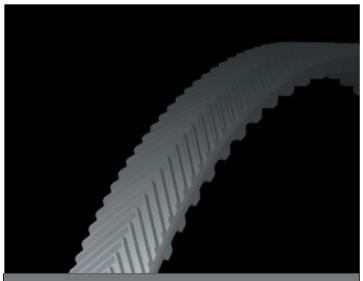
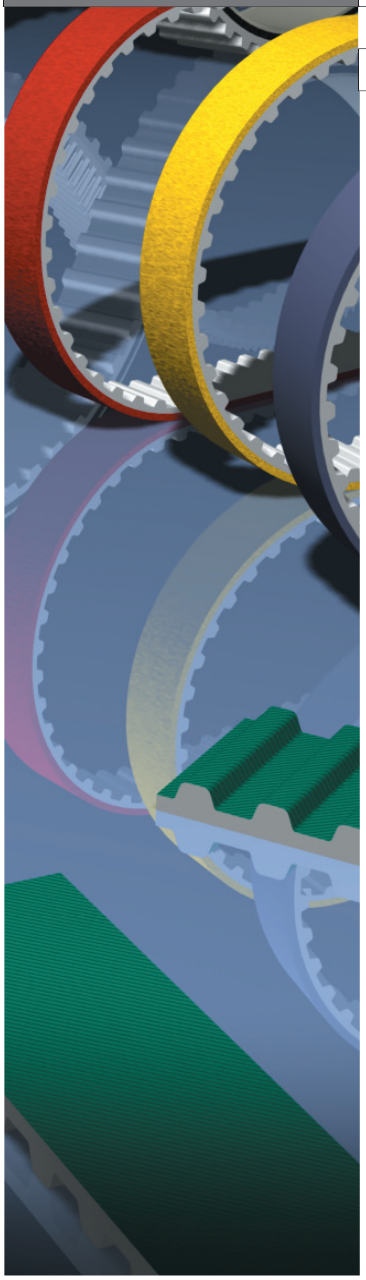
Keeping things moving.





Coated BRECO®- and BRECOFLEX®-TIMING BELTS

BRECO is a member of the Mulco Europe EWIV

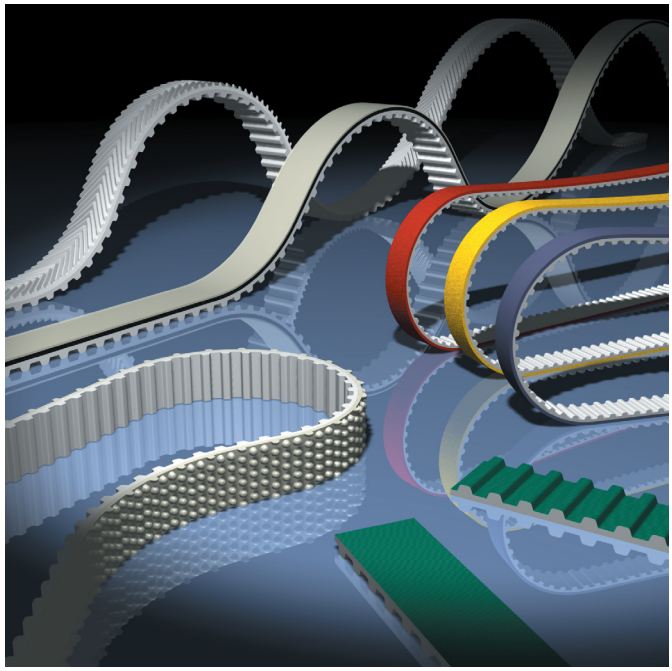
Coated polyurethane timing belts

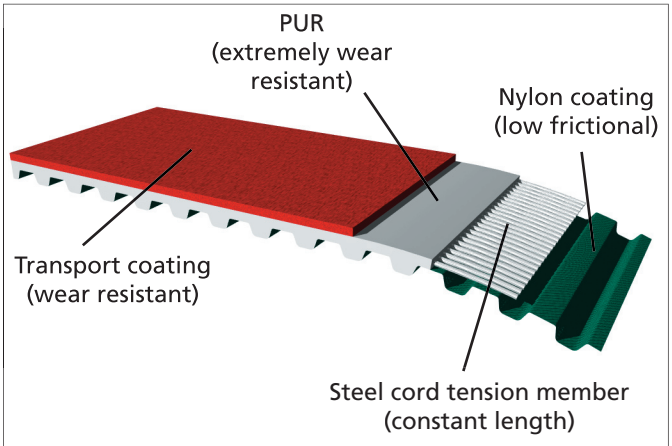
BRECO® and BRECOFLEX® TIMING BELTS consist of wear resistant polyurethane (PUR) and high tensile steel cord tension members. The coating of the timing belts with various materials provides a variety of application possibilities in the transport technology.

The selection of the correct coating depends on the transport item properties and the required grip. High friction for a good carrying effect, low friction to reduce the power transmission performance, soft for sensitive items or hard for sharp-edged items are the determining factors.

Every material involved assumes its task according to its specific property.

To meet specific transport applications, the tooth side and/or the transport side can be mechanically reworked. In this manner, the flexibility of the entire belt can be restored by making incisions in thick coatings.





Construction of the Timing belt

Friction

The friction of the belt on a support produces heat. This increases the more the belt is loaded by the items to be transported. The bed support must be selected such that the friction value of the transport belt in contact with the material of the bed plate results in a minimum value. The bed plate should guarantee good heat dissipation under high pressure forces.

The friction value changes temperature dependent. It increases as the temperature rises and reduces at temperatures below zero (frost).

Information

You should ask for advice for coatings over 75 mm wide and approx. 2 mm thick because of the different processing properties.

Resistance

Depending on the application the resistance of each material part of the coated timing belt is to be viewed separately. The material resistance depends, among others, on the pH value, the concentration, the temperature and the influencing time of the medium. Simple oils generally have no damaging effect on the belt. Additives in the oil and temperatures over approx. 40°C can reduce the longevity.

Temperature influence

If hot items (above approx. 80°C) are transported, ensure that the contact time is as short as possible to avoid heating of the belt substructure to over 80°C. A coated belt can resist a thermally higher load over short distances or a short period, prerequisite that being sufficient cooling for the remaining circulation.

The tooth shear strength is slightly reduced in a temperature range of over approx. 60°C. An additional security is only required with strong tooth load.

The flexibility of the coating is reduced with low ambient temperatures. To this effect, select higher synchronising pulley diameters compared to normal temperatures (see diagram). The flexibility of the timing belt is also reduced with low temperatures. Your Mulco partner offers the corresponding advice.

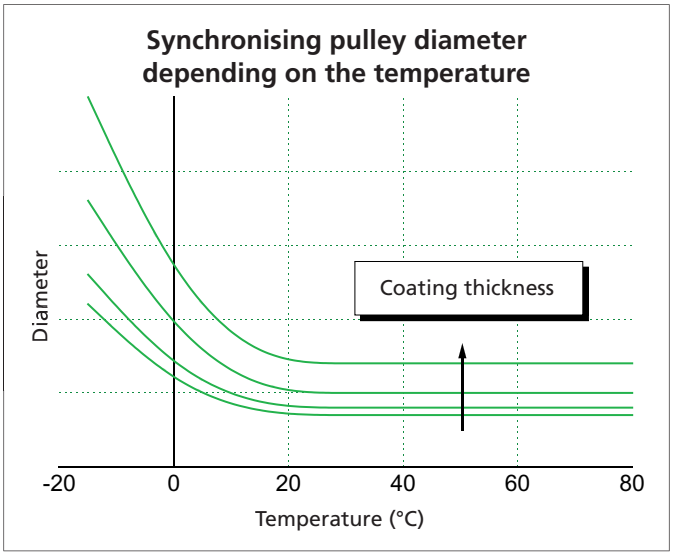
Mechanical rework

Coated BRECO® and BRECOFLEX® TIMING BELTS can be mechanical reworked depending on the coating properties for special function features.

Transport belts with thick coatings have a lower flexibility. Therefore, larger synchronising pulley diameters are required for application. The flexibility is increased by cross grooving or incisions of the coating. Milled grooves are, in as much as they are possible from the technical feasibility point of view, used to improve safe loading and secure positioning of the products.

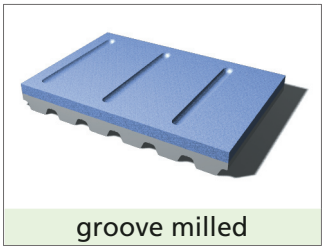
Perforated BRECO® TIMING BELTS are applied in the vacuum transport technology. Also available for this purpose are BRECOFLEX® TIMING BELTS. The BRECO® TIMING BELTS are preferably manufactured with areas without tension members. The teeth are cut in longitudinal direction in relation to the hole size.

Synchronising pulley diameter depending on the temperature



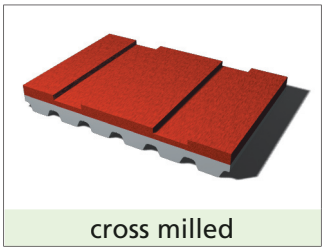
Examples of mechanical rework

Sylomer (blue)



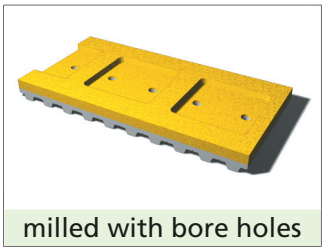
groove milled

Linatex



cross milled

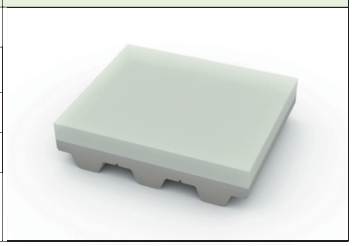
PU - yellow

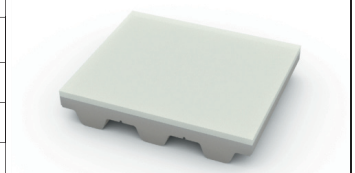


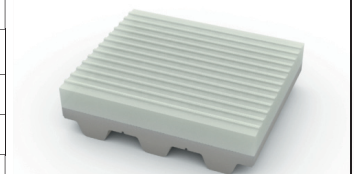
milled with bore holes

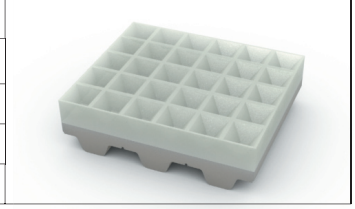
Please ask for available material thicknesses.

Properties		Version T
Colour	transparent	
Material / Hardness	Polyurethane / approx. 85 Shore A	
Temperature resistence	-20°C to +80°C	
chemical Resistance	resistant against simple oil and fats, petrol, ozone	
Application fields	general transport tasks, transport of glass, sheet metal, transport of mechanically aggressiv parts	

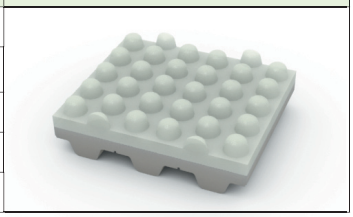
Properties		PU 385
Colour	transparent	
Material / Hardness	Polyurethane / approx. 85 Shore A	
Temperature resistence	-20°C to +80°C	
chemical Resistance	resistant against simple oil and fats, petrol, ozone	
Application fields	general transport tasks, transport of glass, sheet metal, transport of mechanically aggressiv parts	

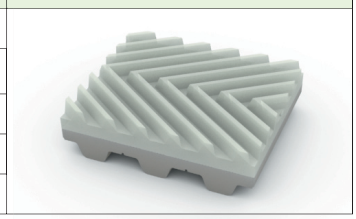
Properties		HV-Film
Colour	transparent shining	
Material / Hardness	Polyurethane / approx. 85 Shore A	
Temperature resistence	-20°C to +80°C	
chemical Resistance	resistant against simple oil and fats	
Application fields	general transport tasks, transport of glas, sheet metal, cardboards	

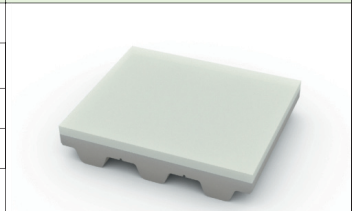
Properties		T-Rille (TR1 and TR2)
Colour	transparent	
Material / Hardness	Polyurethane / approx. 85 Shore A	
Temperature resistence	-20°C to +80°C	
chemical Resistance	resistant against simple oil and fats, petrol, ozone	
Application fields	general transport tasks in wet areas, water, oil	

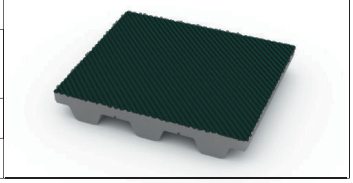
Properties		WM 385
Colour	transparent	
Material / Hardness	Polyurethane / approx. 85 Shore A	
Temperature resistence	-20°C to +80°C	
chemical Resistance	resistant against simple oil and fats, petrol, ozone	
Application fields	general transport tasks in wet areas, water, oil	

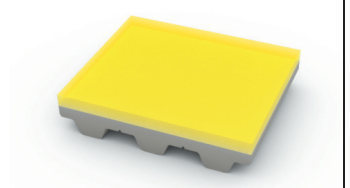
Please ask for available material thicknesses.

Properties		NP 385
Colour	transparent	
Material / Hardness	Polyurethane / approx. 85 Shore A	
Temperature resistence	-20°C to +80°C	
chemical Resistance	resistant against simple oil and fats, petrol, ozone	
Application fields	general transport tasks in wet areas, water, oil	

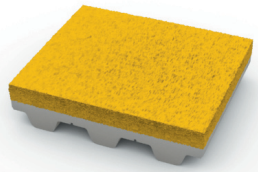
Properties		FG 385
Colour	transparent	
Material / Hardness	Polyurethane / approx. 85 Shore A	
Temperature resistence	-20°C to +80°C	
chemical Resistance	resistant against simple oil and fats, petrol, ozone	
Application fields	general transport tasks in wet areas, water, oil	

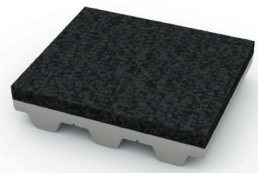
Properties		PU 60 Shore
Colour	transparent	
Material / Hardness	Polyurethan / approx. 60 Shore A	
Temperature resistence	-20°C to +80°C	
chemical Resistance	resistant against simple oil and fats, petrol, ozone	
Application fields	general transport tasks, where high abrasion resistance is needed	

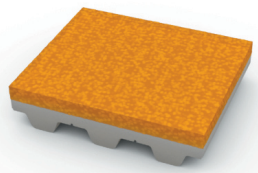
Properties		PA-fabric, anistatic
Colour	black	
Material / Hardness	approx.0,5 mm PU 385, top covering layer 0,1 mm anti-static fabric	
electric conductance	10^5 in new state	
Application fields	accumulating conveyor for electric parts	

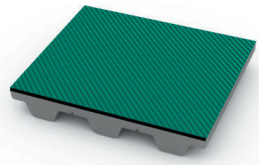
Properties		Polytan
Colour	yellow transparent	
Material / Hardness	Polyurethane / approx. 70 Shore A	
Temperature resistence	-20°C to +80°C	
chemical Resistance	resistant against simple oil and fats, good resistance against ozone, UV-radiation	
Application fields	general transport tasks, transport of mechanically aggressiv parts	

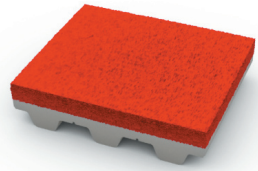
Please ask for available material thicknesses.

Properties		PU-yellow
Colour	yellow, grey (ohne Abbildung)	
Material / Hardness	Polyurethane / approx. 55 Shore A (grey: approx. 45 Shore A)	
Temperature resistence	-10°C to +70°C	
chemical Resistance	resistant against simple oil and fats, not water resistant	
Application fields	Vacuum transport belts subject to high loads, paper industry, textile industry, glass and wood industry	

Properties		TT 60
Colour	black	
Material / Hardness	Polyester-fleece	
Temperature resistence	-10°C to +120°C	
chemical Resistance	resistant against simple oil and fats, electrostatic properties	
Application fields	Glass industry as transport belt in the hot area	

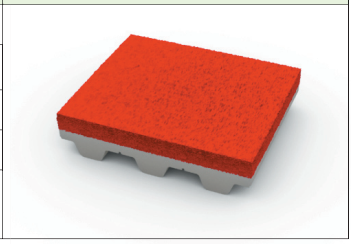
Properties		Celloflex
Colour	yellow-brown	
Material / Hardness	microcellular elastomeric polyurethan / approx. 350 kg/m³	
Temperature resistence	-30°C to +80°C	
chemical Resistance	resistant against simple oil and fats, ozone	
Application fields	Transport of sensitive items, film and packaging industry, textile transport	

Properties		Hamid
Colour	upper layer green, lower layer black	
Material / Hardness	Conveyor side NBR rubber green, intermediate layer Hamid, lower layer NBR rubber black	
Temperature resistence	-30°C to +60°C	
chemical Resistance	resistant against simple oil and fats, water	
Application fields	Paper industry, letter sorting	

Properties		Linatex
Colour	red	
Material / Hardness	95% natural rubber / approx. 38 Shore A	
Temperature resistence	-40°C to +70°C	
chemical Resistance	qualified oil resisting, resistant against wet abrasion, water resistance, please by-pass direct insolation	
Application fields	transport or haul-off belts subject to high friction, Wood, paper, textile industry, transport with a high acceleration	

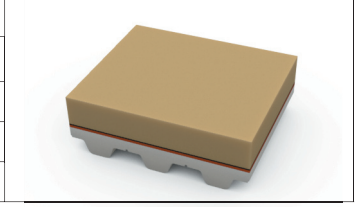
Please ask for available material thicknesses.

Properties		Linatrile
Colour	orange	
Material / Hardness	Vulcanized material based on nitrile, approx. 55 Shore A	
Temperature resistence	-20°C to +110°C	
chemical Resistance	resistant against oil, fats and other chemicals, water resistence	
Application fields	haul-off belts in the textile area, transport of waxy materials	

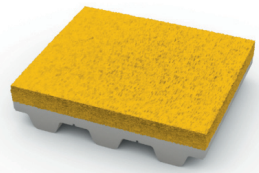
Properties		Linard 60
Colour	red	
Material / Hardness	Silica reinforced natural rubber, approx. 60 Shore A	
Temperature resistence	-20°C to +110°C	
chemical Resistance	resistant against simple oil and fats	
Application fields	using by strong moving material on the surface, material mix (rough/fine)	

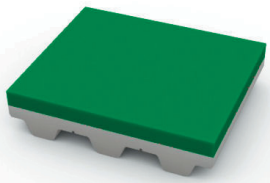
Properties		Linaplus FG FDA
Colour	white	
Material / Hardness	vulcanized natural rubber, approx. 38 Shore A	
Temperature resistence	-40°C to +70°C	
chemical Resistance	resistant against chemicals	
Application fields	Foodstuff industry (wet and moist areas), FDA approval	

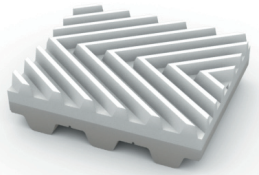
Properties		RP400
Colour	yellow	
Material / Hardness	natural rubber, approx. 39 Shore A	
Temperature resistence	-35°C to +80°C	
chemical Resistance	resistant against simple oil and fats	
Application fields	Glass industry, steel industry, wearing protection	

Properties		Correx
Colour	brown	
Material / Hardness	Para rubber, approx. 36 Shore A	
Temperature resistence	up to approx. +70°C	
chemical Resistance	resistant against simple oil and fats	
Application fields	wearing protection, transport of sheet metal and pipes	

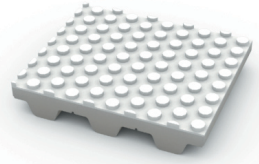
Please ask for available material thicknesses.

Properties		Sylomer
Colour	yellow ((brown, blue, green, red, grey) (without picture))	
Material / Hardness	Elastomeric polyurethane, 150 g/m³; (brown 400 g/m³; blue 220 g/m³; green 300 g/m³; red 510g/m³; grey 680 g/m³;)	
Temperature resistence	-30°C to +70°C	
chemical Resistance	resistant against simple oil and fats	
Application fields	Paper and textil industry, discharging belt conveyor, hugger belts	

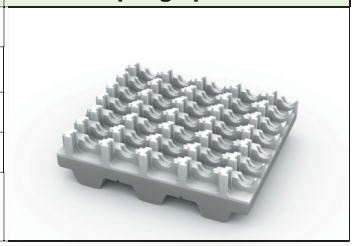
Properties		Sylodyn
Colour	green, yellow (without picture)	
Material / Hardness	closed-cell Polyurethane, 600 g/m³ ; yellow 450 g/m³	
Temperature resistence	-30°C to +70°C	
chemical Resistance	resistant against simple oil and fats	
Application fields	Paper and textil industry, discharging belt conveyor, hugger belts	

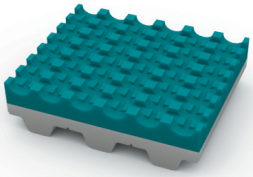
Properties		PVC herringbone FDA
Colour	white	
Material / Hardness	PVC, approx. 65 Shore A	
Temperature resistence	-10°C to +110°C	
chemical Resistance	resistant against oil and fats, acids and lyes	
Application fields	Foodstuff industry, transport of glass in wet areas, FDA approval	

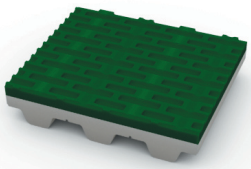
Properties		PVC film FDA
Colour	white	
Material / Hardness	PVC, approx. 48 Shore A	
Temperature resistence	-10°C to +110°C	
chemical Resistance	resistant against oil and fats, acids and lyes	
Application fields	Foodstuff industry, FDA approval	

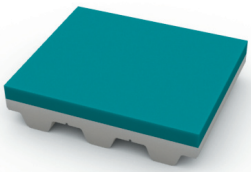
Properties		PVC nap FDA
Colour	white	
Material / Hardness	PVC, approx. 60 Shore A	
Temperature resistence	-10°C to +110°C	
chemical Resistance	resistant against oil and fats, acids and lyes	
Application fields	Foodstuff industry, FDA approval	

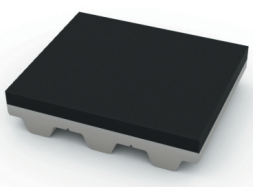
Please ask for available material thicknesses.

Properties		Supergrip FDA
Colour	white	
Material / Hardness	PVC, approx. 55 Shore A	
Temperature resistence	-10°C to +110°C	
chemical Resistance	resistant against oil and fats, acids and lyes	
Application fields	Foodstuff industry (wet and moist areas), FDA approval, glass industry	

Properties		Supergrip
Colour	blue, green (without picture)	
Material / Hardness	PVC, approx. 40 Shore A	
Temperature resistence	-15°C to +90°C	
chemical Resistance	blue: not resistant against oil; green: resistant against simple oil and fats, acids and lyes	
Application fields	well suitable for inclined conveying, transport of light weight items, elevators in the wood and paper industry	

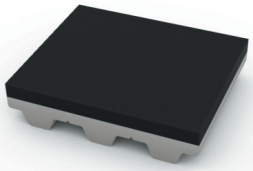
Properties		Minigrip
Colour	green, blue (without picture)	
Material / Hardness	PVC, approx. 65 Shore A, (blue approx. 50 Shore)	
Temperature resistence	-10°C to +110°C (blue -15°C to +90°C)	
chemical Resistance	resistant against oil and fats, acids and lyes	
Application fields	Transport of humid parts	

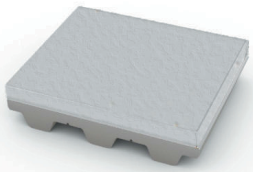
Properties		PVC film
Colour	blue	
Material / Hardness	PVC, approx. 48 Shore A	
Temperature resistence	-15°C to +90°C	
chemical Resistance	low resistace against oil and fats, resistant against acids and lyes	
Application fields	Transport of paper, wood, films and sheet metal, pharmaceutical industry, packing industry	

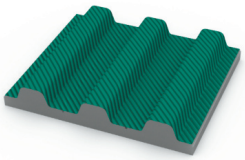
Properties		Porol
Colour	black	
Material / Hardness	closed-cell rubber, 160 - 200 kg/m³	
Temperature resistence	-40°C to +75°C	
chemical Resistance	resistant against water, sea water, methanol, acetone, detergent, acids and lyes	
Application fields	transport of sensitive parts, paper industry, textile industry, cardboard transport	

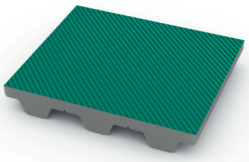
Please ask for available material thicknesses.

Properties		Viton
Colour	black	
Material / Hardness	FKM mix, approx. 70 - 80 Shore A	
Temperature resistence	-10°C to +190°C (short term to 275°C)	
chemical Resistance	good resistant against oil, fats, hydrocarbon, acids, opaque to gas and water vapour	
Application fields	transport of sensitive parts, cardboard transport	

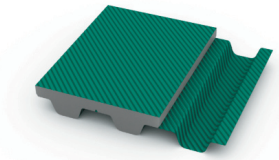
Properties		NBR 65
Colour	black	
Material / Hardness	Nitributadien rubber, approx. 60 - 70 Shore A	
Temperature resistence	-35°C to +70°C	
chemical Resistance	resistant against oil, low resistance against acids and lyes	
Application fields	transport of oily parts	

Properties		Chrome-leather
Colour	grey	
Material / Hardness	leather, tanned with chromous salt	
Temperature resistence	-10°C to +120°C	
chemical Resistance	resistant against oil and fats, weatherproof	
Application fields	Transport of oily and fatty parts, transport of sheet metals and pipes	

Properties		PAZ
Colour	green	
Material / Hardness	Polyamide	
Temperature resistence	-20°C to +50°C	
chemical Resistance	resistant against simple oil and fats	
Application fields	by usage of guide rails	

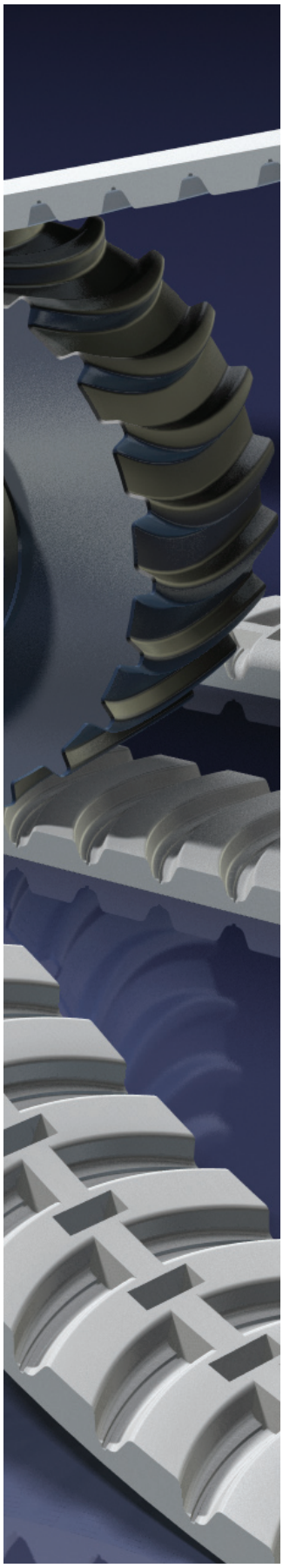
Properties		PAR
Colour	green	
Material / Hardness	Polyamide	
Temperature resistence	-20°C to +50°C	
chemical Resistance	resistant against simple oil and fats	
Application fields	accumulating conveyor	

Please ask for available material thicknesses.

Properties		PAZ-PAR
Colour	green	
Material / Hardness	Polyamide	
Temperature resistence	-20°C to +50°C	
chemical Resistance	resistant against simple oil and fats	
Application fields	by usage of guide rails, accumulating conveyor	

BRECO®
ZAHNRIEMEN

Keeping things moving.



Our distribution partner

Germany

Anton Klocke Antriebstechnik GmbH & Co. KG
Senner Straße 151
D-33659 Bielefeld
Phone: +49 521 95005-01
Fax: +49 521 95005-11
www.klocke-antrieb.de
info@klocke-antrieb.de

Hilger und Kern GmbH Industrietechnik
Käfertaler Straße 253
D-68167 Mannheim
Phone: +49 621 3705-0
Fax: +49 621 3705-403
www.hilger-kern.com
antriebstechnik@hilger-kern.com

Reiff -Technische Produkte- GmbH
Tübinger Straße 2-6
D-72762 Reutlingen
Phone: +49 7121 323-313
Fax: +49 7121 323-318
www.reiff-tp.de
zahnriemen@reiff-tp.de

Roth GmbH & Co. KG
Andernacher Straße 14
D-90411 Nürnberg
Phone: +49 911 99521-0
Fax: +49 911 99521-70
www.roth-ing.de
roth-info@roth-ing.de

Walter Rothermundt GmbH & Co. KG
Am Tannenbaum 2
D-41066 Mönchengladbach
Phone: +49 2161 69462-0
Fax: +49 2161 6644-69
www.rothermundt.de
info@rothermundt.de

Wilhelm Herm. Müller GmbH & Co. KG
Heinrich-Nordhoff-Ring 14
D-30826 Garbsen
Phone: +49 5131 4522-0
Fax: +49 5131 4522-110
www.whm.net
info@whm.net

Switzerland

Angst + Pfister AG
Thurgauerstraße 66
CH-8052 Zürich
Phone: +41 (0) 1 306 61 11
Fax: +41 (0) 1 302 18 71
www.angst-pfister.com
ch@angst-pfister.com

Netherlands

Angst+Pfister B.V.
Boerhaavelaan 19
NL-2713 HA Zoetemeer
Phone: +31 7932037 00
Fax: +31 7932037 99
www.angst-pfister.com
nl@angst-pfister.com

Belgium

Angst+Pfister N.V.S.A.
Kleine Laan 26 c
B-9100 Sint-Niklas
Phone: +32 37780128
Fax: +32 37778398
www.angst-pfister.com
be@angst-pfister.com

Italy

Angst+Pfister SpA
Via Montefeltro 4
I-20156 Milano
Phone: +39 2 30087 1
Fax: +39 2 30087 100
www.angst-pfister.com
it@angst-pfister.com

Schweden

Aratron AB
Box 20087
S-16102 Bromma
Phone: +46 84041 600
Fax:+46 89842 81
www.aratron.se
info@aratron.se

Norway

ARATRON AS
Postboks 214 Holmlia
N-1204 Oslo
Phone: +47 231916 60
Fax: +47 231916 61
www.aratron.no
firmapost@aratron.no

France

Binder Magnetic
1, Allee des Barbanniers
F-92632 Gennevilliers-Cedex
Phone: +33 146 13 80 80
Fax.: +33 146 13 80 99
www.binder-magnetic.fr
info@binder-magnetic.fr

Denmark

BONDY A/S
Hassellunden 14
DK-2765 Smørum
Phone: +45 70 15 14 14
Fax.: +45 44 64 14 16
www.bondy.dk
info@bondy.dk

Spain

Dinámica Distribuciones S.A.
Ctra. No. II, km 592,6
E-08740 S. Andreu de la Barca
Phone: +34 93 6 53 35 00
Fax: +34 93 6 53 35 08
www.dinamica.net
dinamica@dinamica.net

Austria

Haberkorn Ulmer GmbH
Modecenterstraße 7
A-1030 Wien
Phone: +43 17 43 10 30-0
Fax: +43 17 43 10 29
www.haberkorn.com
zr@haberkorn.com

Portugal

J. Baptista + Ca. Lda.
Rua dos Vanzeleres 337
P-4100-484 Porto
Phone: +351-2-606-1600
Fax: +351-2-609-2053
www.jbaptista.pt
jbaptista@jbaptista.pt

Finland

Movetec Oy
Hannuksentie 1
FIN-02270 Espoo
Phone: +35 8 9 5259 230
Fax: +35 8 9 5259 2333
www.movetec.fi
info@movetec.fi

Great Britain

Transmission Developments Co. (G.B.) LTD
Dawkins Road, Hamworthy
GB-Poole Dorset BH15 4HF
Phone: +44 1 20 2 67 55 55
Fax: +44 1 20 2 67 74 66
www.transdev.co.uk
sales@transdev.co.uk

Czech Republic

W. H. Müller s.r.o.
Prazákova 39
CZ-61900 Brno
Phone: +420 543 211 008
Fax: +420 543 217 468
www.whm.cz
whm@whm.cz

Poland

Wilhelm Herm. Müller Polska Sp. z o.o.
ul. Solna 20
PL-85-862 Bydgoszcz
Phone: +48 52 349 07 15
Fax: +48 52 349 00 75
www.whm.pl
whm@whm.pl

USA

BRECOflex Co., L.L.C.
222 Industrial Way West
USA-Eatontown, NJ 07724
Phone: +1 732 460-9500
Fax: +1 732 542-6725
www.brecoflex.com
info@brecoflex.com