



Expertise

Enhanced performance products from Rexnord

Solutions for:

- Corrosion Resistance
- Freedom from Maintenance
- Maximum Service Life
- Highest Performance

RexAthletic
Low-Maintenance

RexCarbon
Maintenance-Free

RexPlus
*Corrosion and
Acid Resistant*

RexSuperPlus
*Maintenance-Free,
Corrosion and
Acid Resistant*

Special Strengths for Special Applications.

With its enhanced product range RexSuperPlus, RexPlus, RexCarbon and RexAthletic Rexnord offers innovative roller chains with the highest service life and reliability for demanding applications in all industrial sectors.

Increased requirements and stringent operating conditions stemming from environmental regulations, as well as economical considerations, demand chains with special strengths, free from weakness. Chains must be:

- **Highly durable, maintenance-free if possible**
- **Temperature resistant**
- **Resistant to weathering**
- **Corrosion resistant**
- **High performance and highly precise**
- **Compatible with hygiene regulations**
- **Operationally efficient**

When regular maintenance is difficult or not possible, or when cold, hot, damp, or wet conditions persist, chains which can withstand a high load are necessary.

RexCarbon is maintenance-free, while RexPlus is extremely corrosion and acid resistant with above-average wear resistance. With RexSuperPlus, both of these elements are brought together to create a maintenance-free, stainless steel chain. RexAthletic completes the range of low maintenance designs with its refined, high quality chain component surfaces. Therefore, problematic applications become more economical and safe.

These new Rexnord expert chain types primarily call on the following technical and material innovations:

- **Stainless steel**
- **Seamless rollers**
- **High-tech thermoplastic sliding sleeves**
- **Food industry-safe lubrication**
- **Alloyed surfaces**
- **Anti-friction coating**

All chains can be equipped with attachments upon request. Simply ask Rexnord's application engineers and they will help you wherever possible.



High-tech thermoplastic sliding sleeves for maintenance-free use and a long lifetime.



Seamless rollers for use in areas with foodstuffs.



High quality processed stainless steel makes RexPlus and RexSuperPlus corrosion and acid resistant.



RexAthletic – Low-Maintenance Long-Lasting, Wear Resistant and Reliable

In many roller chain applications, maintenance and lubrication is extremely limited. The result is poor service life due to insufficient lubrication. This applies in particular to continuous systems where access to the chain is only possible under difficult conditions.

RexAthletic distinguishes itself through particularly good tribological properties. The alloyed coating

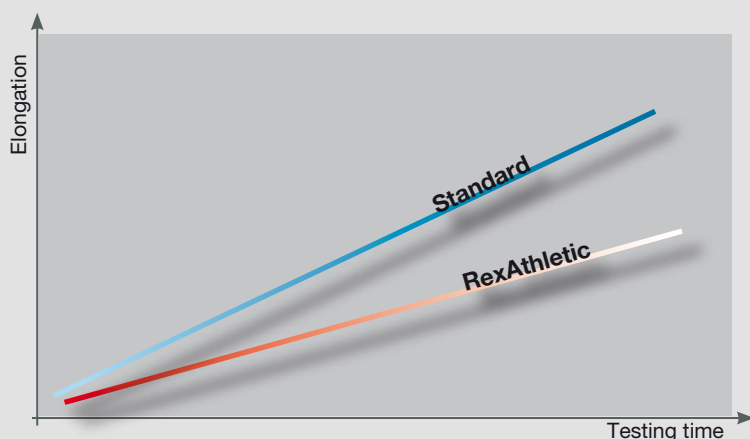
of the chain pin surfaces means that RexAthletic has very good sliding properties, as well as high wear resistance, even with inadequate lubrication. Maintenance requirements are further reduced through a special treatment of the bushings, which improves the maximum running properties. Due to this technical innovation, the interval between lubrication application can be lengthened considerably.

The product's outstanding characteristics are further optimized through the use of high quality, long-lasting lubrication applied in the factory. Because of the structural design of the lubrication, it can not be thrown off while operating at normal chain speed. RexAthletic is resistant to water and has a temperature range from 0 ° C to +120 ° C. The temperature range can be expanded with special low temperature oils upon

request.

The fatigue strength of RexAthletic, as well as the transmittable tensile force, matches the quality of other Rexnord high performance roller chains. All dimensions of the chain are in accordance with DIN / ISO standards. Roller chains in the RexAthletic design are available in sizes 08 B to 72 B.

**Systematic Comparison of Elongation during Runtime
Between a Standard Roller Chain and RexAthletic**



The technically appropriate solution

Specially developed chain links

Substantial lengthening of maintenance interval

Very good tribological properties through special coating of chain pins and bushings

Good price/performance relationship

Price appropriate and technically fitting solution



RexCarbon - No More Lubrication!

Fatigue resistant, high performance for critical areas

In situations where lubrication is limited or impossible, RexCarbon fulfills many industrial application needs without reducing the chain's service life due to malfunction resulting from inadequate lubrication.

No Need for Re-lubrication

RexCarbon has proven itself to be innovative and secure and is the perfect chain for medium load capacity under difficult conditions.

Normally available from stock!

Absolutely no lubrication

No contamination of goods or the environment

Enormously long service life

Achieved through use of optimized materials

Improved wear resistance

More robust due to the use of high-tech thermoplastic

Unique high-tech thermoplastic sliding sleeve

Innovative plastic takes over lubricating film function

Clear safety advantages

No fire-hazards resulting from oil or grease deposits

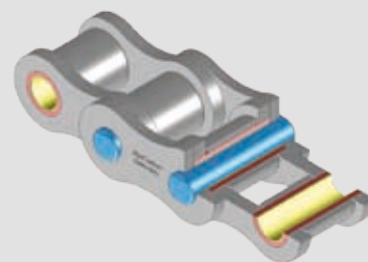
Low Noise

Reduces noise-level at workplace.

Unbeatable Properties

In comparison to conventional chains with plastic sliding sleeves, RexCarbon offers the highest quality because of its high-tech thermoplastic sliding sleeves, leading to many technical advantages. Through the use of high-tech carbon bushings, high fatigue strength is reached. In contrast to a normal standard chain, RexCarbon achieves an 18 times higher resistance to wear. For more information, please see pages 6 and 22 of the Quality Chain catalog, or contact Rexnord's application engineers.

Construction of RexCarbon



- Case hardened steel
- High-tech thermoplastic sliding sleeve
- Case hardened steel

Acceptable Chain Tensile Force

Chain Type	Temperature range - 40 °C to + 80 °C, acceptable tensile force				Temperature range + 80 °C to + 100 °C, acceptable tensile force	
	N up to 0,5 m/s	N 1,0 m/s	N 1,5 m/s	N 2,0 m/s	N up to 0,5 m/s	N 1,0 m/s
08 B-1 CB	850	750	650	500	680	600
10 B-1 CB	1100	1000	900	670	900	700
12 B-1 CB	1500	1300	1100	890	1210	920
16 B-1 CB	3500	3100	2700	2100	2900	2200
08 B-2 CB	1400	1300	1100	850	1160	890
10 B-2 CB	1900	1700	1500	1140	1550	1180
12 B-2 CB	2500	2300	2000	1500	2000	1580
16 B-2 CB	6000	5300	4600	3600	4800	3700



RexPlus – Extremely Corrosion and Acid Resistant Heat – Corrosion – Liquids – Foodstuffs – Hygiene

Rexnord's proven generation of corrosion and acid resistant roller chains fulfill the highest demands with regards to quality, dependability and service life.

Where flowing water is a factor or strict hygienic conditions and corrosion-free material are needed, RexPlus offers superior performance. When normal chain speeds reach approximately 1.5 m/sec., Rex-

Plus can handle the pace – even under extreme loads – better than conventional stainless steel chains. It can withstand temperatures as low as – 40 ° C and up to + 400 ° C, as well as steam, water and abrasive liquids. Through the use of new materials and consistent further developments, RexPlus clearly breaks through the constraints of customary stainless steel chains.

Consistent use of stainless steel and modern production methods

The RexPlus link plates are manufactured from a patented special steel, while the bushing material is high strength austenitic steel. The extraordinary wear resistance of the bushings is achieved through a cold hardening process.

The hardened and tempered chain pins manufac-

tured from ferritic corrosion and acid resistant steel are passivated after a heat treatment.

RexPlus is equipped with seamless, cold formed rollers and then treated with a high performance chain oil, which is permitted to be in direct contact with foodstuffs (approval USDA H1). For more information, please see pages 6 and 24 in the Quality Chain catalog, or contact Rexnord's application engineers.

Acceptable Chain Tensile Force

Chain Type	Temperature range -40 °C to + 200 °C, acceptable tensile force			Temperature range + 200 °C to + 400 °C, acceptable tensile force	
	N up to 0,5 m/s	N 1,0 m/s	N 1,5 m/s	N up to 0,5 m/s	N 1,0 m/s
08 B-1 SS	750	580	500	470	360
10 B-1 SS	1000	770	650	600	480
12 B-1 SS	1400	1100	950	870	680
16 B-1 SS	3000	2300	2000	1800	1400
08 B-2 SS	1280	1000	850	800	624
10 B-2 SS	1700	1800	1100	1000	800
12 B-2 SS	2400	1800	1600	1500	1100
16 B-2 SS	5000	3800	3400	3100	2375
08 B-3 SS	1870	1450	1250	1170	900
10 B-3 SS	2500	1900	1620	1500	1200
12 B-3 SS	3500	2750	2370	2170	1700
16 B-3 SS	7500	5750	5000	4500	3500

Normally available from stock!

Extremely corrosion and acid resistant

Highest standard for roller chains

Maximum Hygiene

Absolute cleanliness via seamless rollers

Improved wear resistance

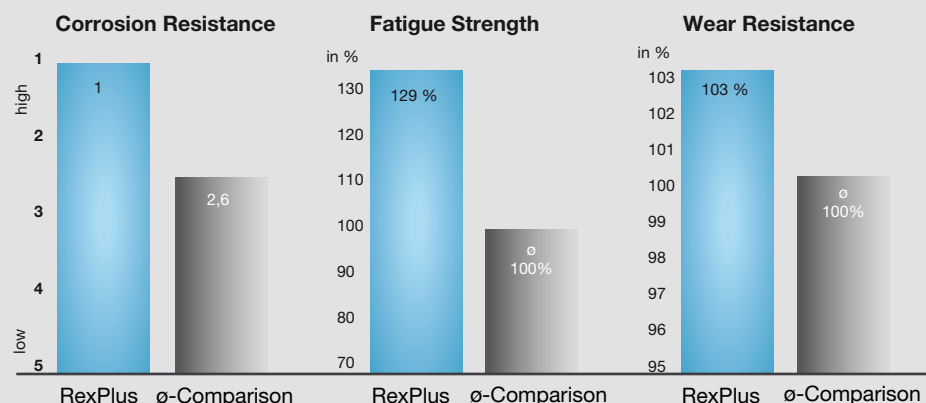
High performance material used for components

High-performance lubrication ex works

Resistant to water and steam



RexPlus – Considerably higher performance in direct comparison



RexSuperPlus - Maintenance-Free and Corrosion Resistant ***The Maintenance-Free Stainless Steel Chain***

RexSuperPlus combines the strengths of both RexPlus and RexCarbon in order to meet the industry requirements for a completely maintenance-free and corrosion resistant chain.

In temperatures of up to +100 °C RexSuperPlus will perform successfully where freedom from maintenance and load capacity characteristics are concerned. By optimizing RexPlus ma-

terials and using patented special steel for the plates, RexSuperPlus achieves corrosion and acid resistance.

High-strength sleeves manufactured from high-tech thermoplastic, bushings manufactured from cold hardened austenitic steel, as well as extraordinarily wear resistant pins make RexSuperPlus a versatile, all-purpose chain. RexSuperPlus exhibits high elasti-

city compared to conventional chains with plastic sleeves.

With its optimized configuration, RexSuperPlus is especially qualified for critical applications, for example, in the food and confectionery industries, in the bottling and drink industries, as well as in the automobile and packaging industries. For more information, please contact Rexnord's application engineers.

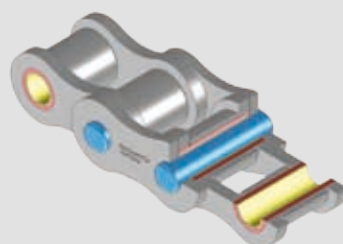
- Normally available from stock!**
- Absolutely no lubrication**
No contamination of goods or environment
- Corrosion Resistant**
Highest standard for roller chains
- High Performance**
Superior strength of all components
- Highest Cleanliness**
Problem-free cleaning possible
- High Performance Lubrication Ex-works**
Perfect for food industries and low temperatures
- Long Service Life**
Wear-optimized chain links

Acceptable Chain Tensile Force

Chain Type	Temperature range - 40 °C to + 80 °C, acceptable tensile force			Temperature range + 80 °C to + 100 °C, acceptable tensile force	
	N up to 0,5 m/s	N 1,0 m/s	N 1,5 m/s	N up to 0,5 m/s	N 1,0 m/s
08 B-1 SS CB	750	580	500	680	520
10 B-1 SS CB	1000	770	650	900	700
12 B-1 SS CB	1400	1100	950	1210	920
08 B-2 SS CB	1280	1000	850	1160	890
10 B-2 SS CB	1700	1800	1100	1550	1180
12 B-2 SS CB	2400	1800	1600	2000	1580



Construction of RexSuperPlus



- High strength quality steel
- High-tech thermoplastic sliding sleeve
- High strength quality steel
- RexPlus material



Which Chain for Which Application?

With Rexnord you will find the optimal solution – it doesn't matter in which area you would like to introduce a chain or in which special application your chain will be placed.

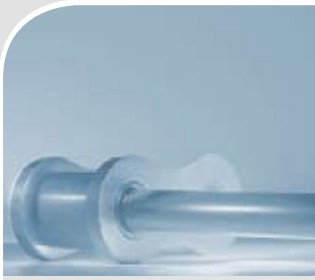
It doesn't always have to be a RexSuperPlus. Just consult Rexnord. The right selection is the basis for a perfect and economic solution, so make use of Rexnord's special expertise. Whether its RexPlus, RexSuperPlus, RexAthletic or RexCarbon, or any of Rexnord's other chain types, they can all be individually produced for your application – with or without attachments.

	RexPro Standard Roller chain	RexAthletic	RexCarbon	RexPlus	RexSuperPlus
Properties of each chain:					
Chain size	04 B - 72 B-3	08 B - 72 B-3	08 B - 16 B-2	08 B - 16 B-3	08 B - 12 B-2
Maintenance	normal	light	maintenance-free	normal	maintenance-free
Fatigue Strength	100%	100%	100%	60%	60%
Tensile Strength	100%	100%	100%	60%	60%
Chain Speed	up to 20 m/s**	up to 20 m/s**	up to 2 m/s	up to 2 m/s	up to 2 m/s
Corrosion and Acid Resistance	no	no	no	yes	yes

Environmental Conditions					
Operating Temperature	- 30°C to 130°C *	0°C to 120°C *	- 40°C to 100°C	- 40°C to 400°C	- 40°C to 100°C
Damp, Corrosive Environment	limited	limited	limited	yes	yes
Dusty	limited	yes	yes	limited	yes
Sanitary	H2-Approval	H2-Approval	H2-Approval	H1-Approval	H1-Approval

* The temperature area can be broadened with special high or low temperature oils.

** An appropriate lubrication method must be chosen depending upon the chain speed.



RexAthletic

Low Maintenance

RexAthletic is the long-lasting, wear-resistant, maintenance-free roller chain with specially developed chain links. It is particularly appropriate for applications where regular maintenance and lubrication is limited, for example, for chains in revolving storage systems, escalators, as well as in drive chains in difficult-to-reach areas.

RexCarbon

Maintenance-Free

Forget about lubrication with RexCarbon. The high-tech thermoplastic sliding sleeve ensures the chain is completely maintenance-free without reducing the service life due to corrosion of the chain links. RexCarbon offers strong performance for all areas where regular maintenance is difficult.

RexPlus

Extremely Corrosion and Acid Resistant

RexPlus is the proven corrosion and acid resistant roller chain that satisfies the highest demands on quality, dependability and service life. Through the use of new materials and consistent further development, RexPlus shows its superiority over all other conventional stainless steel chains.

RexSuperPlus

Maintenance-Free, Corrosion and Acid Resistant

RexSuperPlus is the first chain that is permanently maintenance-free and corrosion and acid resistant, thereby combining the strengths of RexPlus and RexCarbon. High resistance to wear and optimized elasticity enable permanent precision and security in all applications.



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