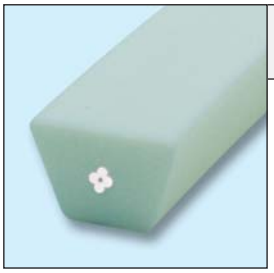
★ = stronger carrier materials upon request

PATENT

DE19900551C1
US Patent No. 6,468,656

PU 90 A white, reinforced Polyester

Available with cogged bottom on request.**



approx. 92° Shore A

- Recommended pretension 1 - 2 %
- Working tension approx. 40 daN/cm²

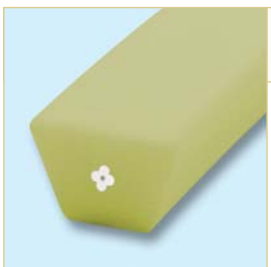
	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
M	8 x 5	7/128	0.32	4	100	328	100	3.9	12.8	28.2
Z	10 x 6	5/64	0.48	6	50	164	130	5.1	19.0	41.8
A	13 x 8	5/64	0.82	10	50	164	160	6.3	32.8	72.2
B	17 x 11	1/8	1.46	18	50	164	180	7.1	58.4	128.5
C	22 x 14	5/32	2.40	29	50	164	270	10.6	96.0	211.2

* = coefficient of friction μ:1

Coefficient of Friction μ: Steel: approx. 0.50 | PE: approx. 0.30 | HDPE: approx. 0.25

Polyester TPE 55 D beige, reinforced Polyester

Available with cogged bottom on request.**



55° Shore D
approx. 100° Shore A

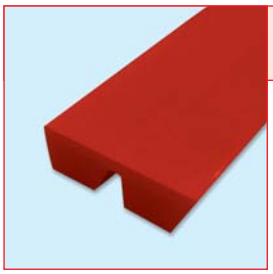
- Recommended pretension 1 - 2 %
- Working tension approx. 65 daN/cm²

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
Z	10 x 6	5/64	0.48	6	50	164	130	5.1	31.2	68.6
A	13 x 8	5/64	0.82	10	50	164	160	6.3	53.3	117.3
B	17 x 11	1/8	1.46	18	50	164	180	7.1	94.9	208.8
C	22 x 14	5/32	2.40	29	50	164	270	10.6	156.0	343.2

* = coefficient of friction μ:1

Coefficient of Friction μ: Steel: approx. 0.35 | PE: approx. 0.30 | HDPE: approx. 0.25 | **FDA/EC/BfR- conform**

** The cogged bottom enables the run over smaller pulleys but also decreases the maximum working tension.
Cogged V-belts can not be used as timing belts.



PU 75 A red smooth

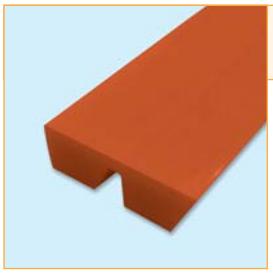
	Profile dimension in mm	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
		cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
Z	21 x 8.5	1.2	13.9	30	100	80	3.2	15.6	34.3

* = coefficient of friction μ:1

approx. 80° Shore A

- Recommended pretension 6 - 8 %
- Working tension approx. 13 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.70 | PE: approx. 0.40 | HDPE: approx. 0.35



PU 80 A orange smooth

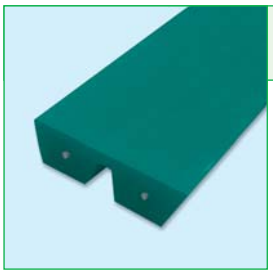
	Profile dimension in mm	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
		cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
Z	24 x 6.8	1.2	14.9	30	100	55	2.2	18.0	39.6
A	30 x 8	1.9	22.4	30	100	85	3.4	28.5	62.7

* = coefficient of friction μ:1

approx. 84° Shore A

- Recommended pretension 4 - 8 %
- Working tension approx. 15 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.65 | PE: approx. 0.35 | HDPE: approx. 0.30 | **FDA/EC/BfR-conform**



PU 85 A mint green, reinforced Polyester

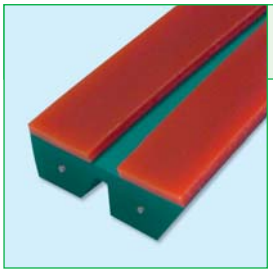
	Profile dimension in mm		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
A	30 x 8	5/64	1.9	22.4	30	100	100	3.9	57	125.4

* = coefficient of friction μ:1

approx. 88° Shore A

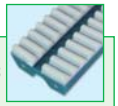
- Recommended pretension 1 - 2 %
- Working tension approx. 30 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.60 | PE: approx. 0.30 | HDPE: approx. 0.25



2C, PU 85 A mint green with PU 70 A orange

other coatings possible



	Profile dimension in mm		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
A	30 x 8	5/64	1.9	22.4	30	100	100	3.9	57	125.4

* = coefficient of friction μ:1

approx. 88° Shore A

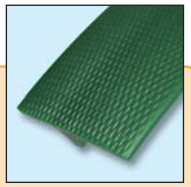
- Recommended pretension 1 - 2 %
- Working tension approx. 30 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.60 | PE: approx. 0.30 | HDPE: approx. 0.25

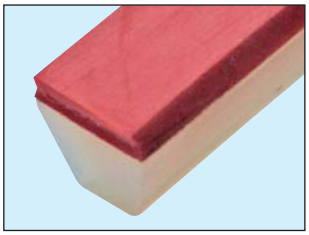
BEHAbelt
Made in Germany

Coatings

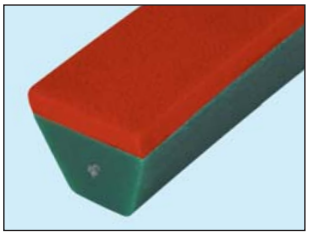
We carry on a wide range of coated products. Enclosed you find a sellection of the most established coatings. Other coatings available upon request.



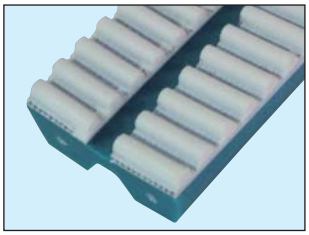
Corrugated surface possible.



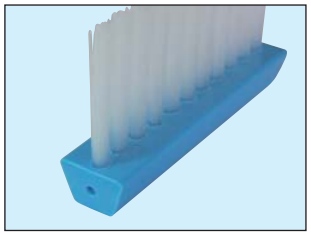
Linatex red
38° Shore A



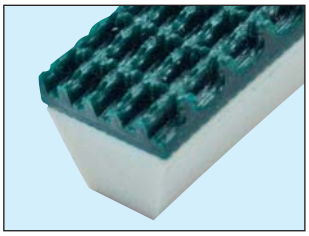
PU-foil 70° Shore A



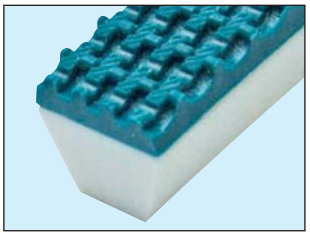
Corrugated coating



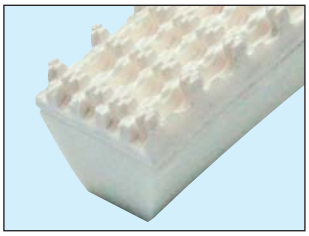
Brush belt with
Polyamide fibers



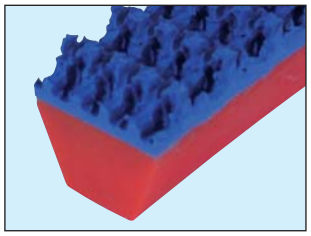
Supergrip PVC-green
40° Shore A



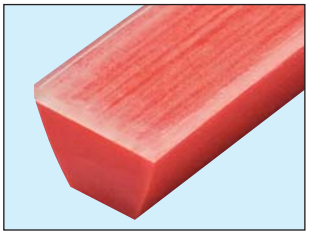
Supergrip PVC-blue
40° Shore A



Supergrip PVC-white
40° Shore A (FDA)

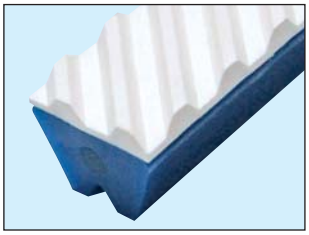


Supergrip Rubber blue
70° Shore A

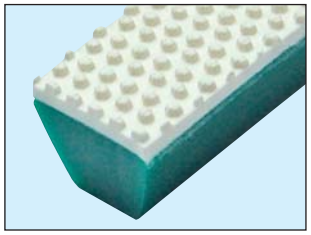


PU film coating
85° Shore A

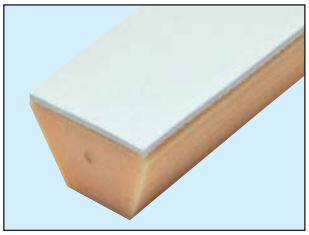
Saw tooth coating PVC white
approx. 60° Shore A (FDA)



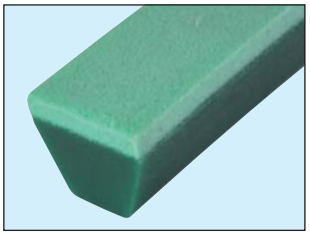
Herring bone coating PVC white
approx. 60° Shore A (FDA)



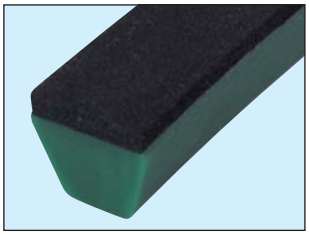
Knob coating PVC white
40° Shore A (FDA)



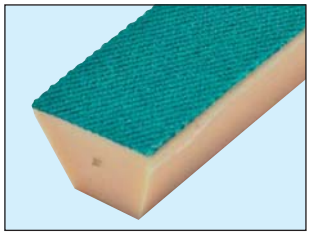
PVC-Film white
40° Shore A



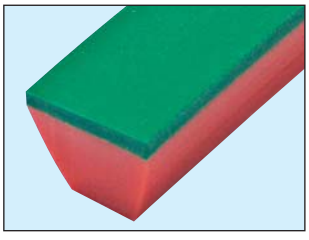
Sylomer L green
PU-Schaum



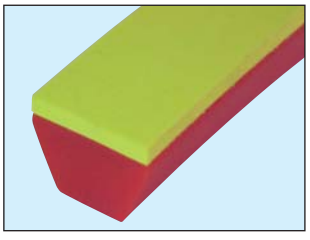
Porol black cell rubber



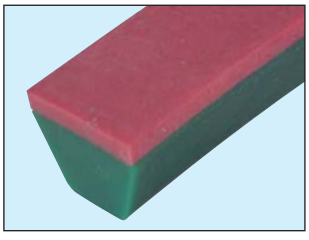
PA fabric



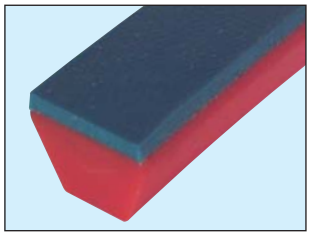
Elastomer green
60° Shore A (very adhesiv)



RP 400 Rubber
35° Shore A



Natural rubber
40° Shore A



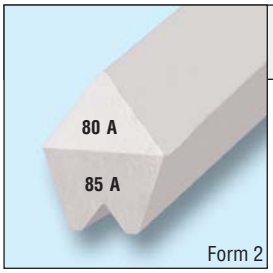
PVC blue
40° Shore A

Further coating options are possible. Let us know your applications! Phone: +1 630 521 9835

2-component extrusion

Form 2 with notch

2 C, PU 80 A / 85 A soft/hard



	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 21	2.22	26.6	30	100	180	7.1	40.0	88.0
C	22 x 28	3.75	45.0	30	100	220	8.7	67.5	148.5

* = coefficient of friction μ:1

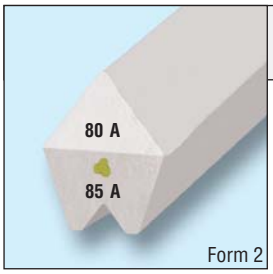
approx. 84/88° Shore A

• Recommended pretension 4 - 6 % | Working tension: approx. 18 daN/cm²

2-component extrusion

Form 2 with notch

2 C, PU 80 A / 85 A soft/hard, reinforced aramid fiber



	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	5/64	2.0	24.4	30	100	200	7.9	60.0	132.0
C	22 x 25	5/64	3.5	42.3	30	100	240	9.5	105.0	231.0

* = coefficient of friction μ:1

approx. 84/88° Shore A

• Recommended pretension 1 - 2 % | Working tension: approx. 30 daN/cm²

Form 2 without notch

PU 80 A transparent

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
C	22 x 25	3.65	43.8	30	100	170	6.7	54.75	120.5

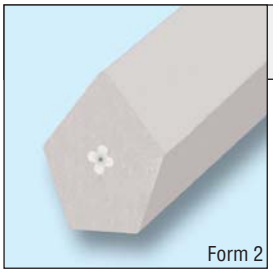
* = coefficient of friction μ:1

approx. 84° Shore A

• Recommended pretension 6 - 8 % | Working tension: approx. 15 daN/cm²

Form 2 without notch

PU 80 A transparent, reinforced Polyester

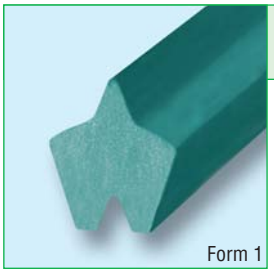


	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
C	22 x 25	5/64	3.65	43.8	30	100	180	7.1	102.2	224.8

* = coefficient of friction μ:1

approx. 84° Shore A

• Recommended pretension 1 - 2 % | Working tension: approx. 28 daN/cm²


Form 1

PU 85 A green

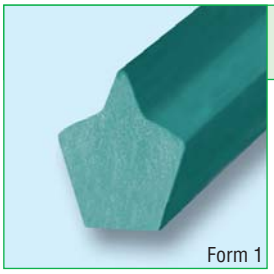
Form 1 with notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
A	13 x 15	1.10	13.3	30	100	110	4.3	19.8	43.6
B	17 x 19	1.82	21.8	30	100	150	5.9	32.7	71.9
C	22 x 24	2.95	35.4	30	100	190	7.5	53.1	116.8

approx. 88° Shore A

* = coefficient of friction μ:1

• Recommended pretension: 6 - 8 % | Working tension: approx. 18 daN/cm²


Form 1

PU 85 A green

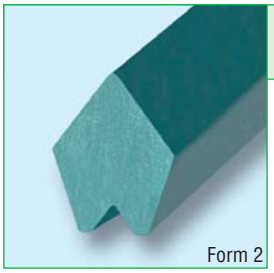
Form 1 without notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	1.95	23.6	30	100	160	6.3	35.12	77.3
C	22 x 24.5	3.26	39.1	30	100	200	7.9	58.7	129.1

approx. 88° Shore A

* = coefficient of friction μ:1

• Recommended pretension: 6 - 8 % | Working tension: approx. 18 daN/cm²


Form 2

PU 85 A green

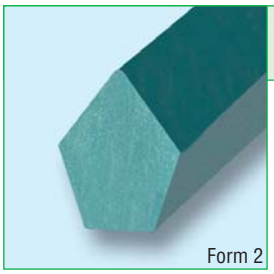
Form 2 with notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
A	13 x 16	1.4	15.0	30	100	140	5.5	25.2	55.4
B	17 x 21	2.22	26.6	30	100	175	6.9	40.0	88.0
C	22 x 28	3.75	45.0	30	100	220	8.7	67.5	148.5

approx. 88° Shore A

* = coefficient of friction μ:1

• Recommended pretension: 6 - 8 % | Working tension: approx. 18 daN/cm²


Form 2

PU 85 A green

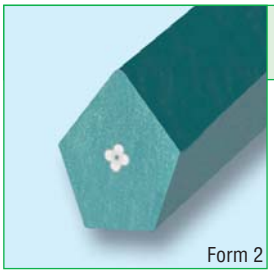
Form 2 without notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	2.13	25.6	30	100	180	7.1	38.3	73.3
C	22 x 25	3.65	43.8	30	100	230	9.1	65.7	144.5

approx. 88° Shore A

* = coefficient of friction μ:1

• Recommended pretension: 6 - 8 % | Working tension: approx. 18 daN/cm²


Form 2

PU 85 A green, reinforced Polyester

Form 2 without notch

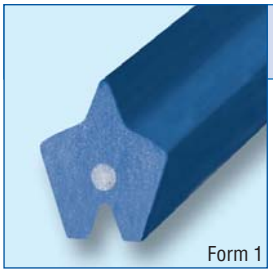
	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	1/8	2.13	25.6	30	100	180	7.1	72.4	159.3
C	22 x 25	5/32	3.65	43.8	30	100	250	9.8	124.1	273.0

approx. 88° Shore A

* = coefficient of friction μ:1

• Recommended pretension: 1 - 2 % | Working tension: approx. 34 daN/cm²

Form 1 with notch



PU 85 A blue, reinforced glass fiber PU, weldable

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm^2	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	5/32	1.82	21.8	30	100	230	9.1	54.6	120.1
C	22 x 24	5/32	2.95	35.4	30	100	270	10.7	88.5	194.7

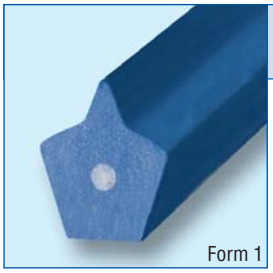
approx. 88° Shore A

* = coefficient of friction μ:1

• Recommended pretension: 1 - 2 % | Working tension: approx. 30 daN/cm^2

PATENT DE19900551C1 US Patent No. 6,468,656

Form 1 without notch



PU 85 A blue, reinforced glass fiber PU, weldable

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm^2	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	5/32	1.95	23.63	30	100	240	9.5	58.5	128.7
C	22 x 24.5	5/32	3.26	39.1	30	100	280	11.0	97.8	215.2

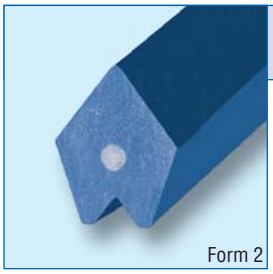
approx. 88° Shore A

* = coefficient of friction μ:1

• Recommended pretension: 1 - 2 % | Working tension: approx. 30 daN/cm^2

PATENT DE19900551C1 US Patent No. 6,468,656

Form 2 with notch



PU 85 A blue, reinforced glass fiber PU, weldable

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm^2	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 21	5/32	2.22	26.6	30	100	280	11.0	66.6	146.5
C	22 x 28	5/32	3.75	45.0	30	100	320	12.6	112.5	247.5

approx. 88° Shore A

* = coefficient of friction μ:1

• Recommended pretension: 1 - 2 % | Working tension: approx. 30 daN/cm^2

PATENT DE19900551C1 US Patent No. 6,468,656

Form 2 without notch

PU 85 A blue, reinforced glass fiber PU, weldable

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	Belt mm	Core ∅ inch	cm^2	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	5/32	2.13	25.6	30	100	290	11.4	63.9	140.6
C	22 x 25	5/32	3.65	43.8	30	100	330	13.0	109.5	240.9

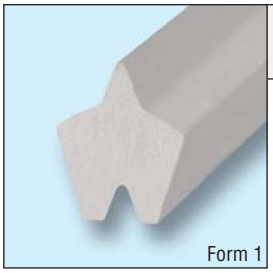
approx. 88° Shore A

* = coefficient of friction μ:1

• Recommended pretension: 1 - 2 % | Working tension: approx. 30 daN/cm^2

PATENT DE19900551C1 US Patent No. 6,468,656

Form 1 with notch



PU 90 A white

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
A	13 x 15	1.10	13.3	30	100	130	5.2	27.5	60.5
B	17 x 19	1.82	21.8	30	100	170	6.7	45.5	100.1
C	22 x 24	2.95	35.4	30	100	210	8.3	73.8	162.4

* = coefficient of friction μ:1

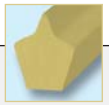
approx. 92° Shore A

• Recommended pretension: 4 - 6 % | Working tension: approx. 25 daN/cm²

Form 1 without notch

PU 90 A white

TPE 40 D dimension 22 x 24.5 on request



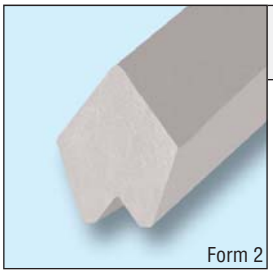
	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	1.95	23.6	30	100	180	7.1	48.8	107.3
C	22 x 24.5	3.26	39.1	30	100	230	9.1	81.5	179.3

* = coefficient of friction μ:1

approx. 92° Shore A

• Recommended pretension: 4 - 6 % | Working tension: approx. 25 daN/cm²

Form 2 with notch



PU 90 A white

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
A	13 x 16	1.24	15.0	30	100	160	6.3	31.0	68.2
B	17 x 21	2.22	26.6	30	100	200	7.8	55.5	122.1
C	22 x 28	3.75	45.0	30	100	240	9.5	93.7	206.1

* = coefficient of friction μ:1

approx. 92° Shore A

• Recommended pretension: 4 - 6 % | Working tension: approx. 25 daN/cm²

Form 2 without notch

PU 90 A white

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
	mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	2.13	25.6	30	100	210	8.3	53.3	117.2
C	22 x 25	3.65	43.8	30	100	250	9.8	91.3	200.8

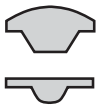
* = coefficient of friction μ:1

approx. 92° Shore A

• Recommended pretension: 4 - 6 % | Working tension: approx. 25 daN/cm²

Special profiles

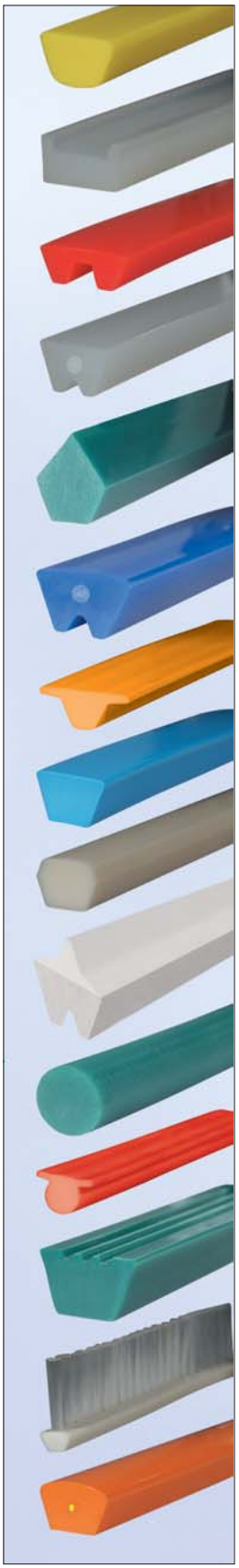
We manufacture profiles made of two components for you on request and therefore combine the advantages of two different materials within one product.
Please direct your inquiry to us.

Type/View	Description	Dimensions	Minimum purchase quantity	
	**belt edge**	13 x 26 mm	30 m (100 feet)*	
	**V-belts with vaulted surface**	8 x 5.5 mm 8 x 6.5 mm 17 x 11.5 mm 16.35 x 11.3 mm	50 m (164 feet)* 50 m (164 feet)* 50 m (164 feet)* 50 m (164 feet)*	see page 15 see page 27
	**Low Ridge-top V-belt**	12.5 x 11 mm	2000 m (6562 feet)	
	**Parallel B-belts**	21 x 8 mm, 30 x 8 mm (Twin A) 24 x 6.8 (Twin Z)	30 m (100 feet)* 30 m (100 feet)* 30 m (100 feet)*	see page 30
	**Prism V-belts**	13 x 7.5 mm	1000 m (3281 feet)	
	**Mould V-belt**	33 x 8 mm	30 m (100 feet)*	
	**Special Profiles**	14.3 x 6.5 x 9.5 mm 19.2 x 5.5 x 8.0 mm	1000 m (3281 feet)	

* Depending on current stock (availability, Shore-hardness, color)

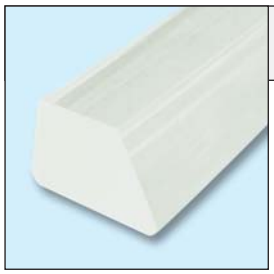
Thanks to our high tech equipped tool making shop, Special profiles can be produced in special colors or hardness with a 100 kg minimum.

Special profiles not shown may require new tooling which can be produced in house.



Type/View	Description	Dimensions	Minimum purchase quantity	
	T-Profile	20 x 8 mm	30 m (100 feet)*	see page 15
	T-Profile	25 x 5 x 5 mm	50 m (164 feet)*	see page 15
	T-Profile	8 x 5 x 5 mm	1000 m (3281 feet)	
	T-Profile	12.7 x 5.5 x 8.35 mm	1000 m (3281 feet)	
	T-Profile	9.5 x 3.8 x 3.1 mm	1000 m (3281 feet)	
	Round belts as T-profile	5.5 x 6.0 x 9 mm 8 x 8.75 x 12.5 mm	2000 m (6562 feet) 1000 m (3281 feet)	
	Double V-belts (Hexagon)	17 x 13.5 mm	500 m (1641 feet)	
	Square profile	11.8 x 11.8 mm	30ft 5inch/piece*	see page 15
	U-Profile	18 x 11.8 mm	30ft 5inch/piece*	see page 15
	Brush V-belt (TPE 55 D)	8 x 5 mm 10 x 6 mm 13 x 8 mm 17 x 11 mm	50 m (164 feet)* 50 m (164 feet)* 50 m (164 feet)* 50 m (164 feet)*	

* Depending on current stock (availability, Shore-hardness, color)



PU 70 A transparent smooth V-guide profile to weld on PU belts

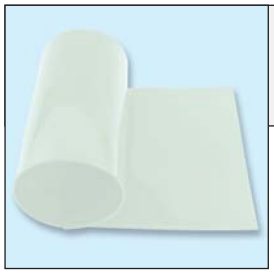
Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley ∅		Working Load/Belt*	
mm	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6 x 4 (Y)	0.19	2.3	150	500	30	1.2	1.9	4.2
8 x 5 (M)	0.32	4	150	500	35	1.4	3.2	7.0
10 x 6 (Z)	0.48	6	150	500	45	1.8	4.8	10.6
13 x 8 (A)	0.82	10	150	500	75	2.9	8.2	18.0
17 x 11 (B)	1.46	18	100	328	105	4.1	14.6	32.1
22 x 14 (C)	2.40	29	50	164	140	5.5	24.0	52.8

* = coefficient of friction μ:1

approx. 76° Shore A

- Recommended pretension 4 - 6 %
- Working tension approx. 10 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.70 | PE: approx. 0.40 | HDPE: approx. 0.35 | **FDA/EC/BfR-conform**



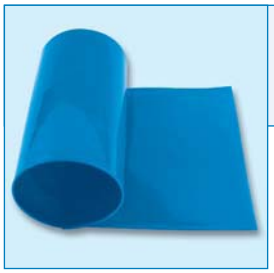
Flat belts PU 65 A transparent

Profile thickness		Profile width		Standard Roll	
mm	inch	mm	inch	ft	m
1.0	3/64	150	5.9	100	30
1.5	1/16	150	5.9	100	30
2.0	5/64	150	5.9	100	30
3.0	1/8	150	5.9	100	30
4.0	5/32	150	5.9	100	30
5.0	2/10	150	5.9	100	30

approx. 72° Shore A

- Recommended pretension 4 - 6 %
- Working tension approx. 10 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.70 | PE: approx. 0.40 | HDPE: approx. 0.35 | **FDA/EC/BfR-conform**



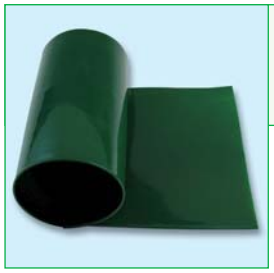
Flat belts PU 75 A sky blue

Profile thickness		Profile width		Standard Roll	
mm	inch	mm	inch	ft	m
1.0	3/64	150	5.9	100	30
1.5	1/16	150	5.9	100	30
2.0	5/64	150	5.9	100	30
3.0	1/8	150	5.9	100	30
4.0	5/32	150	5.9	100	30
5.0	2/10	150	5.9	100	30

approx. 80° Shore A

- Recommended pretension 4 - 6 %
- Working tension approx. 13 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.70 | PE: approx. 0.40 | HDPE: approx. 0.35 | **FDA/EC/BfR-conform**



Flat belts PU 85 A green

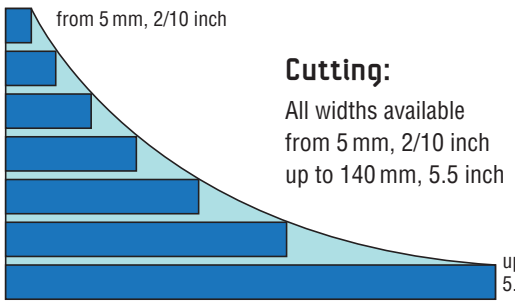
Profile thickness		Profile width		Standard Roll	
mm	inch	mm	inch	ft	m
1.0	3/64	150	5.9	100	30
1.5	1/16	150	5.9	100	30
2.0	5/64	150	5.9	100	30
3.0	1/8	150	5.9	100	30
4.0	5/32	150	5.9	100	30
5.0	2/10	150	5.9	100	30

approx. 88° Shore A

- Recommended pretension 4 - 6 %
- Working tension approx. 18 daN/cm²

Coefficient of Friction μ: Steel: approx. 0.60 | PE: approx. 0.30 | HDPE: approx. 0.25

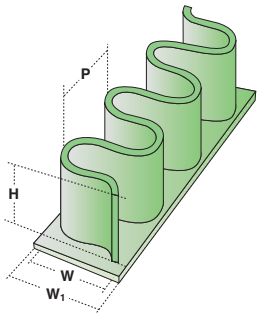
Polyester Flat belts
TPE 40 D and TPE 55 D
in preparation.



Cutting:

All widths available
from 5 mm, 2/10 inch
up to 140 mm, 5.5 inch

Sidewalls and Cleats



Sidewalls white

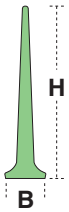
Type	Item number	Height (inch) H	Wave width (inches) W	Base width (inches) W1	Pitch of waves (inches) P	Weight lb/foot	Sidewalls pulley ∅ (inches)	Standard rail (foot)	Hardness (Shore A)
U20W	FBVH020W	0.78	0.91	1.30	1.00	0.13	3.15	328	85
U30W	FBVH030W	1.18	0.91	1.30	1.00	0.17	3.15	328	85
U30W	FBVH030WA	1.18	0.91	1.30	1.00	0.17	3.15	164	85
U40W	FBVH040W	1.57	0.91	1.30	1.00	0.22	3.94	328	85
U40W	FBVH040WA	1.57	0.91	1.30	1.00	0.22	3.94	164	85
U50W	FBVH050W	1.97	0.91	1.30	1.00	0.28	3.94	328	85
U60W	FBVH060W	2.36	1.77	2.17	2.00	0.34	3.94	328	85
U60W	FBVH060WA	2.36	1.77	2.17	2.00	0.34	3.94	164	85
U80W	FBVH080W	3.15	1.77	2.17	2.00	0.40	5.12	328	85
U100W	FBVH100W	3.94	1.77	2.17	2.00	0.47	6.30	164	85
U120W	FBVH120W	4.72	1.77	2.17	2.00	0.57	7.28	164	85

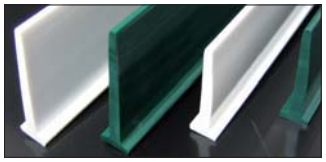
FDA/EC/BfR-conform

Sidewalls apple green/blue

Type	Item number	Height (inch) H	Wave width (inches) W	Base width (inches) W1	Pitch of waves (inches) P	Weight lb/foot	Sidewalls pulley ∅ (inches)	Standard rail (foot)	Hardness (Shore A)
U20COLOR	FBVH020G FBVH020L	0.78	0.91	1.30	1.00	0.13	3.15	328	85
U30COLOR	FBVH030G FBVH030L	1.18	0.91	1.30	1.00	0.17	3.15	328	85
U40COLOR	FBVH040G FBVH040L	1.57	0.91	1.30	1.00	0.22	3.94	328	85
U60COLOR	FBVH060G FBVH060L	2.36	1.77	2.17	2.00	0.34	3.94	328	85
U80COLOR	FBVH080G FBVH080L	3.15	1.77	2.17	2.00	0.40	5.12	328	85
U100COLOR	FBVH100G FBVH100L	3.94	1.77	2.17	2.00	0.47	6.30	164	85

FDA/EC/BfR-conform





PU cleats white/green/blue

Item number	Urethane cleats	Cleat type	Color	Height (inches)	Base width (inches)	Standard rail	Cleat lengths (feet per piece)	Hardness (Shore A)
FBCJ020WT	PU cleats	Thin cleat	White	0.79	0.32	80 pcs. = 787.40ft	9ft 10in	88
FBCJ030WT	PU cleats	Thin cleat	White	1.18	0.35	50 pcs. = 492.13ft	9ft 10in	88
FBCJ040WT	PU cleats	Thin cleat	White	1.57	0.35	48 pcs. = 472.44ft	9ft 10in	88
FBCJ020GT	PU cleats	Thin cleat	Green	0.79	0.32	80 pcs. = 787.40ft	9ft 10in	88
FBCJ030GT	PU cleats	Thin cleat	Green	1.18	0.35	50 pcs. = 492.13ft	9ft 10in	88
FBCJ040GT	PU cleats	Thin cleat	Green	1.57	0.35	48 pcs. = 472.44ft	9ft 10in	88
FBCJ020LT	PU cleats	Thin cleat	Blue	0.79	0.32	80 pcs. = 787.40ft	9ft 10in	88
FBCJ030LT	PU cleats	Thin cleat	Blue	1.18	0.35	50 pcs. = 492.13ft	9ft 10in	88
FBCJ040LT	PU cleats	Thin cleat	Blue	1.57	0.35	48 pcs. = 472.44ft	9ft 10in	88

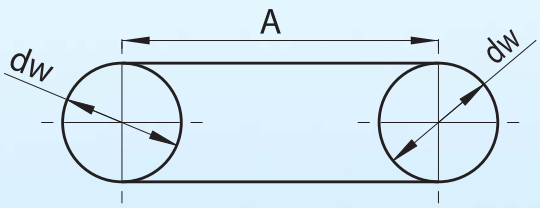
FDA/EC/BfR-conform

Tailoring – Example of calculation

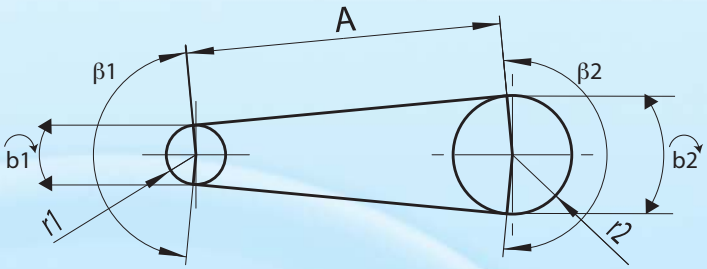
Express-Service

We are able to tailor Round- and V-belts of different lengths and diameters - within a few days and with high quality. Feel free to contact us.

We always need the production length Lf in mm/inch on your inquiry order.



Lf1



Lf2

Lf = production length
A = center distance
dw = effective diameter

r = radius
β (beta) = angle of wrap
b = arc length

Appropriate formula

$Lf_1 = \frac{dw \times \pi}{2} \times 2 + 2 \times A + \text{Belt } \varnothing$

Example 1

Lf1

Task

dw = 50 mm

A = 250 mm

Belt ∅: 5.00 mm

Calculation

$Lf_1 = \frac{(50\text{ mm} \times 3.142)}{2} \times 2 + 2 \times (250\text{ mm}) + \text{Belt } \varnothing$

$Lf_1 = 157.1\text{ mm} + 500\text{ mm}$

$= 657.1\text{ mm} + 5\text{ mm } \varnothing$

$= 662.1\text{ mm} - \textbf{Pretension} = Lf_1$

Appropriate formula

$Lf_2 = b1 + b2 + 2 \times A + \text{Belt } \varnothing$

$b1 = \frac{\pi}{180°} \times r1 \times \beta1$

$b2 = \frac{\pi}{180°} \times r2 \times \beta2$

Example 2

Lf2

Task

A = 250 mm Belt ∅: 5.00 mm

r1 = 20 mm

r2 = 25 mm

β1 = 170°

β2 = 190°

Calculation

$b1 = \frac{3.142}{180°} \times 20\text{ mm} \times 170°$

$= 59.35\text{ mm}$

$b2 = \frac{3.142}{180°} \times 25\text{ mm} \times 190°$

$= 82.91\text{ mm}$

$Lf_2 = 59.35\text{ mm} + 82.91\text{ mm} + 2 \times (250\text{ mm}) + 5\text{ mm } \varnothing$

$= 647.26\text{ mm} - \textbf{Pretension} = Lf_2$

Please see the recommended pretension at the corresponding belt quality

BEHAbelt
Made in Germany

Friction welding machine RS02 for Polyurethane profiles

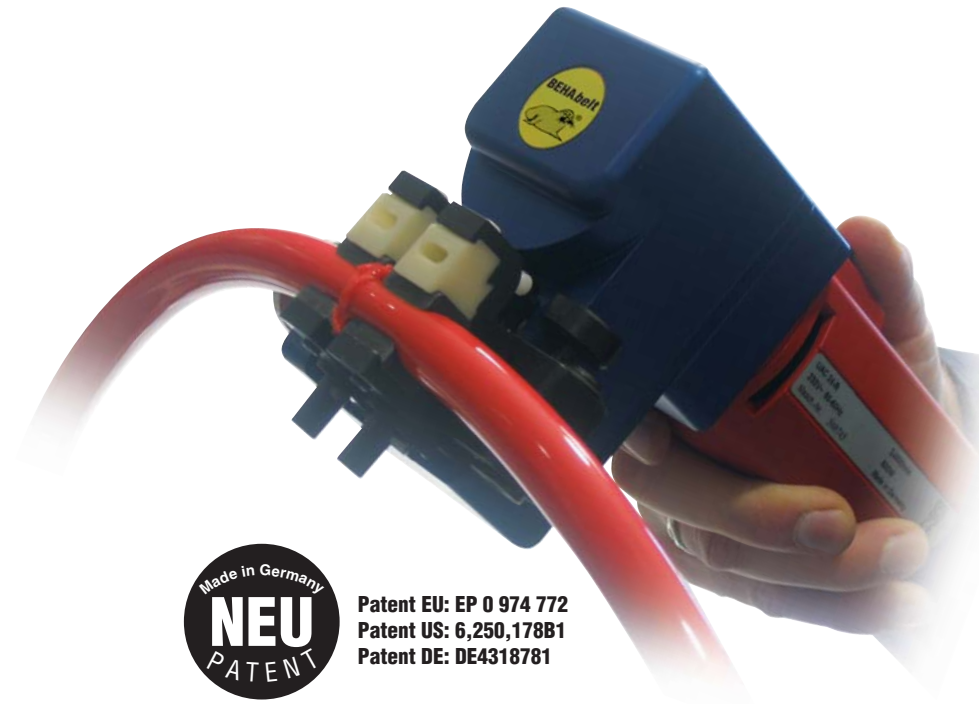
Machine consists of:

- Drive motor 115 Volt/AC with speed control and ON/OFF switch
- Excentric drive with automatic activated lift
- Clamping device with center lever and release button key
- Exchangeable profile jaws
- Adjusting knob for contact pressure

For Round belts from ∅ 5 to 20 mm (7/32 - 25/32 inch)

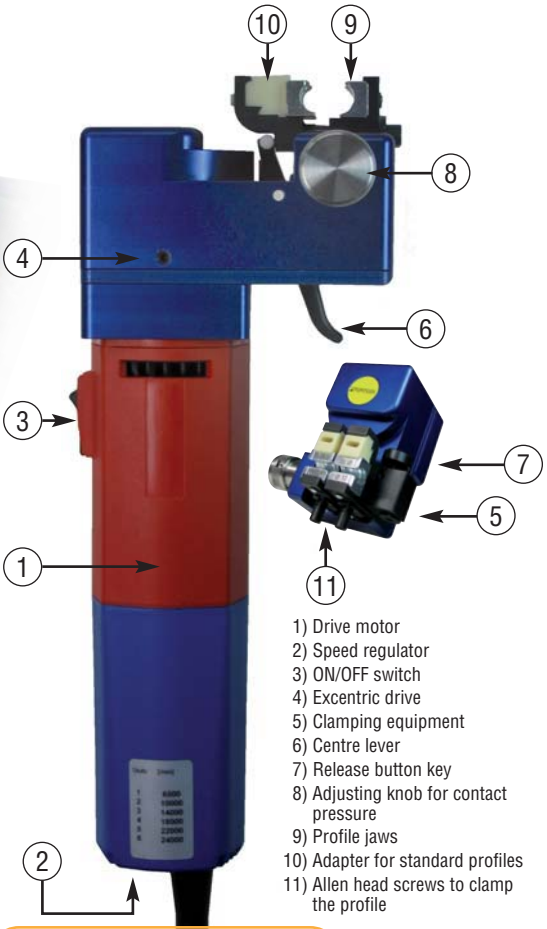
For V-belts from 6 x 4 to 22 x 14 mm (Y - C)

Special kit of profile jaws for special profiles upon request



Made in Germany NEU PATENT

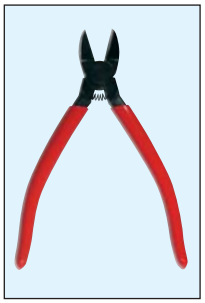
Patent EU: EP 0 974 772
Patent US: 6,250,178B1
Patent DE: DE4318781



1) Drive motor
2) Speed regulator
3) ON/OFF switch
4) Excentric drive
5) Clamping equipment
6) Centre lever
7) Release button key
8) Adjusting knob for contact pressure
9) Profile jaws
10) Adapter for standard profiles
11) Allen head screws to clamp the profile

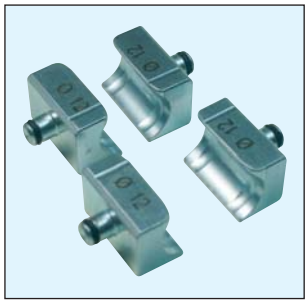
Carrying bag with hard foam inlay

Allen key



Edge cutter SE 02

Scissors AS 02



Kit of profile jaws

Scope of delivery

- Friction welding machine RS02
- 1 kit of standard profile jaws at your own choise
- 1 Allen key
- 1 Scissors AS 02
- 1 Edge cutter SE 02
- Carrying bag with hard foam inlay

Hotpress HP01

For highest quality

Hotpress HP01 for PU- and Polyester-profiles

Overlap welding

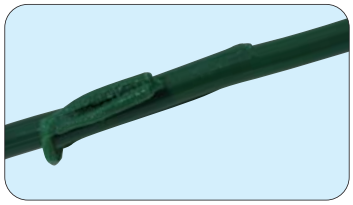
Controller guided hotpress for highest welding security for Polyurethane and Polyester belts

NEW

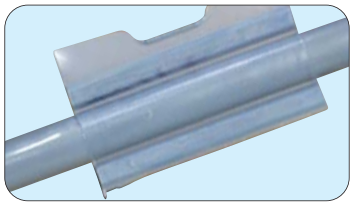
Overlap welding

HP01 press with programmable controller is now available with new mold for overlap welding!

- User-friendly and safe operation
- Accurate splice
- Especially suitable for profiles with reinforcement



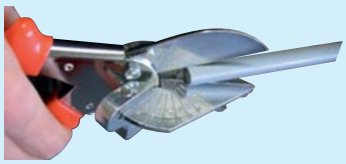
Conventional splice



Accurate and neat splice with the Hotpress HP01

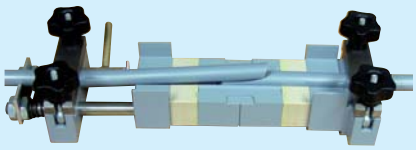
Perfect weld in only 5 steps

1



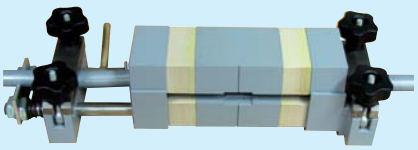
Cut both belt ends.

2



Insert the profile into the mold and clamp sidewise.

3



Close top of the mould and put it in the press.

4

Turn the knob and close the press.

5

Select the menu and press the start button.
Welding process is running fully automated.

Scope of delivery

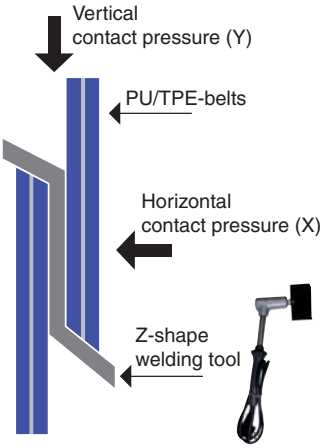
- Hotpress HP01
- Controller HP01
- Cooling unit 6.4l
- Edge cutter SE02
- Screw driver
- Scissors AS04
- Mould (optional and for additional charge)

BEHAbelt
Made in Germany

Guide clamp set FZ03 for all popular profiles

Overlap welding

NEW



General information

The guide clamp FZ03 is used for safe and accurate overlap welding of Round and V-belts made of Polyurethane and Polyester.

- Professional and safe overlap welding of Polyurethane and Polyester profiles.
- Due to its small size the FZ03 clamp can be used in confined spaces.
- With the handy FZ03-set you have all essential joining tools ready at your finger tips.
- The unique design allows for the splice to be compressed in horizontal and vertical direction.

Result

→ Accurate and very strong joint

→ Less failures in the splice area according to the overlap weld with additional vertical contact pressure.

Ready for all popular profiles

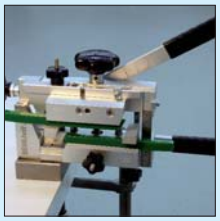
Perfect weld in only 5 steps

1

Select the clamping piece lockers and clamping pieces according to the profile and insert into the FZ03.

2

Cut belt ends according to the Z-shape of the welding paddle to the desired length and insert them overlapping into the FZ03.

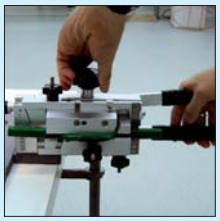


3

Melt the profile with the Z-shaped welding paddle.

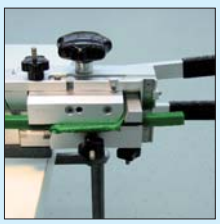
4

Remove the welding tool very fast and close the FZ03 again.



5

Remain the profile within the guide clamp to cool down. Afterwards remove the excess welding remains with the SE02 edge cutter.



Scope of delivery

1 pc. Aluminium box
1 pc. Guide clamp FZ03
1 pc. Edge cutter SE02
1 pc. table fixture
1 pc. Z-shape welding tool H15, 115 Volt
1 pc. Scissors with movable stop AS04
1 set of clamping pieces for Round belts ∅ 5/16-19/32 inch
1 set of clamping pieces for V-belts (A, B, C)

Multi TC
Temperature-controlled welding instrument

For two temperature ranges:
PU 290 °C / Polyester 240 °C

Description	Article. No.
Multi TC 230 V ~ 50/60 Hz	**FBWMTC230**

Welding instruments SG02 & SG03
for Polyurethane (PU) or Polyester

Welding instrument SG02
for Polyurethane (PU) 290 °C - 300 °C

Welding instrument SG03
for Polyester (TPE) 215 °C - 240 °C

Description	Article. No.
SG02 PU - 230 V	**FBWSG02**
SG03 HYT - 230 V	**FBWSG03**

Spare paddle Multi TC and TC72
for Multi TC or SG02/03

Spare paddle for Multi TC

Spare paddle for SG02/03 (TC 72)

Description	Article. No.
Spare paddle Multi TC or TC72	**FBWMTC1 / FBWTC72**

Voltage converter
for Multi TC, SG02 and SG03

Voltage converter for
Multi TC 120 V ~ 50/60 Hz

Description	Article. No.
Voltage converter 120 V ~ 50/60 Hz	**FBW00013010U**

Guide clamp FZ01
for Round- and V-belts

Handy and lightweigth for Round belts
up to ∅ 10 mm (7/16 inch) and
V-belts up to profile 10 (Z)

Description	Article. No.
Guide clamp FZ01	**FBWFZ01**

Guide clamp FZ02/1
for Round- and V-belts

Robust and accurate
for V-belts up to profile 32 (D)
and round belts from ∅ 8 mm (5/16 inch)

Description	Article. No.
Guide clamp FZ02/1	**FBWFZ02/1**

Guide clamp set
Guide clamp and table fixture

Set consisting of Guide clamp FZ02/1
and table fixture TB02

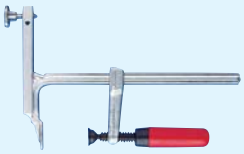
Description	Article. No.
Guide clamp set	**FBWFZSET01**

Belt tensioner RSH01 & RSH02
for Round and V-belts

Belt tensioner with attachment
for pre-tensioning of Round
and V-belts

Description	Article. No.
Design RSH01 450 mm (18“) clamp travel, suitable up to approx. 3 m belt length	**FBWRSH01** (450 mm)
Design RSH02 900 mm (36“) clamp travel, suitable up to approx. 9 m belt length	**FBWRSH02** (900 mm)

Table fixture TB02
for guide clamp FZ02/1



For guide clamp FZ02/1

Description	Article. No.
Table fixture TB02	**FBWTB02**

Scissors AS02
Scissors with stop

For round belts up to ∅ 12 mm (15/32 inch)

Description	Article. No.
Scissors AS02	**FBWAS02**

Scissors AS03
Scissors with stop

For Round- and V-belts

For 90° cut and mitre cut

Description	Article. No.
Scissors AS03	**FBWAS03**

Scissors AS04
Scissors with movable angular stop

For 45°, 60°, 75°, 90°, 105°,
120° and 135°-cuts

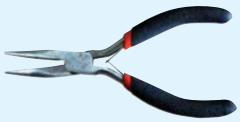
Description	Article. No.
Scissors AS04	**FBWAS04**

Edge cutter SE 02
with special grinding

To remove the welding bead

Description	Article. No.
Edge cutter SE02	**FBWSE02**

Pliers SZ01



Pliers SZ01 for quick joining of
Hollow round belts with fasteners.
Optional: Corresponding fasteners for diameter
3/16, 1/4, 5/16, 3/8, 1/2, 19/32 inch available.

Description	Article. No.
Pliers SZ01	**FBWSZ01**

HDT Digital thermometer 6001

Temperature range:
-50° C...1350° C/-50° F...1999° F
Optional: Rubber protective covering

Description	Article. No.
HDT Digital thermometer 6001	**FBW00006001D**
HDT Rubber protective covering	**FBW00001101D**

Temperature probe Type 115
Surface rapid probe

Temperature range:
-0° C...400° C

Description	Article. No.
Type 115/9035	**FBW00009035D**

Aluminium box for Round-/ V-belt tools

Unloaded box with foam inlay - Tools of choice

Hard foam inlay adequate for the following devices:

· Welding Instrument (Multi TC, SG02 or SG03)
· Guide clamp FZ02/1
· Guide clamp FZ01
· Edge cutter SE02
· Scissors AS03
· Surface probe type 115
· HDT Digital thermometer 6001

Dimensions (W x H x D): 46 x 16 x 36 cm

Description
Aluminium box for round-/ V-belt tools

Welding kit and Carrying bag

for small profiles

Composed of:
· 2 pcs. guide clamps FZ01
· optional: 1 pc. welding instrument SG02, SG03 or Multi TC
· optional: 1 pc. edge cutter SE02 or scissors AS02

Dimensions (W x H x D): 31 x 20 x 5 cm

Description
Welding kit and Carrying bag

Multi TC

Temperature-controlled welding instrument

The top-selling welding paddle tool worldwide!

Polyurethane and Polyester

290°C **240°C**

The BEHAbelt Multi TC is the only paddle-welding tool for Polyurethane and Polyester that keeps the optimum welding temperature, thanks to his electronic temperature control. Therefore, you always get the best welding security.

Advantages at a glance:

- Very fast heating- up period
- Visual display for achievement of the optimum welding temperature
- Small, handy and robust welding instrument
- For two temperature ranges: Polyurethane and Polyester
- Continuous welding temperature trough temperature control even at long-term operation
- Teflon coated welding paddle for easy cleaning

Description
Multi TC 230 V ~ 50/60 Hz

Article. No.
FBWMTC230

BEHAbelt
Made in Germany

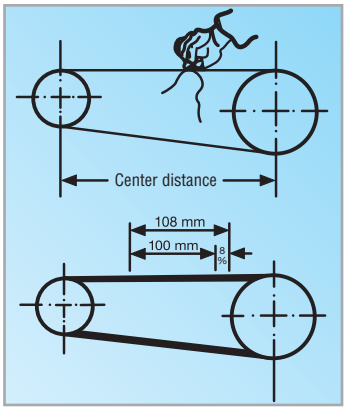
www.behabelt.com

...is always worth a visit!

24-hours information

For detailed instruction manuals for welding of PU- and Polyester profiles please visit the 'Downloads' part on our website www.behabelt.com

Instruction manual FZ03 and HP01 on request.



Finding the correct belt length

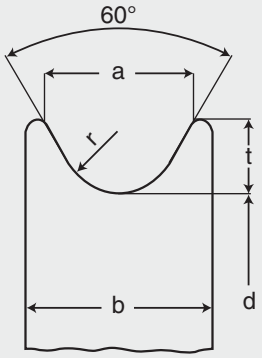
Use a string or steel tape to make measurements after bypassing gravity or springloaded take-up. Distance between pulleys should remain fixed. To obtain efficient energy transfer and good belt life, the belt pretension should be 1 to 8%, based on hardness and length of the belt. To verify pretension on an installed belt, apply two markings separated by 10 inches (or 100 mm) on the belt when it is free from tension. The increase of space between the markers after mounting the belt in tenths of an inch (or mm) provides a measure of the pretension in percent.

Connect Quick-Joining for Quick Replacements

The belts with diameters of 3/16, 1/4, 5/16, 3/8, 1/2, 19/32 inch in the qualities PU 75 A, PU 85 A und PU 90 A are also available as hollow belts, shaped as tubes with reinforced wall thickness. They can be connected via metal connectors, as shown in the picture. For a high number of drive and conveyor problems, when the belts are not subject to heavy loads or high speeds, this type of joining represents a good alternative to the welded junction. (Make sure that the minimum pulley diameter and the pulley form are correct).

When applying the metal nipple, special care has to be taken not to damage the sharp edges. This would restrict the tensile strength of the junction. Therefore, we recommend the use of pointed pliers.

Pulleys for Round belts



Recommended pulley dimensions – dimensions in mm

Belt ∅	2	3	4	4.8	5	6	6.3	7	8	9.5	10	12	12.5	15	18	20
a	4.5	5.5	7	8	8	10	10	11	12	14.5	15	18	18.5	23	28	30
b	6.5	8	10	12	12	14	14	15	16	19	19	22	23.0	27	32	36
t	2.5	3	3.5	4	4	5	5	5.5	6	7	7.5	9	9	12	14	15
r	1.4	1.9	2.5	3	3	3.5	3.5	4	4.5	5.5	5.5	6.5	7	8	9.5	11

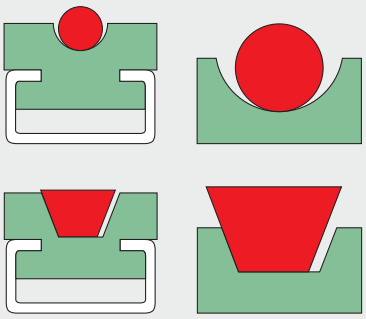
Please select the minimum pulley diameter according to the different PU/Polyester qualities.

Guide rails to support Round- and V-belts

We recommend to support the belts by supporting rails or with reels. This way you can avoid efficiently bending under load of the material to be conveyed. For a better lateral guiding especially with long conveyors the reels or supporting rails are to be provided with a groove.

These grooves must be constructed in a way so that the belt is lying at the bottom of the groove and can only run laterally.

The guide rails shall be made of low coefficient material (PE-HDPE). We can recommend material and supliers to help with your design.



Special Made Types

We manufacture your desired profile with maximum accuracy and quality. We extrude our slide profiles as materials sold by metre.

Reinforcement breaking load: daN/lbs

Diameter mm (inch)	Glass fiber PU Working load max. 10 % Breaking tension approx. < 10%	Aramid Working load < 1.5 % Breaking tension approx. 4%	Polyester Working load < 10 % Breaking tension approx. 12%	Steel
1.5 (7/128)	–	approx. 180 daN	approx. 100 daN	–
2.0 (5/64)	–	approx. 300 daN	approx. 140 daN	–
2.5 (1/10)	–	–	–	approx. 355 daN
3.0 (1/8)	approx. 40 daN	approx. 560 daN	approx. 390 daN	–
4.0 (5/32)	approx. 69 daN	–	approx. 500 daN	–
Note	**„PATENT“ - weldable** Recommendation: Butt welding	not weldable Recommendation: Overlap welding	not weldable Recommendation: Overlap welding	Recommendation: Crimping

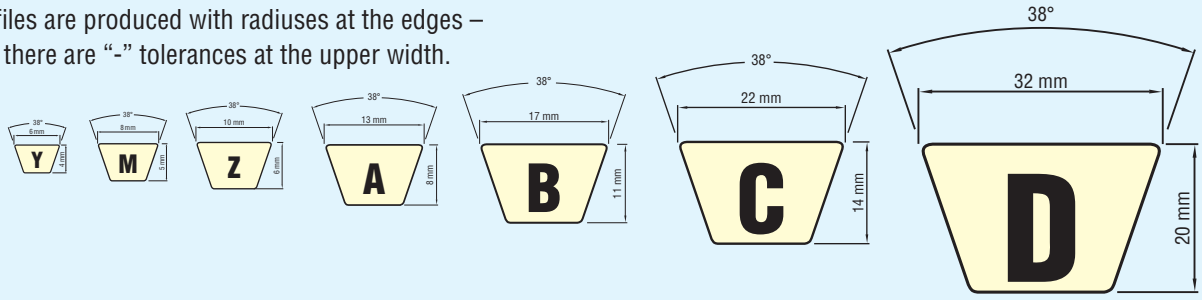
Adhesion factor and V-belt dimensions

Adhesion factor µ

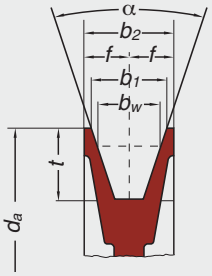
Quality	Al	Steel	Glass	wood	PE – Polyethylene	HDPE – Polyethylene-Superfinish
PU 65 A	0.90	0.70	0.60	0.80	0.40	0.35
PU 75 A	0.85	0.70	0.50	0.70	0.40	0.35
PU 80 A	0.80	0.65	0.45	0.65	0.35	0.30
PU 85 A	0.75	0.60	0.40	0.60	0.30	0.25
PU 90 A	0.70	0.50	0.30	0.45	0.30	0.25
PU 95 A	0.65	0.45	0.25	0.40	0.25	0.20
Polyester TPE 40 D	0.70	0.50	0.30	0.45	0.30	0.25
Polyester TPE 55 D	0.45	0.35	0.30	0.35	0.15	0.10
Polyester TPE 63 D	0.45	0.35	0.30	0.35	0.15	0.10

V-belt dimensions according to DIN 2215/ISO

All V-profiles are produced with radiuses at the edges – therefore there are "-" tolerances at the upper width.



Profile acc. DIN 2215		6	8	10	13	17	22	32
World standard acc. to ISO		Y	M	Z	A	B	C	D
Upper width b (mm)		6	8	10	13	17	22	32
Height h (mm)		4	5	6	8	11	14	20
Lower width u (mm)		3.3	4.55	5.9	7.5	9.4	12.35	18.25
Calculation of the belt length La and Lw if the inner length Li is determined or known	La = Li La = Lw	+25 +10	+31 +12	+38 +16	+50 +20	+69 +29	+88 +30	+126 +51
	Lw = Li Lw = La	+15 -10	+19 -12	+22 -16	+30 -20	+40 -29	+58 -30	+75 -51
Recommended belt speed max. m/s	PU 75 A	10	10	10	10	10	10	10
	PU 80 A	10	10	10	10	10	10	10
	PU 85 A	15	15	15	15	15	15	15
	PU 90 A	15	15	15	15	15	15	15
	Polyester 55 D	20	20	20	20	20	20	20
Weight	approx. kg/m	0.023	0.040	0.060	0.100	0.180	0.290	0.620



For BEHAbelt V-belts according to DIN 2215 V-belt pulleys according to DIN 2217 need to be used.

The production length Lf results of the effective length Lw minus pretension.

Calculation:

$$v = \frac{dw \times n_1}{19100}$$

v = belt speed (m/s)

n_1 = speed of the smaller pulley (min. –1)

dw = effective diameter of the smaller pulley (mm)

Properties, Fields of application

For the different fields of application BEHAbelt has developed a range of belt profiles to achieve an economical conveying of goods.

Properties

The BEHAbelt transport belts are used instead of complex conveying belts. They are running individually or in several lines one beside the other and transport the goods to be conveyed horizontally and even in positive and negative inclinations.

Fields of application

Please find the following examples of the variety of fields of applications, where BEHAbelt transport belts are successfully used:

Drive pulley and deflection pulley

The drive pulleys and deflection pulleys should be formed as disc pulleys, DIN 2217 or pulleys for round belts (refer to BEHAbelt recommendation page 48 and 49). Please choose the minimum pulley diameters according to the values listed in tables.

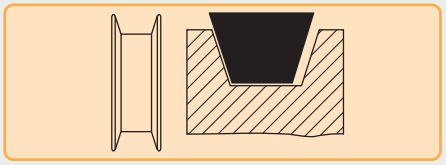
Due to the relatively slow conveying speed – 1 m per second according to experience – we have selected according to the material quality (shore hardness).

As the goods are being drawn, the drive pulley is to be provided at the end of the conveyor.

Supporting rolls / supporting rails

In order that the belts which are loaded with the goods to be conveyed will not bend in most cases supporting rolls or supporting rails are required. Supporting rolls may be stitchers or pulleys. The V-belt groove is to be performed in a way so that the transport belt is being supported at the bottom of the groove and can only touch the pulley with one side and will not jam in the groove.

The diameter and number of the required supporting rolls is depending on the length of the haulway as well as on the weight and dimensions of the goods to be conveyed. Supporting rails which are mainly made of plastics are designed smooth or with a keyway for a better guiding of the transport belt. The dimensions of the groove are to be performed at a width that the belt will not jam (see illustration).



The supporting or guiding rails should be made of materials with good sliding qualities; PE-HDPE

Pretension

In order to ensure a functional work of the transport installation, a suitable pretension of the belts is required. We therefore recommend an elongation factor of about 1 to 8 % according to the belt quality (Shore hardness) and belt length.

TO CONVEY:

- **Doors, parts of cabinets, veneer and plastic plats for the wood-working**
- **electronic devices, circuit boards, in production lines**
- **Tiles, washed-out concrete slabs and pavement in concrete factories**
- **Floor tiles of the ceramics industry, flat glass**
- **Car body parts and sharp-edged sheet plats of the car industry**
- **Paperboard containers and boxes of the packing industry, mail and parcel sending**
- **Pastries, milk products, meat, fish, fruits, vegetables of the food industry**

Further applications:

- **Paper processing installations of the printing industry**
- **Drive of roller conveyors in logistics centres**
- **For can-, tin and bottle transportation systems**
- **Harvesters and sorting machines for farming**

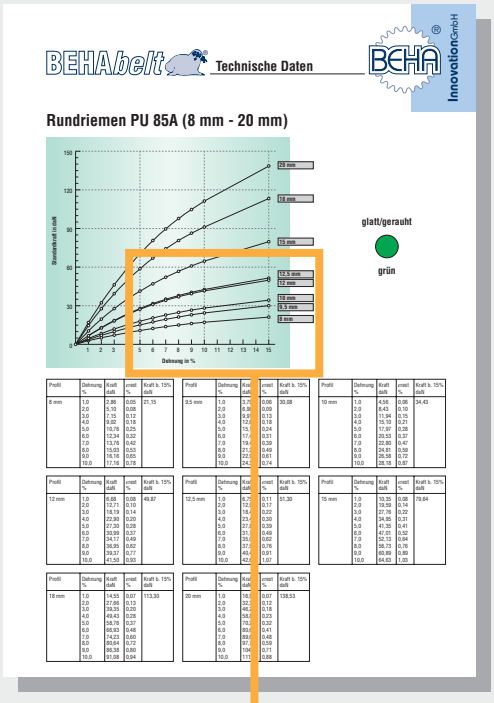
BEHAbelt Made in Germany

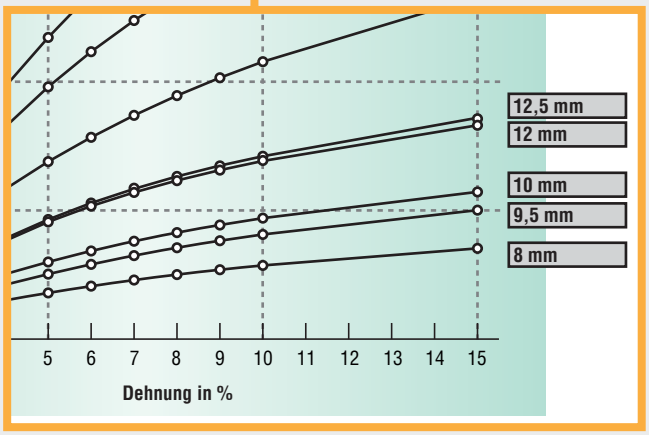
Technical data on tension-lengthening diagrams

upon request

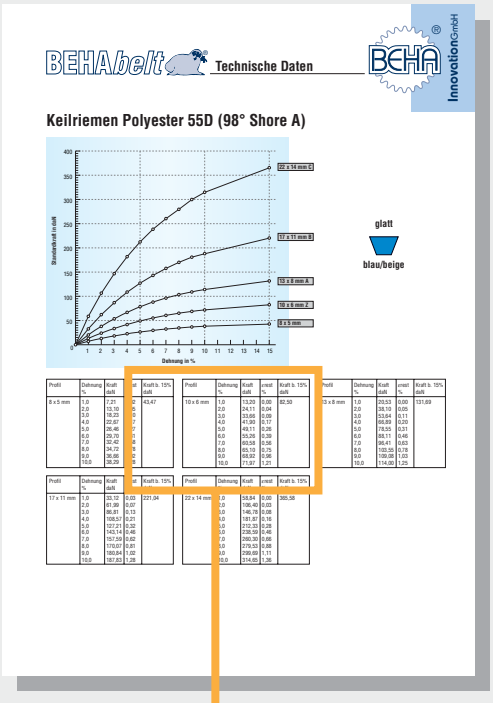
The tension-lengthening diagrams for special calculations of belts are available for all BEHAbelt Round and V-belt qualities of our standard delivery range.

Example:
Round belt PU 85 A
(approx. 88° Shore A)





Example:
V-belt Polyester TPE 55 D
(approx. 100° Shore A)



Tension at 15% daN	Profile	Elongation %	Tension daN	resid.ε %	Tension at 15% daN
43,47	10 x 6 mm	1,0	13,20	0,00	82,50
		2,0	24,11	0,04	
		3,0	33,66	0,09	
		4,0	41,90	0,17	
		5,0	49,11	0,26	
		6,0	55,26	0,39	
		7,0	60,58	0,56	
		8,0	65,10	0,75	
		9,0	68,92	0,96	
		10,0	71,97	1,21	

Tension at 15% daN	Profile	Elongation %	Tension daN	resid.ε %	Tension at 15% daN

Calculation for PU-Polyester Round and V-belts (simplified)

a) Determine the load (kg) on the total conveyor.

b) Please observe the minimum effective diameter of the pulley made of PU/Polyester material at required belt cross section according to our technical recommendations.

c) Support the belt conveyer on the load carrying side. Coefficient of friction μ of the sliding surface with steel, PE, HDPE, rollers or rolls or any other support needs to be determined.

The calculation for round, V- or special profiles is always identical.

$$\text{Allowed load kg} = \frac{\text{material cross section cm}^2 \text{ x working tension of the material quality daN/cm}^2}{\text{coefficient of friction } \mu}$$

$$\text{Example} = \frac{\text{profile 17 x 11 material cross section: 1.46 cm}^2 \text{ x working tension force PU 85 A : 18 daN/cm}^2}{\text{coefficient of friction HDPE 0.25}} = 105 \text{ kg}$$

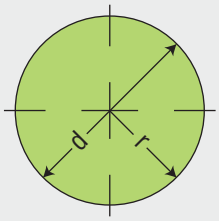
You will find the values which we used for this calculation in the chapters of the corresponding profile charts.

The calculated allowed load always corresponds to the highest load of the belt cross section and material quality for the recommended pretension (highest value).

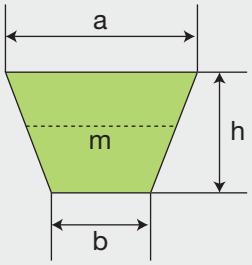
ATTENTION: The adhesion factors may change to negative values due to contamination or wear. The tensioning of the belts is very important.

NOTE: In order to perform detailed calculations, we recommend you to have a look at Roloff/Matek “machine elements” – Internet: www.roloff-matek.de

Calculation of the cross section of round and V-belts



$$A_{cm^2} = \frac{\pi}{4} \times d^2 \approx 0{,}785 \times d^2$$



$$A_{cm^2} = \frac{a+b}{2} \times h = m \times h$$

$$m = \frac{a+b}{2}$$

Select the belt cross section or the number of required belts

$$\text{Belt cross section} = \frac{\text{total load kg x coefficient of friction } \mu}{\text{Working tension force PU-type per cm}^2}$$

$$\text{Example} = \frac{\text{conveying weight 180 kg x coefficient of friction HDPE 0.25}}{\text{Working tension PU 85 A 18 daN/cm}^2} = 2.50\,\text{cm}^2 \text{ traction}$$

Example of the assignment: transport installation for empty beer crates

Total conveying weight max.:	180 kg ✓
Centre distance conveying installation:	7 m
Effective diameter of pulleys:	140 mm
Considered belt quality:	PU 85 A (18 daN/cm²)
Required number of belts:	2 pieces V-belts
Support of the belts:	HDPE guiding friction value μ 0.25
Required belt cross section according to the calculation:	2.50 cm²

Refer to the V-belt table on page 26 PU 85 A green smooth

Results in:

2 pieces V-belts profile 17 x 11 PU 85 A

Belt cross section 1.46 cm² x 2 = 2.92 cm²

$$\text{Working tension} = \frac{\text{26 daN/belt PU 85 A}}{\text{coefficient of friction HDPE 0.25}} = 104\,\text{kg/belt x 2} = 208\,\text{kg}$$ ✓

Selection of the belt quality

- It generally takes place for the calculated belt cross sections cm² with the working tension of the belt daN/cm² according to the quality as well as to the coefficient of friction μ of the belt support.
- The traction force is increased by more pretension; thus the belt can convey a higher load.
- The sliding surfaces (support) of the belts should generally have a low adhesion factor μ.
- For the product storage on a conveyer the traction force of the belt needs to be divided by the average value of both coefficient of friction μ.

$$\text{Adhesion factor } \mu \text{ NEW} = \frac{\text{coefficient of friction product + coefficient of friction sliding surface}}{2}$$

Production tolerances

Production tolerances BEHAbelt Round- and V-belts

Description	Dimension mm	(inch)	Tolerance ≈ mm (inch)
Round belt			
Type PU 75 A / 80 A	∅ 2 - ∅ 8	(∅ 5/64 - 5/16)	± 0.2 (± 1/128)
Type PU 75 A / 80 A	∅ 9 - ∅ 15	(∅ 45/128 - 19/32)	± 0.3 –
Type PU 85 A / 90 A / 95 A	∅ 2 - ∅ 8	(∅ 5/64 - 5/16)	± 0.2 (± 1/128)
Type PU 85 A / 90 A / 95 A	∅ 9 - ∅ 15	(∅ 45/128 - 19/32)	± 0.3 –
Type PU 85 A / 90 A / 95 A	∅ 18 - ∅ 20	(∅ 3/4 - 25/32)	± 0.5 (± 1/64)
Type Polyester TPE 40 D / 55 D	∅ 3 - ∅ 8	(∅ 1/8 - 5/16)	± 0.2 (± 1/128)
Type Polyester TPE 40 D / 55 D	∅ 9 - ∅ 15	(∅ 45/128 - 19/32)	± 0.3 –
Type Polyester TPE 63 D	∅ 6.3, ∅ 9.5, ∅ 12.5	(∅ 1/4 - 3/8 - 1/2)	± 0.3 –

Round belts can be produced upon request and for corresponding demand in "-" or "+"-tolerance.

Description	Dimension mm	(ISO)	Tolerance ≈ mm (inch)
V-belts acc. to DIN 2215			0-width height
Type PU 65 A	6 - 8 - 10 - 13 - 17 - 22	(Y - M - Z - A - B - C)	– 0.5 (-1/64) + 0.5 (+1/64)
Type PU 75 A	6 - 8 - 10 - 13 - 17 - 22 - 32	(Y - M - Z - A - B - C - D)	– 0.5 (-1/64) + 0.5 (+1/64)
Type PU 80 A	6 - 8 - 10 - 13 - 17 - 22 - 32	(Y - M - Z - A - B - C - D)	– 0.5 (-1/64) + 0.5 (+1/64)
Type PU 85 A	6 - 8 - 10 - 13 - 17 - 22 - 32	(Y - M - Z - A - B - C - D)	– 0.5 (-1/64) + 0.5 (+1/64)
Type PU 90 A	8 - 10 - 13 - 17 - 22 - 32	(M - Z - A - B - C - D)	– 0.5 (-1/64) + 0.5 (+1/64)
Type Polyester TPE 40 D	8 - 10 - 13 - 17 - 22	(M - Z - A - B - C)	– 0.5 (-1/64) + 0.5 (+1/64)
Type Polyester TPE 55 D	8 - 10 - 13 - 17 - 22	(M - Z - A - B - C)	– 0.5 (-1/64) + 0.5 (+1/64)

BEHAbelt® Made in Germany

Properties thermoplastic PU elastomers

Property	Unit	DIN	ISO	PU 80 A	PU 85 A	PU 90 A
Hardness	Shore A	53505	868	82	88	93
Hardness	Shore D	53505	868		37	41
Density	g/cm³	53479	1183	1.19	1.19	1.20
Tensile strength	MPa	53504	37	50	50	55
Elongation at break	%	53504	37	650	650	550
Tension at 20 % elongation	MPa	53504	37	2.5	3.5	7
Tension at 100 % elongation	MPa	53504	37	4.5	6	9
Tension at 300 % elongation	MPa	53504	37	8,5	13	15
Tear-growth resistance	N/mm	53515	34	65	75	95
Abrasion	mm³	53516	4649	30	30	25
Compression set at room temperature	%	DIN EN ISO	815	25	25	25
Compression at 70 °C	%	DIN EN ISO	815	35	40	40
Tensile strength after 21 days of stocking in water at 80 °C	MPa	53504	37	35	38	40
Elongation at break after 21 days of stocking in water at 80 °C	%	53504	37	650	650	550
Notch impact value (Charpy) +23 °C	kJ/m²	DIN EN ISO	179	kB	kB	kB
Notch impact strength (Charpy) -30 °C	kJ/m²	DIN EN ISO	179	kB	kB	kB
Burning behaviour		UL 94				

according to manufacturer's specifications

Properties thermoplastic Polyester elastomers

Properties	Test conditions	ISO	Unit	TPE 40 D	TPE 55 D
Rupture stress	50 mm/min	527-1/-2	MPa	30	42
Breaking elongation	50 mm/min	527-1/-2	%	420	500
Tension at 5 % elongation	50 mm/min	527-1/-2	MPa	2.4	6.9
Tension 10 % elongation	50 mm/min	527-1/-2	MPa	3.6	10.3
Tensile module	1 mm/min	527-1/-2	MPa	53	180
Bending module	-40°C 23°C 100°C	178	MPa	155 62 27	760 180 110
Notch impact strength[2)]	-40°C 23°C	ASTM D256 Methode A	J/m	No rupture No rupture	170 No rupture
Melting temperature at DSC	10°K/min	3146 C	°C	150	203
Temperature of deformation resistance	0.45 MPa 1.8 MPa		75-1/2 °C °C	50	70 45
Vicat softening temperature	10 N	306	°C	110	180
Flow rate of liquefied material	Temperature/load	1133	g/10 min °C/kg	5.3 190/2.16	7.5 220/2.16
Density		1183	kg/m³	1150	1200
Water absorption	Saturation, storing of water	Same as ISO 62	%	0.7	0.6
Hardness, Shore D	(Highest value) 15 s	ASTM D2240 868	Points	40 39	55 52
Tear resistance at changing, bending stress Ross (punshed)		ASTM D1052	Cycles up to 5 x Cutting	$>10^6$ $>10^6$	5×10^5 $>5 \times 10^5$
Abrasion resistance	Taber, CS-17 pulley Taber, H-18 pulley	ASTM D1044	mg/1000 Turns	3 100	6 64
Breaking strength	2 mm, form C	34	kN/m	101	158

according to manufacturer's specifications

Indicate your application

As your competent partner we like to help out any way we can and support you with our technical advice.

Therefore we need the following details and indications.

Feel free to contact us via telephone, E-mail or fax and we like to provide further assistance.

Contact:

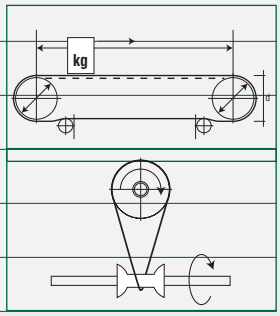
E-Mail: usa@behabelt.com
Phone: +1 630 521 9835
Fax: +1 630 521 9836

In order to perform the appropriate the dimensioning of belts for you, please make the following indications

Short symbol	Description	Unit	Your Indication	
A	Centre distance of the conveying way	inch		
V	Conveying speed	m/sec.		
X	Tension device (if existing)	inch		
DW	Effective diameter of pulleys of all used pulleys	inch	DW1	DW2…
α1	Angle of rape small pulleys	° (Degree)		
α2	Angle of rape large pulleys	° (Degree)		
Rμ	Coefficient of friction for belt support Sliding surface of rolls	μ		
G	Total weight of the goods to be conveyed	max. kg		

Description of the installation: Environment of the installation

(Indications concerning e.g. temperature, humidity, dirt, chemicals, …)



Fax template

BEHAbelt
Made in Germany

☐ Order ☐ Request

To: (Please fill in recipien)

Sender:

Firm:	Dep.:
Name:	Phone:
Street:	Fax:
ZIP-Code/City:	E-Mail:
Customer-No:	Your wholesaler:

Quantity m – pc.	**Profile dimension**	**Material quality/ Description**	**Production length/ Lf in mm**	**Price/€/net m - pc.**

Delivery address (if other than sender)

Firm:	Street:
	ZIP-Code/City:

Date | Signature

Terms and conditions

Online-Service

Our terms and conditions can be found on our homepage under the following link:
http://www.behabelt.com/terms/t&c.pdf

Your notes

Professional welding technique for PU

EU-Patent: EP 0 974 772
US-Patent: 6,250,178B1

Friction welding machine RS02

The handy “manual welding machine” which allows perfect welding of PU belts.

weight
1 kilogram = 2.2 lbs

force
1 daN (decaNewton) = 2.2 lbs.

length
1 Meter = 3.28 feet

BEHAbelt profiles are available at your specialist dealer or our area representatives.

Your specialist dealer/system supplier

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