

# **Product overview ROBALON plastics**



Wear parts for general engineering and plant construction

























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The Röchling LERIPA Papertech production facility in Oepping/Upper Austria.

#### **Competence, Quality, Innovation**

56 sites

in 20 countries





#### Röchling Group

The Röchling Group, founded in 1822, has been active in the plastic processing sector for over 90 years already. The global plastics group headquartered in Mannheim (Germany) brings together 56 companies in 20 countries worldwide.

With the two company sectors, high-performance plastics and automobile plastics, the Röchling Group focuses on the processing of high-quality, technical plastics into semi-finished products, pre-assembled components and systems for a multitude of industrial applications.

www.roechling.com







Permanent spirit of innovation in new and further development

#### First point of contact

for innovative wear solutions

#### **Longstanding cooperation**

with engineers

Own research & development department

## Röchling LERIPA Papertech GmbH & Co KG

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#### Röchling LERIPA Papertech

The company, headquartered in Oepping in Upper Austria, is a leading manufacturer and processor of plastics. We are experts in the manufacture of innovative wear solutions for general engineering and plant construction, the paper industry and agricultural engineering. We are also your point of contact for semi-finished products, parts from drawings and bespoke solutions from technical plastics.

Top quality and a spirit of innovation have been traditional at Röchling LERIPA Papertech for over 300 years and from our position as regional leaders in the leather tanning industry, we have now developed into a global player.

www.leripa.com



ROBALON is a sintering plastic consisting of ultra-high molecule low-pressure polyethylene (UHMW-PE). It is alloyed with molybdenum sulphide, crosslinkers and UV stabilisers.

LERIPA started manufacturing ROBALON plastic over 50 years ago. Nowadays, 6 different ROBALON modifications are produced - we can therefore offer the right material for every customer requirement.

With ROBALON, Röchling LERIPA Papertech are the people to contact for any issues you have with slide and wear.

## Manufacture and processing

All materials are produced in a special long-term sinter pressing process, with very long pressing cycles. Our sintering presses facilitate the production of 12 m long panels.

This process has numerous advantages compared to conventional extrusion, injection moulding or standard sintering processes.

- Stress-free internal structure due to long-term sinter pressing process
- Wear-resistant
- 12 m long components with no welding seam
- High notched impact strength
- High resistance against stress crack formation

ROBALON pre-assembled components are manufactured by machine processing with state-of-the-art machinery allowing individual and precise processing.

#### Advantages of ROBALON

- Excellent slide
   and wear characteristics
- Very high notched impact strength
- No water absorption and no swelling
- High chemical resistance
- No corrosion
- Low temperature resistance
- UV- and weather-resistant
- Lightweight
- Dirt-repellent
- Noise-insulating

Our production processes: Sintering pressing, planing, sawing, drilling, lathing, milling, bevelling, surface refinement, cutting, welding, thermoforming



## **An overview** of material modifications

We offer the right material for all your requirements. We would be delighted to advise you in selecting the right material.

## **Standard types**

#### **ROBALON-S**

#### The classic

alloyed with molybdenum sulphide, with crosslinkers, UV stabilised



Ideal for semi-finished products and pre-assembled components where extraordinary slide and wear characteristics are required

For universal use



- with no molybdenum sulphide, without crosslinkers
- physiologically safe

**ROBALON-W** 

very good electrical insulation value



Colour white

Excellently suited to the **foodstuffs** 

and electrical industry

#### ROBALON-Z

- with reinforced molybdenum sulphide alloy
- particularly low-friction



For strongly adhesive viscid material with a high degree of humidity





#### **Special types**

#### **ROBALON-E**

- with anti-static
- electrically-conducting
- no static charging



Ideal for the electronic and semi-conductor industry and in explosion-protected areas in mining and industry



#### **ROBALON-GL**

- molybdenum sulphide alloy
- addition of microglass balls



#### Increased rigidity



#### ROBALON-R

- reclaim produced entirely from UHMW-PE qualities (ROBALON)
- only pure UHMW-PE recycled material is used for ROBALON-R, in contrast to the reclaims customary on the



With slightly reduced characteristics



## **Material characteristics Technical data**

	ROBALON-S	ROBALON-W	ROBALON-Z	ROBALON-E	ROBALON-GL	ROBALON-R
Colour	black	white	grey	black	black	Black with white inlays
Wear resistance						
Low-friction						
UV-, light- and weather-resistant						
AST (anti-static characteristics)						
Electrically insulating						
	low	high				

	Measuring proc.	ROBALON-S	ROBALON-W	ROBALON-Z	ROBALON-E	ROBALON-GL	ROBALON-R			
Density - g/cm <sup>3</sup>	DIN EN ISO 1183	0,93	0,93	0,93	0,94	0,97	0,93			
Average molar mass - g/mol	Viscosimetrically determined	9.2	million — arithmeti	cally determined in	accordance with t	he Margolies equa	tion			
Yield stress at 50 % elongation - MPa	DIN EN ISO 527-1	18	17	18	16	19	16			
Breaking elongation - %	DIN EN ISO 527-1	200	300	280	270	370	200			
Traction E module - MPa	DIN EN ISO 527-1	550	470	580	600	670	550			
Notched impact strength (Charpy 23°C) - kJ/m	DIN EN ISO 179-2	140	160	160	110	-	-			
Shore hardness - scale D	DIN EN ISO 868, 15s	63	63	63	63	64	63			
Melting temperature DSC, 10 K/min - °C	DIN EN ISO 3146			1;	35					
Therm. length elongation coefficient - 10 <sup>-6</sup> K <sup>-1</sup> (in mm per 10°C temp. difference and running metres)	DIN 53752	2	2	2	2	2	2			
Application temperature - °C	constant	-200 to 80	-200 to 80	-200 to 80	-200 to 80	-200 to 80	-200 to 80			
Water absorption - %	-	0.01	0.01	0.01	0.01	0.01	0.01			
Specif. surface resistance - $\Omega$	DIN IEC 60093	10 <sup>10</sup>	10 <sup>12</sup>	10 <sup>10</sup>	10 <sup>7</sup>	10 <sup>10</sup>	10 <sup>10</sup>			
Specif. contact resistance - Ωm	DIN IEC 60093	10 <sup>10</sup>	10 <sup>12</sup>	10 <sup>10</sup>	10 <sup>4</sup>	10 <sup>10</sup>	10 <sup>10</sup>			
Pressure creep test	Stress 2N/mr	Stress 2N/mm2, 1 hr. > compression approx. 2 % at 23°C   Stress 10N/m2, 56 hrs > compression approx. 20 % at 80°C								

Please note that all data reflects our experience, subject to further technical investigations. and no liability can be accepted for the results (due to different cases of application).

## **Chemical resistance**

Due to its unpolar structure, ROBALON demonstrates unusually high resistance to chemicals and other media. It is resistant to watery solutions of salts, acids and alkalis.

ROBALON is resistant to strong oxidants such as nitric acid, ozone, oleum, hydrogen peroxide or halogens to a limited extent.

	Temperature							
	20°C	50°C	80°C					
Acetone	Υ	Y	-					
Aluminium chloride	Υ	Υ	Y					
Formic/ methanoic acid	Υ	Υ	-					
Beer	Υ	Υ	Y					
Petrol	Υ	L	-					
Benzene	L	L	-					
Butyric acid	Υ	Υ	-					
<b>Butyl alcohol</b>	Υ	Υ	Y					
Diesel fuel	Υ	Υ	L					
Acetic acid 10 %	Υ	Υ	Y					
Acetic acid 99 %	Υ	Υ	L					
Ethanol, alcohols	Υ	Υ	-					
Ethylene glycol	Υ	Υ	Υ					
Hydrofluoric acid	Υ	N	N					
Photographic developer	Υ	Υ	-					
Fruit juices	Υ	Υ	Y					
Glycerine	Υ	Υ	Y					
Heating oil	Υ	L	-					
Hydraulic fluid	Υ	L	-					
Potassium hydroxide solution	Υ	Υ	Y					
Cooking salt, saturated solution	Υ	Υ	Y					
Carbonic acid	Υ	Υ	Y					
Milk	Υ	Υ	Y					
Lactic acid	Υ	Υ	-					

	_
Υ	resistant
	swelling < 3 % or weight loss < 0.5 %.
	Breaking elongation not significantly reduced.

resistant to a limited extent
swelling of 3 % to 8 % or weight loss
of 0.5 % to 5 % and/or breaking elongation
reduced by 50 %. Tensile strength and
tearing strength reduced by less than 20 %.

N non-resistant
swelling > 8 % or weight loss > 5 %
and/or breaking elongation
reduced by > 50 %. Tensile
strength and tearing strength
reduced by more than 20 %.

no test results are available here

	Temperature							
	20°C 50°C 80°C							
Sea water	Υ	Y	Y					
Engine oil	Υ	Υ	L					
Sodium chloride	Υ	Υ	Υ					
Sodium hydroxide solution	Υ	Υ	Υ					
Olive oil	Υ	Υ	Υ					
Ozone	L	N	-					
Oleic acid	Υ	Υ	L					
Petroleum 100 %	Υ	L	-					
Phosphoric acid 85 %	Υ	Υ	Υ					
Nitric acid 20 %	Υ	Y	L					
Nitric acid 50 %	L	N	N					
Conc. nitric acid	N	N	N					
Hydrochloric acid	Υ	Y	Y					
Sulphuric acid	Υ	Y	Υ					
Sulphuric acid 50 %	Υ	Y	Υ					
Sulphuric acid 75 %	Υ	L	L					
Conc. sulphuric acid	Υ	N	N					
Soda, sodium carbonate	Υ	Y	Υ					
Wine	Υ	Y	Υ					
Detergent in watery solution	Υ	Υ	Υ					
Distilled water	Υ	Υ	Y					
Zinc chloride	Υ	Υ	Y					
Citric acid	Υ	Y	Υ					

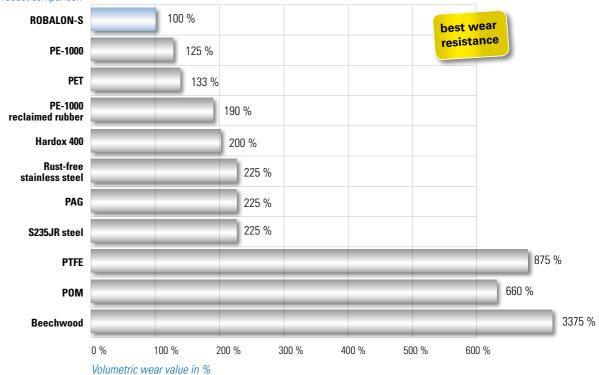


#### **Test results**

#### Wear resistance\*

In accordance with Sand-Slurry process (ROBALON-S = 100 %)

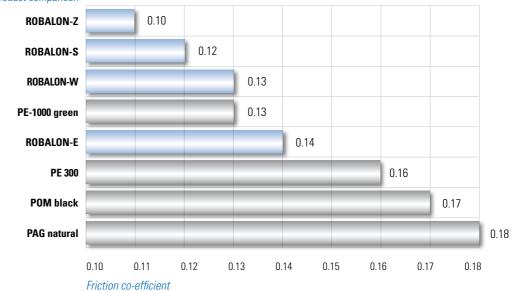
#### Product comparison



\*Test pieces (101.6 x 25.4 x 6.35 mm) are rotated in a water-sand container for 24 hours at 1500 revolutions/min. Weight loss is then measured in %. ROBALON-S = 100 %.

#### Slide characteristics\*

#### Product comparison



<sup>\*</sup> tested on the Röchling LERIBA Papertech wear simulation machine.

Adjustment parameters: test pieces with a locating surface of 40 x 25 mm (strength 10 mm) were tested in dry running against sheer sheet steel (S235JR) with a contact pressure of 1N/mm2 and a speed of 2 m/sec. on a slide friction facility. The average value of the dynamic friction values was then measured and depicted in the table.



## and numerous operating hours

Extreme temperatures, heavy loads

require reliable products. You can rely on ROBALON – the plastic with special additives ensures an excellent service life. Do not settle for less.

## **Spare parts** for piste equipment **Drive sprockets** • Resistant to low temperatures No splits or breaks · Very high abrasion resistance • No ice or snow accumulation at the base of the teeth UV- and weather-resistant Supply range: The oldest ROBALON drive sprocket was All current manufacturers and types

in operation for 13 years and over 7000

hours. Our ROBALON drive sprockets are in use on 22 different types of piste equipment worldwide.

| 12

| 12

Spare parts for

Other applications

funiculars

Special models on request

#### What our customers say

#### Hochficht skiing area

"We were operating our Ratrak 260 with a ROBALON drive sprocket for 13 years. Material breakage simply wasn't an issue."

Martin Lauss, operations director of the Hochficht (Upper Austria) skiing area

#### **Chain deflectors**

- No splits or breaks
- · Very high abrasion resistance
- No ice and snow accumulation
- . UV- and weather-resistant

#### Supply range:

All current manufacturers and types | Special models on request

#### Track guides

Extremely high service life over 6000 operating hours possible!

- Light-weight
- Noticeable chain spring improvement
- Very high abrasion resistance

#### Supply range:

All current manufacturers and types | Special models on request

## Mudguards and overthrow protection

- . UV- and weather-resistant
- . No splits or breaks
- · Very high wear resistance

#### Supply range:

All current manufacturers and types | Special models on request

#### Protective floor rails

- · Very high abrasion resistance
- Protection of chain and garage floors
- Resistant to low temperatures

### Supply range:

Unwelded lengths up to 12 m

## **Spare parts** for cableways and lift equipment

#### Scuff rails for cabs and cableways stations

- Very good slide and wear characteristics
- Impact-resistant
- No discoloration

#### Supply range:

Panels and rails in all current dimensions





#### Bars

- Durable
- Low-noise
- UV- and weather-resistant



## **Spare parts for funiculars**

#### Inclined roller cases

- · Very good slide and wear characteristics
- UV- and weather-resistant
- Significant noise reduction

Inclined rollers
also available as a whole



#### Supply range:

All current manufacturers and types, special models upon request

#### Side slide disks

- Low-friction
- Wear resistant
- Low-noise



#### Supply range:

All current manufacturers and types, special models upon request

#### **Grinding blocks**

- Cable-protecting
- UV- and weather-resistant
- Low-friction



#### Supply range:

All current manufacturers and types, special models upon request Available with or without cable grooves

### Other applications







Protection rails for lift struts

Ski holders

Drive connectors



## Linings for various industries

Highly wear-resistant plastic linings for a wide range of applications in the most diverse sectors:

- No adherence
- UV- and weather-resistant
- Very good wear characteristics
- Low-friction
- Noise-absorbent
- Easy to install
  Elements pre-rolled or edged



#### **Applications:**

ROBALON plastic bunker linings, silos, chutes, troughs, funnels, bunker outlets, delivery cones, tip chutes, oscillating and vibrating conveyors, weighing vessels, dust separators, tipper trucks, wagons, etc.

#### for

Coal, ores, limestone, cement, glass sand, clay, gravel, ballast, gypsum, phosphate, magnesites, salts, chemical fertilisers, sawdust, wood chips, grain, sugar beet, animal feed, etc.

#### One-stop shop:

- Excellent, bespoke lining material
- Fixtures such as screws, nuts, spiral drills, caps
- Assembly
- Support and on-site consultation

# Linings for biogas plants

We supply special lining systems for biogas plants that all but banish corrosion and wear. The plastic lining panels in the biogas plant prevent direct contact between aggressive biomasses and the container wall and increase the lifespan.

- No corrosion high chemical resistance
- High wear resistance -very durable
- No adherence, no freezing in winter easy to clean
- Extremely low-friction energy-saving

Excellent corrosion protection



- No extensive pre-treatment required on the container; just needs to be swept dry
- The lining can be directly fitted to the untreated steel surface.
- The panels are pre-cut and bored on our premises
- The joints are welded and bore holes sealed to produce a self-contained vessel that means no corrosion.
- No container damage from bore holes or weld seams
- No nuts, bolts, etc. on the panel outer = no risk of injury
- Service life greatly increased

#### Supply range:

- Excellent, bespoke lining material for your biogas plant
- Fixtures such as screws, nuts, spiral drills, caps
- Assembly
- Support and on-site consultation

#### **Spiral conveyors**

- Excellent chemical resistance to acids and alkalis
- Excellent slide and wear characteristics Up to 20 % energy saving
- Weight saving of up to 50 %
   Compared to steel or stainless steel designs
- Self-cleaning and dirt-repellent
   Material being conveyed does not stick









ROBALON offers the construction industry an impact-resistant material with a no-split, no-break guarantee. Its outstanding features are its wear characteristics and excellent weather resistance and you can also benefit from our many years of experience.

### Wear parts for cranes and trucks

#### Supporting discs for cranes

- Lubricant resistant
- Impact-resistant no splits or breaks
- UV and weather resistant
- Light-weight
- No water absorption

#### Supply range:

All current dimensions available, special dimensions on request

#### Slide blocks

- Outstanding slide characteristics
- . No splits or breaks
- UV- and weather-resistant
- High impact strength

#### Supply range:

All current manufacturers and types available, special dimensions on request

## Other applications



Wearing plates for vibrators and rammers



Castors



Linings: see page 13



High-performance and above all sophisticated plastic solutions guarantee satisfaction in the timber industry. See for yourself...

#### Drive connectors, sliders and slide bushings

- Wear resistant
- Low-friction
- UV- and weather-resistant
- No splits or breaks

#### Supply range:

All current manufacturers and types, special dimensions on request

#### **Guide profiles**

For **further information** on our guide profiles, we would refer you to our comprehensive range in **transport**, **conveying and storage technology on page 18**.



#### Highly wear-resistant plastic linings

for numerous applications in the most diverse of sectors.

Further information on page 13.



We offer field-tested slide and wear parts which are 100 % reliable. Rely on ROBALON and you will not be disappointed.

#### **Curve guides**

- Wear-resistant
- Low-friction
- Resistant to chemicals

#### Supply range:

Bespoke production possible

#### Spiral conveyors

- Low-friction
- Resistant to hydrolysis
- Low-noise

#### Supply range:

Bespoke production possible

#### Pile blocks

- Physiologically safe
- Easy to clean
- True-to-size manufacture

#### Supply range:

Bespoke production possible









#### Important information

All specifications in mm

Flat profile guides

Linear guides

**Galvanised steel C profiles** 

Plastic guides: standard length 2 m Individual lengths up to 11.5 m

Steel C profiles are not included in the scope of delivery
Max. length 6 m

Please note the heat expansion in ROBALON when chain and belt guides are fitted

## Advantages of ROBALON in chain and belt guides

- Low friction co-efficient energy saving due to low driving power
- **Self-lubricating** no oil lubrication necessary
- High abrasion resistance
- **Protects chains** increases the service life of chains
- Low-noise operation
- Resistant to hydrolysis
- **Easy to clean** ROBALON materials have dirt-repelling characteristics

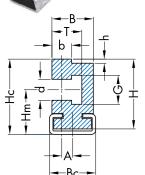
## **Chain guides for roller chains**

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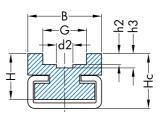




CE type tier guide for roller chains in accordance with DIN 8187

LERIPA type No.	Chain dimensions	DIN ISO	C profile no.	В	н	Вс	Нс	Hm	A	т	b	h	d	G
CE 3.1	3/8" x 7/32"	06 B-1	C3	16.5	25	20	27	17	5.5	9.9	5.5	1.5	6.6	9.3
CE 3.2	1/2" x 5/16"	08 B-1	C3	16.5	30	20	32	19.5	4.5	12.7	7.5	2.2	8.7	12.3
CE 3.3	5/8" x 3/8"	10 B-1	C3	20	35.5	20	37.5	22.5	5.4	14.8	9.3	2.6	10.4	15.4
CE 6.1	3/4" x 7/16"	12 B-1	C5	28	40	27	42	25.5	7.9	17.5	11.3	2.4	12.3	16.9
CE 9.1	1" x 17 mm	16 B-1	C9	38	53	38	57	35	11.3	26.8	16.5	3.5	16.1	22.4



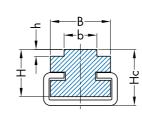


CU type for single roller chains in accordance with DIN 8187

	LERIPA type No.	Chain dimensions	DIN ISO	C profile no.	В	н	Нс	G	d2	h2	h3
	CU 3.1	1/2" x 5/16"	08 B-1	C3	20	10	15	12.8	4.9	3.5	4.8
	CU 6.1	5/8" x 3/8"	10 B-1	C5	24	12	18	15.4	5.5	3.6	5.1
	CU 6.2	3/4" x 7/16"	12 B-1	C5	24	12	18	16.9	6.2	3.9	5.7
	CU 9.1	1" x 17 mm	16 B-1	C9	33	20	30	24.4	8.9	8.4	9.9
2	CU 9.2	1 1/4" x 3/4	20 B-1	C9	50	25	35	28	11	10	12.2
-	CU 9.3	1 1/2" x 1"	24 B-1	C9	55	30	40	35	16	13	16

CT type for single roller chains in accordance with DIN 8187





LERIPA type No.	Chain dimensions	DIN ISO	C profile no.	В	н	Нс	b	h
CT 3.1	1/2" x 3/16"	083	C3	20	15	17	4.7	1.6
CT 3.2	1/2" x 1/4"	085	C3	20	15	17	6.2	2.2
CT 3.3	1/2" x 5/16"	08 B-1	C3	20	15	17	7.5	2.2
CT 3.4	5/8" x 1/4"		C3	20	15	17	6.3	2.6
CT 3.5	5/8" x 3/8"	10 B-1	C3	20	15	17	9.3	2.6
CT 3.6	3/4" x 7/16"	12 B-1	C3	24	15	17	11.3	2.4
CT 6.1	3/4" x 7/16"	12 B-1	C5	30	15	18	11.3	2.4
CT 6.2	1" x 17 mm	16 B-1	C5	24	15	18	16.5	3.5
CT 6.3	1 1/4" x 3/4"	20 B-1	C5	28	17	20	19	4.2
CT 9.1	1 1/2" x 1"	24 B-1	C9	33	25	30	24.7	5.5
CT 9.2	1 3/4" x 31 mm	28 B-1	C9	38	25	30	30.1	6.8
CT 9.3	2" x 31 mm	32 B-1	C9	38	25	30	30.1	7.7



b b J

CTT type for double roller chains in accordance with DIN 8187

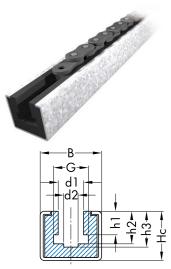
LERIPA type No.	Chain dimensions	DIN ISO	C profile no.	В	Н	Нс	b	h
CTT 3.1	1/2" x 5/16"	08 B-2	C3	21.4	15	17	7.5	2.2
CTT 3.2	5/8" x 3/8"	10 B-2	C3	25.9	15	17	9.3	2.6
CTT 6.1	3/4" x 7/16"	12 B-2	C5	30.7	15	20	11.3	2.4
CTT 9.1	1" x 17 mm	16 B-2	C9	48.3	20	27	16.5	3.5
CTT 9.2	1 1/4" x 3/4"	20 B-2	C9	55.3	25	30	19	4.3

#### CK type for single roller chains in accordance with DIN 8187

B

LERIPA type No.	Chain dimensions	DIN ISO	C profile no.	В	Н	Нс	G	d1	d2	h1	h2	h3
CK 3.1	3/8" x 5/32"		C3	20	19	21	9.3	6.6	4	3.8	5.8	8
CK 3.2	3/8" x 7/32"	06 B-1	C3	20	19	21	9.3	6.6	4	5.6	8.7	9.9
CK 3.3	1/2" x 3/16"		C3	20	19	21	10.8	8	4	4.7	7.4	8.3
CK 6.1	1/2" x 1/4"		C5	28	29	32	11.8	8	5	6.2	9.8	11.2
CK 6.2	1/2" x 1/4"		C5	28	29	32	12.8	8.7	5	6.2	10.8	11.3
CK 6.3	1/2" x 5/16"	08 B-1	C5	28	29	32	12.8	8.7	5	7.5	11.5	12.7
CK 6.4	5/8" x 1/4"		C5	30	29	32	15.4	10.4	6	6.2	10.3	11.7
CK 6.5	5/8" x 3/8"	10 B-1	C5	30	29	32	15.4	10.4	6	9.4	13.5	14.8
CK 6.6	3/4" x 7/16"	12 B-1	C5	32	32	35	16.9	12.3	7	11.5	15.9	17.5
CK 6.7	1" x 17 mm	16 B-1	C5	40	45	48	24.4	16.1	10	16.8	25.7	26.8

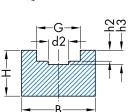
#### CKS type for single roller chains in accordance with DIN 8187



LERIPA type No.	Chain dimensions	DIN ISO	C profile no.	В	Нс	G	d1	d2	h1	h2	h3
CKS 10.1	3/8" x 5/32"		C10	30	24	9.3	6.6	4	3.8	5.8	8
CKS 10.2	3/8" x 7/32"	06 B-1	C10	30	24	9.3	6.6	4	5.6	8.7	9.9
CKS 10.3	1/2" x 3/16"		C10	30	24	10.8	8	4	4.7	7.4	8.3
CKS 10.4	1/2" x 1/4"		C10	30	24	11.8	8	5	6.2	9.8	11.2
CKS 10.5	1/2" x 1/4"		C10	30	24	12.8	8.7	5	6.2	10.2	11.3
CKS 10.6	1/2" x 5/16"	08 B-1	C10	30	24	12.8	8.7	5	7.5	11.5	12.7
CKS 10.7	5/8" x 1/4"		C10	30	24	15.4	10.4	6	6.2	10.3	11.7
CKS 10.8	5/8" x 3/8"	10 B-1	C10	30	24	15.4	10.4	6	9.4	13.5	14.8
CKS 10.9	3/4" x 7/16"	12 B-1	C10	30	24	16.9	12.3	7	11.5	15.9	17.5
CKS 11.1	1" x 17 mm	16 B-1	C11	45	40	24.4	16.1	10	16.8	25.7	26.8
CKS 11.2	1 1/4" x 3/4"	20 B-1	C11	45	40	27.5	19.3	11	19.4	29.3	31.2
CKS 11.3	3/4" x 7/16"	12 B-1	C11	45	40	16.9	12.3	7	11.5	15.9	17.5

#### FU type for single roller chains in accordance with DIN 8187

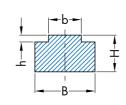




LERIPA type No.	Chain dimensions	DIN ISO	В	н	h2	h3	d2	G
FU 1	3/8" x 5/32"		20	15	2.7	4	3.7	9.3
FU 2	3/8" x 7/32"	06 B-1	20	15	2.8	4.2	3.7	9.3
FU 3	1/2" x 3/16"		20	15	2.3	3.4	4	10.8
FU 4	1/2" x 1/4"		20	15	3.2	4.7	4.4	11.8
FU 5	1/2" x 1/4"		20	15	3.5	4.8	4.9	12.8
FU 6	1/2" x 5/16"	08 B-1	25	15	3.5	4.8	4.9	12.8
FU 7	5/8" x 1/4"		25	15	3.6	5.2	5.5	15.4
FU 8	5/8" x 3/8"	10 B-1	25	15	3.6	5.1	5.5	15.4
FU 9	3/4" x 7/16"	12 B-1	25	20	3.9	5.7	6.2	16.9
FU 10	1" x 17 mm	16 B-1	35	25	8.4	9.9	8.9	22.4

#### FT type for single roller chains in accordance with DIN 8187

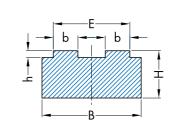




LERIPA type No.	Chain dimensions	DIN ISO	В	Н	b	h
FT 1	3/8" x 5/32"		15	10	3.8	1.5
FT 2	3/8" x 7/32"	06 B-1	15	10	5.5	1.5
FT 3	1/2" x 3/16"		15	10	4.7	1.6
FT 4	1/2" x 1/4"		20	10	6.2	2.2
FT 5	1/2" x 5/32"		20	10	6.2	2.2
FT 6	1/2" x 5/16"	08 B-1	20	10	7.5	2.2
FT 7			20	15	7.5	2.2
FT 8			20	20	7.5	2.2
FT 9			20	30	7.5	2.2
FT 10	5/8" x 1/4"		20	10	6.3	2.6
FT 11	5/8" x 3/8"	10 B-1	20	10	9.3	2.6
FT 12			20	15	9.3	2.6
FT 13			20	20	9.3	2.6
FT 14			20	30	9.3	2.6
FT 15	3/4" x 7/16"	12 B-1	25	10	11.3	2.4
FT 16			25	15	11.3	2.4
FT 17			25	20	11.3	2.4
FT 18			25	30	11.3	2.4
FT 19	1" x 17 mm	16 B-1	40	15	16.5	3.5
FT 20			40	20	16.5	3.5
FT 21			40	30	16.5	3.5
FT 22	1 1/4" x 3/4"	20 B-1	45	15	19	4.2
FT 23	1 1/2" x 1"	24 B-1	60	15	24.7	5.5
FT 24	1 3/4" x 31 mm	28 B-1	70	20	30.1	6.8
FT 25	2" x 31 mm	32 B-1	70	20	30.1	7.7

#### FTT type for double roller chains in accordance with DIN 8187

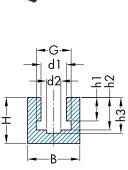




LERIPA type No.	Chain dimensions	DIN ISO	В	н	b	h	E
FTT 1	3/8" x 7/32"	06 B-2	25	10	5.5	1.5	15.7
FTT 2	1/2" x 5/16"	06 B-2	35	10	7.5	2.2	21.4
FTT 3			35	15	7.5	2.2	21.4
FTT 4			35	20	7.5	2.2	21.4
FTT 5			35	30	7.5	2.2	21.4
FTT 6	5/8" x 3/8"	10 B-2	40	10	9.3	2.6	25.9
FTT 7	3/4" x 7/16"	12 B-2	45	10	11.3	2.4	30.7
FTT 8	1" x 17 mm	16 B-2	70	15	16.5	3.5	48.3
FTT 9	1 1/4" x 3/4"	20 B-2	80	15	19	4.3	55.3
FTT 10	1 1/2" x 1"	24 B-2	105	20	24.7	5.5	73.1
FTT 11	1 3/4" x 31 mm	28 B-2	125	25	30.1	6.8	89.7
FTT 12	2" x 31 mm	32 B-2	125	30	30.1	7.7	88.7

FKS type for single roller chains (divided) in accordance with DIN 8187

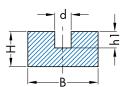




LERIPA type No.	Chain dimensions	DIN ISO	В	н	h1	h2	h3	d1	d2	G
FKS 1	3/8" x 5/32"		20	25	3.8	5.8	8	6.6	4	9.3
FKS 2	3/8" x 7/32"	06 B-1	20	25	5.6	8.7	9.9	6.6	4	9.3
FKS 3	1/2" x 3/16"		20	25	4.7	7.4	8.3	8	4	10.8
FKS 4	1/2" x 1/4"		24	30	6,2	9.8	11.2	8	5	11.8
FKS 5	1/2" x 1/4"		24	30	6.2	10.2	11.3	8.7	5	12.8
FKS 6	1/2" x 5/16"	08 B-1	24	30	7.5	11.5	12.7	8.7	5	12.8
FKS 7	5/8" x 1/4"		30	30	6.2	10.3	11.7	10.4	6	15.4
FKS 8	5/8" x 3/8"	10 B-1	30	35	9.4	13.5	14.8	10.4	6	15.4
FKS 9	3/4" x 7/16"	12 B-1	40	35	11.5	15.9	17.5	12.3	7	16.9
FKS 10	1" x 17 mm	16 B-1	40	45	16.8	25.7	26.8	16.1	10	22.4
FKS 11	1 1/4" x 3/4"	20 B-1	50	50	19.4	29.3	31.2	19.3	11	27.5
FKS 12	1 1/2" x 1"	24 B-1	60	60	25.2	38.2	40.1	25.7	16	36.5
FKS 13	1 3/4" x 31 mm	28 B-1	60	70	30.8	46.9	48.9	28.3	17	41.5
FKS 14	2" x 31 mm	32 B-1	70	75	30.8	47.3	53	29.6	19	44.5

## **Chain guides for round link chains**

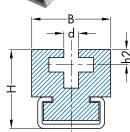




RU type slide ralls for rour	ia iink chains in ad	ccordance with Div	1 /66 and Dily /64

LERIPA type No.	Chain designation	В	Н	d	h1
RU 6	6	30	15	7	7
RU 8	8	35	20	9	9
RU 10	10	45	25	11	11
RU 13	13	55	30	15	15

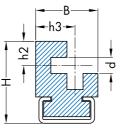




CRU type slide rails for round link chains in accordance with DIN 766 and DIN 764

LERIPA type No.	Chain designation	C profile No.	В	Н	d	h2
CRU 6	6	C9	45	45	7	8
CRU 8	8	C9	50	50	9	9.5
CRU 10	10	C9	50	60	11	14





CRUV type slide rails for round link chains in accordance with DIN 766 and DIN 764

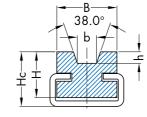
LERIPA type No.	Chain designation	C profile No.	В	Н	d	h2	h3
CRUV 6	6	C3	27	34	7	10.5	17.5
CRUV 8	8	C5	32	42	9	12.5	20.5
CRUV 10	10	C9	42.5	56	11	16.5	25.5

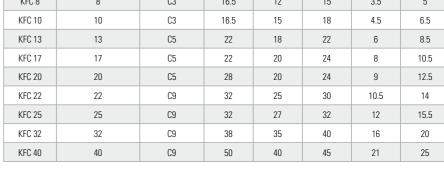
## **Belt guides**



KFC type v-belt guide with steel C profile (also available without steel C profile)

LERIPA type No.	Belt No.	C profile No.	В	н	Нс	h	b
KFC 8	8	C3	16.5	12	15	3.5	5
KFC 10	10	C3	16.5	15	18	4.5	6.5
KFC 13	13	C5	22	18	22	6	8.5
KFC 17	17	C5	22	20	24	8	10.5
KFC 20	20	C5	28	20	24	9	12.5
KFC 22	22	C9	32	25	30	10.5	14
KFC 25	25	C9	32	27	32	12	15.5
KFC 32	32	C9	38	35	40	16	20
KFC 40	40	C9	50	40	45	21	25







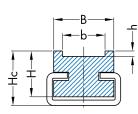
RFC type round belt guide with steel C profile (also available without steel C profile)

LERIPA type No.	Belt No.	C profile No.	В	Н	Нс	h	r
RFC 5	5	C3	16.5	12	15	3	3
RFC 6	6.3	C3	16.5	15	18	4	4
RFC 8	8	C3	16.5	15	18	5	5
RFC 10	9.5	C5	22	16	20	6	6
RFC 12	12.5	C5	22	16	20	8	7
RFC 15	15	C9	32	20	25	10	9
RFC 18	18	C9	32	20	25	12	10

#### FRC type toothed belt guide with steel C profile

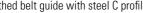
LERIPA	Dalttima	Belt Width	C weefle No	В		D-	Hc		
type No.	Belt type		C profile No.	В	Н	Bc		b	h
FRC 2.4	T 2,5	4	C3	10	8	20	12	5	1
FRC 2.6		6	C3	12	8	20	12	7	1
FRC 2.8		8	C3	15	8	20	12	9	1
FRC 2.10		10	C3	19	8	20	12	11	1
FRC 2.12		12	C5	21	8	28	12	13	1
FRC 5.6	T 5	6	C3	12	10	20	14	7	1.8
FRC 5.8		8	C3	15	10	20	14	9	1.8
FRC 5.10		10	C3	19	10	20	14	11	1.8
FRC 5.12		12	C5	21	10	28	14	13	1.8
FRC 5.16		16	C5	25	10	28	14	17	1.8
FRC 5.20		20	C9	30	10	38	14	21	1.8
FRC 5.25		25	C9	35	12	38	18	26	2
FRC 5.32		32	C11	42	12	45	18	33	2
FRC 10.10	T 10	10	C3	19	12	20	18	20	3.8
FRC 10.12		12	C5	21	12	28	18	13	3.8
FRC 10.16		16	C5	25	12	28	18	17	3.8
FRC 10.20		20	C9	30	12	38	18	21	3.8
FRC 10.25		25	C9	35	12	38	18	26	3.8
FRC 10.32		32	C11	42	12	45	18	33	3.8
FRC 10.50		50	C11	60	15	45	20	51	4





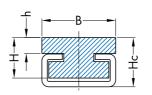
#### FR type toothed belt guide

LERIPA type No.	Belt type	Belt Width	В	н	b	h
FR 2.4	T 2,5	4	10	8	5	1
FR 2.6		6	12	8	7	1
FR 2.8		8	15	8	9	1
FR 2.10		10	19	8	11	1
FR 2.12		12	21	8	13	1
FR 5.6	T 5	6	12	10	7	1.8
FR 5.8		8	15	10	9	1.8
FR 5.10		10	19	10	11	1.8
FR 5.12		12	21	10	13	1.8
FR 5.16		16	25	10	17	1.8
FR 5.20		20	30	10	21	1.8
FR 5.25		25	35	12	26	2
FR 5.32		32	42	12	33	2
FR 10.10	T 10	10	19	12	11	3.5
FR 10.12		12	21	12	13	3.5
FR 10.16		16	25	12	17	3.5
FR 10.20		20	30	12	21	3.5
FR 10.25		25	35	12	26	3.5
FR 10.32		32	42	12	33	3.5
FR 10.50		50	60	15	51	3.8
FR 10.75		75	85	15	76	3.8
FR 10.100		100	110	15	101	3.8



## Flat profile guides





LERIPA type No.	C profile No.	В	Н	hc	h
CF 3.1	C3	20	10	14	4
CF 3.2	C3	20	15	17	7
CF 3.3	C3	20	18	20	10
CF 6.1	C5	28	10	16	4
CF 6.2	C5	28	15	19	7
CF 9.1	C9	38	12	22	4
CF 9.2	C9	38	20	25	7

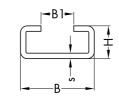
## **Galvanised steel C profiles**



C rails made from galvanised steel for use as brackets on our ROBALON plastic slide rails.

The C profiles can be screw-fixed or welded. Sliding the plastic guides onto the C rails is then extremely easy. Max. length up to 6 m.

LERIPA type No.	В	Н	B1	s	
C3	20	10	10	1.5	
C5	28	12	14	2	
C9	38	18	22	2.5	
C10	30	24	20	1.5	
C11	45	40	31	2	



## Linear guides



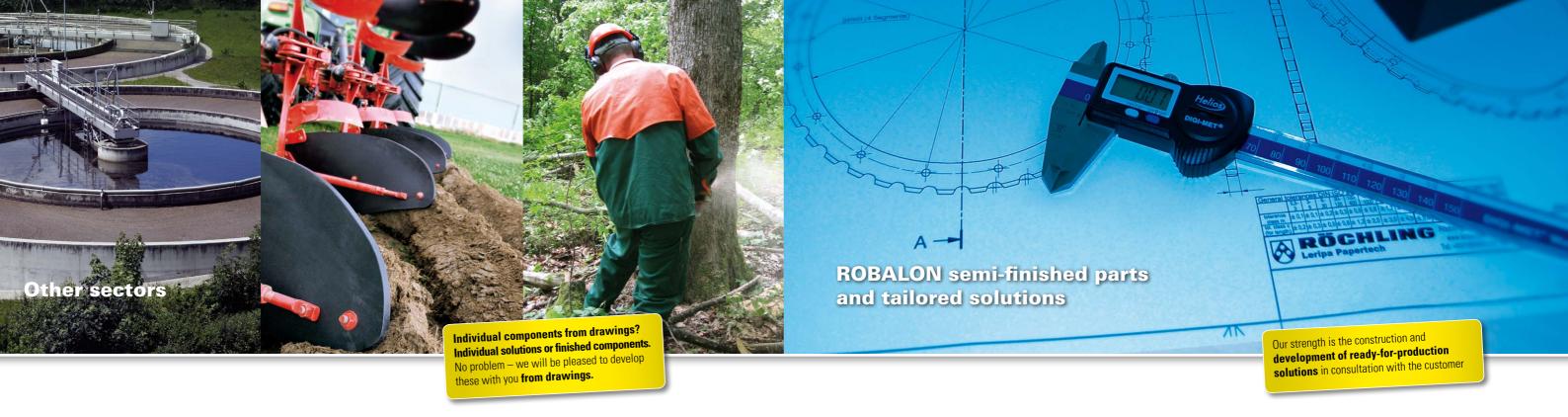




Linear guide

Slide guide

Slide bushing for a telescopic crane



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## **Panels**

#### Normal format

Thickness, length, and width available in mm increments Thickness tolerance: ± 0.2 mm

Thickness	Length	Width
8 to 160	Max. 12,000	Max. 1,000



Thickness, length, and width available in mm increments Thickness tolerance: ± 0.3 mm

#### Thin panels

Length and width available in mm increments Thickness tolerance: ± 0.2 mm

Thickness	Length	Width
2	Max. 5,000	Max. 600
3	Max. 5,000	Max. 600
4	Max. 5,000	Max. 600
5	Max. 5,000	Max. 1,000
6	Max. 5,000	Max. 1,000
7	Max. 5,000	Max. 1,000



Diameter and thickness available in mm increments Thickness tolerance: ± 0.3 mm

Thickness	Diameter
15 to 120	Max. Ø 1,300





All dimensions in mm



#### **Round rods**

Diameter	Standard length	Special length	Diameter tolerance
ø 8	1,000	Max. 10,000	+1.3 / +0.7
ø 10	1,000	Max. 10,000	+1.3 / +0.7
ø 12	1,000	Max. 10,000	+1.3 / +0.7
ø 15	1,000	Max. 10,000	+1.3 / +0.7
ø 20	1,000	Max. 10,000	+1.3 / +0.7
ø 25	1,000	Max. 10,000	+1.3 / +0.7
ø 30	1,000	Max. 10,000	+1.3 / +0.7
ø 35	1,000	Max. 10,000	+1.3 / +0.7
ø 40	1,000	Max. 10,000	+1.3 / +0.7
ø 50	1,000	Max. 10,000	+1.3 / +0.7
ø 60	1,000	Max. 10,000	+1.3 / +0.7
ø 70	1,000	-	+1.5 / +0.5
ø 80	1,000	-	+1.5 / +0.5
ø 90	1,000	-	+1.5 / +0.5
ø 100	1,000	-	+1.5 / +0.5
ø 110	1,000	-	+1.5 / +0.5
ø 120	1,000	-	+1.5 / +0.5
ø 130	1,000	-	+1.5 / +0.5
ø 140	1,000	-	+1.5 / +0.5
ø 150	1,000	-	+1.5 / +0.5

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We wish to point out that all the information contained in this brochure reflects our experience (subject to further technical investigations). However, we cannot accept liability for the results when ROBALON is used.

