

BEHAelt****®
Made in Germany



DELIVERY PROGRAMME

**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

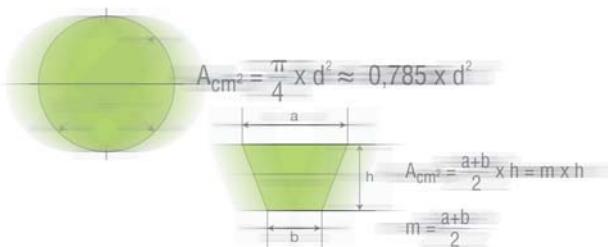
For the benefit of technical enhancements respectively adoption to modified standards or provisions are provided.

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



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About us

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

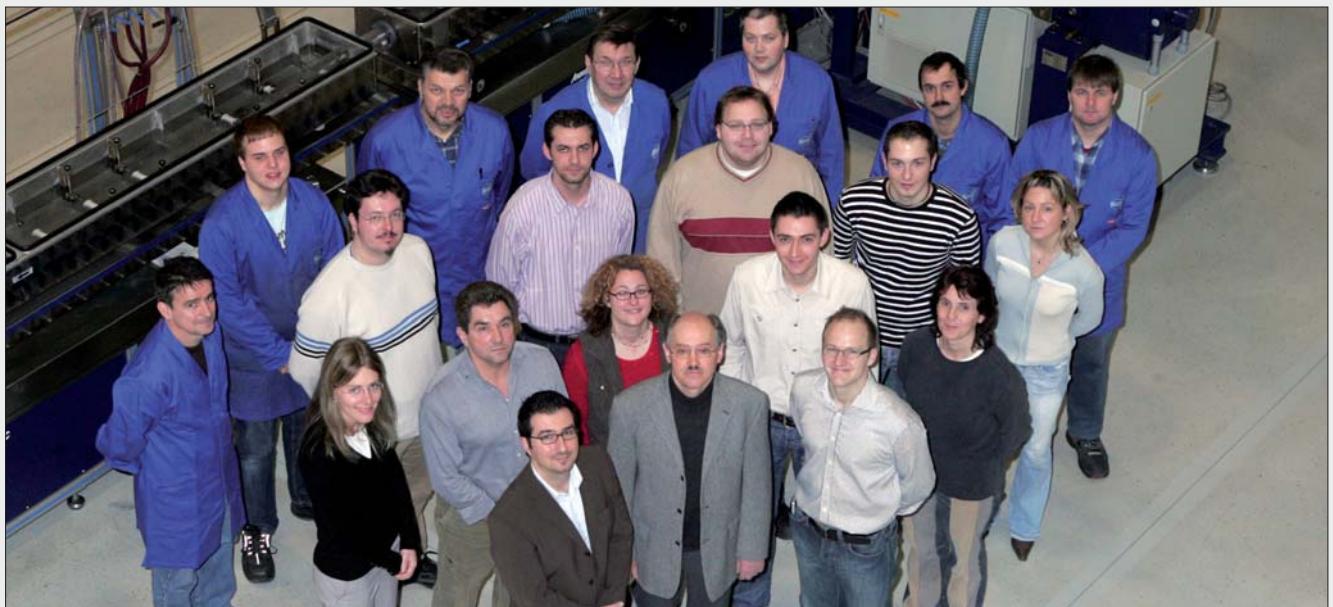
Our success is based on knowledge of the market and serving our customers with a broad line of profiles. Our strategy is to provide the best extrusion profiles in the market today and lead the industry in new innovative products in the future. Our in house tool shop allows us to react quickly to changing 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.

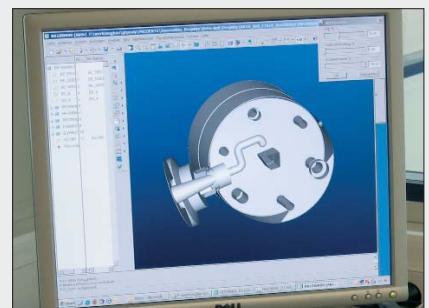
All procedures and activities are conducted with the highest possible commitment to quality. We comply with the specification of the standard DIN EN ISO 9001:2008.



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 principle 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.



Materials and application areas

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 colours have been chosen:

Shore-Hardness	Colour
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

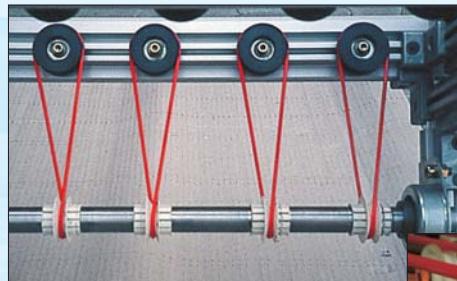
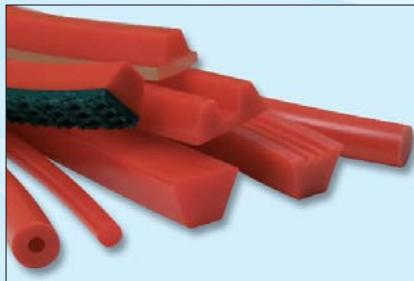
Profile	Diameter in mm	PU 65 A (approx. 72° Shore A)	PU 70 A (approx. 76° Shore A)	PU 75 A (approx. 80° Shore A)	PU 80 A (approx. 84° Shore A)	PU 85 A (approx. 88° Shore A)	PU 90 A (approx. 92° Shore A)	PU 95 A (approx. 98° Shore A)	TPE 40 D (approx. 92° Shore A)	TPE 55 D (approx. 100° Shore A)	TPE 63 D (approx. >100° Shore A)	Profiles for food industry
Round belts smooth	2 - 20			P. 18 	P. 18 	P. 19 	P. 20 		P. 20 	P. 21 		P. 12-13
Round belts roughened	2 - 20					P. 19 						P. 13
Round belt smooth, reinforced	6 - 20				P. 22 	P. 22 	P. 23 	P. 24 		P. 24 	P. 24 	P. 14
Round belts roughened, reinforced	6 - 20					P. 22-23 						
Hollow Round belts smooth	4,8 - 15		P. 25 		P. 25 	P. 25 						P. 13
Hollow Round belts roughened	4,8 - 15					P. 25 						
V-belts smooth	6x4 (Y) - 32x20 (D)			P. 26 	P. 26 	P. 26 	P. 27 		P. 27 	P. 27 		P. 15
V-belts smooth, reinforced	6x4 (Y) - 32x20 (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	8x5,5 8x6,5 16,35x11,3					P. 36 				P. 27 		P. 15
U-Profile Square-Profile	11,8 x 18,0 11,8x11,8				P.15 & 37 							
T-Profiles	20x8 25x5x5				P.15 & 37 							P.15
3-grooved V-Belts	17x11 (B) 22x14 (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)	6x4 (Y) - 32x20 (D)		P. 38 									
Cleats	20 - 40					P. 39 						
Sidewalls	20 - 120					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



Transport system with drive via vertical shaft BEHAbelt round belt PU 75 A, 4 mm Ø



Enamelling line with BEHAbelt PU 75 A round belts, 12,5 mm Ø

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.

Polyurethane type PU 80 A transparent/orange [approx. 84° Shore A]

Our dynamic belts



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



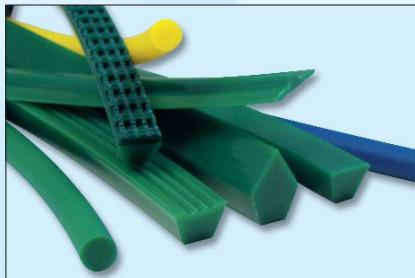
Transport systems with BEHAbelt Round belt PU 80 A orange

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



Polyurethane type PU 85 A green/yellow/ ultramarine blue [approx. 88° Shore A]

Our all around
belts



Lock out with BEHAbelt Round belt
PU 85 A green, 5 mm Ø



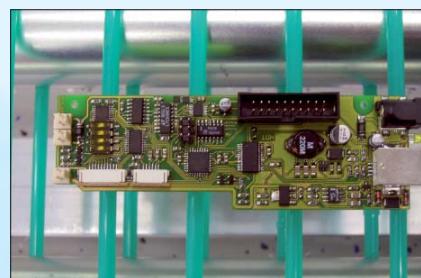
Transport system pre-press process
via BEHAbelt Round belt PU 85 A green
roughened

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.

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.

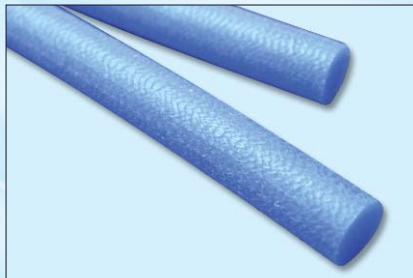


Circuit board transport system via
BEHAbelt Round belt PU 85 A
emerald-green, 10 mm Ø

Materials and application areas

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

Our
PLUS-quality



PATENT

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

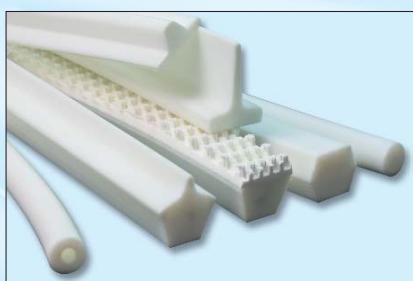
For small pulleys PU 75 A *PLUS* in orange available.



Roller conveyors with BEHAbelt Round belts PU 85 A *PLUS*

Polyurethane type PU 90 A white [approx. 92° Shore A]

Our reliable
belts



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

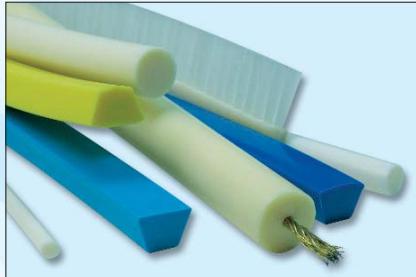
This PU material incorporates excellent elasticity and damping characteristics. This grade is well matched to applications that require medium and heavy loading. These belts often replace the conventional rubber V-belts for conveying systems.

Tile conveying via BEHAbelt pointed V-belts PU 90 A, profile 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



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



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

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).

Polyester TPE type 63 D [approx. >100° Shore A] beige/silber

Our can cables



Can cable transport system with BEHAbelt Round belt Polyester TPE 63 D, 9,5mm Ø

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 enquiry.

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, colour silver.

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

Materials and application areas

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)
Colour: sky blue
- PU 80 A (approx. 84° Shore A)
Colour: ultramarine blue
- PU 85 A (approx. 88° Shore A)
Colour: 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 programme are also suitable for the application within the food industry.



Transportsystem for the food industry with BEHAbelt T-Profile PU 85 A sapphire blue, 5x5x25 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.

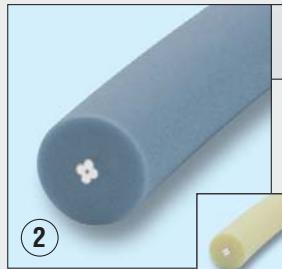
BfR "Plastics Recommendations" for use within the food industry

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".

Example of product charts

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General explanation of the product chart



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

Diameter Ø mm ⑦		Cross section ⑧	Weight 9	Standard Roll ⑩		Recommended pulley Ø ⑪		Working Load/Belt* ⑫	
Belt	Core	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6,3	3,0	0,310	3,8	150	500	100	3,9	20,2	44,4
9,5	3,0	0,710	8,5	150	500	150	5,9	46,2	101,6
12,5	3,0	1,230	14,8	150	500	200	7,8	80,0	176,0

- ③ 63° Shore D
approx. >100° Shore A
- ④ • Recommended pretension
1 - 2 %
- ⑤ • Working tension
approx. 65 daN/cm²

* = coefficient of friction $\mu:1$

This material is also listed on page 24

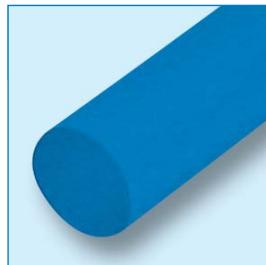
- ⑥ Coefficient of Friction μ
 - Steel approx. 0,35
 - PE approx. 0,15
 - HDPE approx. 0,10

FDA/EC/BfR- conform

C A P T I O N

- ① BEHA belt material type
- ② Colour illustration (Note: Original belt colour 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/cm²) 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 Ø of profile and reinforcement (in mm) 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 Ø (mm and inch)
(Smaller pulleys shorten the durability of the belts)
- ⑫ Approx. working load of the profile for coefficient of friction $\mu:1$ (daN/Belt and lbs/Belt)
Approx. working tension (5) x cross section (8)

Belts for the food industry



PU 75 A sky blue smooth

approx. 80° Shore A

- Recommended pretension
6 - 8 %
- Working tension
approx. 12 daN/cm²

Coefficient of Friction μ

- Steel approx. 0,70
 - PE approx. 0,40
 - HDPE approx. 0,35
- FDA/EC/BfR- conform

Diameter \varnothing		Cross section	Weight	Standard Roll		Min. Pulley \varnothing		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	10	0,4	0,4	0,8
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	1,5	3,3
3/16	4,8	0,181	2,2	200	656	35	1,4	2,2	4,8
	5,0	0,197	2,4	100	328	40	1,6	2,4	5,2
7/32	6,0	0,283	3,4	100	328	50	2,0	3,4	7,5
1/4	6,3	0,310	3,8	100	328	55	2,2	3,7	8,2
9/32	7,0	0,385	4,7	100	328	60	2,4	4,6	10,2
5/16	8,0	0,500	6	100	328	65	2,6	6,0	13,2
3/8	9,5	0,710	8,5	100	328	75	3,0	8,5	18,7
7/16	10,0	0,785	9,4	50	164	80	3,2	9,4	20,7
15/32	12,0	1,130	13,5	50	164	90	3,5	13,6	29,8
1/2	12,5	1,230	14,8	50	164	100	3,9	14,8	32,5
19/32	15,0	1,770	21,5	50	164	120	4,7	21,2	46,7

* = coefficient
of friction μ :1



PU 80 A ultramarine blue smooth

approx. 84° Shore A

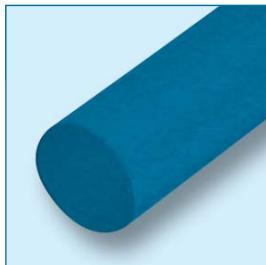
- Recommended pretension
6 - 8 %
- Working tension
approx. 14 daN/cm²

Coefficient of Friction μ

- Steel approx. 0,65
 - PE approx. 0,35
 - HDPE approx. 0,30
- FDA/EC/BfR- conform

Diameter \varnothing		Cross section	Weight	Standard Roll		Min. Pulley \varnothing		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	15	0,6	0,4	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	3,9
3/16	4,8	0,181	2,2	200	656	40	1,6	2,5	5,6
	5,0	0,197	2,4	100	328	45	1,8	2,8	6,1
7/32	6,0	0,283	3,4	100	328	55	2,2	4,0	8,7
1/4	6,3	0,310	3,8	100	328	60	2,4	4,3	9,5
9/32	7,0	0,385	4,7	100	328	65	2,6	5,4	11,9
5/16	8,0	0,500	6	100	328	75	3,0	7,0	15,4
3/8	9,5	0,710	8,5	100	328	90	3,5	9,9	21,9
7/16	10,0	0,785	9,4	50	164	95	3,7	11,0	24,2
15/32	12,0	1,130	13,5	50	164	110	4,3	15,8	34,8
1/2	12,5	1,230	14,8	50	164	115	4,5	17,2	37,9
19/32	15,0	1,770	21,5	50	164	140	5,5	24,8	54,5

* = coefficient
of friction μ :1



PU 85 A sapphire blue smooth/textured

approx. 88° Shore A	
• Recommended pretension	6 - 8 %
• Working tension	approx. 17 daN/cm ²

Coefficient of Friction μ	
• Steel	approx. 0,60
• PE	approx. 0,30
• HDPE	approx. 0,25

FDA/EC/BfR- conform

Diameter Ø		Cross section	Weight	Standard Roll		Min. Pulley Ø		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	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	2,1	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	3,3	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	11,6
9/32	7,0	0,385	4,7	100	328	65	2,6	6,5	14,4
5/16	8,0	0,500	6	100	328	75	3,0	8,5	18,7
3/8	9,5	0,710	8,5	100	328	90	3,5	12,1	26,6
7/16	10,0	0,785	9,4	50	164	95	3,7	13,3	29,4
15/32	12,0	1,130	13,5	50	164	110	4,3	19,2	42,3
1/2	12,5	1,230	14,8	50	164	115	4,5	20,9	46,0
19/32	15,0	1,770	21,5	50	164	140	5,5	30,1	66,2

* = coefficient of friction $\mu:1$

BEHA belt PU 90 A available on request.



PU 75 A sky blue smooth Hollow round belts

Diameter Ø mm		Cross section	Weight	Standard Roll		Min. Pulley Ø		Working Load/ Belt*	
Ext. Ø	In. Ø	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
4,8	1,8	0,147	1,8	200	656	30	1,2	1,8	3,9
6,3	2,5	0,261	3,2	100	328	45	1,8	3,1	6,9
8,0	3,2	0,420	5,1	100	328	55	2,2	5,0	11,1
9,5	3,8	0,600	7,2	100	328	65	2,6	7,2	15,8
12,5	5,2	1,020	12,4	50	164	85	3,4	12,2	26,9
15,0	5,2	1,560	19	50	164	100	4,0	18,7	41,2

* = coefficient of friction $\mu:1$

Coefficient of Friction μ	
• Steel	approx. 0,70
• PE	approx. 0,40
• HDPE	approx. 0,35

FDA/EC/BfR- conform

Belts for the food industry



PU 85 A sapphire blue smooth, reinforced Polyester

approx. 88° Shore A

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

Coefficient of Friction μ

- Steel approx. 0,60
- PE approx. 0,30
- HDPE approx. 0,25

FDA/EC/BfR- conform

Diameter Ø mm		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt	Core	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6,0	1,5	0,283	3,4	100	328	60	2,4	7,9	17,4
6,3	1,5	0,310	3,8	100	328	65	2,6	8,7	19,1
7,0	1,5	0,385	4,7	100	328	70	2,8	10,8	23,7
8,0	2,0	0,500	6	100	328	80	3,2	14,0	30,8
9,5	2,0	0,710	8,5	100	328	95	3,7	19,9	43,7
10,0	2,0	0,785	9,4	50	164	100	3,9	22,0	48,4
12,0	2,0	1,130	13,5	50	164	120	4,7	31,6	69,6
12,5	2,0	1,230	14,8	50	164	125	4,9	34,4	75,8
15,0	3,0	1,770	21,5	50	164	150	5,9	49,6	109,0

* = coefficient of friction $\mu:1$

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 programme 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

U - BELTS



Polyester TPE 40 D/
55 D beige smooth
page 27

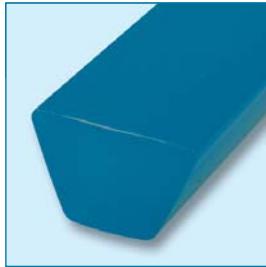
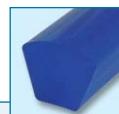


Polyester TPE 55 D beige
smooth, reinforced Polyester
page 29

FLAT BELTS



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



PU 85 A sapphire blue smooth

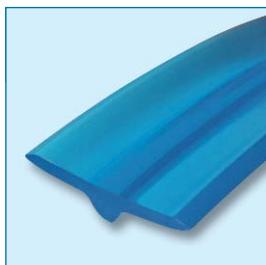
available with vaulted surface – 8 x 6.5 mm

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6x4 (Y)	0,19	2,3	100	328	45	1,8	3,2	7,1
8x5 (M)	0,32	4	100	328	50	2,0	5,4	12,0
10x6 (Z)	0,48	6	50	164	70	2,8	8,2	18,1
13x8 (A)	0,82	10	50	164	90	3,5	13,9	30,7
17x11 (B)	1,46	18	50	164	120	4,7	24,8	54,6
22x14 (C)	2,40	29	50	164	160	6,3	40,8	89,8

* = coefficient of friction $\mu:1$

Coefficient of Friction μ : Steel: approx. 0,60 | PE: approx. 0,30 | HDPE: approx. 0,25 | FDA/EC/BfR- conform

- approx. 88° Shore A
- Recommended pretension 6 - 8 %
 - Working tension approx. 17 daN/cm²



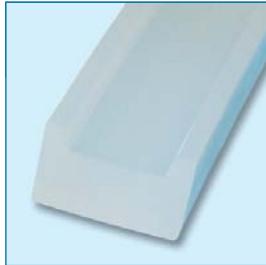
T-Profile PU 85 A sapphire blue smooth

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
25x5x5	0,59	7,3	30	100	50	3,2	10,0	22,1
20x8	0,83	10,0	30	100	80	2,0	14,1	31,0

* = coefficient of friction $\mu:1$

Reibwerte μ : Stahl: ca. 0,60 | PE: ca. 0,30 | HDPE: ca. 0,25 | FDA/EC/BfR-konform

- approx. 88° Shore A
- Recommended pretension 6 - 8 %
 - Working tension approx. 17 daN/cm²



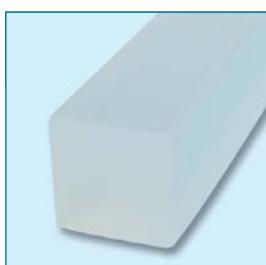
U-Profile PU 85 A transparent smooth

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
11,8x18	1,70	20	9,27 m/piece		120	4,7	28,9	63,6

* = coefficient of friction $\mu:1$

Coefficient of Friction μ : Steel: approx. 0,60 | PE: approx. 0,30 | HDPE: approx. 0,25 | FDA/EC/BfR- conform

- approx. 88° Shore A
- Recommended pretension 4 - 6 %
 - Working tension approx. 17 daN/cm²



Square-Profile PU 85 A transparent smooth

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
11,8x11,8	1,39	16,7	9,27 m/piece		120	4,7	23,6	52,0

* = coefficient of friction $\mu:1$

Coefficient of Friction μ : Steel: approx. 0,60 | PE: approx. 0,30 | HDPE: approx. 0,25 | FDA/EC/BfR- conform

- approx. 88° Shore A
- Recommended pretension 4 - 6 %
 - Working tension approx. 17 daN/cm²

Round belts



PU 75 A PLUS orange roughened

approx. 80° Shore A

- Recommended pretension
4 - 6 %
- Working tension*
approx. 17 daN/cm²

Coefficient of Friction μ

- Steel approx. 0,70
- PE approx. 0,40
- HDPE approx. 0,35

Diameter Ø		Cross section	Weight	Standard Roll		Min. Pulley Ø		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	10	0,4	0,5	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	2,1	4,7
3/16	4,8	0,181	2,2	200	656	35	1,4	3,1	6,8
	5,0	0,197	2,4	100	328	40	1,6	3,3	7,4
7/32	6,0	0,283	3,4	100	328	50	2,0	4,8	10,6
1/4	6,3	0,310	3,8	100	328	55	2,2	5,3	11,6
9/32	7,0	0,385	4,7	100	328	60	2,4	6,5	14,4
5/16	8,0	0,500	6	100	328	65	2,6	8,5	18,7
3/8	9,5	0,710	8,5	100	328	75	3,0	12,1	26,6
7/16	10,0	0,785	9,4	50	164	80	3,2	13,3	29,4
15/32	12,0	1,130	13,5	50	164	90	3,5	19,2	42,3
1/2	12,5	1,230	14,8	50	164	100	3,9	20,9	46,0
19/32	15,0	1,770	21,5	50	164	120	4,7	30,1	66,2
3/4	18,0	2,54	31	50	164	150	5,9	43,2	95,0
25/32	20,0	3,14	40	50	164	170	6,7	53,4	117,4

* = coefficient of friction $\mu:1$



PU 85 A PLUS blue roughened

approx. 88° Shore A

- Recommended pretension
2 - 4 %
- Working tension*
approx. 24 daN/cm²

Coefficient of Friction μ

- Steel approx. 0,60
- PE approx. 0,30
- HDPE approx. 0,25

Diameter Ø		Cross section	Weight	Standard Roll		Min. Pulley Ø		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	15	0,6	0,8	1,7
1/8	3,0	0,071	0,9	200	656	25	1,0	1,7	3,7
5/32	4,0	0,126	1,6	200	656	30	1,2	3,0	6,7
3/16	4,8	0,181	2,2	200	656	40	1,6	4,3	9,6
	5,0	0,197	2,4	100	328	45	1,8	4,7	10,4
7/32	6,0	0,283	3,4	100	328	55	2,2	6,8	14,9
1/4	6,3	0,310	3,8	100	328	60	2,4	7,4	16,4
9/32	7,0	0,385	4,7	100	328	65	2,6	9,2	20,3
5/16	8,0	0,500	6	100	328	75	3,0	12,0	26,4
3/8	9,5	0,710	8,5	100	328	90	3,5	17,0	37,5
7/16	10,0	0,785	9,4	50	164	95	3,7	18,8	41,4
15/32	12,0	1,130	13,5	50	164	110	4,3	27,1	59,7
1/2	12,5	1,230	14,8	50	164	115	4,5	29,5	64,9
19/32	15,0	1,770	21,5	50	164	140	5,5	42,5	93,5
3/4	18,0	2,54	31	50	164	170	6,7	61,0	134,1
25/32	20,0	3,14	40	50	164	180	7,1	75,4	165,8

* = coefficient of friction $\mu:1$

Round belts



Available with roughened surface on request.



PU 75 A red smooth

Brown upon request

approx. 80° Shore A

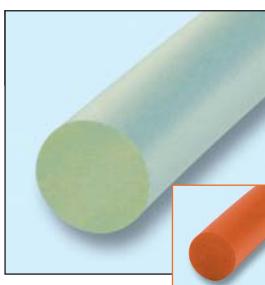
- Recommended pretension 6 - 8 %
- Working tension* approx. 13 daN/cm²

Coefficient of Friction μ red smooth

- Steel approx. 0,70
- PE approx. 0,40
- HDPE approx. 0,35

Diameter Ø			Cross section	Weight	Standard Roll		Min. Pulley Ø		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	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 $\mu:1$



PU 80 A transparent/orange smooth

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

Diameter Ø			Cross section	Weight	Standard Roll transp./orange		Min. Pulley Ø		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	200/30	656/100	15	0,6	0,5	1,1
1/8	3,0	0,071		0,9	200/30	656/100	25	1,0	1,0	2,2
5/32	4,0	0,126		1,6	200/30	656/100	30	1,2	1,9	4,2
3/16	4,8	0,181		2,2	200/30	656/100	40	1,6	2,7	5,9
	5,0	0,197		2,4	100/30	328/100	45	1,8	2,9	6,4
7/32	6,0	0,283		3,4	100/30	328/100	55	2,2	4,2	9,2
1/4	6,3	0,310		3,8	100/30	328/100	60	2,4	4,7	10,3
9/32	7,0	0,385		4,7	100/30	328/100	65	2,6	5,8	12,8
5/16	8,0	0,500		6	100/30	328/100	75	3,0	7,5	16,5
3/8	9,5	0,710		8,5	100/30	328/100	90	3,5	10,6	23,3
7/16	10,0	0,785		9,4	50/30	164/100	95	3,7	11,8	26,0
15/32	12,0	1,130		13,5	50/30	164/100	110	4,3	17,0	37,4
1/2	12,5	1,230		14,8	50/30	164/100	115	4,5	18,4	40,5
19/32	15,0	1,770		21,5	50/30	164/100	140	5,5	26,5	58,3
3/4	18,0	2,54		31	50/30	164/100	170	6,7	38,1	83,8
25/32	20,0	3,14		40	50/30	164/100	180	7,1	47,0	103,4

* = coefficient of friction $\mu:1$



PU 85 A green smooth/roughened

approx. 88° Shore A	
• Recommended pretension	6 - 8 %
• Working tension	approx. 18 daN/cm ²

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 Ø		Cross section	Weight	Standard Roll		Min. Pulley Ø		Working Load/Belt*	
inch	mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	Ibs
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 %

Conductivity approx. 10 ⁹ Ω per cm	
• Working tension	approx. 18 daN/cm ²

Coefficient of Friction μ	
• Steel	approx. 0,60
• PE	approx. 0,30
• HDPE	approx. 0,25

Diameter Ø		Cross section	Weight	Standard Roll		Min. Pulley Ø		Working Load/Belt*	
inch	mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	Ibs
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

Round belts



PU 90 A white smooth

Red upon request

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

Diameter Ø		Cross section	Weight	Standard Roll		Min. Pulley Ø		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	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



Polyester TPE 40 D beige smooth

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

Diameter Ø		Cross section	Weight	Standard Roll		Min. Pulley Ø		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	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



Polyester TPE 55 D beige smooth

approx. 55° Shore D/
100° Shore A

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

Coefficient of Friction μ

- Steel approx. 0,35
 - PE approx. 0,15
 - HDPE approx. 0,10
- FDA/EC/BfR- conform

Diameter Ø		Cross section	Weight	Standard Roll		Min. Pulley Ø		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 $\mu:1$

Options for reinforced belting

Our standard delivery programme includes four types of reinforcements:

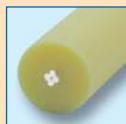


Reinforcement glass fiber PU, weldable

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	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	–	approx. 180 daN	approx. 100 daN	–
2,0	–	approx. 300 daN	approx. 140 daN	–
2,5	–	–	–	approx. 355 daN
3,0	approx. 40 daN	approx. 560 daN	approx. 390 daN	–
4,0	approx. 69 daN	–	approx. 500 daN	–
Note	„PATENT“ - weldable Recommendation: Butt welding	not weldable Recommendation: Overlap welding	not weldable Recommendation: Overlap welding	Recommendation: Crimping

Round belts *reinforced*



PU 80 A orange, reinforced Polyester

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

Diameter Ø mm		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt	Core	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6,0	1,5	0,283	3,4	30	100	55	2,1	7,4	16,2
6,3	1,5	0,310	3,8	30	100	60	2,3	8,1	17,7
7,0	1,5	0,385	4,7	30	100	65	2,5	10,0	22,0
8,0	2,0	0,500	6	30	100	75	2,9	13,0	28,6
9,5	2,0	0,710	8,5	30	100	90	3,5	18,5	40,6
10,0	2,0	0,785	9,4	30	100	95	3,7	20,4	44,9
12,0	3,0	1,130	13,5	30	100	110	4,3	29,4	64,6
12,5	3,0	1,230	14,8	30	100	115	4,5	32,0	70,4
15,0	4,0	1,770	21,5	30	100	140	5,5	46,0	101,2
18,0	4,0	2,54	31	30	100	170	6,6	66,0	145,3
20,0	4,0	3,14	40	30	100	180	7,0	81,6	179,6

* = coefficient of friction $\mu:1$



reinforcement weldable

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

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

Diameter Ø mm		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt	Core	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
8,0	3,0	0,500	6	100	328	80	3,2	15,0	33,0
9,5	3,0	0,710	8,5	100	328	95	3,7	21,3	46,9
10,0	3,0	0,785	9,4	50	164	100	3,9	23,6	51,9
12,0	4,0	1,130	13,5	50	164	120	4,7	33,9	74,6
12,5	4,0	1,230	14,8	50	164	125	4,9	36,9	81,2
15,0	4,0	1,770	21,5	50	164	150	5,9	53,1	116,8
18,0	★	2,54	31	50	164	190	7,5	★	★
20,0	★	3,14	40	50	164	200	7,9	★	★

★ = stronger carrier materials upon request

* = coefficient of friction $\mu:1$

Coefficient of Friction μ ultramarine blue roughened

- Steel approx. 0,45
- PE approx. 0,30
- HDPE approx. 0,25



DE19900551C1
US Patent No. 6,468,656



PU 85 A green roughened, reinforced aramid fiber

Diameter Ø mm		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6,0	1,5 Ø	0,283	3,4	100	328	60	2,3	7,9	17,4
6,3	1,5 Ø	0,310	3,8	100	328	65	2,5	8,7	19,1
7,0	1,5 Ø	0,385	4,7	100	328	70	2,8	10,8	23,8
8,0	2,1 Ø	0,500	6	100	328	80	3,2	15,1	33,2
9,5	2,1 Ø	0,710	8,5	100	328	95	3,7	21,3	46,9
10,0	2,1 Ø	0,785	9,4	50	164	100	3,9	23,6	51,9
12,0	2,1 Ø	1,130	13,5	50	164	120	4,7	33,9	74,6
12,5	2,1 Ø	1,230	14,8	50	164	125	4,9	36,8	81,0
14,3	3,0 Ø	1,616	19,3	50	164	145	5,7	51,4	113,1
15,0	3,0 Ø	1,77	21,5	50	164	150	5,9	56,5	124,3
18,0	3,0 Ø	2,54	31	50	164	190	7,5	81,4	179,1
20,0	3,0 Ø	3,14	40	50	164	200	7,9	100,5	221,1

* = coefficient of friction $\mu:1$

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. 0,45
- PE approx. 0,30
- HDPE approx. 0,25



PU 90 A white smooth, reinforced Polyester

Diameter Ø mm		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt	Core	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6,0	1,5	0,283	3,4	100	328	65	2,6	11,3	24,9
6,3	1,5	0,310	3,8	100	328	70	2,8	12,4	27,3
7,0	1,5	0,385	4,7	100	328	75	3,0	15,4	33,9
8,0	2,0	0,500	6	100	328	85	3,4	20,0	44,0
9,5	2,0	0,710	8,5	100	328	100	3,9	28,4	62,5
10,0	2,0	0,785	9,4	50	164	105	4,1	31,4	69,1
12,0	3,0	1,130	13,5	50	164	125	4,9	45,2	99,4
12,5	3,0	1,230	14,8	50	164	130	5,1	49,2	108,2
15,0	4,0	1,770	21,5	50	164	155	6,1	70,8	155,8
18,0	4,0	2,54	31	50	164	175	6,9	101,6	223,5
20,0	4,0	3,14	40	50	164	185	7,3	125,6	276,3

* = coefficient of friction $\mu:1$

approx. 92° Shore A

- Recommended pretension 1 - 2 %
- Working tension 1,5 approx. 40 daN/cm²

Coefficient of Friction μ

- Steel approx. 0,50
- PE approx. 0,30
- HDPE approx. 0,25

Round belts *reinforced*



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

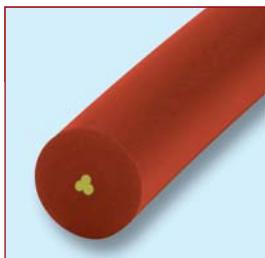
FDA/EC/BfR- conform

Polyester TPE 55 D beige smooth, reinforced Polyester

Diameter Ø mm		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt	Core	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6,0	1,5	0,283	3,4	100	328	75	3,0	18,4	40,5
6,3	1,5	0,310	3,8	100	328	80	3,2	20,1	44,2
7,0	1,5	0,385	4,7	100	328	90	3,5	25,0	55,0
8,0	2,0	0,500	6	100	328	100	3,9	32,5	71,5
9,5	2,0	0,771	8,5	100	328	120	4,7	50,1	110,2
10,0	2,0	0,785	9,4	50	164	125	4,9	51,0	112,2
12,0	3,0	1,130	13,5	50	164	150	5,9	73,4	161,5
12,5	3,0	1,230	14,8	50	164	160	6,3	80,0	176,0
15,0	4,0	1,770	21,5	50	164	180	7,1	115,0	253,0
18,0	4,0	2,54	31	50	164	240	9,5	165,0	363,0
20,0	4,0	3,14	40	50	164	300	11,8	204,0	448,8

* = coefficient
of friction $\mu:1$

Can Cable



approx. 98° Shore A

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

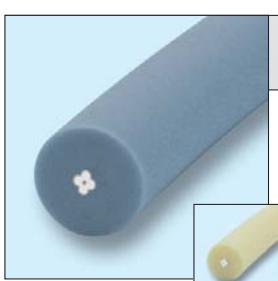
PU 95 A red matt, reinforced Aramid fiber

Diameter Ø mm		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt	Core	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
9,5	2,0	0,710	8,5	150	500	120	4,7	35,5	78,1

* = coefficient
of friction $\mu:1$

with additional UU
protection [silver]

Can Cable



Polyester TPE 63 D silver/beige smooth, reinforced Polyester

Diameter Ø mm		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt	Core	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6,3	3,0	0,310	3,8	150	500	100	3,9	20,2	44,4
9,5	3,0	0,710	8,5	150	500	150	5,9	46,2	101,6
12,5	3,0	1,230	14,8	150	500	200	7,8	80,0	176,0

* = coefficient
of friction $\mu:1$

63° 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

Hollow round belts

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 transport applications and are often used in practice.



PU 75 A red smooth Hollow round belt

Diameter Ø mm		Cross section	Weight	Standard Roll		Min. Pulley Ø		Working Load/Belt*	
Ext. Ø	In. Ø	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
4,8	1,8	0,147	1,8	200	656	30	1,2	1,9	4,2
6,3	2,5	0,261	3,2	100	328	45	1,8	3,4	7,5
8,0	3,2	0,420	5,1	100	328	55	2,2	5,5	12,1
9,5	3,8	0,600	7,2	100	328	65	2,6	7,8	17,2
12,5	5,2	1,020	12,4	50	164	85	3,4	13,3	29,3
15,0	5,2	1,560	19	50	164	100	4,0	20,2	44,4

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 Ø mm		Cross section	Weight	Standard Roll		Min. Pulley Ø		Working Load/Belt*	
Ext. Ø	In. Ø	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
4,8	1,8	0,147	1,8	200	656	35	1,4	2,6	5,7
6,3	2,5	0,261	3,2	100	328	55	2,2	4,6	10,1
8,0	3,2	0,420	5,1	100	328	65	2,6	7,5	16,5
9,5	3,8	0,600	7,2	100	328	75	3,0	10,0	22,0
12,5	5,2	1,020	12,4	50	164	100	3,9	18,0	39,6
15,0	5,2	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 Ø mm		Cross section	Weight	Standard Roll		Min. Pulley Ø		Working Load/Belt*	
Ext. Ø	In. Ø	cm²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
4,8	1,8	0,147	1,8	200	656	45	1,8	3,6	7,9
6,3	2,5	0,261	3,2	100	328	60	2,4	6,5	14,3
8,0	3,2	0,420	5,1	100	328	75	3,0	10,0	22,0
9,5	3,8	0,600	7,2	100	328	85	3,4	15,0	33,0
12,5	5,2	1,020	12,4	50	164	115	4,5	25,0	55,0
15,0	5,2	1,560	19	50	164	140	5,5	38,0	83,6



Corresponding fasteners for diameter 4,8, 6,3, 8,0, 9,5, 12,5, 15,0 mm available.



PU 75 A red smooth

Brown upon request

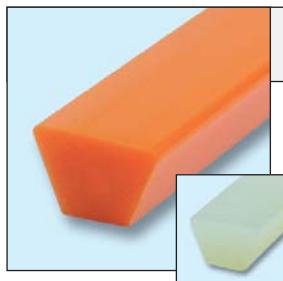
approx. 80° Shore A

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

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6x4 (Y)	0,19	2,3	100	328	35	1,4	2,5	5,5
8x5 (M)	0,32	4	100	328	40	1,6	4,2	9,2
10x6 (Z)	0,48	6	50	164	50	2,0	6,2	13,6
13x8 (A)	0,82	10	50	164	80	3,2	10,5	23,1
17x11 (B)	1,46	18	50	164	100	3,9	19,0	41,8
22x14 (C)	2,40	29	50	164	145	5,7	31,0	68,2
32x20 (D)	5,00	62	25	82	210	8,3	65,0	143,0

* = coefficient of friction μ :1

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
17x11 and 22x14 mm



approx. 84° Shore A

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

Profile dimension	Cross section	Weight	Standard Roll orange/transp.		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6x4 (Y)	0,19	2,3	30/100	100/328	40	1,6	2,9	6,4
8x5 (M)	0,32	4	30/100	100/328	45	1,8	4,8	10,6
10x6 (Z)	0,48	6	30/50	100/164	55	2,2	7,2	15,8
13x8 (A)	0,82	10	30/50	100/164	85	3,3	12,3	27,1
17x11 (B)	1,46	18	30/50	100/164	110	4,3	21,9	48,2
22x14 (C)	2,40	29	30/50	100/164	150	5,9	36,0	79,2
32x20 (D)	5,00	62	30/25	100/82	220	8,7	75,0	165,0

* = coefficient of friction μ :1

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

approx. 88° Shore A

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

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
6x4 (Y)	0,19	2,3	100	328	45	1,8	3,4	7,5
8x5 (M)	0,32	4	100	328	50	2,0	5,7	12,5
10x6 (Z)	0,48	6	50	164	70	2,8	8,6	18,9
13x8 (A)	0,82	10	50	164	90	3,5	14,7	32,3
17x11 (B)	1,46	18	50	164	120	4,7	26,0	57,2
22x14 (C)	2,40	29	50	164	160	6,3	43,0	94,6
32x20 (D)	5,00	62	25	82	230	9,1	96,0	211,2

* = coefficient of friction μ :1

Coefficient of Friction μ : Steel: approx. 0,60 | PE: approx. 0,30 | HDPE: approx. 0,25



approx. 92° Shore A

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

PU 90 A white smooth

Available with cogged bottom on request.**

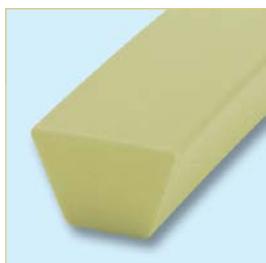


Red upon request

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
8x5 (M)	0,32	4	100	328	60	2,4	8,0	17,6
10x6 (Z)	0,48	6	50	164	80	3,2	12,0	26,4
13x8 (A)	0,82	10	50	164	100	3,9	20,0	44,0
17x11 (B)	1,46	18	50	164	140	5,5	36,0	79,2
22x14 (C)	2,40	29	50	164	200	7,9	60,0	132,0
32x20 (D)	5,00	62	25	82	280	11,0	125,0	275,0

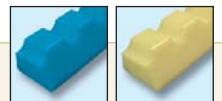
* = coefficient of friction $\mu:1$

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 Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
8x5 (M)	0,32	4	100	328	60	2,4	11,2	24,6
10x6 (Z)	0,48	6	50	164	80	3,2	16,8	37,0
13x8 (A)	0,82	10	50	164	100	3,9	28,7	63,1
17x11 (B)	1,46	18	50	164	140	5,5	51,0	112,2
22x14 (C)	2,40	29	50	164	200	7,9	84,0	184,8

* = coefficient of friction $\mu:1$

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 Ø		Working Load/Belt*	
mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
8x5 (M)	0,32	4	100	328	80	3,2	16,0	35,2
10x6 (Z)	0,48	6	50	164	100	3,9	24,0	52,8
13x8 (A)	0,82	10	50	164	120	4,7	40,0	88,0
17x11 (B)	1,46	18	50	164	160	6,3	73,0	160,6
22x14 (C)	2,40	29	50	164	230	9,1	120,0	264,0

* = coefficient of friction $\mu:1$

Coefficient of Friction μ

- Steel approx. 0,35
- PE approx. 0,15
- HDPE approx. 0,10

FDA/EC/BfR- conform



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



approx. 80° Shore A

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

PU 75 A orange, reinforced glass fiber PU

Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
Z	10x6	3,0	0,48	6	50	164	80	3,2	10,5
A	13x8	3,0	0,82	10	50	164	100	3,9	18,0
B	17x11	4,0	1,46	18	50	164	140	5,5	32,0
C	22x14	4,0★	2,40	29	50	164	180	7,1	★

* = coefficient of friction $\mu:1$

Coefficient of Friction μ : Steel: approx. 0,70 | PE: approx. 0,40 | HDPE: approx. 0,35

★ = stronger carrier materials upon request

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approx. 84° Shore A

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

PU 80 A orange, reinforced Polyester

Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
M	8x5	1,5	0,32	4	30	100	45	1,8	9,6
Z	10x6	2,0	0,48	6	30	100	55	2,2	14,4
A	13x8	2,0	0,82	10	30	100	85	3,3	24,6
B	17x11	3,0	1,46	18	30	100	110	4,3	43,8
C	22x14	4,0	2,40	29	30	100	150	5,9	72,0

* = coefficient of friction $\mu:1$

Coefficient of Friction μ : Steel: approx. 0,65 | PE: approx. 0,35 | HDPE: approx. 0,30 | FDA/EC/BfR- conform



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

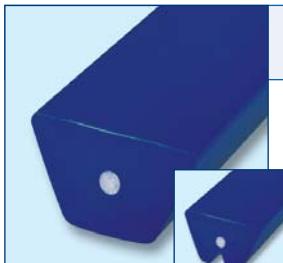
PU 85 A green, reinforced aramid fiber

Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
M	8x5	1,5	0,32	4	50	164	60	2,4	9,0
Z	10x6	2,0	0,48	6	50	164	70	2,8	13,4
A	13x8	2,0	0,82	10	50	164	100	3,9	24,6
B	17x11	3,0	1,46	18	50	164	140	5,5	43,8
C	22x14	4,0	2,40	29	50	164	180	7,1	76,8

* = coefficient of friction $\mu:1$

Coefficient of Friction μ : Steel: approx. 0,60 | PE: approx. 0,30 | HDPE: approx. 0,25

Weldable reinforcement



approx. 88° Shore A

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

PU 85 A ultramarine blue, reinforced glass fiber PU

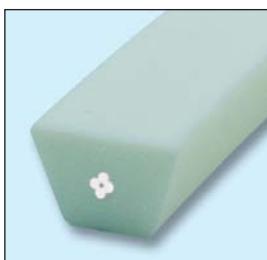
Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
Z	10x6	3,0	0,48	6	50	164	100	3,9	14,4
A	13x8	3,0	0,82	10	50	164	140	5,5	24,6
B	17x11	4,0	1,46	18	50	164	180	7,1	43,0
C	22x14	4,0★	2,40	29	50	164	220	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

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US Patent No. 6,468,656


approx. 92° Shore A

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

PU 90 A white, reinforced Polyester

Available with cogged bottom on request.**



Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
M	8x5	1,5	0,32	4	100	328	100	3,9	12,8
Z	10x6	2,0	0,48	6	50	164	130	5,1	19,0
A	13x8	2,0	0,82	10	50	164	160	6,3	32,8
B	17x11	3,0	1,46	18	50	164	180	7,1	58,4
C	22x14	4,0	2,40	29	50	164	270	10,6	211,2

 * = coefficient of friction μ :1

 Coefficient of Friction μ : Steel: approx. 0,50 | PE: approx. 0,30 | HDPE: approx. 0,25


55° Shore D · approx. 100° Shore A

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

Polyester TPE 55 D beige, reinforced Polyester

Available with cogged bottom on request.**



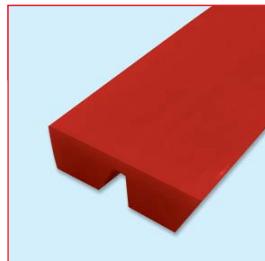
Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
Z	10x6	2,0	0,48	6	50	164	130	5,1	31,2
A	13x8	2,0	0,82	10	50	164	160	6,3	53,3
B	17x11	3,0	1,46	18	50	164	180	7,1	94,9
C	22x14	4,0	2,40	29	50	164	270	10,6	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.

Parallel-U-belts



PU 75 A red smooth

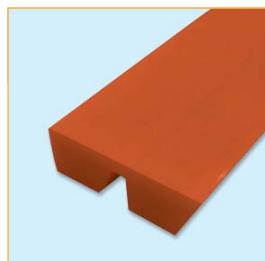
Profile dimension in mm	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
			cm ²	kg/100 m	m	ft	mm	inch
Z 21x8,5		1,2	13,9	30	100	80	3,2	15,6
								34,3

* = coefficient of friction $\mu:1$

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 Ø		Working Load/Belt*	
			cm ²	kg/100 m	m	ft	mm	inch
Z 24x6,8		1,2	14,9	30	100	55	2,2	18,0
A 30x8		1,9	22,4	30	100	85	3,4	28,5
								62,7

* = coefficient of friction $\mu:1$

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 Ø		Working Load/Belt*			
			Belt	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch
A 30x8	2,0	1,9	22,4		30	100	100	3,9	57	125,4

* = coefficient of friction $\mu:1$

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 Ø		Working Load/Belt*			
			Belt	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch
A 30x8	2,0	1,9	22,4		30	100	100	3,9	57	125,4

* = coefficient of friction $\mu:1$

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

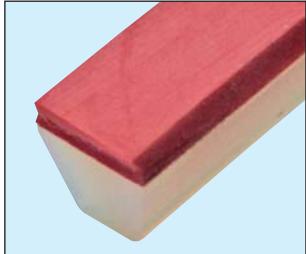
Coatings

We carry on a wide range of coated products.

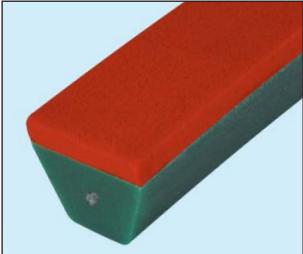
Enclosed you find a selection of the most established coatings.

Other coatings available upon request.

Corrugated surface possible.



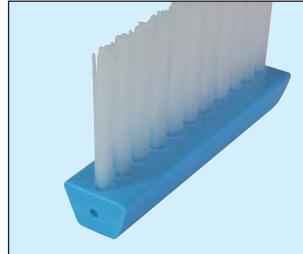
Linatex red
38° Shore A



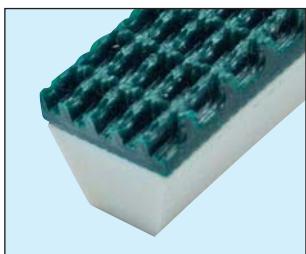
PU-foil 70° Shore A



Corrugated coating



Brush belt with
Polyamide fibers



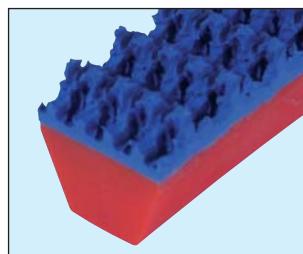
Supergrip PVC-green
40° Shore A



Supergrip PVC-blue
40° Shore A



Supergrip PVC-white
40° Shore A (FDA)



Supergrip Rubber blue
70° Shore A



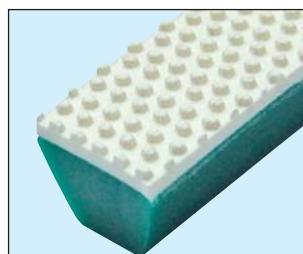
PU film coating
85° Shore A



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



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



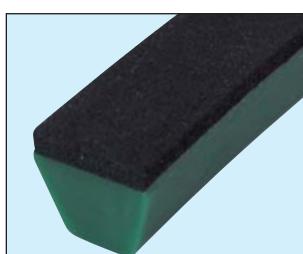
Knob coating PVC white
40° Shore A (FDA)



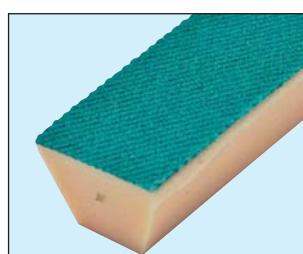
PVC-Film white
40° Shore A



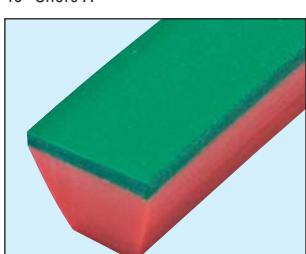
Sylomer L green
PU-Schaum



Porol black cell rubber



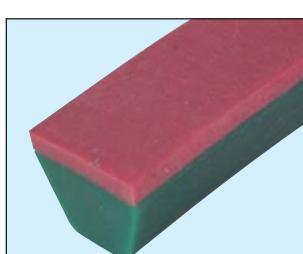
PA fabric



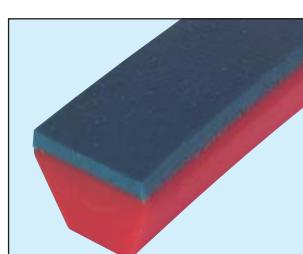
Elastomer green
60° Shore A (very adhesive)



RP 400 Rubber
35° Shore A

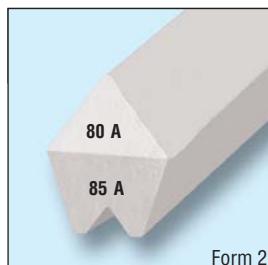


Natural rubber
40° Shore A



PVC blue
40° Shore A

Ridge-top-V-belts for the tile industry



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

2-component
extrusion

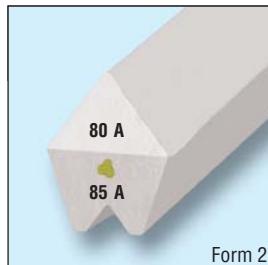
Form 2 with notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	Belt mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17x21	2,22	26,6	30	100	180	7,1	40,0	88,0
C	22x28	3,75	45,0	30	100	220	8,7	67,5	148,5

approx. 84/88° Shore A

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

* = coefficient of friction $\mu:1$



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

2-component
extrusion

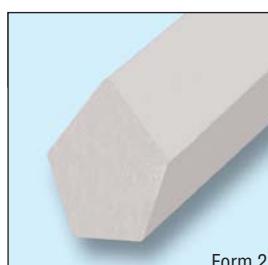
Form 2 with notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*		
	Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17x19	2,0	2,0	24,4	30	100	200	7,9	60,0	132,0
C	22x25	2,0	3,5	42,3	30	100	240	9,5	105,0	231,0

approx. 84/88° Shore A

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

* = coefficient of friction $\mu:1$



PU 80 A transparent

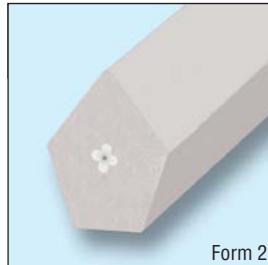
Form 2 without notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	Belt mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
C	22x25	3,65	43,8	30	100	170	6,7	54,75	120,5

* = coefficient of friction $\mu:1$

approx. 84° Shore A

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



PU 80 A transparent, reinforced Polyester

Form 2 without notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*		
	Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
C	22x25	2,0	3,65	43,8	30	100	180	7,1	102,2	224,8

* = coefficient of friction $\mu:1$

approx. 84° Shore A

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

Form 1 with notch


PU 85 A green

Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	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

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

* = coefficient of friction $\mu:1$

Form 1 without notch


PU 85 A green

Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	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

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

* = coefficient of friction $\mu:1$

Form 2 with notch

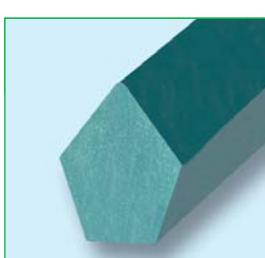

PU 85 A green

Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	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

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

* = coefficient of friction $\mu:1$

Form 2 without notch


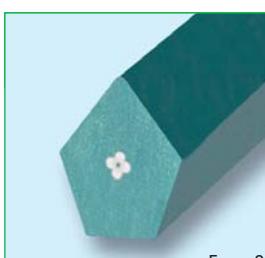
PU 85 A green

Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	3,0	21,3	25,6	30	100	180	7,1	38,3
C	22 x 25	4,0	3,65	43,8	30	100	230	9,1	65,7

approx. 88° Shore A

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

* = coefficient of friction $\mu:1$

Form 2 without notch


PU 85 A green, reinforced Polyester

Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	3,0	21,3	25,6	30	100	180	7,1	72,4
C	22 x 25	4,0	3,65	43,8	30	100	250	9,8	124,1

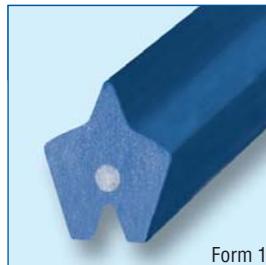
approx. 88° Shore A

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

* = coefficient of friction $\mu:1$

Ridge-top-U-belts

for the tile industry



Form 1

approx. 88° Shore A

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

Form 1 with notch

PU 85 A blue, reinforced glass fiber PU, weldable

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	4,0	1,82	21,8	30	100	230	9,1	54,6	120,1
C	22 x 24	4,0	2,95	35,4	30	100	270	10,7	88,5	194,7

* = coefficient of friction μ :1

PATENT

DE19900551C1
US Patent No. 6,468,656



Form 1

approx. 88° Shore A

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

Form 1 without notch

PU 85 A blue, reinforced glass fiber PU, weldable

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	4,0	1,95	23,63	30	100	240	9,5	58,5	128,7
C	22 x 24,5	4,0	3,26	39,1	30	100	280	11,0	97,8	215,2

* = coefficient of friction μ :1

PATENT

DE19900551C1
US Patent No. 6,468,656



Form 2

approx. 88° Shore A

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

Form 2 with notch

PU 85 A blue, reinforced glass fiber PU, weldable

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 21	4,0	2,22	26,6	30	100	280	11,0	66,6	146,5
C	22 x 28	4,0	3,75	45,0	30	100	320	12,6	112,5	247,5

* = coefficient of friction μ :1

PATENT

DE19900551C1
US Patent No. 6,468,656



Form 2

approx. 88° Shore A

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

Form 2 without notch

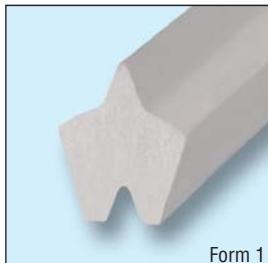
PU 85 A blue, reinforced glass fiber PU, weldable

	Profile dimension		Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	Belt mm	Core Ø mm	cm ²	kg/100 m	m	ft	mm	inch	daN/Belt	lbs
B	17 x 19	4,0	2,13	25,6	30	100	290	11,4	63,9	140,6
C	22 x 25	4,0	3,65	43,8	30	100	330	13,0	109,5	240,9

* = coefficient of friction μ :1

PATENT

DE19900551C1
US Patent No. 6,468,656



PU 90 A white

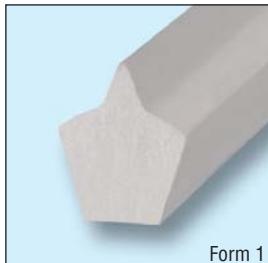
Form 1 with notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	mm	cm ²	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

approx. 92° Shore A

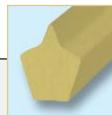
* = coefficient of friction $\mu:1$

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



PU 90 A white

TPE 40 D dimension 22 x 24,5
on request



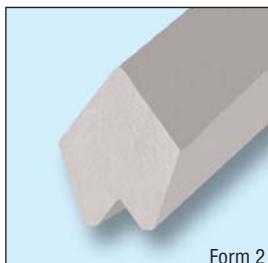
Form 1 without notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	mm	cm ²	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

approx. 92° Shore A

* = coefficient of friction $\mu:1$

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



PU 90 A white

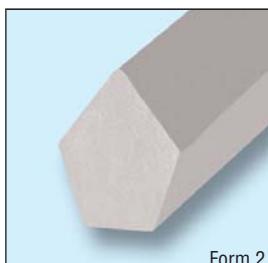
Form 2 with notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	mm	cm ²	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

approx. 92° Shore A

* = coefficient of friction $\mu:1$

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



PU 90 A white

Form 2 without notch

	Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
	mm	cm ²	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

approx. 92° Shore A

* = coefficient of friction $\mu:1$

- 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 enquiry 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)*
	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)*
	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, colour)



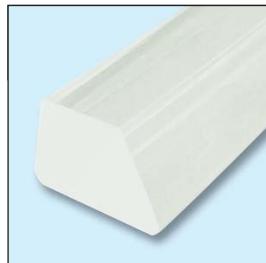
Thanks to our high tech equipped tool making shop, Special profiles can be produced in special colours or hardness with a 100 kg minimum. Special profiles not shown may require new tooling which can be produced in house.

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	9,27 m/piece* see page 15
	U-Profile	18 x 11,8 mm	9,27 m/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, colour)

Flat belts and V-guide profiles



approx. 76° Shore A

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

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

Profile dimension	Cross section	Weight	Standard Roll		Recommended pulley Ø		Working Load/Belt*	
mm	cm ²	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

Coefficient of Friction μ : Steel: approx. 0,70 | PE: approx. 0,40 | HDPE: approx. 0,35 | FDA/EC/BfR-conform



approx. 72° Shore A

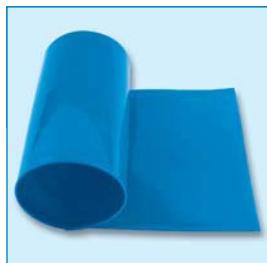
- Recommended pretension 4 - 6 %
- Working tension approx. 10 daN/cm²

Flat belts PU 65 A transparent

Profile thickness	Profile width	Standard Roll		
mm	inch	mm	inch	ft
1,0	3/64	150	5,9	100
1,5	1/16	150	5,9	100
2,0	5/64	150	5,9	100
3,0	1/8	150	5,9	100
4,0	5/32	150	5,9	100
5,0	2/10	150	5,9	100

Coefficient of Friction μ : Steel: approx. 0,70 | PE: approx. 0,40

HDPE: approx. 0,35 | FDA/EC/BfR-conform

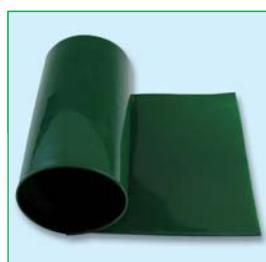


Flat belts PU 75 A sky blue

Profile thickness	Profile width	Standard Roll		
mm	inch	mm	inch	ft
1,0	3/64	150	5,9	100
1,5	1/16	150	5,9	100
2,0	5/64	150	5,9	100
3,0	1/8	150	5,9	100
4,0	5/32	150	5,9	100
5,0	2/10	150	5,9	100

Coefficient of Friction μ : Steel: approx. 0,70 | PE: approx. 0,40

HDPE: approx. 0,35 | FDA/EC/BfR-conform



approx. 88° Shore A

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

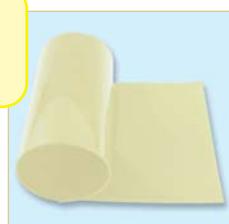
Flat belts PU 85 A green

Profile thickness	Profile width	Standard Roll		
mm	inch	mm	inch	ft
1,0	3/64	150	5,9	100
1,5	1/16	150	5,9	100
2,0	5/64	150	5,9	100
3,0	1/8	150	5,9	100
4,0	5/32	150	5,9	100
5,0	2/10	150	5,9	100

Coefficient of Friction μ : Steel: approx. 0,60 | PE: approx. 0,30

HDPE: approx. 0,25

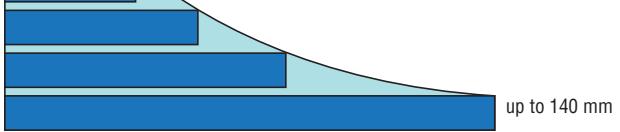
Polyester Flat belts
TPE 40 D and TPE 55 D
in preparation.



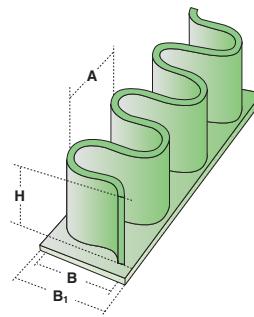
from 5 mm

Cutting:

All widths available from
5 mm up to 140 mm



Sidewalls and Cleats



Sidewalls white

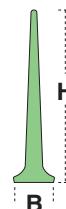
Type	Item number	Height (mm) H	Wave width (mm) W	Base width (mm) W1	Pitch of waves (mm) P	Weight (g/m)	Sidewalls pulley Ø (mm)	Standard rail (m (ft))	Hardness (Shore A)
U20W	FBVH020W	20,00	23,00	32,00	25,40	200,00	80,00	100 (328)	85
U30W	FBVH030W	30,00	23,00	32,00	25,40	260,00	80,00	100 (328)	85
U40W	FBVH040W	40,00	23,00	32,00	25,40	330,00	100,00	100 (328)	85
U50W	FBVH050W	50,00	23,00	32,00	25,40	420,00	100,00	100 (328)	85
U60W	FBVH060W	60,00	45,00	55,00	50,80	510,00	100,00	100 (328)	85
U80W	FBVH080W	80,00	45,00	55,00	50,80	590,00	130,00	100 (328)	85
U100W	FBVH100W	100,00	45,00	55,00	50,80	700,00	160,00	100 (328)	85
U120W	FBVH120W	120,00	45,00	55,00	50,80	850,00	185,00	100 (328)	85

FDA/EC/BfR-conform

Sidewalls apple green/blue

Type	Item number	Height (mm) H	Wave width (mm) W	Base width (mm) W1	Pitch of waves (mm) P	Weight (g/m)	Sidewalls pulley Ø (mm)	Standard rail (m (ft))	Hardness (Shore A)
U20COLOR	FBVH020G FBVH020L	20,00	23,00	32,00	25,40	200,00	80,00	100 (328)	85
U30COLOR	FBVH030G FBVH030L	30,00	23,00	32,00	25,40	260,00	80,00	100 (328)	85
U40COLOR	FBVH040G FBVH040L	40,00	23,00	32,00	25,40	330,00	100,00	100 (328)	85
U60COLOR	FBVH060G FBVH060L	60,00	45,00	55,00	50,80	510,00	100,00	100 (328)	85
U80COLOR	FBVH080G FBVH080L	80,00	45,00	55,00	50,80	590,00	130,00	100 (328)	85
U100COLOR	FBVH100G FBVH100L	100,00	45,00	55,00	50,80	700,00	160,00	100 (328)	85

FDA/EC/BfR-conform



PU cleats white/green/blue

Type	Item number	Color	Height (mm) H	Foot Width (mm) W	Standard length per piece (m)	Standard roll	Weight (g/m)	Hardness (Shore A)
PU Thin Cleat 20 white	FBCJ020WT	white	20,00	8,00	3,0	80 pcs. = 240m	75,00	88
PU Thin Cleat 30 white	FBCJ030WT	white	30,00	9,00	3,0	50 pcs. = 150m	109,00	88
PU Thin Cleat 40 white	FBCJ040WT	white	40,00	9,00	3,0	48 pcs. = 144m	129,00	88
PU Thin Cleat 20 green	FBCJ020GT	green	20,00	8,00	3,0	80 pcs. = 240m	75,00	88
PU Thin Cleat 30 green	FBCJ030GT	green	30,00	9,00	3,0	50 pcs. = 150m	109,00	88
PU Thin Cleat 40 green	FBCJ040GT	green	40,00	9,00	3,0	48 pcs. = 144m	129,00	88
PU Thin Cleat 20 blue	FBCJ020LT	blue	20,00	8,00	3,0	80 pcs. = 240m	75,00	88
PU Thin Cleat 30 blue	FBCJ030LT	blue	30,00	9,00	3,0	50 pcs. = 150m	109,00	88
PU Thin Cleat 40 blue	FBCJ040LT	blue	40,00	9,00	3,0	48 pcs. = 144m	129,00	88

FDA/EC/BfR-conform

Tailoring – Example of calculation

Express-Service

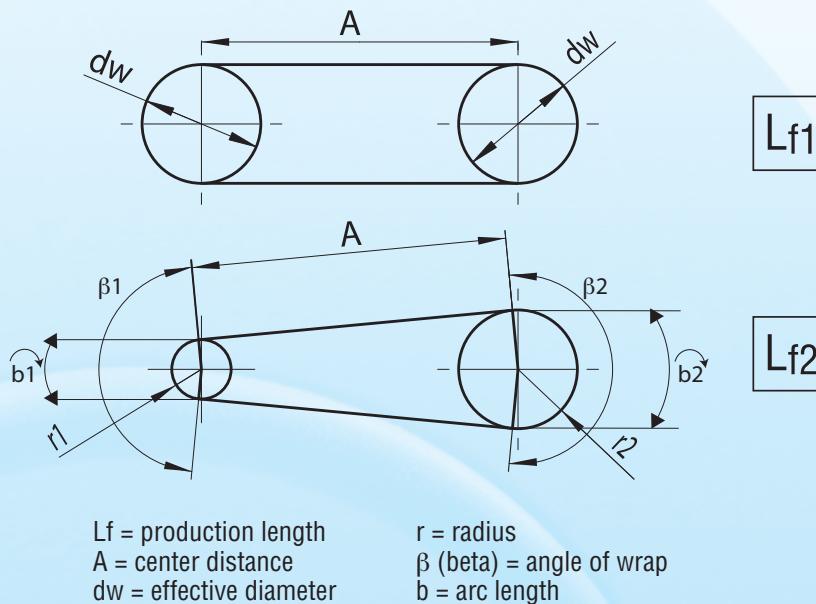
We are able to tailor Round- and V-belts of different lengths and diameters - within a few days and with high quality. Feel free to contact us.

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



Appropriate formula

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



Appropriate formula

$$Lf_2 = b_1 + b_2 + 2 \times A + \text{Belt } \emptyset$$

$$b_1 = \frac{\pi}{180^\circ} \times r_1 \times \beta_1$$

$$b_2 = \frac{\pi}{180^\circ} \times r_2 \times \beta_2$$

Example 1

Task

Lf1

$$dw = 50 \text{ mm}$$

$$A = 250 \text{ mm}$$

$$\text{Belt } \emptyset: 5,00 \text{ mm}$$

Calculation

$$Lf_1 = \frac{(50 \text{ mm} \times 3,142)}{2} \times 2 + 2 \times (250 \text{ mm}) + \text{Belt } \emptyset$$

$$Lf_1 = 157,1 \text{ mm} + 500 \text{ mm}$$

$$= 657,1 \text{ mm} + 5 \text{ mm } \emptyset$$

$$= 662,1 \text{ mm} - \text{Pretension} = Lf_1$$

Please see the recommended pretension at the corresponding belt quality

Example 2

Task

Lf2

$$A = 250 \text{ mm} \quad \text{Belt } \emptyset: 5,00 \text{ mm}$$

$$r_1 = 20 \text{ mm}$$

$$r_2 = 25 \text{ mm}$$

$$\beta_1 = 170^\circ$$

$$\beta_2 = 190^\circ$$

Calculation

$$b_1 = \frac{3,142}{180^\circ} \times 20 \text{ mm} \times 170^\circ \\ = 59,35 \text{ mm}$$

$$b_2 = \frac{3,142}{180^\circ} \times 25 \text{ mm} \times 190^\circ \\ = 82,91 \text{ mm}$$

$$Lf_2 = 59,35 \text{ mm} + 82,91 \text{ mm} + 2 \times (250 \text{ mm}) + 5 \text{ mm } \emptyset \\ = 647,26 \text{ mm} - \text{Pretension} = Lf_2$$

Friction welding machine

BEHAbelt®
Made in Germany

Friction welding machine RS02 for Polyurethane profiles

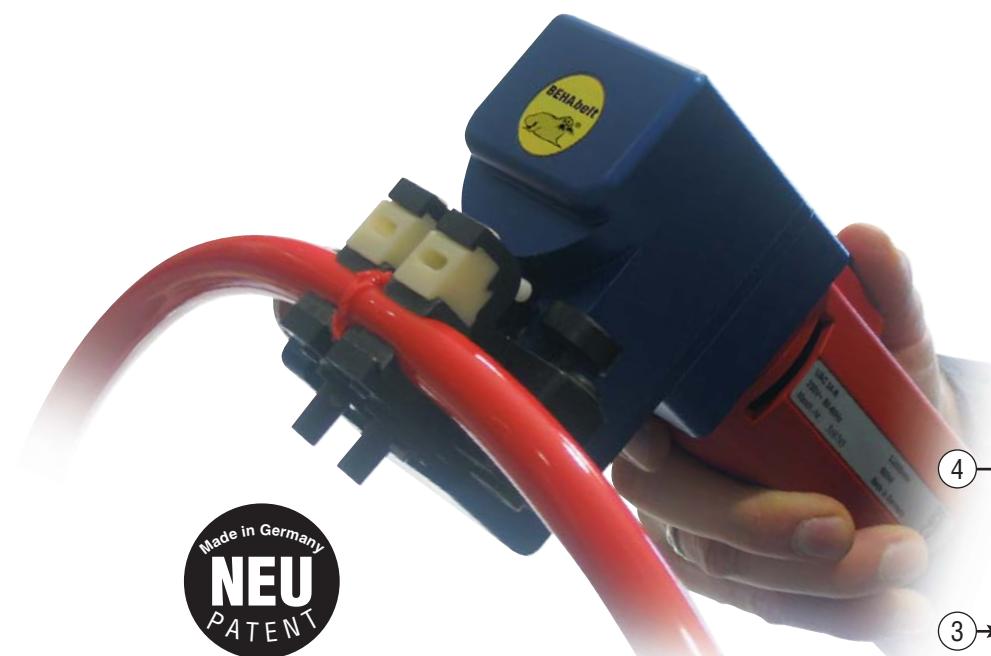
Machine consists of:

- Drive motor 230 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 Ø 5 to 20 mm

For V-belts from 6 x 4 to 22 x 14 mm

Special kit of profile jaws for special profiles upon request



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



Carrying bag with hard foam inlay



Allen key



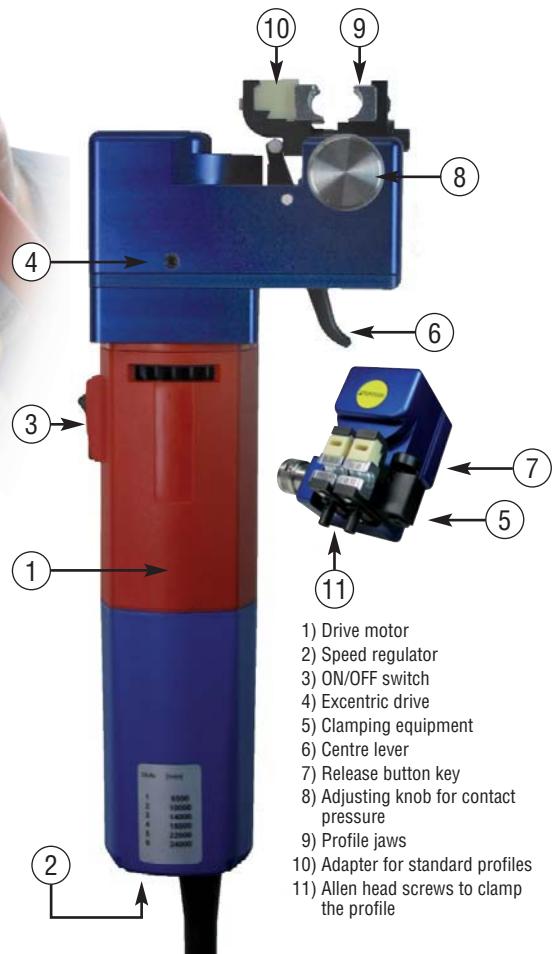
Edge cutter SE 02



Scissors AS 02



Kit of profile jaws



- 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

Scope of delivery

- Friction welding machine RS02
- 1 kit of standard profile jaws at your own choice
- 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

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

NEW



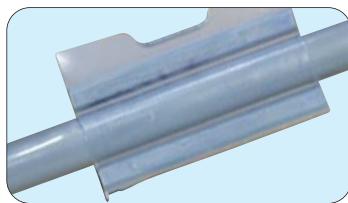
Overlap welding

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



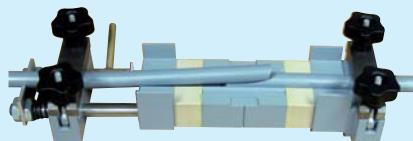
Perfect weld in only 5 steps

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
- Cooling unit 6,4l
- Screw driver
- Scissors AS04
- Mould (optional and for additional charge)
- Controller HP01
- Edge cutter SE02
- Scissors AS04

Guide clamp set FZ03 for all popular profiles

Overlap welding

NEW

Vertical contact pressure (Y)

PU/TPE-belts

Horizontal contact pressure (X)

Z-shape welding tool



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.

Scope of delivery:

- 1 pc. Aluminium box
- 1 pc. Guide clamp FZ03
- 1 pc. Z-shape welding tool H15, 230 Volt
- 1 pc. Scissors with movable stop AS04
- 1 pc. Edge cutter SE02
- 1 set of clamping pieces for Round belts Ø 8.0 - 15.0 mm
- 1 set of clamping pieces for V-belts (A, B, C)
- 1 pc. table fixture

**Perfect weld
in only 5 steps**

1

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



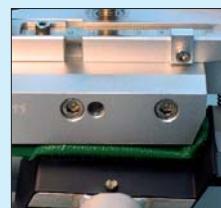
2

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



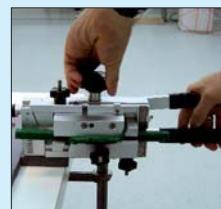
3

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.



Ready for all
popular profiles

Joining Tools

Multi TC

Temperature-controlled welding instrument



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

Description
Multi TC 230 V ~ 50/60 Hz

Article. No.
FBWMTC230

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
Spare paddle Multi TC or TC72

Article. No.
FBWMTC1 / FBWTC72

Guide clamp FZ01

for Round- and V-belts



Handy and lightweighth for Round belts up to Ø 10 mm and V-belts up to profile 10 (Z)

Description
Guide clamp FZ01

Article. No.
FBWFZ01

Guide clamp set

Guide clamp and table fixture



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

Description
Guide clamp set

Article. No.
FBWFZSET01

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
SG02 PU - 230 V
SG03 HYT - 230 V

Article. No.
FBWSG02
FBWSG03

Voltage converter

for Multi TC, SG02 and SG03



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

Description
Voltage converter 120 V ~ 50/60 Hz

Article. No.
FBW00013010U

Guide clamp FZ02/3

for Round- and V-belts

For 90°-welding



Robust and accurate
for V-belts up to profile 32 (D)
and round belts from Ø 8 mm

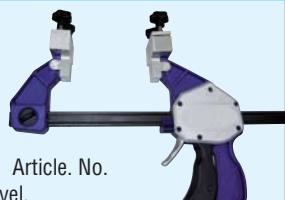
Description
Guide clamp FZ02/3

Article. No.
FBWFZ02/3

Belt tensioner RSH01 & RSH02

for Round and V-belts

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



Description
Design RSH01 450 mm (18") clamp travel,
suitable up to approx. 3 m belt length
Design RSH02 900 mm (36") clamp travel,
suitable up to approx. 9 m belt length

Article. No.
FBWRSH01 (450 mm)
FBWRSH02 (900 mm)

Table fixture TB02
for guide clamp FZ02/1



For guide clamp FZ02/1

Description
Table fixture TB02

Article. No.
FBWTB02

Scissors AS02
Scissors with stop



For round belts up to Ø 12 mm

Description
Scissors AS02

Article. No.
FBWAS02

Scissors AS03
Scissors with stop

For Round-
and V-belts



For 90° cut and mitre cut

Description
Scissors AS03

Article. No.
FBWAS03

Scissors AS04
Scissors with movable angular stop



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

Description
Scissors AS04

Article. No.
FBWAS04

Edge cutter SE 02
with special grinding



To remove the welding bead

Description
Edge cutter SE02

Article. No.
FBWSE02

Pliers SZ01



Pliers SZ01 for quick joining of
Hollow round belts with fasteners.
Optional: Corresponding fasteners for diameter
4.8, 6.3, 8.0, 9.5, 12.5, 15.0 mm available.

Description
Pliers SZ01



Article. No.
FBWSZ01



HDT Digital thermometer 6001



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

Description
HDT Digital thermometer 6001
HDT Rubber protective covering

Article. No.
FBW00006001D
FBW00001101D

Temperature probe Type 115
Surface rapid probe



Temperature range:
-0° C...400° C

Description
Type 115/9035

Article. No.
FBW00009035D

Multi TC and Service-Sets

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



Junction techniques

BEHAbelt®
Made in Germany

www.behabelt.com

...is always worth a visit!

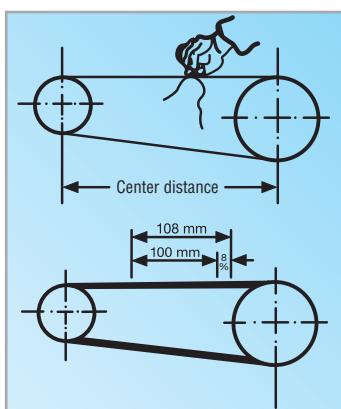


24-hours information

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.

Useful Services Downloads Contact BEHA belt Video



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.



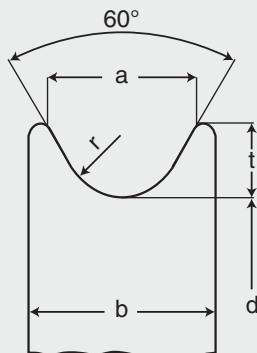
Connect Quick-Joining for Quick Replacements

The belts with diameters of 4.8 – 6.3 – 8 – 9.5 – 12.5 – 15 mm 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

Pulleys for Round belts



Recommended pulley dimensions – dimensions in mm

Belt Ø	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

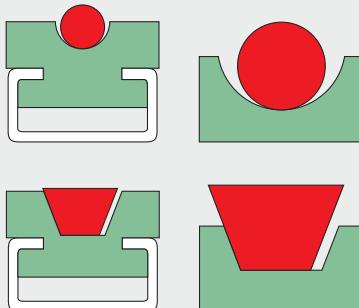
Please select the minimum pulley diameter according to the different PU/Polyester qualities.

Guide rails to support Round- and U-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 suppliers 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	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	–	approx. 180 daN	approx. 100 daN	–
2,0	–	approx. 300 daN	approx. 140 daN	–
2,5	–	–	–	approx. 355 daN
3,0	approx. 40 daN	approx. 560 daN	approx. 390 daN	–
4,0	approx. 69 daN	–	approx. 500 daN	–
Note	„PATENT“ - weldable Recommendation: Butt welding	not weldable Recommendation: Overlap welding	not weldable Recommendation: Overlap welding	Recommendation: Crimping

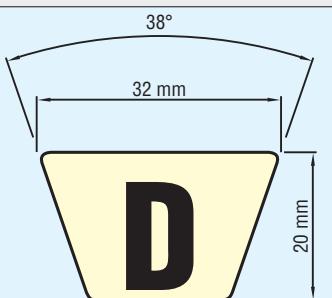
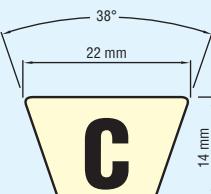
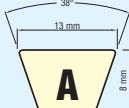
Adhesion factor and V-belt dimensions

Adhesion factor μ

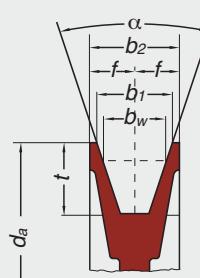
Quality	Al	Steel	Glass	wood	PE – Polyethylene	HDPE – Polyethylene-Superfinish
PU 65 A	0,90	0,70	0,60	0,80	0,40	0,35
PU 75 A	0,85	0,70	0,50	0,70	0,40	0,35
PU 80 A	0,80	0,65	0,45	0,65	0,35	0,30
PU 85 A	0,75	0,60	0,40	0,60	0,30	0,25
PU 90 A	0,70	0,50	0,30	0,45	0,30	0,25
PU 95 A	0,65	0,45	0,25	0,40	0,25	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 radii 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	
	PU 80 A	10	10	10	10	10	10	
	PU 85 A	15	15	15	15	15	15	
	PU 90 A	15	15	15	15	15	15	
	Polyester 55 D	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 BEHA belt 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: $v = \text{belt speed (m/s)}$

$v = \frac{dw \times n_1}{19100}$ $n_1 = \text{speed of the smaller pulley (min. -1)}$

$dw = \text{effective diameter of the smaller pulley (mm)}$

Design guidelines

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:

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

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.

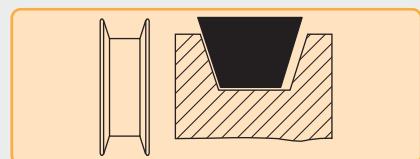
Due to the relatively slow conveying speed – 1 m per second according to experience – we have selected according to the material quality (shore hardness).

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.

Tension-lengthening diagrams

BEHAbelt®
Made in Germany

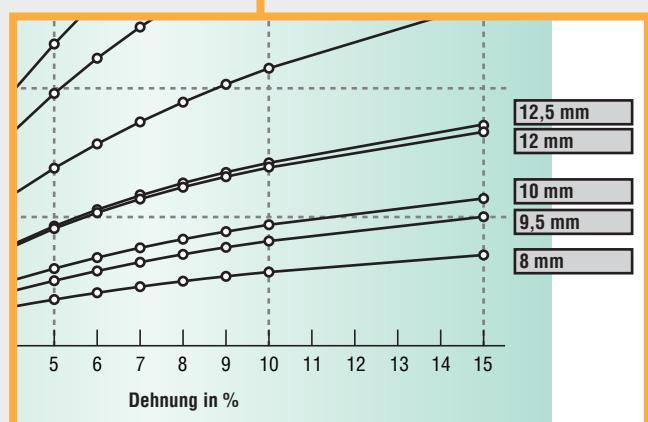
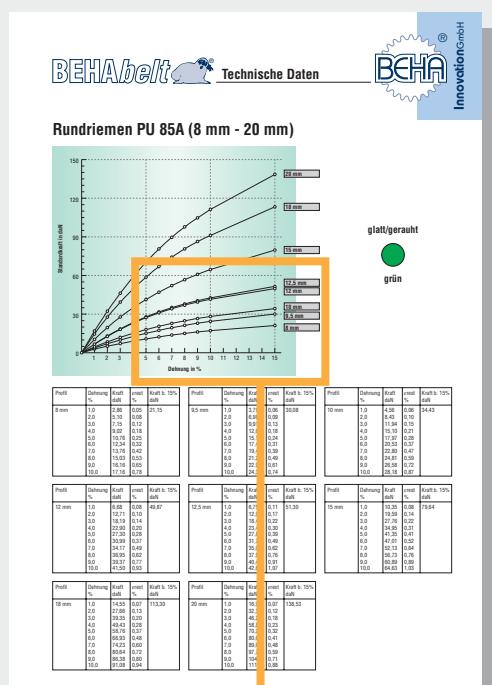
upon request

Technical data on tension-lengthening diagrams

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

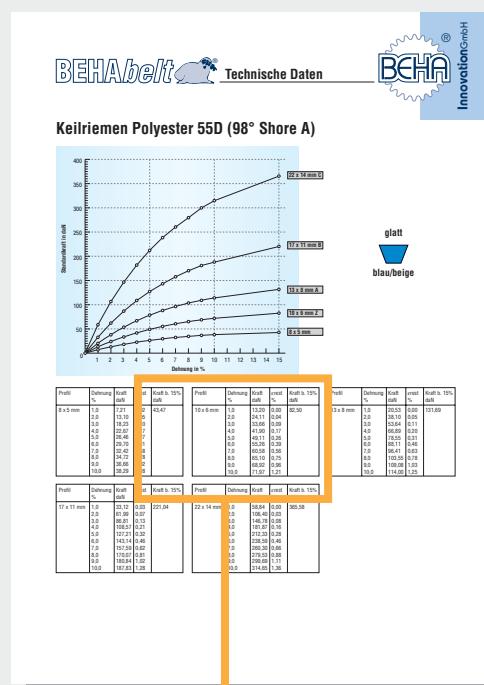
Example:

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



Example:

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



ε	Tension at 15% daN	Profile	Elongation %	Tension daN	resid. ε %	Tension at 15% daN	P
43,47	10 x 6 mm	1,0	13,20	0,00	82,50		13
		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			
ε	Tension at 15% daN	Profile	Elongation %	Tension daN	resid. ε %	Tension at 15% daN	P

Calculation

Calculation for PU-Polyester Round and U-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, U- or special profiles is always identical.

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

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

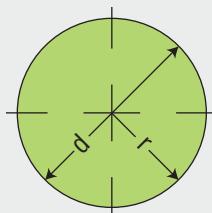
You will find the values which we used for this calculation in the chapters of the corresponding profile charts.

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

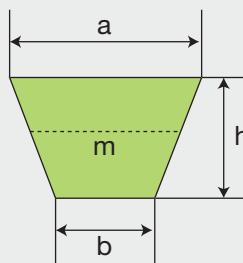
ATTENTION: The adhesion factors may change to negative values due to contamination or wear.
The tensioning of the belts is very important.

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 U-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

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

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

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 $1.46 \text{ cm}^2 \times 2 = 2.92 \text{ cm}^2$

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

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 .

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

Production tolerances

Production tolerances BEHAbelt Round- and U-belts

Description	Dimension mm (inch)		Tolerance ≈ mm (inch)
Round belt			
Type PU 75 A/80 A	Ø 2 - Ø 8 (Ø 5/64 - 5/16)		± 0,2 (± 1/128)
Type PU 75 A/80 A	Ø 9 - Ø 15 (Ø 45/128 - 19/32)		± 0,3 -
Type PU 85 A/90 A/95 A	Ø 2 - Ø 8 (Ø 5/64 - 5/16)		± 0,2 (± 1/128)
Type PU 85 A/90 A/95 A	Ø 9 - Ø 15 (Ø 45/128 - 19/32)		± 0,3 -
Type PU 85 A/90 A/95 A	Ø 18 - Ø 20 (Ø 3/4 - 25/32)		± 0,5 (± 1/64)
Type Polyester TPE 40 D/55 D	Ø 3 - Ø 8 (Ø 1/8 - 5/16)		± 0,2 (± 1/128)
Type Polyester TPE 40 D/55 D	Ø 9 - Ø 15 (Ø 45/128 - 19/32)		± 0,3 -
Type Polyester TPE 63 D	Ø 6,3, Ø 9,5, Ø 12,5 (Ø 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			
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)

Properties thermoplastic PU elastomers

according to manufacturer's specifications

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				

Properties thermoplastic Polyester elastomers

according to manufacturer's specifications

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 (punched)		ASTM D1052	Cycles up to 5 x Cutting	>10 ⁶ >10 ⁶	5x10 ⁵ >5x10 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

Technical advice

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: support@behabelt.de

Phone: +49 (0) 7684 / 907 - 0

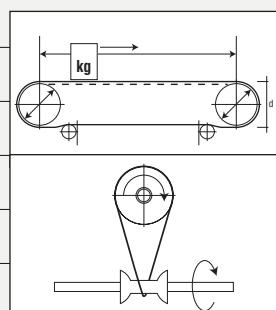
Fax: +49 (0) 7684 / 907 - 101

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)	mm	
DW	Effective diameter of pulleys of all used pulleys	mm	DW1 DW2...
α_1	Angle of rape small pulleys	° (Degree)	
α_2	Angle of rape large pulleys	° (Degree)	
R μ	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



Order Request

To:
(Please fill in recipient)

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

LubeSite® Lubricator

Facts you need to know about lubrication

Manual lubrication is subject to many variables. You must set up a fixed schedule and stick to that schedule. It is easy to forget about the schedule when you are busy. When you manually lubricate your equipment you run the additional risk of applying too much or not enough lubrication. Both cases are bad. Too much lubrication will cause over heating of the bearings. Too little lubrication and you will run the bearings dry.

With the high cost of lube oil and high costs of repairs and labour, analysis have shown that it is possible to reduce the overall cost of operating your equipment by using automatic lubricators.

A steady oil flow only when the bearing Drive is running avoids dry running and over lubricating.

LubeSite® lubricators can be used for all units with antifriction- or floating bearings.

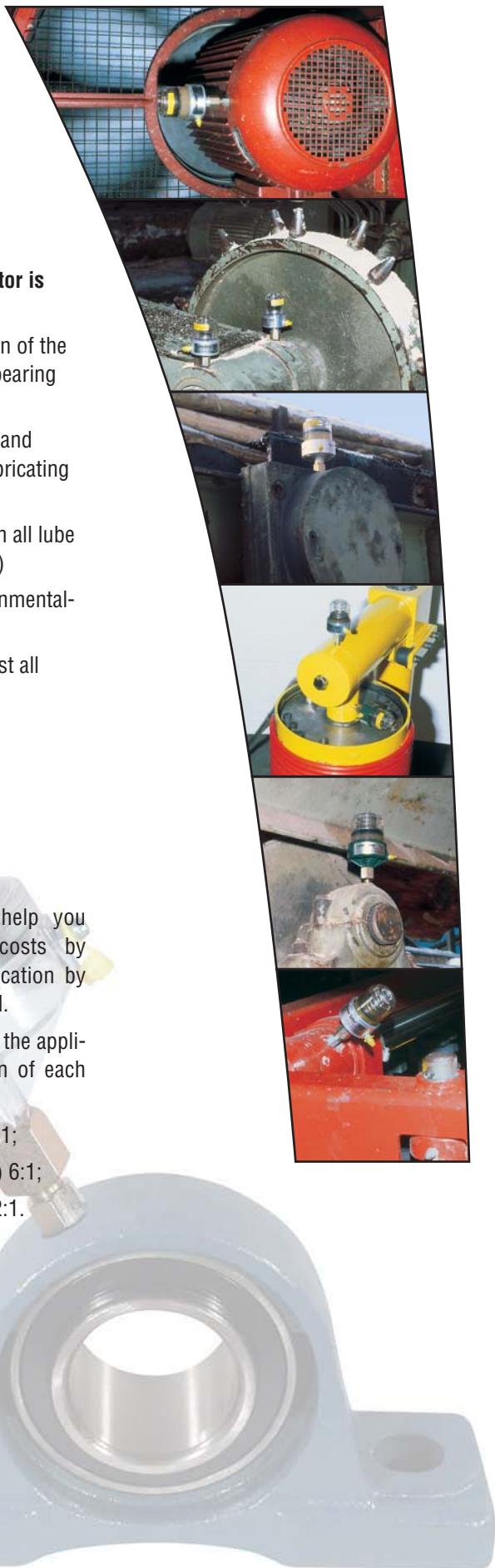
The consistent lubrication of the bearing can be achieved by the spring pressure and the bevelled lengthwise slotted plunger.

Decreasing of the spring pressure on the aperture results in an increase at the plunger.

Because of the low pressure under 0,7 bar, the lubricator only flows, when the bearing moves.

LubeSite® automatic lubricator is characterised by:

- NO over- or under lubrication of the bearing resulting in longer bearing life
- Cost savings both in labour and materials through longer lubricating Intervals
- Possibility to refill again with all lube oils (consistency 0...4 NLGI)
- Easy to maintain and environmental-friendly construction
- Extensive program for almost all applications



LubeSite® lubricators will help you lower your maintenance costs by replacing your manual lubrication by lubricators that can be refilled.

The refill interval depends on the application and bearing condition of each unit:

small (Type 202, 302, 502) 3:1;

medium (Type 205, 305, 505) 6:1;

large (Type 260, 360, 560) 12:1.



LubeSite® automatic refill lubricators

Light construction



LubeSite®-series 200

Heavy construction



LubeSite®-series 300

For chemically aggressive media



LubeSite®-series 500

High temperature accomplishment



LubeSite® 704

LubeSite® 202, 205 and 260 within the clear-sight cages are the standard lubricators for most bearing applications.

They only supply lube oil, when the bearing is moving and therefore protect the bearing from over and under lubrication.

Units are assembled with medium springs. Three additional light and heavy springs each are included in a box of ten. Model 260 is assembled within a single package with additional springs (light, heavy)

Area of operations...: -25...+120° C

LubeSite® 302, 305 and 360 are designed for bearing housings which operate under static conditions, vibration and centrifugal forces. The strong metal castings compensate for the heavy loads. The main application areas are eccentric presses, compactors, stone mills, construction machines, pumps, etc. Units are assembled with medium springs. Three additional light and heavy springs each are included in a box of ten.

Model 360 is assembled within a single package with additional springs (light, heavy)

Area of operations...: -25...+120° C

LubeSite® 502, 505 and 560 is resistant to aggressive chemical agents.

The light metal cases are special nickel-chrome double plated. The seals are plated with chemical resistant VITON.

The 500 series is a proven product for many years in the chemical, food and nuclear industry. Units are assembled with medium springs. Three additional light and heavy springs each are included in a box of ten.

Model 560 is assembled within a single package with additional springs (light, heavy)

Area of operations...: -25...+120° C

LubeSite® 704 is the only automatic lubricator on the market, that can be used in ambient and high temperature applications.

The case is made of light metal, the body is made of borosilicate glass, the pressure spring is made of high quality steel and the sealing is made of temperature consistent VITON.

LubeSite® 704 is used with best results within roller mills, plants, dehumidifiers, etc.

Model 704 is assembled within a single package with one additional heavy spring.

Area of operations...: -25...+230° C

Order more information
about LubeSite®!

Technical data LubeSite® springs



Type	■ low	■ medium	■ strong	■ extra strong
Spring resilience N tensioned/unstressed				
202	26/13 N	40/20 N	54/27 N	98/49 N
205	30/15 N	44/22 N	72/36 N	90/45 N
206	84/42 N	130/65 N	140/70 N	156/78 N
302	26/13 N	40/20 N	54/27 N	98/49 N
305	30/15 N	44/22 N	72/36 N	90/45 N
360	84/42 N	130/65 N	140/70 N	156/78 N
302	26/13 N	40/20 N	54/27 N	98/49 N
305	30/15 N	44/22 N	72/36 N	90/45 N
360	84/42 N	130/65 N	140/70 N	156/78 N
704	-	80/40 N	158/79 N	-

Terms and conditions

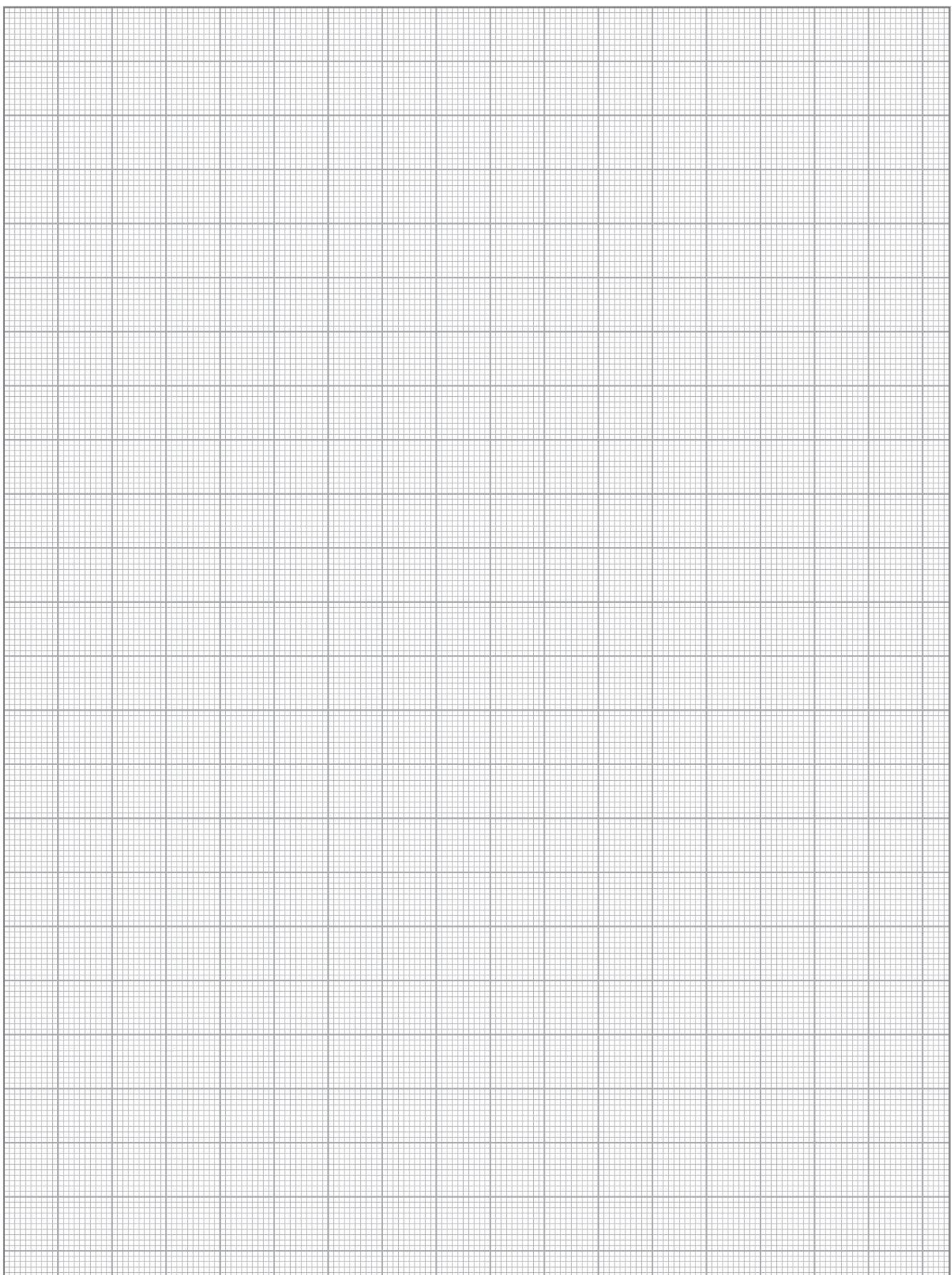
**Online-
Service**

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

Your notes

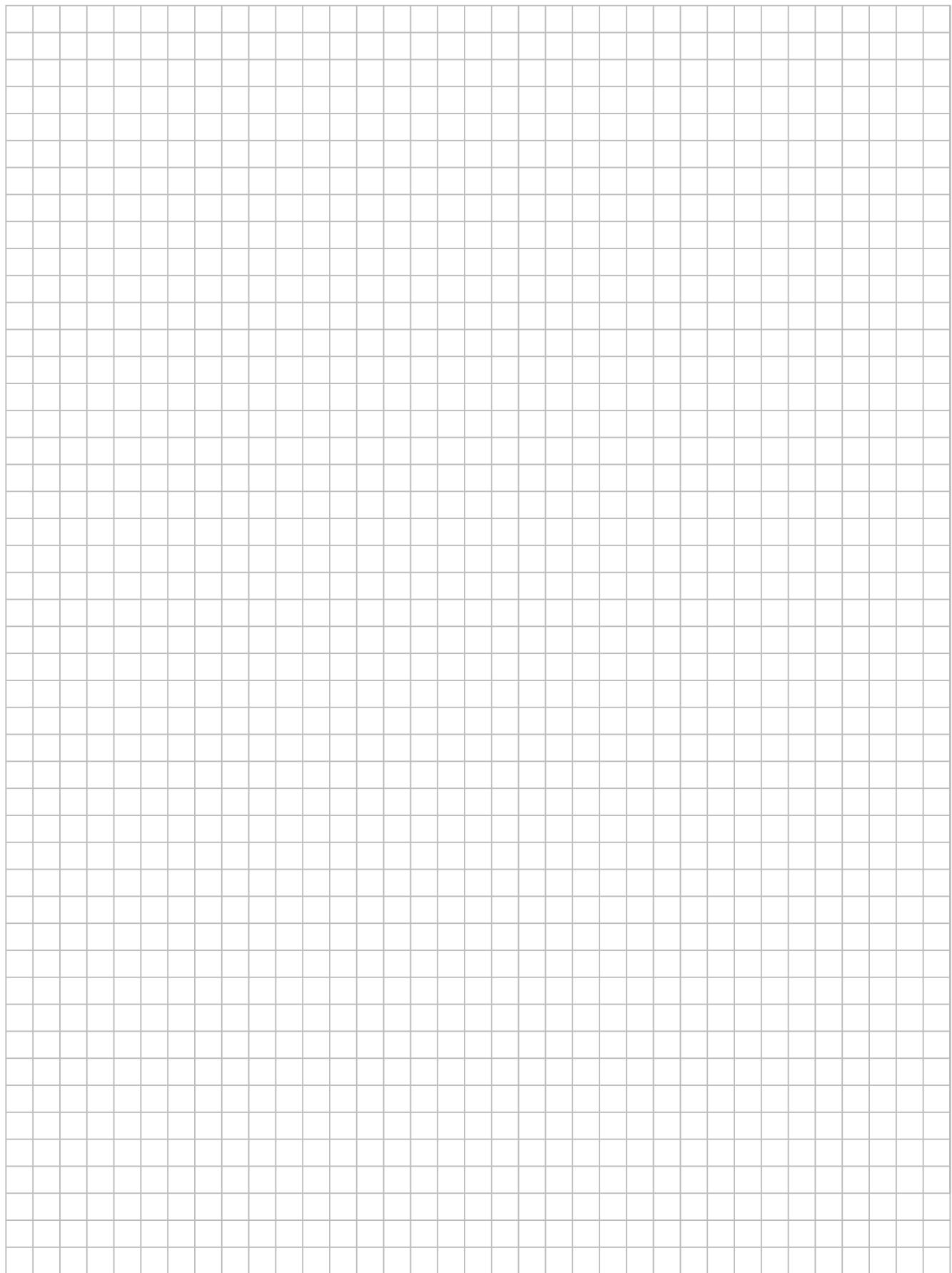
Notes

BEHAbelt®
Made in Germany



Notes

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Access plan:



Address

BEHA Innovation GmbH
In den Engematten 16
79286 Glottertal / Germany
Phone: +49 (0) 76 84 / 907 - 0
Fax: +49 (0) 76 84 / 907 - 101
E-Mail: info@behabelt.com
Internet: www.behabelt.com



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BEHA Innovation GmbH

In den Engematten 16 · 79286 Glottertal/Germany
Phone: +49 (0) 76 84 / 907 - 0 · Fax: +49 (0) 76 84 / 907 - 101
E-Mail: info@behabelt.com · Internet: www.behabelt.com

