



CHAIN SOLUTIONS FOR CEMENT PLANTS

PORTAL RECLAIMER – DRAG CHAIN CONVEYOR – APRON & PAN CONVEYORS
BUCKET ELEVATORS – ALTERNATIVE FUELS

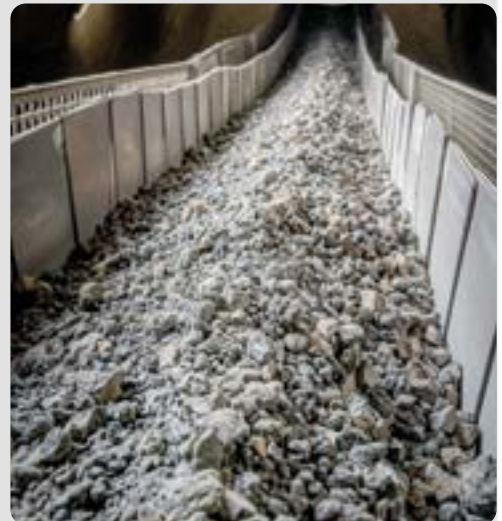




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Subject to technical and dimensional changes as well as printing errors.
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WE ARE FB CHAIN

2026

GERMANY

Facility expansion in Eslohe

2025

FINLAND

80 Years of chain production

AUSTRIA

Facility expansion in Kufstein

2021

RotaLube®

Becomes part of FB Group

2019

SWITZERLAND

Acquisition of Brandenberger Chain

FINLAND

FB Ketju significantly increased capacity and opened a second chain production facility in Lappi

2014

FRANCE

Founding of FB Chaines

2007

ENGLAND

Founding of FBkc, manufacturer of special chains including assembly service; part of the FB Group since 2019

1999

GERMANY

Founding of FB Ketten

1995

GLOBAL REBRANDING

of all FB companies under the protected brand name FB

1989

AUSTRIA

Founding of FB Ketten

1986

ENGLAND

Start of production for Leaf Chain attachments and components for materials handling vehicles as well as plant and mechanical engineering

1945

FINLAND

Manufacturing of bush chains and special conveyor chains including attachments

1912

THE FIRST FB CHAIN

Start of production for roller chains, sharp top roller chains, Leaf chains, and bush conveyor chains Under the "efbe" brand in Eskilstuna

1870

SWEDEN

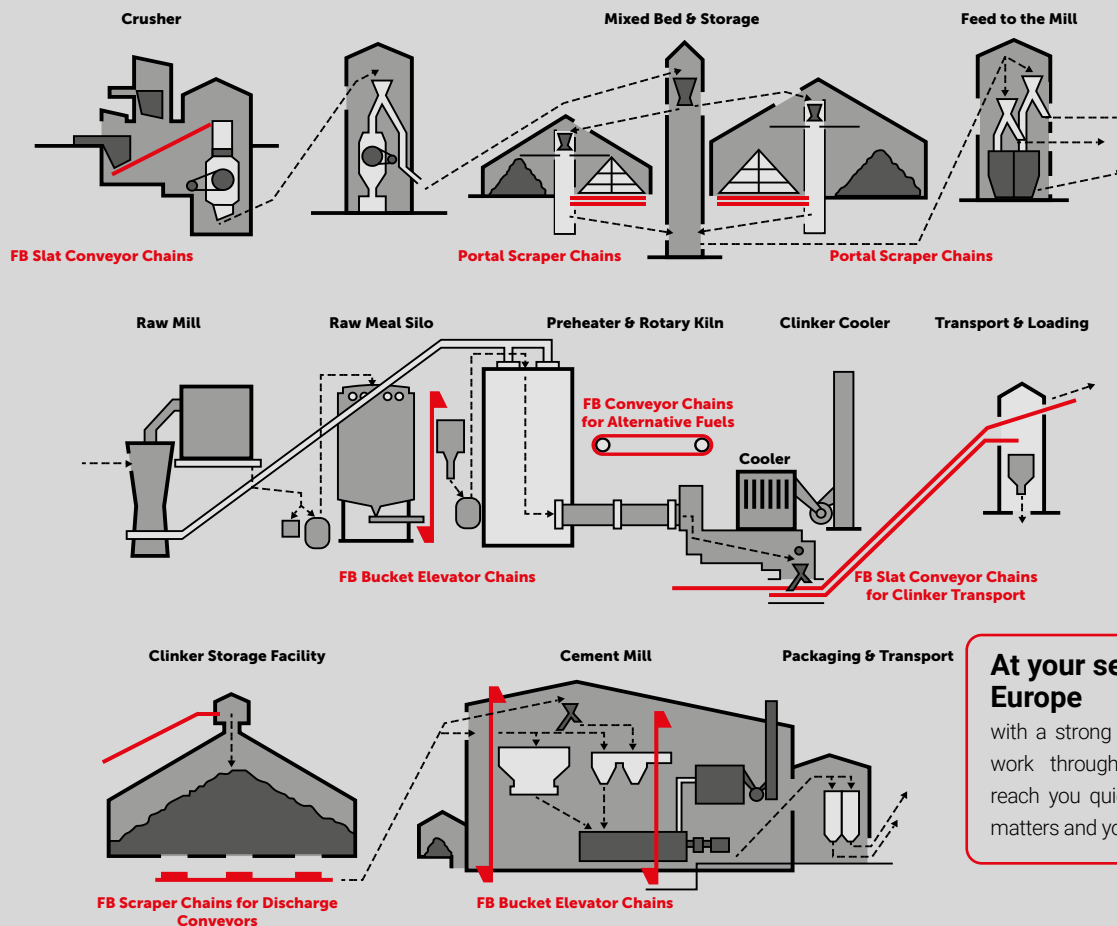
Founded by Adolf Hedengran



HIGH-PERFORMANCE CHAIN SOLUTIONS FOR CEMENT PLANTS

The history of FB dates back to 1870, when Adolf Fredrik Hedengran laid the foundation in Eskilstuna, Sweden, for a company that has consistently evolved: from a steel processor into a specialised manufacturer of heavy-duty chain systems.

Since 1912, we have been developing and manufacturing drive and conveyor chains – with a clear focus on durability, operational reliability, and cost-efficiency under the most demanding conditions.



At your service across Europe

with a strong sales and service network throughout Europe, we can reach you quickly – exactly when it matters and you need us.

Maximum Operational Reliability

Cement plants place extreme demands on conveying technology:

- Abrasive materials
- High temperatures
- Continuous operation

This is exactly where we come in:

Working in close collaboration with our customers, our chain application engineers develop field-proven solutions that reduce downtime, extend maintenance intervals, and sustainably lower total cost of ownership.

Our strengths

- Optimisation of existing systems
- Extension of service life
- Reduction of unplanned downtime

Rapid Response – Flexible Production

Time is a critical factor in a cement plant.

We respond very quickly and can deliver on short notice; many chain types are available from stock.

Tailored Solutions instead of Compromises

Standard solutions don't always fit – especially in the cement industry.

We analyse your application in detail and develop:

- Customised chain solutions
- Optimised components for existing systems
- Cost-effective alternatives to current solutions

Upon request we provide on-site support – from analysis to implementation.

Experience that delivers measurable results

Our experienced application engineers speak your language – with technical expertise and a focus on solutions.

You benefit from:

- Practical advice
- Rapid technical clarification
- Innovative, cost-effective approaches



FB-retroFIT

WHAT'S IN IT FOR YOU AND WHY IT PAYS OFF:

ENHANCED SERVICE



Sustainable modernisation instead of replacement

FB-retroFIT extends the service life of chain conveyors and reduces material consumption, CO2 emissions, energy costs, downtime, and investment costs.



Greater Cost Efficiency with FB-retroFIT

With innovative FB-retroFIT concepts, we boost system profitability through extended service life, lower operating costs, or increased capacity-ideally delivering all three benefits simultaneously. Cost-effective and without the need for complex new construction or system modifications.



Zero risk – a complete, single-source solution: Your FB chain application engineers

- We take measurements on-site – including sprockets, shafts, buckets, scrapers, flights, etc.
- We address your system-specific requirements
- We propose improvements
- We design cost-effective and robust solutions
- We can also arrange installation upon request



From practice – for practice

Customer feedback, results from plant audits, our own observations, and best practice reports are an important part of our internal development.

HIGH QUALITY PRODUCTS



Everything from a single source – one partner for every need

Chains, flights, scrapers, conveyor rollers, system audits and installation – a single point of contact for everything.



Modern Machinery

We continuously invest in modern manufacturing capabilities. This enables us to achieve high and consistent product quality, as well as competitive production costs and prices.



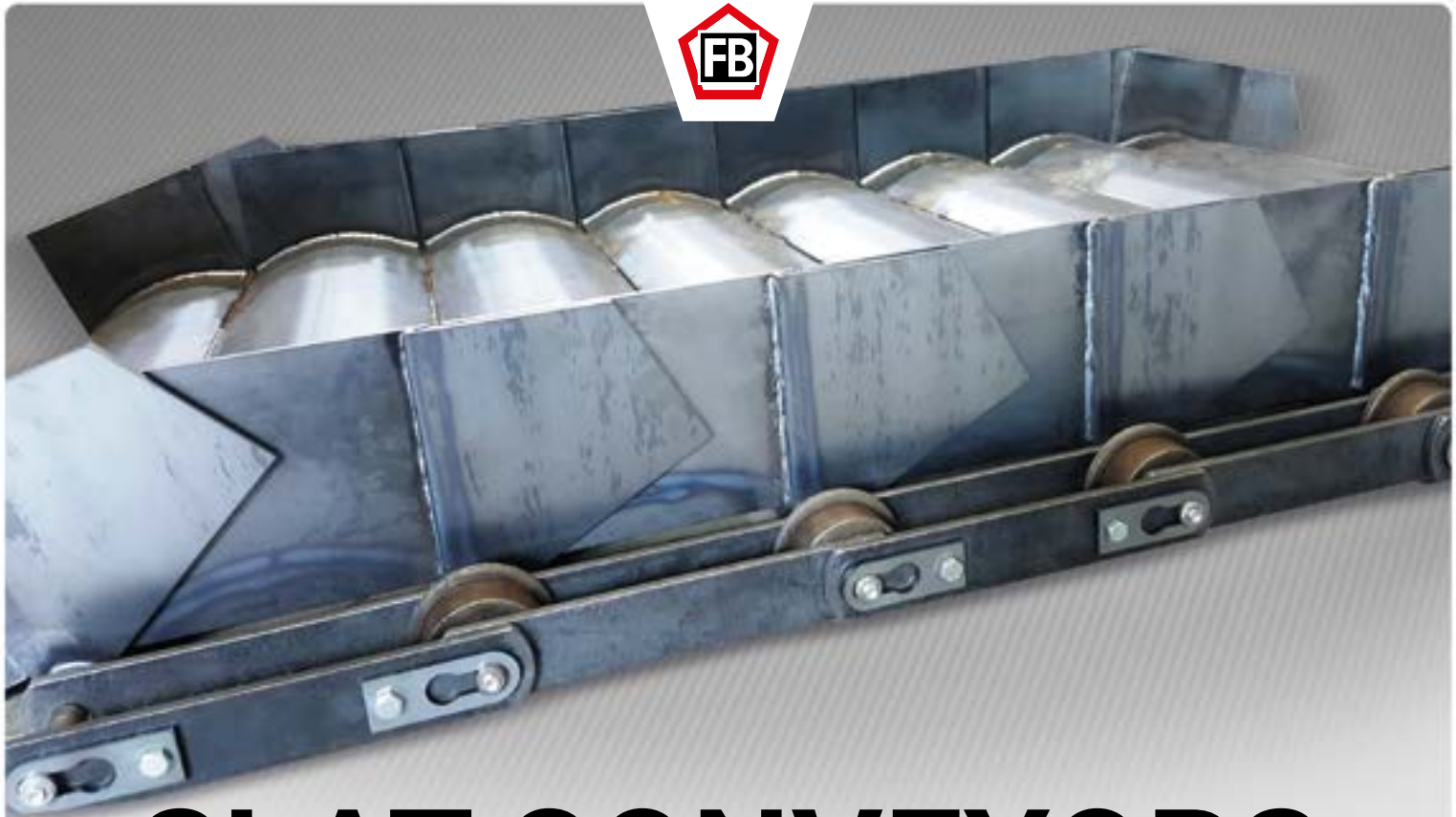
Ready-to-install and easy to mount

We tailor our chain solutions precisely to your installation parameters. Pre-assembly is carried out in consultation with you. This reduces installation effort, commissioning time and interface risks.



Wear-resistant components

High-alloy materials, hardened parts, and precision manufactured joint components with high surface quality ensure a long service life, high fatigue strength, and reliable operation – even under demanding operating conditions and at elevated temperatures.



SLAT CONVEYORS

SLAT CONVEYOR CHAINS, SPROCKETS, SUPPORT ROLLERS, RETURN ROLLERS, DRIVE SHAFTS, AND SPARE PARTS FOR DEMANDING BULK MATERIAL APPLICATIONS

WHY USE FB SLAT CONVEYORS?

Robust, dense slat conveyor chains ensure safe and reliable material transport, even under extreme operating conditions.



Drive shaft with hardened sprockets



Slat conveyor chain with guided rollers



Greater cost-efficiency with FB-retroFIT

FB-retroFIT boosts system profitability through extended service life, lower operating costs, and increased capacity—without complex modifications.



Lower installation costs

Precisely tailored apron conveyor chains and pre-assembly customised to the specific installation site reduce installation effort, commissioning times, and interface risks.



High operational reliability

Highly robust, precision-manufactured apron plates ensure a perfect fit, long service life, and reliable operation—even under heavy loads.



Zero risk—a single-source solution

Our FB chain application engineers take on-site measurements, develop cost-effective solutions, and can also organise installation upon request.



High system availability

Practical apron plate mounting designs simplify installation and reduce maintenance downtime during operation.



PAN CONVEYORS

We develop and manufacture bushing conveyor chains and rigid-back conveyor chains for the reliable transport of clinker, coal, iron ore, recycled materials, and other demanding bulk goods. **For short- and long-pan conveyors, overlapping pan conveyors, hinged pan conveyors, or bucket conveyors – precisely tailored to your application.**

WHY USE FB PAN CONVEYOR CHAINS?



Greater cost-efficiency with FB-retroFIT

FB-retroFIT boosts system profitability through extended service life, lower operating costs, and increased capacity—without complex modifications.



Reduced risk and costs through on-site service

Our FB chain specialists analyse your system on-site and develop solutions tailored precisely to your needs.



Compatible, ready-to-install components

Matching system solutions reduce interface points, simplify installation, and ensure smooth recommissioning.



Wear-resistant components

High-quality materials and precision-manufactured parts ensure a long service life and reliable operation—even under demanding conditions.



Developed from real-world experience

Customer feedback and practical experience are continuously incorporated into our ongoing development.



Consistent quality and competitive prices

Modern manufacturing ensures high product quality and cost-efficient production.



Bucket elevator / clinker transport





MAINTENANCE-FREE GUIDED ROLLERS FOR SLAT CONVEYORS

Guide or support rollers used in the bulk material handling industry—for instance, in apron and slat conveyors—are typically mounted on an axle or a stub shaft.

The ball bearings within them are relubricated via grease nipples. Provided that lubrication intervals are observed and the work is carried out correctly, a very long service life can be achieved—though this also depends on the material being conveyed and the operating parameters.

Maintenance-free versions reduce maintenance requirements and operating costs.

WHY USE PAN CONVEYOR ROLLERS FROM FB?



Flexible solutions from FB-retroFIT

We manufacture guided rollers based on on-site measurements, samples, or drawings, and offer optimised, sealed-for-life slat conveyor rollers as a cost-effective alternative.



High system availability

Wear-resistant hardened roller bodies, axles, and adapted components increase the service life of the slat conveyor rollers and extend replacement intervals.



Resource-efficient and sustainable

Maintenance-free slat conveyor rollers reduce lubricant consumption, lubricant contamination, and maintenance requirements.



Extended service life and operational reliability

Sealed-for-life slat conveyor rollers last significantly longer than inadequately lubricated or unlubricated guided rollers.



Maintenance-free slat conveyor rollers



Cellular belt roller with grease nipple



PORTAL SCRAPER

Portal scrapers are important scraper-chain conveyors in the production process. They scrape bulk materials from a stockpile onto a conveyor belt, which transports the raw material—such as clay, limestone, marl, granulated blast-furnace slag, iron ore, fuels, and more—to subsequent production stages.

Portal scrapers are also referred to as stockpile reclaimers or clearing scrapers. In brickworks or clay processing plants, they are known as pit excavators or bucket-chain excavators. One or two booms equipped with conveyor chains are mounted on the portal. Typically, block-link chains or conveyor chains with rollers are used.

WHY USE FB PORTAL SCRAPER CHAINS?



Scraper rakes / blades



Portal scraper for granulated blast furnace slag



retroFIT

Flexible solutions with FB-retroFIT

We manufacture custom-made stacker-reclaimer chains based on measurements, samples, or drawings, replacing energy-intensive block-link chains with ready-to-install FB-r**EVOLUTION** portal scraper chains – without requiring modifications to existing systems. This saves energy and effort, and cuts costs by up to €30,000 annually.



Resource-efficient and sustainable

Ready-to-install system solutions reduce interface points, simplify installation, and ensure smooth recommissioning.



Extended service life for chains, sprockets, and chain wear strips

FB-r**EVOLUTION**-portal scraper chains last up to three times longer than block-link or round-link chains. Sprockets and chain wear strips also achieve significantly longer service lives.



High system availability

Wear-resistant hardened components, optimised design, and tailored initial lubrication increase operational reliability by 30–50%.



BUCKET ELEVATORS

FB bucket elevator chains reduce downtime and increase system availability – even when handling hot, abrasive, or coarse-grained materials. For over 80 years, we have been manufacturing bushed conveyor chains for demanding applications in the building materials industry, power plants, and the recycling sector. As a chain manufacturer, we offer flexibility, tailoring dimensions, design, materials, and heat treatments to specific system requirements. We manufacture chains with virtually any pitch and specialise in optimising or retrofitting existing chain attachment systems.

WHY USE FB BUCKET ELEVATOR CHAINS?



Hardened drive wheel



Bucket elevator boot



Drive shaft – hardened gear segments



Flexible solutions with FB-retroFIT

We manufacture bucket elevator chains, elevator buckets, sprockets, tooth segments, tyres, pulleys, and shafts based on on-site measurements, samples, or drawings. Converting round-link chain bucket elevators to twin-strand conveyor chains or central chain systems is also becoming increasingly important.



Zero risk – a complete, single-source solution

Our FB chain application engineers take on-site measurements, incorporate customer-specific requirements, develop proposals for improvement, and can also organise installation upon request.



Practical solutions for real-world applications

Bucket elevator audits, wear reports, customer feedback, and practical experience are continuously incorporated into our product development.



Wear-resistant components

High-alloy materials, hardened components, and precision joint parts and chain links ensure a long service life, high fatigue strength, and reliable operation – even at elevated temperatures.



ALTERNATIVE FUEL CONVEYORS

In cement production, the majority of thermal energy is consumed during the firing of cement clinker in rotary kiln systems. To reduce energy costs and advance the decarbonisation of the cement industry, fossil fuels are increasingly being replaced by alternative fuels (EBS) and secondary fuels (SBS)—such as fluff, high-calorific waste, used tires, and non-recyclable plastic waste.

WHY USE EBS CHAINS FROM FB?



Flexible solutions through FB-retroFIT

We manufacture conveyor chains, sprockets, tooth segments, idler wheels, and shafts based on on-site measurements, samples, or drawings.



Field-proven solutions that work

Over 80 years of experience, standard chains available from stock, system-specific modifications, and optional installation coordination ensure reliable conveyor chain solutions.



Wear-resistant components

High-alloy materials, hardened components, and precision-engineered link parts ensure a long service life, high fatigue strength, and reliable operation—even under demanding conditions and at elevated temperatures.



From practice—for practice

Audits, wear reports, customer feedback, and practical experience are continuously incorporated into our R&D. Modern manufacturing further ensures consistent product quality and competitive costs.



Drop-forged fork link chains



Apron conveyors



Infeed conveyors for recycled plastics



FB BUSH CONVEYOR CHAINS

DIN 8165, DIN 8167 (ISO 1977), SMS 1698

The conveyor chains with bushings manufactured by FB meet the highest quality standards. FB conveyor chains featuring welded pins and bushings (types HT and HTH) achieve world-class levels of fatigue strength, operational reliability, and breaking strength.

We achieve this high breaking strength through the use of high-quality, highly weldable steels, a chain design optimised over decades, and heat treatments perfectly matched to the materials used.

We have been manufacturing conveyor chains in Scandinavia for over 110 years; our newest and most modern production facility was opened in Lappi (Finland) in 2019.

High operational reliability and system availability



Headed pins ensure high fatigue strength and stability. Optional 30–50% higher load capacity and breaking strength via welded pins and bushings.

High quality and long service life



Achieved through high-grade steels, optimised chain design, process-controlled component manufacturing and heat treatment, as well as fully automated chain assembly.

ADVANTAGES



High load-bearing capacity and fatigue strength

Fine-blanked link plates with an optimal, tight press fit increase resistance to impact loads and lateral forces.



Ideally suited for welding on attachments

Made with low-carbon, high-strength chain link plates.



Flexibility and customised solutions

We tailor dimensions, materials, heat treatments, and designs to your specific operating parameters. For corrosive media, stainless and hardened joint components offer a proven solution.



Ready-to-install solutions – resource-efficient, sustainable, and cost-effective

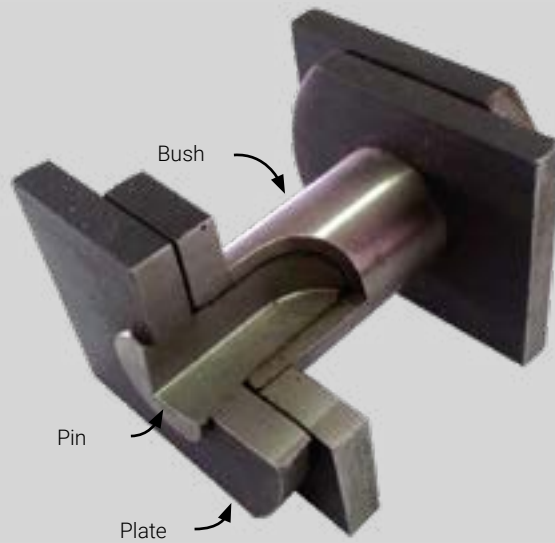
Upon request, we cut chains to your specified lengths and mount attachments. This results in less waste, lower costs, and reduced effort for you.



State-of-the-art technology

Customer-oriented, sustainable product and application development driven by constant dialogue and close collaboration with plant operators and leading OEMs. Continuous investment in modern production equipment, machinery, and robotics technology.

MATERIALS, HEAT TREATMENTS AND MANUFACTURING PROCESSES



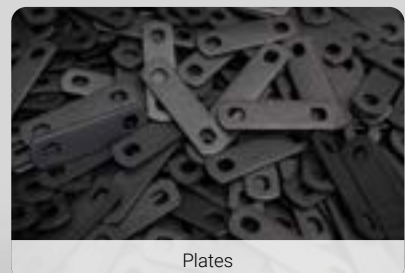
	Pin	Bushes	Roller	Plates
Materials:	alloy steels, on request also stainless and acid-resistant			easily weldable steels with low carbon content and high strength, on request also available as stainless and acid-resistant design
Heat treatment:	induction-hardened and ground on the bearing surface	case-hardened, optionally hardened and tempered and induction-hardened and ground		naturally hard, hardened and tempered or induction-hardened
Production:	round riveted or welded, optionally case-hardened materials	seamlessly drawn tube with anti-rotation feature, press-fitted with a very precise fit and, welded from the outside of the inner plate if required	modern CNC machining centres	precision punched plate holes, double or triple punched
Options:	other locking methods such as head pins, clips cotter pins or locking rings	maintenance-free bearings (e.g. IGUS)	wear bushes, ball bearings, needle bearings	Coatings (e.g., galvanised)



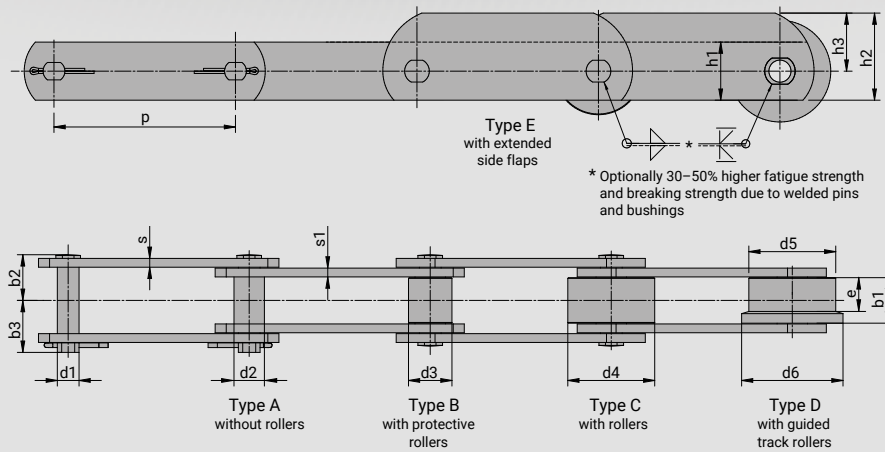
Pins



Bushes



Plates



30–50% greater operational reliability thanks to welded FB conveyor chains

FB is the leading manufacturer of welded bushing conveyor chains. Our in-house welding specialists continuously refine our welding processes and robotic systems to meet the high standards and specific needs of our demanding customers. The goal of achieving maximum chain service life, superior system availability, high operational reliability, and the lowest possible operating costs drives us to find the best commercial and technical solution for you every day.



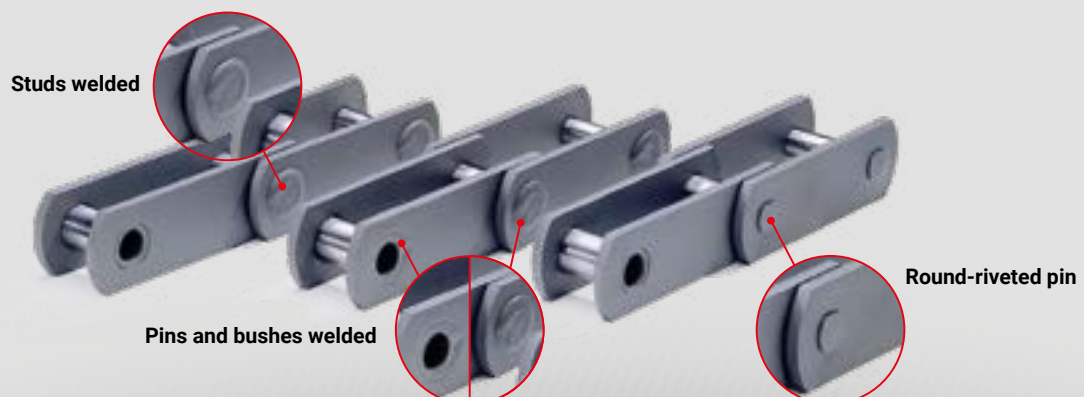
Customised Solutions

Bushing conveyor chains can be adapted to any conveying task through the use of welded-on or bent-on attachments, extended or welded-on pins, external or internal rollers made of steel or plastic, and low-maintenance plain bearings or ball bearings.



Quality Control

We are committed to producing and supplying high-quality, reliable, and high-performance chains for our customers. To meet this commitment, we have established very stringent quality control standards. We monitor and control every stage of production and inspect the chains prior to shipment. To ensure the continuous development of our conveyor chains and manufacturing methods, we work closely with end-users, technical universities, and external testing institutes.





FB CONVEYOR CHAINS DIN 8165, FV SERIES

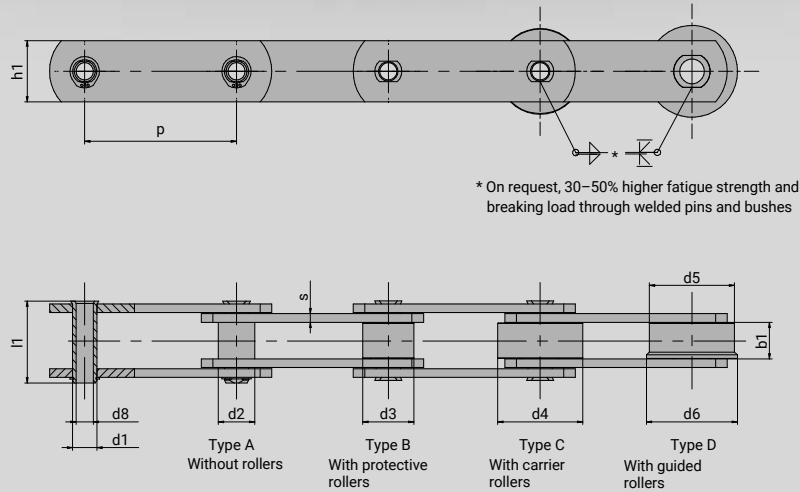
Type	Breaking Load	Allowed Load	Pitch	Inner Width	Pin	Bush	Roller Type B	Roller Type C	Roller Type D				Plates			
	F _B min	F _{DYN} min	p	b ₁	d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	b ₂	b ₃	s/s ₁	h ₁	h ₂	h ₃
	(kN)	(N)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
(FV40)	40	6.700	40 50 63 80 100	18	10	15	20	32	40	48	18,5	22,0	4	25	35	22,0
FV40	40	6.700	40 50 63 80 100	18	10	15	20	32	40	48	18,5	22,0	3	26	35	22,0
FV63	63	10.500	63 80 100 125	22	12	18	26	40	50	60	23,0	27,5	4	30	40	25,0
FV90	90	15.000	63 80 100 125	25	14	20	30	48	63	73	26,5	31,0	5	35	45	27,5
FV112	112	18.700	63 80 100 125 160	30	16	22	32	55	72	87	31,5	36,0	6	40	50	30,0
FV140	140	23.400	100 125 160 200	35	18	26	36	60	80	95	34,0	40,0	6	45	60	37,5
FV180	180	30.000	100 125 160 200	45	20	30	42	70	100	120	43,0	50,0	8	50	70	45,0
FV250	250	41.700	125 160 200 250	55	26	36	50	80	125	145	49,0	57,0	8	60	80	50,0
FV315	315	52.500	160 200 250 315	65	30	42	60	90	140	170	58,5	66,5	10	70	90	55,0
FV400	400	66.700	160 200 250 315	70	32	44	60	100	150	185	65,5	75,5	12	70	90	55,0
FV500	500	83.400	160 200 250 315	80	36	50	70	110	160	195	70,5	80,5	12	80	100	60,0
FV630	630	105.000	200 250 315 400	90	42	56	80	120	170	210	76,5	86,5	12	100	120	70,0

Other dimensions and designs available on request.

FB CONVEYOR CHAINS DIN 8167 (ISO 1977), M SERIES

Type	Breaking Load	Allowed Load	Pitch	Inner Width	Pin	Bush	Roller Type B	Roller Type C	Roller Type D				Plates			
	F _B min	F _{DYN} min	p	b ₁	d ₁	d ₂	d ₃	d ₄ /d ₅	d ₆	e	b ₂	b ₃	s/s ₁	h ₁	h ₂	h ₃
	(kN)	(N)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
M40	40	5.700	63 80 100 125	20	8,5	12,5	18	36	42	13,5	21	24	4	25	35	22,5
M56	56	8.000	63 80 100 125	24	10	15	21	42	50	17,0	24	27	4	30	45	30,0
M80	80	11.400	80 100 125 160	28	12	18	25	50	60	20,0	29	33	5	35	50	32,5
M112	112	16.000	80 100 125 160	32	15	21	30	60	70	22,0	33	38	6	40	60	40,0
M160	160	22.800	100 125 160 200	37	18	25	36	70	85	25,5	38	43	7	50	70	45,0
M224	224	32.000	100 125 160 200	43	21	30	42	85	100	30,0	44	49	8	60	90	60,0
M315	315	45.000	160 200 250 315	48	25	36	50	100	120	33,0	51	58	10	70	100	65,0
M450	450	64.000	200 250 315 400	56	30	42	60	120	140	37,0	60	66	12	80	120	80,0
M630	630	90.000	250 315 400 500	66	36	50	70	140	170	45,0	69	78	14	100	-	-
(M900)	900	128.000	250 315 400 500	78	44	60	85	170	210	52,0	79	89	15	120	-	-
M900	900	128.000	250 315 400 500	78	44	60	85	170	210	52,0	79	89	16	120	-	-

Other dimensions and designs available on request.



FB HOLLOW PIN CONVEYOR CHAINS DIN 8165, FV SERIES

Type	Breaking Load		Allowable Load	Pitch p	Inner Width b ₁	Pin		Bush	Roller Type B	Roller Type C	Roller Type D		Plates		
	F _B min	F _B min	F _{DYN} min			d ₈	d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	l ₁	s	h ₁
	(kN)	(kN)	(N)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
FVC63	46	75	10.500	63 80 100 125 160	22	8,2	12	18	26	40	50	60	46	4	30
FVC90	73	90	15.000	63 80 100 125 160 200 250	25	10,2	14	20	30	48	63	78	53	5	35
FVC112	90	132	18.700	100 125 160 200 250	30	11,2	16	22	32	55	72	87	63	6	40
FVC140	110	170	23.400	100 125 160 200 250	35	12,2	18	26	36	60	80	95	68	6	45
FVC180	145	190	30.000	125 160 200 250 315	45	14,2	20	30	42	70	100	120	68	8	50
FVC250	215	300	41.700	160 200 250 315	55	18,2	26	36	50	80	125	145	98	8	60

FB HOLLOW PIN CONVEYOR CHAINS DIN 8168, M SERIES

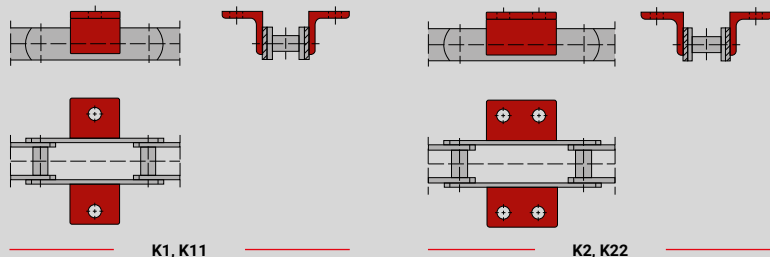
Type	Break- ing Load	Allowable Load	Pitch p	Inner Width b ₁	Pin		Bush	Roller Type B	Roller Type C	Roller Type D		Plates		
	F _B min	F _{DYN} min			d ₈	d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	l ₁	s	h ₁
	(kN)	(N)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
(MC28)	28	4.000	63 80 100 125 160	20	8,5	12,5	18,0	25	36	36	45	42	4,0	25
MC28	28	4.000	63 80 100 125 160	20	8,2	13,0	17,5	25	36	36	45	40	3,5	25
(MC56)	56	8.000	80 100 125 160 200 250	22	10,1	15,0	21,0	30	50	50	60	49	5,0	35
MC56	56	8.000	80 100 125 160 200 250	24	10,2	15,5	21,0	30	50	50	60	47	4,0	35
(MC112)	112	16.000	80 100 125 160 200 250	30	14,1	20,0	30,0	42	70	70	85	66	7,0	50
MC112	112	16.000	100 125 160 200 250 315	32	14,3	22,0	29,0	42	70	70	85	64	6,0	50
(MC224)	224	32.000	125 160 200 250 315	40	20,2	30,0	42,0	60	100	100	120	86	10,0	70
MC224	224	32.000	125 160 200 250 315	43	20,3	31,0	41,0	60	100	100	120	83	8,0	70

Other dimensions and designs available on request.

FB HOLLOW PIN CONVEYOR CHAINS DIN 8165, FV SERIES

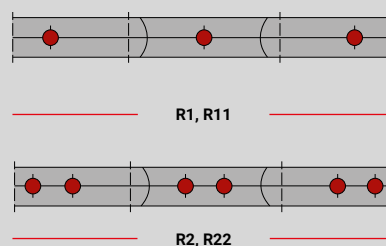
Conveyor chains

with single-sided or double-sided attachment plates



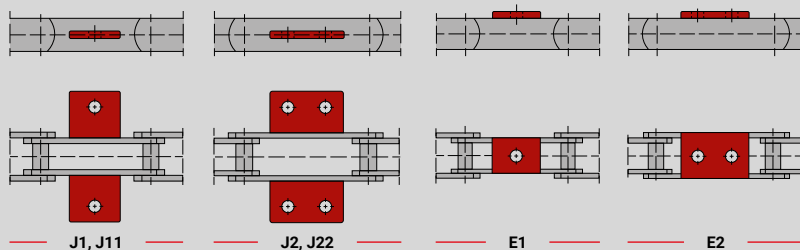
Conveyor chains with holes

for attaching buckets, scrapers, plastic parts, or carriers



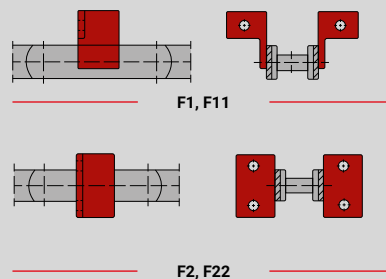
Conveyor chains

with flat steel bars
(flat steel attachments)



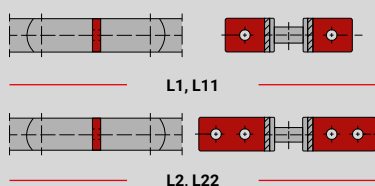
Conveyor chains

with welded-on or bent-on scraper flights
on one or both sides

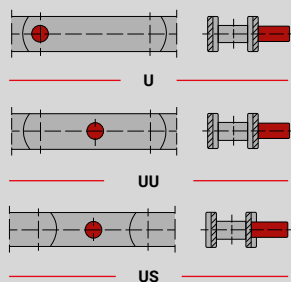


Conveyor chains

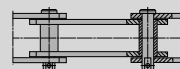
with flights welded on one or both sides,
with or without holes, with or without
plastic scrapers



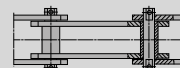
Extended studs, Protruding studs



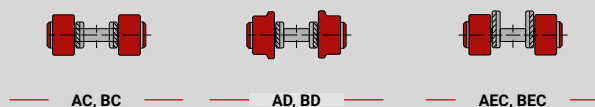
Stud pins



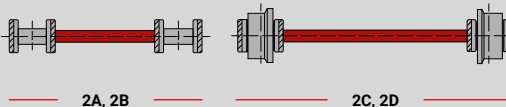
Clevis pin



External track rollers

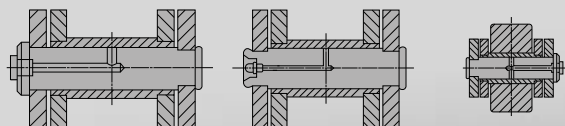


Slat conveyor chains, hinge-type chains

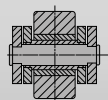


LOW-MAINTENANCE CONVEYOR CHAINS

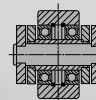
Grease nipple with lubrication bore



Wear bushings (bronze bushings)

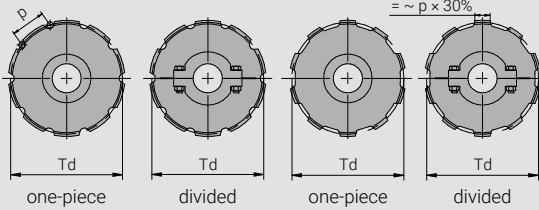


Ball bearings, Needle bearings



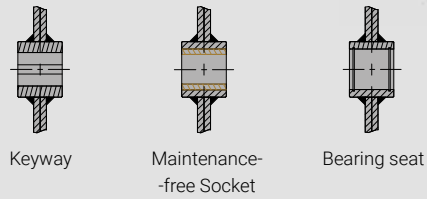
SPROCKETS – METRIC PITCH

Standard tooth gap



Widened tooth gap – Reversible design = double the service life

Borehole variants



Pitch circle diameter Td (mm)

Number of teeth	Pitch p (mm)											
	40	50	63	80	100	125	160	200	250	315	400	500
6	80,00	100,00	126,00	160,00	200,00	250,00	320,00	400,00	500,00	630,00	800,00	1000,00
7	92,19	115,24	145,20	184,38	230,48	288,10	368,76	460,96	576,20	726,01	921,92	1152,40
8	104,52	130,65	164,62	209,04	261,31	326,63	418,09	522,62	653,27	823,12	1045,24	1306,55
9	116,95	146,19	184,19	233,90	292,38	365,47	467,80	584,76	730,95	920,99	1169,52	1461,90
10	129,44	161,80	203,87	258,88	323,61	404,51	517,77	647,22	809,02	1019,37	1294,37	1618,05
11	141,98	177,47	223,61	283,96	354,95	443,68	567,92	709,90	887,37	1118,09	1419,80	-
12	154,54	193,18	243,41	309,09	386,37	482,96	618,19	772,74	965,92	1217,06	1545,48	-
13	167,14	208,93	263,25	334,28	417,86	522,32	668,57	835,72	1044,65	1316,25	1671,44	-
14	179,76	224,70	283,12	359,52	449,40	561,75	719,04	898,80	1123,50	1415,61	-	-
15	192,38	240,48	303,01	384,77	480,97	601,21	769,55	961,94	1202,42	1515,05	-	-
16	205,03	256,29	322,92	410,06	512,58	640,72	820,12	1025,16	1281,45	1614,62	-	-
17	217,68	272,11	342,85	435,37	544,22	680,27	870,75	1088,44	1360,55	1714,29	-	-
18	230,35	287,94	362,80	460,70	575,88	719,85	921,40	1151,76	1439,70	-	-	-
19	243,02	303,77	382,75	486,04	607,55	759,43	972,08	1215,10	1518,87	-	-	-
20	255,70	319,62	402,72	511,40	639,25	799,06	1022,80	1278,50	1598,12	-	-	-
21	268,38	335,47	422,69	536,76	670,95	838,68	1073,52	1341,90	1677,37	-	-	-
22	281,06	351,33	442,68	562,13	702,67	878,33	1124,27	1405,34	-	-	-	-
23	293,75	367,19	462,66	587,51	734,39	917,98	1175,02	1486,78	-	-	-	-
24	306,45	383,06	482,66	612,90	766,13	957,66	1225,80	1532,26	-	-	-	-
25	319,14	398,93	502,65	638,29	797,87	997,33	1276,59	1595,74	-	-	-	-
26	331,84	414,81	522,66	663,69	829,62	1037,02	1327,39	1659,24	-	-	-	-
27	344,55	430,69	542,66	689,10	861,38	1076,72	1378,20	1722,76	-	-	-	-
28	357,25	446,57	562,67	714,51	893,14	1116,42	1492,02	-	-	-	-	-
29	369,96	462,45	582,69	739,92	924,92	1156,13	1479,85	-	-	-	-	-
30	382,67	478,34	602,70	765,34	956,68	1195,85	1530,68	-	-	-	-	-



Split and hardened conveyor chain sprocket



Hardened conveyor sprocket



Soid tooth-rim



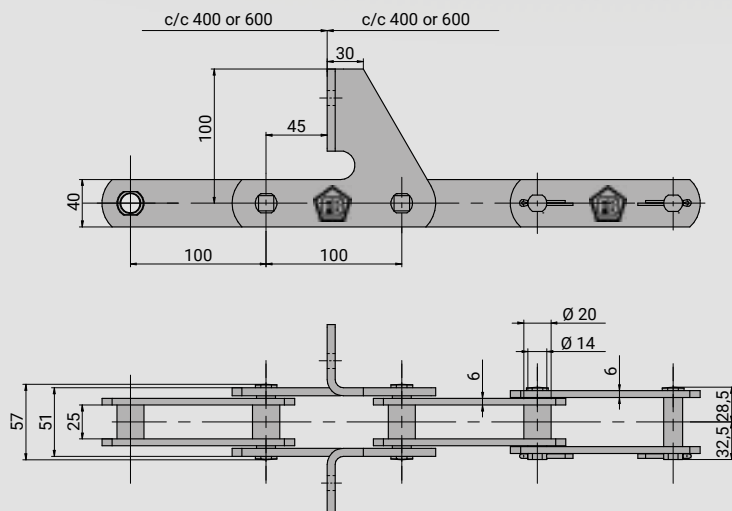
Split & hardened tooth-rim



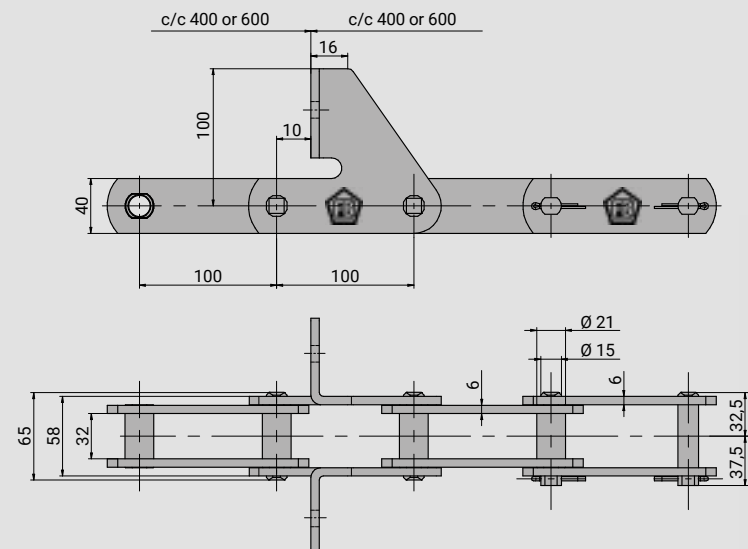
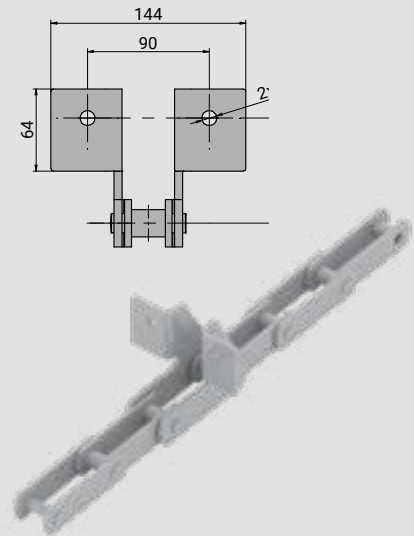
FB SCRAPER CHAINS

Part Number	Pitch	Inside Width	Pins	Bushes/ Rollers	Link Plate Dimensions	Breaking Load
	p	b _i	Ø d _i	Ø d ₂ / d ₃	h ₁ x s	
	(mm)	(mm)	(mm)	(mm)	(mm)	(kN)
(FV90)A100T/F11x400 or x600	100	25	14	20	40x6	140
M112A100T/F11x400 or x600	100	32	15	21	40x6	140
M112A100T/F2x400 or x600	100	32	15	21	40x6	140
FV140A125T/T4x500 or x1000	125	35	18	26	45x6	160
FV140A125T/F22x250 or x500	125	35	18	26	45x6	160
(M160)A160TERW/(F2)x640	160	37	18	25	50x7	185
FV180A125T/T4x500 or x1000	125	45	20	30	50x8	205
(FV180)C160V/(F4)x640	160	45	20	30 / 70	50x8	200
(FV250C)160V/(F4)x640	160	45	26	36 / 70	60x10	400

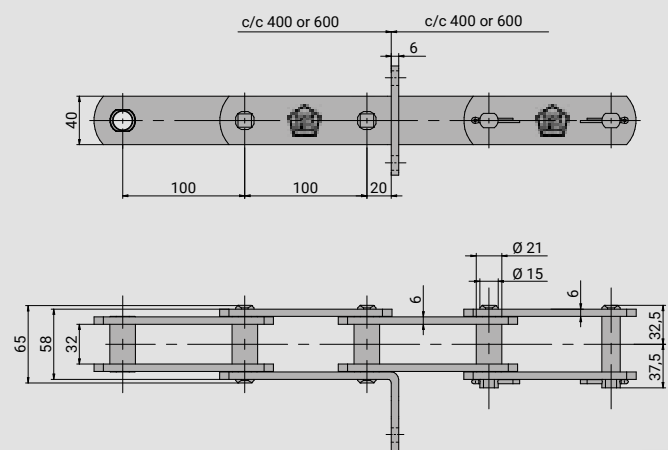
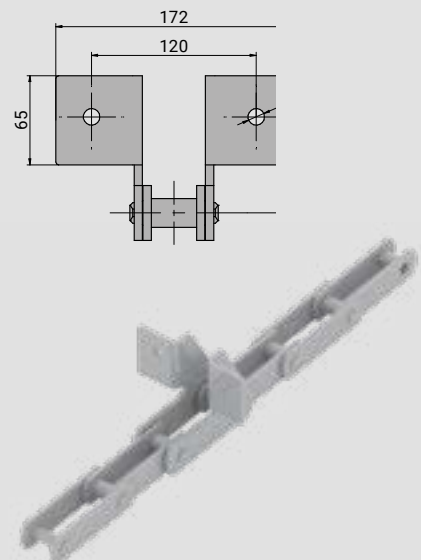




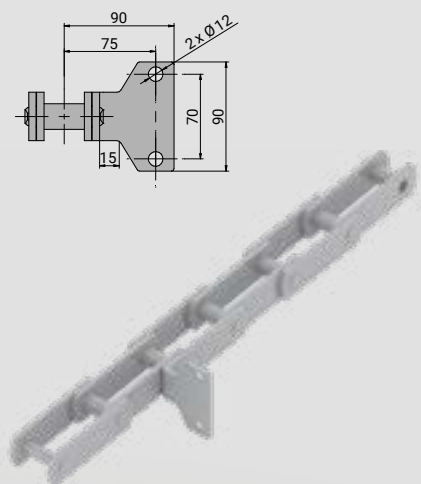
(FV90)A100T/F11x400/600

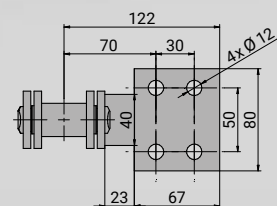
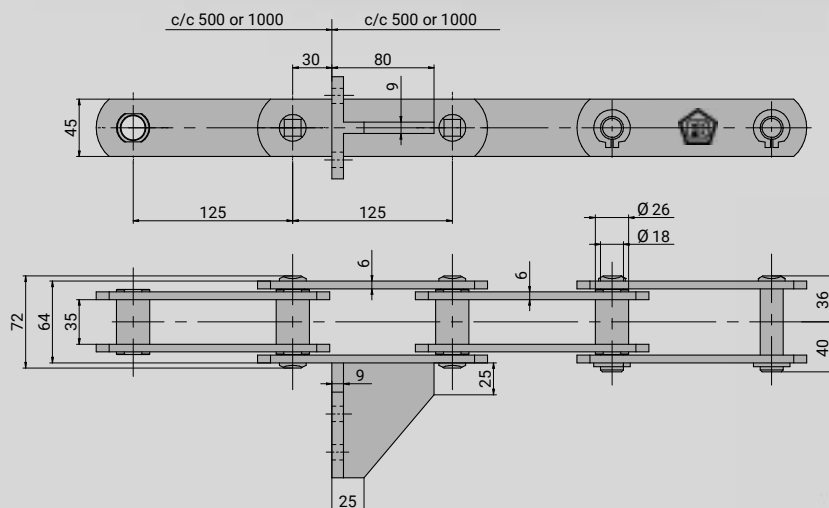


M112A100T/F11x400/600

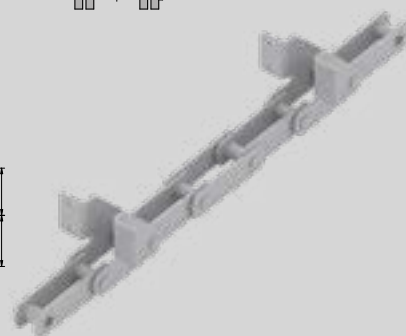
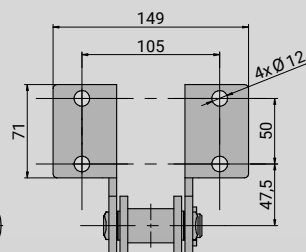
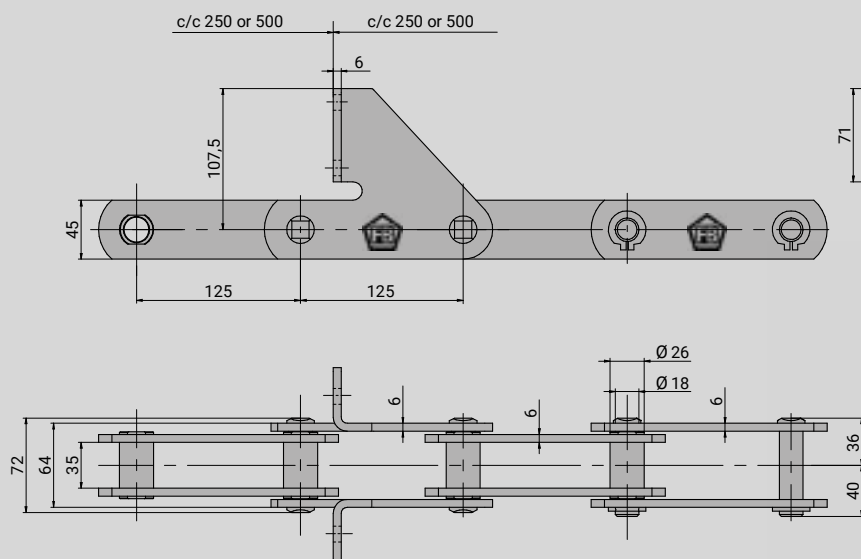


M112A100T/F2x400/600

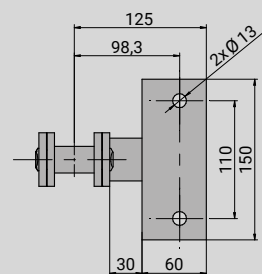
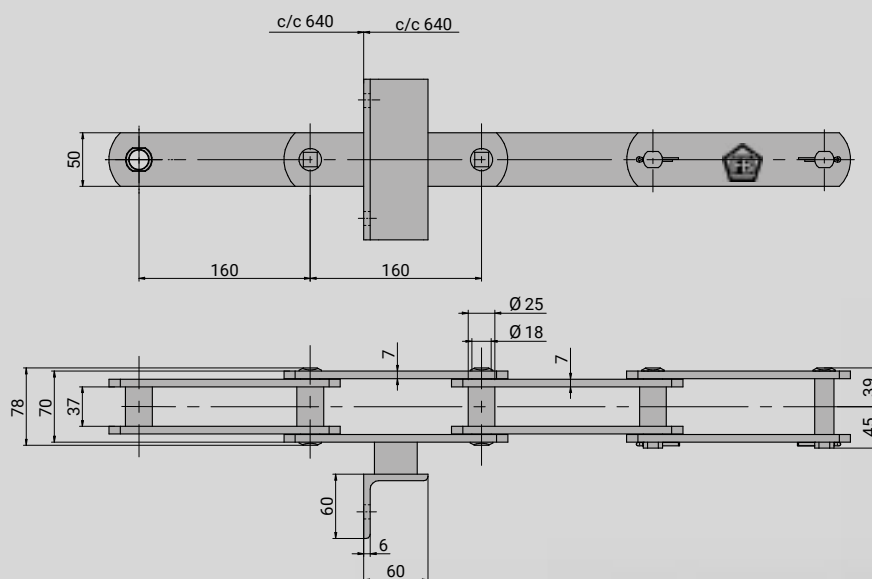




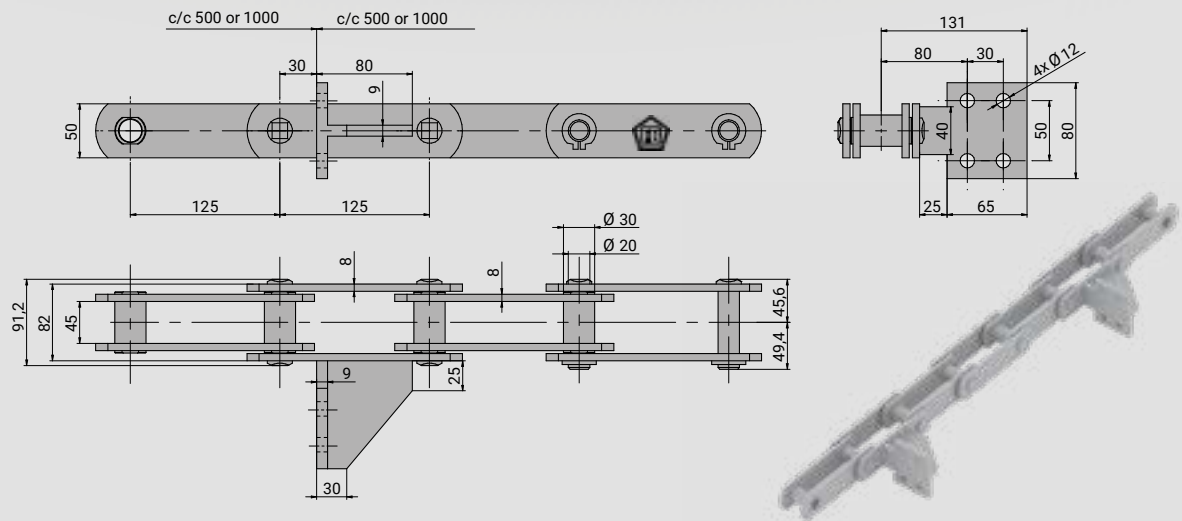
FV140A125T/T4x500/1000



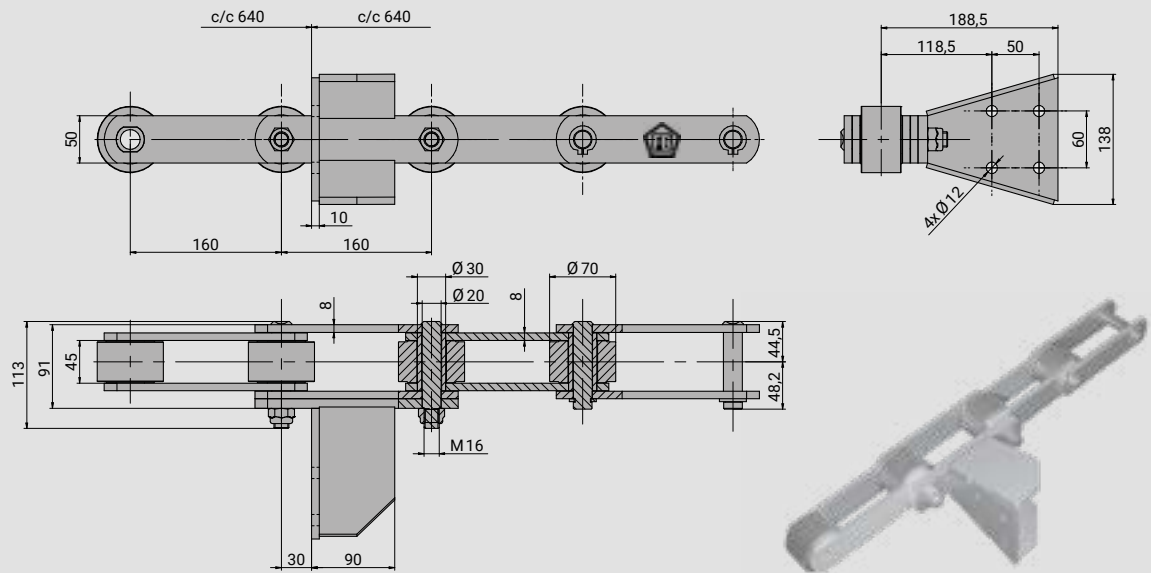
FV140A125T/F22x250/500



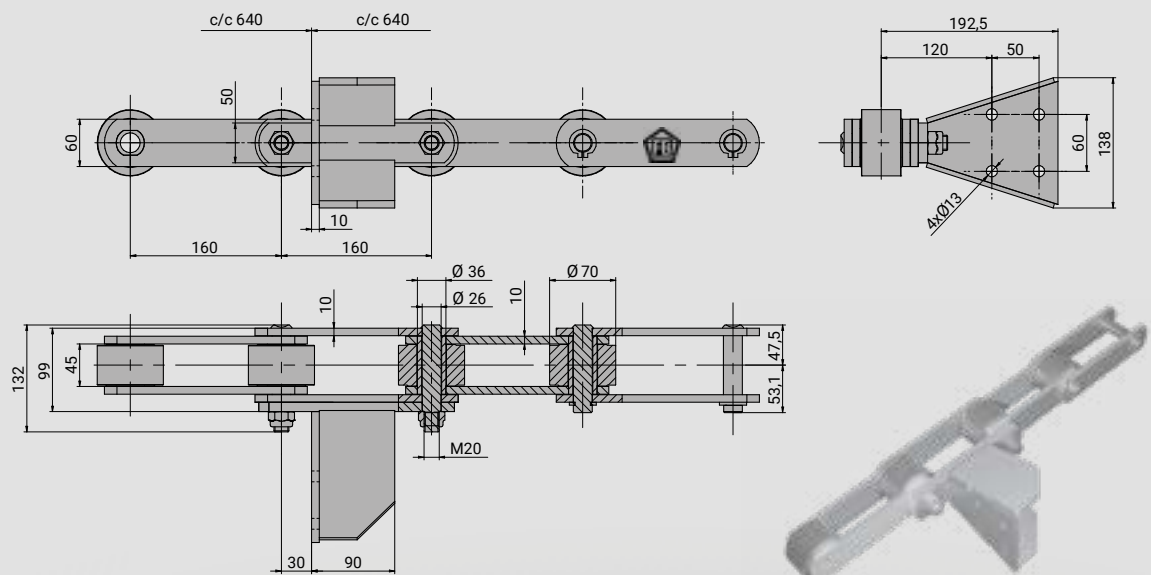
(M160)A160TERW/(F2)x640



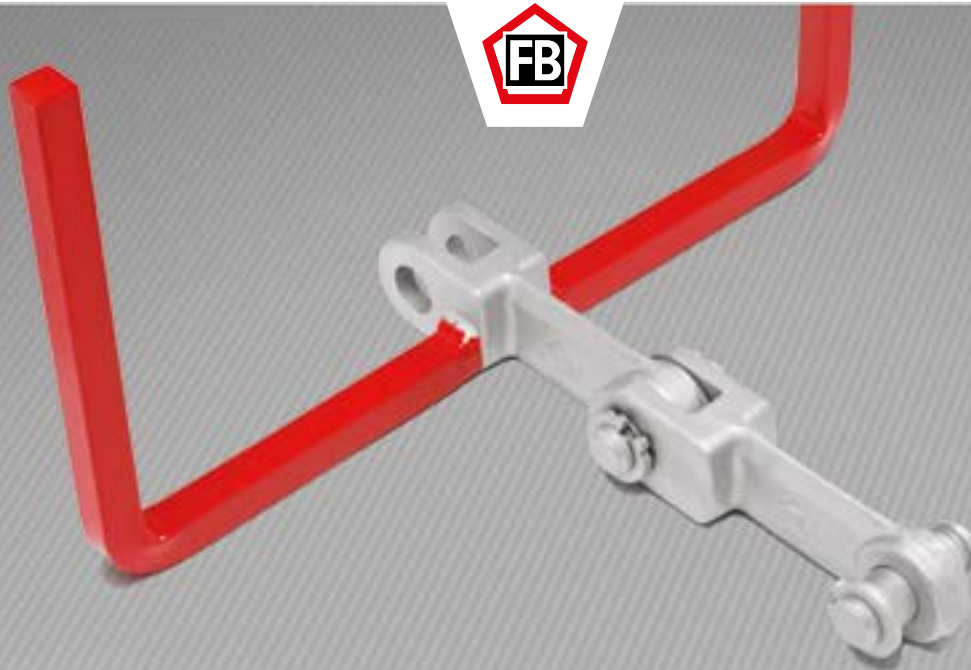
FV180A125T/T4x500/1000



(FV180)C160V/(F4)x640



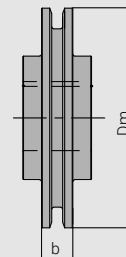
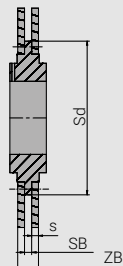
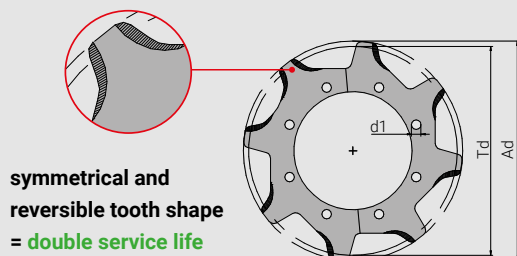
(FV250C)160V/(F4)x640



FB DROP FORGED LINK CHAINS

SPROCKETS WITH OPTIMISED TOOTH PROFILE

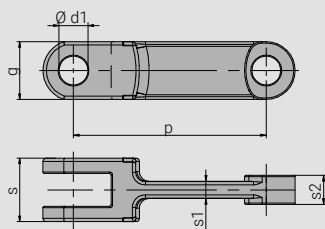
DEFLECTION PULLEYS



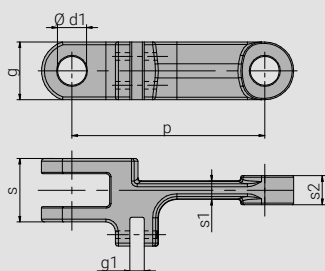
No. of teeth	Outer Ø	Pitch Circle Diameter	R100104			R100105			CirculationØ	Bore-hole Ø	Fastener	Weight
			Tooth Width	Slot Width	Plate Thickness	Tooth Width	Slot Width	Plate Thickness				
	Ad	Td	ZB	SB	s	ZB	SB	s	Sd	d ₁		(kg/ Stück)
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		
6	304	284,00	46	16	15	64	24	20	192	17	6 x M16	22
7	344	327,31	46	16	15	64	24	20	233	17	7 x M16	33
8	390	371,06	46	16	15	64	24	20	280	17	8 x M16	47
9	434	415,18	46	16	15	64	24	20	330	17	9 x M16	68
10	474	459,52	46	16	15	64	24	20	368	17	10 x M16	82
11	534	504,02	46	16	15	64	24	20	420	17	11 x M16	101
12	564	548,64	46	16	15	64	24	20	466	17	12 x M16	130
13	615	593,37	46	16	15	64	24	20	512	17	13 x M16	176
14	660	638,15	46	16	15	64	24	20	558	17	14 x M16	220
15	702	682,87	46	16	15	64	24	20	603	17	15 x M16	251
16	750	727,90	46	16	15	64	24	20	650	17	16 x M16	349

Suitable for Sprocket z=	Ø	R100104	R100105	Weight
		Width	Width	
	Dm	b	b	(kg/ Stück)
	(mm)	(mm)	(mm)	
6	200	50	70	15
7	245	50	70	23
8	295	50	70	29
9	345	50	70	41
10	390	50	70	50
11	440	50	70	68
12	490	50	70	84
13	530	50	70	88
14	580	50	70	100
15	620	50	70	126
16	670	50	70	151

DROP FORGED LINK CHAINS



Type A



Type D

Alternative to Type D

Chain Type	Type	Pitch	Link Width	Bar Thickness		Link Height	Attachment Slot	Hole	Breaking Load				Weight (kg/m)
		p	s	s ₁	s ₂	g	g ₁	Ø d ₁	20MnCr5e*	18NiCrMo5e*	C40V**	42CrMo4V**	
		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kN)	(kN)	(kN)	(kN)	
R100101	A	101,6	24	6	8,0	36	-	14	90	95	100	130	3,85
R100102	A	101,6	30	8	12,0	36	-	14	120	130	150	200	5,25
R200101	A	102,0	25	6	8,0	36	-	14	75	85	90	120	3,95
R100103	A	142,0	24	6	8,0	47	-	20	110	120	145	200	4,50
R100104	A	142,0	42	11	19,0	50	-	25	270	280	350	440	10,40
R100105	A	142,0	62	15	28,0	50	-	25	370	400	500	600	14,90
R200102	A	142,0	56	18	25,0	50	-	25	310	350	400	480	12,50
R100106	A	150,0	24	6	8,0	50	-	20	110	120	145	200	5,00
R100107	A	150,0	42	12	15,5	47	-	25	230	250	300	340	10,00
R100108	A	160,0	50	12	23,0	50	-	25	300	320	400	520	10,50
R200103	A	160,0	42	12	20,0	45	-	20	260	275	320	380	11,00
R300175	D	175,0	72	22	30,0	60	11,0	30	500	550	600	710	15,00
R100109	A	200,0	66	17	32,0	60	-	28	530	580	650	750	16,30
R200105	A	200,0	54	15	25,5	50	-	25	310	350	400	480	12,80
R200106	D	200,0	52	18	25,0	50	13,0	25	300	340	330	460	11,50
R200107	D	200,0	58	17	25,0	50	11,5	25	310	350	450	550	13,00
R200108	D	200,0	70	20	30,0	60	13,0	30	500	550	600	750	19,40
R300216	A	216,0	64	20	26,0	73	-	35	480	500	630	700	20,00
R100110	A	250,0	70	20	31,0	75	-	34	600	650	750	1.000	24,00
R200110	A	250,0	66	18	33,0	60	-	28	530	580	650	750	14,00
R200111	D	250,0	70	20	30,0	60	13,0	30	500	550	600	700	16,00
R100111	A	260,0	70	21	31,0	75	-	34	600	650	750	1.000	21,65

* Case-hardened ** hardened and tempered

■ Calculated theoretical breaking load □ Tested breaking load ■ Chain available, but new tool required



FB - rEVOLUTION SCRAPER CONVEYOR CHAINS

The latest generation of scraper conveyor chains is the cost-effective and durable alternative to drop forged link chains, round-link chains, and block-link chains.

The innovative and field-proven features of modern FB scraper conveyor chains—featuring welded pins and bushings as well as heat-treated chain links—make them ideal for use in the building materials, recycling, wood, and paper industries, as well as in waste incineration and biomass power plants.

These scraper conveyor chains are designed so that no modifications to existing conveyor systems are required, as the chains and sprockets are adapted to the existing equipment. They can be manufactured with virtually any chain pitch.



ADVANTAGES



Longer service life

Reduced longitudinal wear due to larger joint surface and hardened pins and bushings, no crevice corrosion between plates, pins or bushings. Doubled service life thanks to reversible sprockets and tooth segments.



Higher breaking strength and fatigue strength

Welded pins, bushings, and strong chain links increase breaking load and fatigue strength.



Improved welding options

More surface area for welding and excellent weldable link material = stronger drive connection than with fork-link chains.



Increased operational reliability

Highly resistant to lateral and shock loads, strong drive connection, no detachable components, such as locking rings or welded pins.



Lower operating costs

Lighter chains (up to 30% less weight), reduced length wear, and longer sprocket service life reduce operating costs.



Stainless alternative

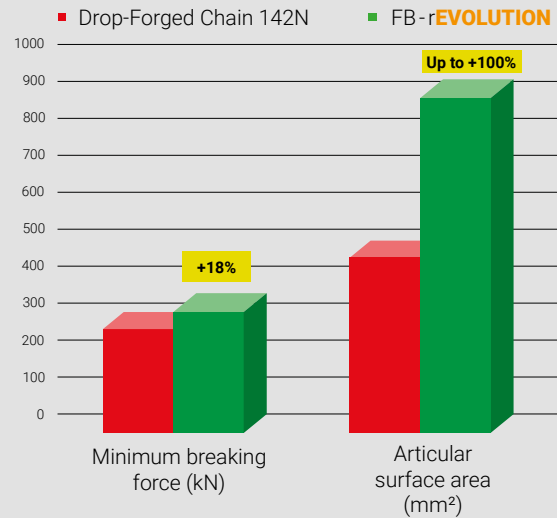
Stainless, hardened pins and bushings are available as an alternative for use in corrosive conditions.



FB - rEVOLUTION DRAG CHAIN SOLUTIONS

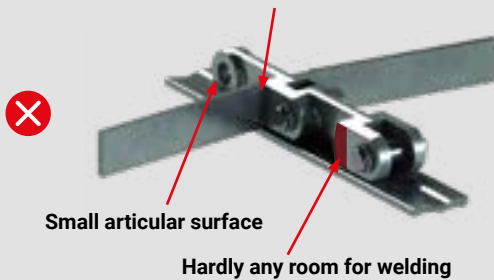
AT A GLANCE:

- Reduce your operating costs
- Increase your system availability and operational reliability
- Extend the service life of your chains, sprockets, and usually the chain wear strips as well
- Offer the possibility of optimised flight connections



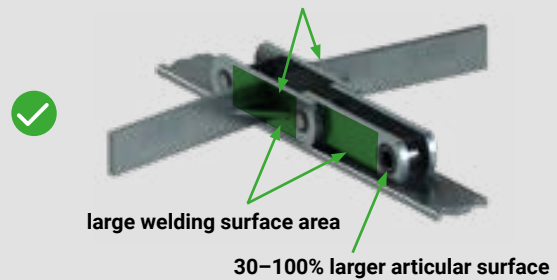
Conventional drop forged chains:

Welding onto case-hardened chain links is problematic.

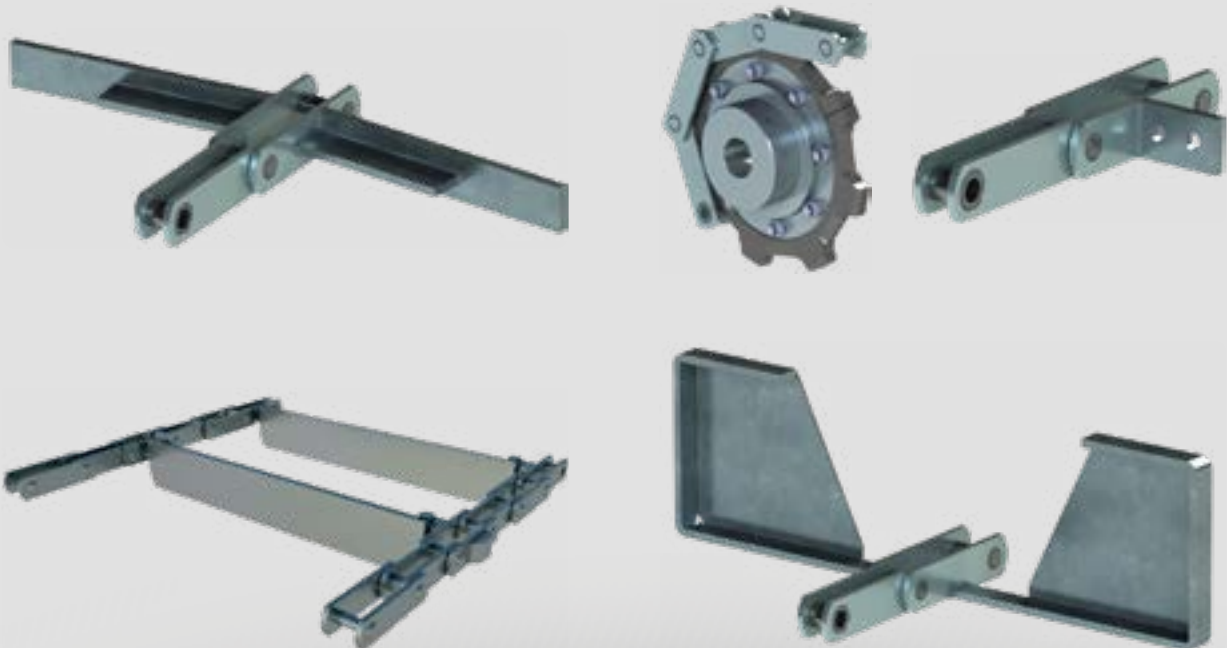


FB - rEVOLUTION Scraper conveyor chains:

Plates highly weldable (max. 0.27% C)



FB - rEVOLUTION SCRAPER CONVEYOR CHAIN EXAMPLES





- INNOVATIVE AND SUSTAINABLE SCRAPERS

Flights for trough chain conveyors are typically manufactured from steel, plastic, or a combination of these two materials. Advantages of plastic include its low weight and high sliding properties. Steel, on the other hand, offers greater durability and allows for additional reinforcement via welded structures.

A weakness of both materials is their susceptibility to overloading caused by foreign objects—such as stones, steel clips, or wires—which can bend them. In double-chain conveyors, this can reduce the chain track width. Consequently, the chains jump off the sprockets, making a major breakdown inevitable. The mechanical damage to the chains and sprockets is usually less significant than the resulting costs for the conveyor system and the downtime costs affecting critical operations such as fuel supply, silo discharge, ash removal, and wood chip handling. In biomass power plants, this can force boilers to run on gas—a practice that contradicts the sustainable concept of a biomass heating plant and incurs very high costs. Special **inno**® scraper flights offer a cost-effective alternative— a solution for these and similar applications. They slide as easily as plastic, are abrasion-resistant, and act as a predetermined breaking point during severe overloads. This protects the rest of the system components, prevents high consequential costs, and ensures the continued, reliable operation of the trough conveyors.

ADVANTAGES

Weight savings

Energy savings due to low coefficient of friction (approx. 0.2) – sliding action Half the weight of steel; approx. 60–80% lighter



High quality ensures operational reliability

Engineered predetermined breaking point guarantees high system availability and operational reliability, while preventing high consequential costs



Environmentally friendly

Sustainable natural material; physiologically harmless and biodegradable (used flights go directly to incineration in most power plants)



Cost savings

High-pressure moulded **inno**® flights are stable and abrasion-resistant; typically used for multiple chain service cycles, thereby reducing operating costs



Longer service life

No swelling; washable, antistatic, and resistant to oils and water

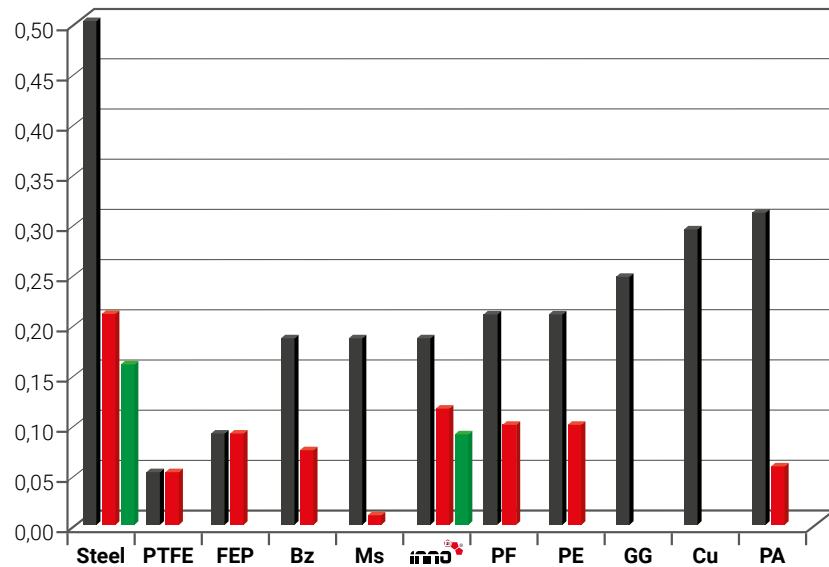


Excellent resistance at maximum operating temperatures

Supplied ready-to-install; versatile application range from -200°C to approx. +100°C



appx.	Steel		
Friction coefficient μ	Dry	Lubricated	Lubricated Molykote
Steel	0,50	0,20	0,15
PTFE	0,04	0,04	
FEP	0,08	0,08	
Bz	0,18	0,07	
Ms	0,18		
innoflex	0,18	0,11	0,08
PF	0,20	0,10	
PE	0,20	0,10	
GG	0,24		
Cu	0,29		
PA	0,30	0,06	



Technical details		innoflex 100	innoflex 500	innoflex 1000
Bulk density g/cm³				
DIN 53479		um 750 kg/m ³	um 1.350 kg/m ³	um 1.350 kg/m ³
Flexural strength N/mm ²	II Layer	65 N/mm ²	165 N/mm ²	160 N/mm ²
DIN 53452	⊥ Layer	75 N/mm ²	180 N/mm ²	190 N/mm ²
Impact resistance kJ/m ²	II Layer	-	25 kJ/m ²	20 kJ/m ²
DIN 53453	⊥ Layer	-	50 kJ/m ²	40 kJ/m ²
Notched impact strength kJ/m ²	II Layer	-	20 kJ/m ²	14 kJ/m ²
DIN 53453	⊥ Layer	-	50 kJ/m ²	-
Tensile strength N/mm ²	II Layer	65 N/mm ²	125 N/mm ²	120 N/mm ²
Compressive strength N/mm ²	II Layer	43 N/mm ²	135 N/mm ²	130 N/mm ²
DIN 53454	⊥ Layer	35 N/mm ²	270 N/mm ²	240 N/mm ²
Ball indentation hardness N/mm ²	⊥ Layer	-	140 N/mm ²	150 N/mm ²
Gap load N	⊥ Layer	-	3.000 N	3.600 N
Shearing resistance N/mm ²	II Layer	-	10 N/mm ²	10 N/mm ²
	⊥ Layer	-	60 N/mm ²	-
Modulus of elasticity N/mm²				
DIN 53457 Flexure	⊥ Layer	8.200 N/mm ²	17.000 N/mm ²	17.000 N/mm ²
DIN 53457 Pressure	⊥ Layer	7.400 N/mm ²	2.600 N/mm ²	-
	II Layer	5.600 N/mm ²	6.000 N/mm ²	14.000 N/mm ²
Coefficient of sliding friction μ_G				
against mill-finish stainless steel sheet II	⊥ Layer	-	0,2 - 0,3	0,18
Water absorption in percent after 24 hours water storage (test specimen 50x50x30) DIN 53495				
		26%	3,50%	3,80%

II Layer = in the direction of the layers ⊥ layer = perpendicular to the layers
 For special applications, we are also able to produce special designs with significantly optimised properties. Please contact us.



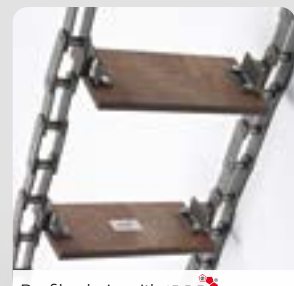
Missing predetermined breaking point



Missing predetermined breaking point



innoflex scraper attachment



Profile chain with innoflex scrapers



CHAIN LUBRICANT SYSTEM RotaLube®

Extend the service life of your chains and sprockets with the unique automatic lubrication system from RotaLube®.

The optimal amount of lubricant at the right time! RotaLube® is the only industrial chain lubrication system that guarantees the lubricant is applied to the precise lubrication point.

The automatic lubrication system responds instantly to changes in speed and works perfectly for roller chains and conveyor chains of all sizes and types.

RotaLube®

ADVANTAGES



Extended chain service life

Up to 60 times longer service life; highly recommended especially for corrosive environments



Cost savings

Increased system availability and profitability; reduces lubricant consumption, energy costs, and spare parts costs



Simple and effective to use

Fully automatic system operation, easy to install, continuous monitoring



Flexible

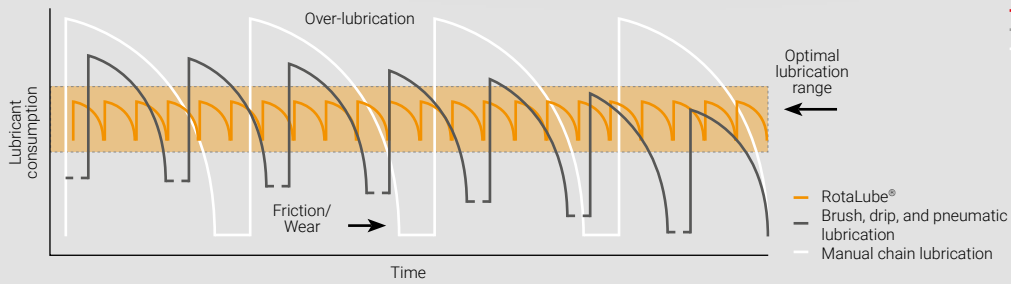
Suitable for various chain sizes, conveyed goods, operating conditions, lubricant types, and manufacturers; system can lubricate from above, below, or the side



Environmentally friendly

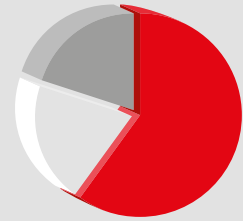
No lubricant waste due to the prevention of over-lubrication

Performance of RotaLube



Causes of chain wear

- 60% incorrect lubrication
- 20% mechanical damage
- 20% other reasons

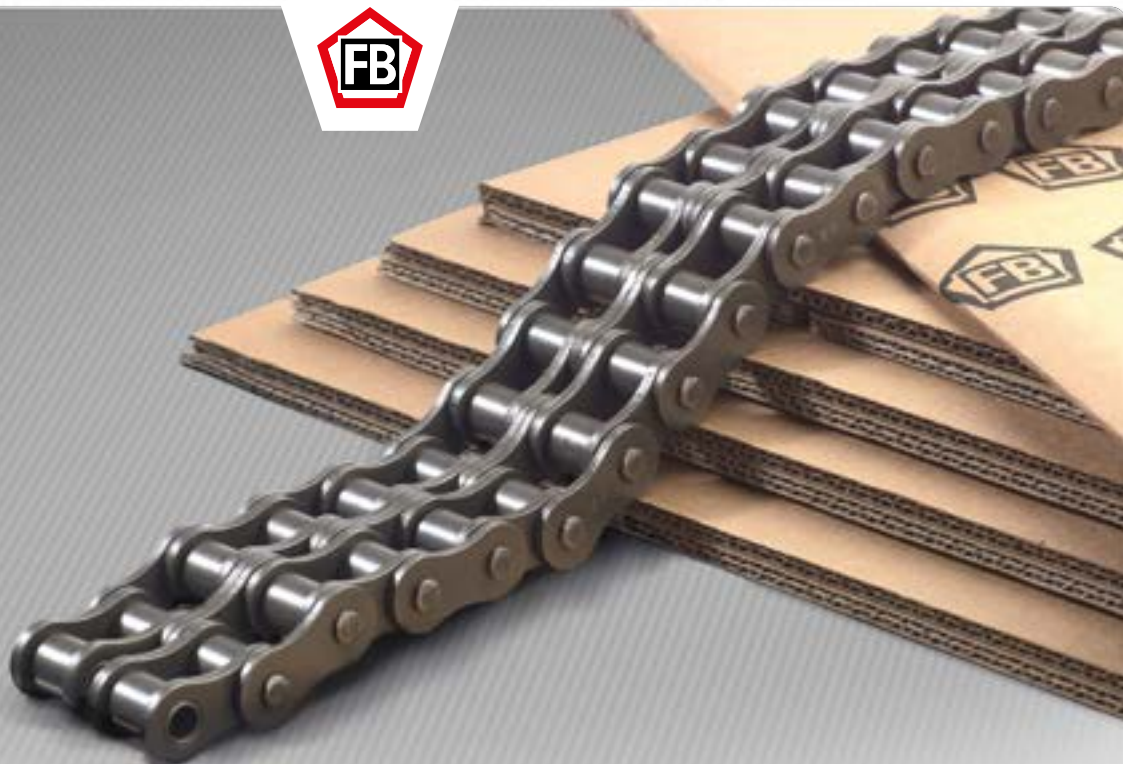


RotaLube®



THE FOLLOWING LUBRICANT PROPERTIES ARE IMPORTANT:

- excellent penetrating ability to quickly enter the gaps between chain components
- outstanding protection against wear and corrosion
- resistance to dirt, water, various acids, etc.
- superior water and oxidation resistance
- excellent long-term adhesion, ensuring the lubricant is not thrown off the chain by high centrifugal forces
- lubricants with cleaning properties are ideal



FB HIGH-PERFORMANCE ROLLER CHAINS

High-efficiency roller chains designed for optimal use in industrial and commercial applications.

With correct chain selection, optimal operating conditions, and proper lubrication and maintenance, roller chains achieve an efficiency of nearly 99%.

Roller chains consist of inner links—comprising inner plates, press-fitted bushings, and mounted rollers—as well as outer links with press-fitted and riveted pins. The rollers reduce friction losses and wear, dampen noise, and—thanks to their design—enable the transmission of high forces and chain speeds of up to 30 m/s.



High fatigue strength and durability

Precision components with tight manufacturing tolerances and fine-blanked side plates with minimal wasting

ADVANTAGES



High quality ensures operational reliability

High-grade steels and tools, process-controlled component manufacturing and heat treatment, fully automated chain assembly, and in-process quality control guarantee the high quality of FB roller chains



Low joint wear in roller chains

SBR design featuring chain bushings and rollers made from cold-drawn precision steel tubing (SBR stands for Solid Bush Roller)



Resource-efficient and sustainable

Recyclable materials and resource-efficient production minimise environmental impact



Chain cutting service – reduced effort

We cut chains to your specifications. You benefit from less waste, lower costs, and reduced effort



Short delivery times thanks to Europe-wide logistics

Also available for roller chains with attachments (e.g., flat, angled, and guide plates, extended pins, as well as various plastic components, brackets, rubber parts, etc.)



PRECISION MANUFACTURING

FB high-performance roller chains are manufactured with seamless drawn bushings and rollers.

FB chain link plates are manufactured using progressive tooling that presses, cuts, and fine-shaves in a single operation. This achieves the maximum possible contact area between the sidebars and joint components, delivering the highest potential fatigue strength.

The chain pins are also calibrated, cut to precise length, and centreless ground following heat treatment. After heat treatment, the link plates undergo shot peening to remove sharp edges, eliminate minor surface imperfections, and increase the components' residual compressive stress.

FB high-performance roller chains are assembled fully automatically, dynamically pre-stretched, and lubricated immediately thereafter.

This means the chain joints are flexed over sprockets and guide rollers while being pre-stretched and lubricated, ensuring that the oil penetrates effectively into all chain components.

Dynamic pre-stretching and dynamic lubrication result in reduced initial elongation and less joint wear.



Progressive composite tools



Heat treatment



Calibrating the wire



Dynamic pre-stretching

Optimised link plate shape increases fatigue strength

FB ISO roller chains are manufactured with link plates featuring reduced waist contours to increase fatigue strength and operational reliability.



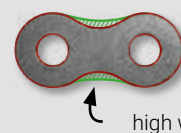
Inner link plate 16B



Outer link plate 12B



Inner link plate 10B



Inner link 08B

high waist

OPTICAL COMPONENT INSPECTION

All components and assembled chains are inspected using automated imaging technology.

Missing components, undersized pins, poor riveting, or other potential issues and defects are immediately flagged and rejected at this stage.

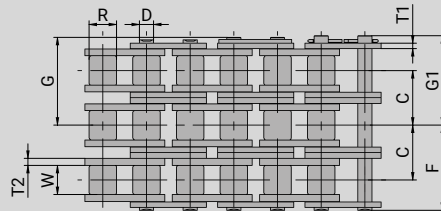
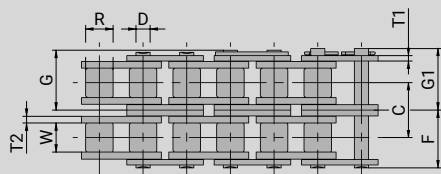
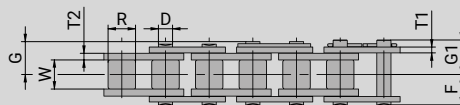
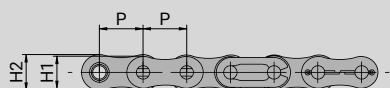
Our optical image recognition systems (CCD = Charge-Coupled Device) are integrated into the assembly lines and, following years of continuous improvement, have replaced virtually all manual or mechanical inspection methods.



Optical image recognition (CCD)



FB HIGH-PERFORMANCE ROLLER CHAINS B-SERIES, ISO 606 - DIN 8187

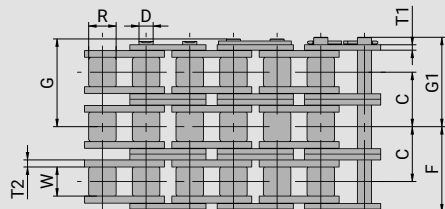
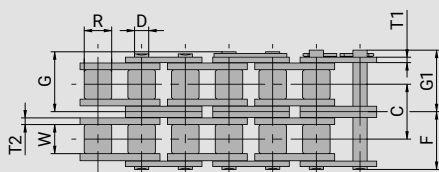
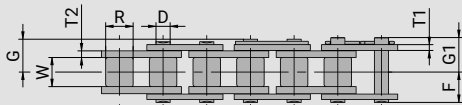
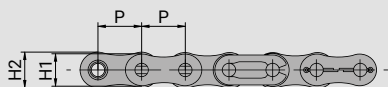


Item Number	Pitch		Connecting Links	Clear Width	Roller	Plates				Pins				Centre Distance	Breaking Force		Weight		
	P					W min	Ø R max	H1 max	H2 max	T1 max	T2 max	Ø D max	F max		G max	G1 max		C	DIN
	(inch)	(mm)												(mm)					
06B-1*	⅜"	9,525	CG NG KG	5,72	6,35	8,10	8,10	1,00	1,30	3,28	6,10	7,40	-	-	8.900	10.300	0,39		
06B-2*	⅜"	9,525		5,72	6,35	8,10	8,10	1,00	1,30	3,28	11,20	12,30	-	10,24	16.900	18.600	0,74		
06B-3*	⅜"	9,525		5,72	6,35	8,10	8,10	1,00	1,30	3,28	16,30	17,40	-	10,24	24.900	26.500	1,09		
08B-1	½"	12,700	CG NG KG	7,75	8,51	10,20	11,80	1,50	1,50	4,44	8,20	9,50	-	-	17.800	19.100	0,65		
08B-2	½"	12,700		7,75	8,51	10,20	11,80	1,50	1,50	4,44	15,30	16,70	-	13,92	31.100	34.300	1,30		
08B-3	½"	12,700		7,75	8,51	10,20	11,80	1,50	1,50	4,44	22,20	23,50	-	13,92	45.500	49.100	1,92		
10B-1	⅝"	15,875	SG CG NG KG	9,65	10,16	13,00	14,60	1,65	1,65	5,06	9,60	11,10	11,80	-	22.200	26.500	0,92		
10B-2	⅝"	15,875		9,65	10,16	13,00	14,60	1,65	1,65	5,06	17,90	19,40	20,10	16,59	44.500	53.000	1,68		
10B-3	⅝"	15,875		9,65	10,16	13,00	14,60	1,65	1,65	5,06	26,20	27,50	28,20	16,59	66.700	79.500	2,62		
12B-1	¾"	19,050	SG CG NG KG	11,68	12,07	16,00	16,00	1,80	1,80	5,72	11,10	12,60	13,70	-	28.900	33.400	1,24		
12B-2	¾"	19,050		11,68	12,07	16,00	16,00	1,80	1,80	5,72	20,80	22,40	23,40	19,46	57.800	66.700	2,28		
12B-3	¾"	19,050		11,68	12,07	16,00	16,00	1,80	1,80	5,72	30,60	31,90	32,50	19,46	86.700	100.100	3,55		
16B-1	1"	25,400	SG CG NG KG	17,02	15,88	20,80	20,80	3,20	4,00	8,28	17,70	19,25	20,20	-	60.000	78.500	2,65		
16B-2	1"	25,400		17,02	15,88	20,80	20,80	3,20	4,00	8,28	33,64	35,16	36,16	31,88	106.000	157.000	5,25		
16B-3	1"	25,400		17,02	15,88	20,80	20,80	3,20	4,00	8,28	49,58	51,12	52,12	31,88	160.000	235.400	7,86		
20B-1	1¼"	31,750	SG NG KG	19,56	19,05	26,00	26,00	3,50	4,50	10,19	20,50	-	23,50	-	95.000	117.700	3,85		
20B-2	1¼"	31,750		19,56	19,05	26,00	26,00	3,50	4,50	10,19	38,73	-	41,72	36,45	170.000	235.400	7,65		
20B-3	1¼"	31,750		19,56	19,05	26,00	26,00	3,50	4,50	10,19	56,95	-	59,95	36,45	250.000	353.200	11,45		
24B-1	1½"	38,100	SG NG KG	25,40	25,40	33,00	33,00	5,20	6,00	14,63	26,65	-	32,35	-	160.000	176.600	7,60		
24B-2	1½"	38,100		25,40	25,40	33,00	33,00	5,20	6,00	14,63	50,83	-	56,53	48,36	280.000	353.200	14,80		
24B-3	1½"	38,100		25,40	25,40	33,00	33,00	5,20	6,00	14,63	75,00	-	80,72	48,36	425.000	529.700	21,90		
28B-1	1¾"	44,450	SG NG KG	30,99	27,94	37,00	37,00	6,30	7,50	15,90	32,48	-	37,97	-	200.000	206.000	9,05		
28B-2	1¾"	44,450		30,99	27,94	37,00	37,00	6,30	7,50	15,90	62,26	-	67,75	59,56	360.000	402.000	17,12		
28B-3	1¾"	44,450		30,99	27,94	37,00	37,00	6,30	7,50	15,90	92,04	-	97,53	59,56	530.000	589.000	25,61		
32B-1	2"	50,800	SG NG KG	30,99	29,21	42,00	42,00	6,40	7,10	17,81	32,68	-	38,17	-	250.000	260.000	10,63		
32B-2	2"	50,800		30,99	29,21	42,00	42,00	6,40	7,10	17,81	61,95	-	67,45	58,55	450.000	495.400	20,85		
32B-3	2"	50,800		30,99	29,21	42,00	42,00	6,40	7,10	17,81	91,23	-	96,72	58,55	670.000	745.600	31,57		
40B-1	2½"	63,500	SG NG KG	38,10	39,37	52,90	52,90	8,00	8,50	22,89	40,20	-	47,30	-	355.000	388.500	16,25		
40B-2	2½"	63,500		38,10	39,37	52,90	52,90	8,00	8,50	22,89	76,35	-	83,45	72,29	630.000	745.600	31,86		
40B-3	2½"	63,500		38,10	39,37	52,90	52,90	8,00	8,50	22,89	112,50	-	119,60	72,29	950.000	1.098.700	48,14		
48B-1	3"	76,200	SG NG KG	45,72	48,26	63,50	63,50	10,00	12,10	29,24	49,40	-	56,50	-	560.000	610.200	25,05		
48B-2	3"	76,200		45,72	48,26	63,50	63,50	10,00	12,10	29,24	95,00	-	102,10	91,21	1.000.000	1.157.600	49,83		
48B-3	3"	76,200		45,72	48,26	63,50	63,50	10,00	12,10	29,24	140,60	-	147,70	91,21	1.500.000	1.736.400	75,07		
56B-1	3½"	88,900	SG NG KG	53,34	53,98	77,85	77,85	12,30	13,60	34,32	117,00	-	137,00	-	850.000	850.000	35,80		
56B-2	3½"	88,900		53,34	53,98	77,85	77,85	12,30	13,60	34,32	223,00	-	243,60	106,60	1.600.000	1.600.000	70,00		
56B-3	3½"	88,900		53,34	53,98	77,85	77,85	12,30	13,60	34,32	330,50	-	350,20	106,60	2.240.000	2.240.000	105,00		

* With straight side plates. Other dimensions on request.



FB HIGH-PERFORMANCE ROLLER CHAINS – A SERIES, ISO 606 – DIN 8188



Item Number	Pitch		Connecting Links	Clear Width	Roller	Plates				Pins				Centre Distance	Breaking Force		Weight
	P					W min	Ø R max	H1 max	H2 max	T1 max	T2 max	Ø D max	F max		G max	G1 max	
	(inch)	(mm)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(N)	(N)
40-1	½"	12,700	SG	7,85	7,92	10,20	11,80	1,50	1,50	3,98	8,20	9,35	10,00	-	13.900	18.100	0,63
40-2	½"	12,700	CG	7,85	7,92	10,20	11,80	1,50	1,50	3,98	15,30	17,00	17,60	14,40	27.800	36.300	1,19
40-3	½"	12,700	NG	7,85	7,92	10,20	11,80	1,50	1,50	3,98	22,65	23,80	24,55	14,40	41.700	54.400	1,77
50-1	⅝"	15,875	KG	7,85	7,92	10,20	11,80	1,50	1,50	3,98	22,65	23,80	24,55	14,40	41.700	54.400	1,77
50-1	⅝"	15,875	SG	9,40	10,16	13,00	14,80	2,00	2,00	5,09	10,10	11,65	12,60	-	21.800	30.400	1,01
50-2	⅝"	15,875	CG	9,40	10,16	13,00	14,80	2,00	2,00	5,09	19,20	20,70	21,10	18,10	46.300	60.800	2,04
50-3	⅝"	15,875	NG	9,40	10,16	13,00	14,80	2,00	2,00	5,09	28,30	29,65	30,20	18,10	65.400	91.200	3,05
60-1	¾"	19,050	KG	9,40	10,16	13,00	14,80	2,00	2,00	5,09	28,30	29,65	30,20	18,10	65.400	91.200	3,05
60-1	¾"	19,050	SG	12,57	11,91	15,50	17,50	2,40	2,40	5,96	12,50	14,15	15,40	-	31.100	43.100	1,44
60-2	¾"	19,050	CG	12,57	11,91	15,50	17,50	2,40	2,40	5,96	24,00	25,50	26,90	22,80	62.600	86.300	3,03
60-3	¾"	19,050	NG	12,57	11,91	15,50	17,50	2,40	2,40	5,96	35,35	36,95	37,65	22,80	93.900	129.500	4,50
80-1	1"	25,400	KG	12,57	11,91	15,50	17,50	2,40	2,40	5,96	35,35	36,95	37,65	22,80	93.900	129.500	4,50
80-1	1"	25,400	SG	15,75	15,88	20,40	23,90	3,20	3,20	7,94	16,10	17,75	18,80	-	55.600	76.500	2,40
80-2	1"	25,400	CG	15,75	15,88	20,40	23,90	3,20	3,20	7,94	30,60	32,20	33,60	29,30	111.200	153.000	5,26
80-3	1"	25,400	NG	15,75	15,88	20,40	23,90	3,20	3,20	7,94	45,30	47,00	48,00	29,30	166.800	229.600	7,80
100-1	1¼"	31,750	KG	15,75	15,88	20,40	23,90	3,20	3,20	7,94	45,30	47,00	48,00	29,30	166.800	229.600	7,80
100-1	1¼"	31,750	SG	18,90	19,05	24,80	30,10	4,00	4,00	9,54	20,10	-	23,10	-	87.000	115.800	3,74
100-2	1¼"	31,750	CG	18,90	19,05	24,80	30,10	4,00	4,00	9,54	38,00	-	41,00	35,80	174.000	231.500	7,51
100-3	1¼"	31,750	NG	18,90	19,05	24,80	30,10	4,00	4,00	9,54	55,90	-	58,90	35,80	261.000	347.300	11,20
120-1	1½"	38,100	KG	18,90	19,05	24,80	30,10	4,00	4,00	9,54	55,90	-	58,90	35,80	261.000	347.300	11,20
120-1	1½"	38,100	SG	25,22	22,23	30,00	35,00	4,80	4,80	11,11	25,20	-	28,60	-	125.000	152.100	6,18
120-2	1½"	38,100	CG	25,22	22,23	30,00	35,00	4,80	4,80	11,11	47,90	-	51,30	45,40	250.000	304.100	12,25
120-3	1½"	38,100	NG	25,22	22,23	30,00	35,00	4,80	4,80	11,11	70,60	-	74,00	45,40	375.000	456.200	18,30
140-1	1¾"	44,450	KG	25,22	22,23	30,00	35,00	4,80	4,80	11,11	70,60	-	74,00	45,40	375.000	456.200	18,30
140-1	1¾"	44,450	SG	25,22	25,40	36,20	42,00	5,60	5,60	12,71	27,30	-	31,50	-	170.000	210.900	7,49
140-2	1¾"	44,450	CG	25,22	25,40	36,20	42,00	5,60	5,60	12,71	51,75	-	55,75	48,90	340.000	421.800	14,83
140-3	1¾"	44,450	NG	25,22	25,40	36,20	42,00	5,60	5,60	12,71	76,20	-	80,40	48,90	510.000	632.700	22,20
160-1	2"	50,800	KG	25,22	25,40	36,20	42,00	5,60	5,60	12,71	76,20	-	80,40	48,90	510.000	632.700	22,20
160-1	2"	50,800	SG	31,55	28,58	41,40	48,00	6,40	6,40	14,29	32,55	-	37,25	-	223.000	269.800	10,10
160-2	2"	50,800	CG	31,55	28,58	41,40	48,00	6,40	6,40	14,29	61,80	-	66,50	58,50	446.000	539.600	20,04
160-3	2"	50,800	NG	31,55	28,58	41,40	48,00	6,40	6,40	14,29	91,05	-	95,75	58,50	669.000	809.300	30,02
200-1	2½"	63,500	KG	31,55	28,58	41,40	48,00	6,40	6,40	14,29	91,05	-	95,75	58,50	669.000	809.300	30,02
200-1	2½"	63,500	SG	37,85	39,68	51,80	60,10	8,00	8,00	19,85	39,75	-	47,10	-	347.000	451.300	16,50
200-2	2½"	63,500	CG	37,85	39,68	51,80	60,10	8,00	8,00	19,85	75,55	-	82,85	71,60	694.000	902.500	32,70
200-3	2½"	63,500	NG	37,85	39,68	51,80	60,10	8,00	8,00	19,85	111,35	-	118,65	71,60	1.041.000	1.353.800	49,05
240-1	3"	76,200	KG	37,85	39,68	51,80	60,10	8,00	8,00	19,85	111,35	-	118,65	71,60	1.041.000	1.353.800	49,05
240-1	3"	76,200	SG	47,35	47,63	62,40	72,20	9,50	9,50	23,81	47,70	-	54,80	-	500.000	672.000	24,20
240-2	3"	76,200	CG	47,35	47,63	62,40	72,20	9,50	9,50	23,81	91,60	-	98,70	87,80	1.000.000	1.344.000	47,80
240-3	3"	76,200	NG	47,35	47,63	62,40	72,20	9,50	9,50	23,81	135,50	-	142,60	87,80	1.500.000	2.016.000	71,10

Other dimensions available on request.



CG
Spring connecting link



SG
Cotter pin connecting link



NG
Rivet connecting link



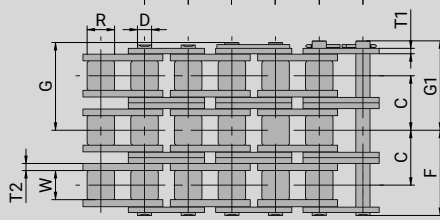
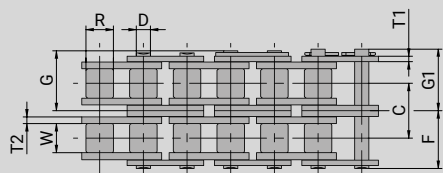
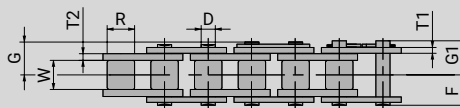
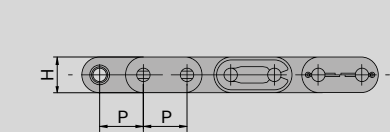
KG
Offset link



IG
Inner link



FB HIGH-PERFORMANCE ROLLER CHAINS WITH STRAIGHT SIDE PLATES, ISO 606 - DIN 8187



Item Number	Pitch		Connecting Links	Clear Width	Roller	Plates			Pin				Centre Distance	Breaking Force		Weight
	P					H max	T1 max	T2 max	Ø D max	F max	G max	G1 max		C	DIN	
	(inch)	(mm)		W min	Ø R max								(mm)			
06B-1GL	⅜"	9,525	CG NG KG	5,72	6,35	8,10	1,00	1,30	3,28	6,10	7,40	-	-	8.900	10.300	0,39
06B-2GL	⅜"	9,525		5,72	6,35	8,10	1,00	1,30	3,28	11,20	12,30	-	10,24	16.900	18.600	0,74
06B-3GL	⅜"	9,525		5,72	6,35	8,10	1,00	1,30	3,28	16,30	17,40	-	10,24	24.900	26.500	1,09
08B-1GL	½"	12,700	CG NG KG	7,75	8,51	11,80	1,50	1,50	4,45	8,35	9,85	-	-	17.800	32.300	0,80
08B-2GL	½"	12,700		7,75	8,51	11,80	1,50	1,50	4,45	15,43	16,78	-	13,92	31.100	41.300	1,45
08B-3GL	½"	12,700		7,75	8,51	11,80	1,50	1,50	4,45	22,45	23,65	-	13,92	45.500	52.700	2,10
10B-1GL	⅝"	15,875	SG CG NG KG	9,65	10,16	14,70	1,70	1,70	5,08	9,75	11,15	12,15	-	22.200	38.200	1,06
10B-2GL	⅝"	15,875		9,65	10,16	14,70	1,70	1,70	5,08	18,05	19,45	20,45	16,59	44.500	54.800	2,00
10B-3GL	⅝"	15,875		9,65	10,16	14,70	1,70	1,70	5,08	26,35	27,75	28,75	16,59	66.700	70.800	2,87
12B-1GL	¾"	19,050	SG CG NG KG	11,68	12,07	16,10	1,85	1,85	5,72	11,25	12,95	13,85	-	28.900	31.300	1,32
12B-2GL	¾"	19,050		11,68	12,07	16,10	1,85	1,85	5,72	21,00	22,60	23,60	19,46	57.800	65.700	2,62
12B-3GL	¾"	19,050		11,68	12,07	16,10	1,85	1,85	5,72	30,75	32,4	33,45	19,46	86.700	102.500	3,89
16B-1GL	1"	25,400	SG CG NG KG	17,02	15,88	21,00	3,20	4,00	8,28	17,70	19,25	20,20	-	60.000	73.200	2,70
16B-1GL(24)	1"	25,400		17,02	15,88	24,00	3,20	4,00	8,28	17,70	19,25	20,20	-	60.000	73.200	3,30
16B-2GL	1"	25,400		17,02	15,88	21,00	3,10	4,15	8,28	34,00	35,30	37,00	31,88	106.000	146.700	6,10
16B-3GL	1"	25,400		17,02	15,88	21,00	3,10	4,15	8,28	49,90	51,30	53,00	31,88	160.000	200.600	9,12
20B-1GL	1 ¼"	31,750	SG NG KG	19,56	19,05	26,40	3,50	4,55	10,19	20,70	-	24,90	-	95.000	101.300	4,16
24B-1GL	1 ½"	38,100		25,40	25,40	33,00	5,00	6,00	14,63	26,70	-	31,10	-	160.000	180.900	7,47
32B-1GL	2"	50,800		30,99	29,21	42,20	6,30	7,00	17,81	33,40	-	37,50	-	250.000	271.500	10,45

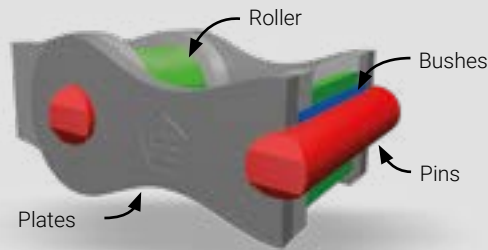
Other dimensions available on request.

FB HEAVY-DUTY ROLLER CHAINS (REINFORCED), SIMILAR TO ISO 606

Item Number	Pitch		Connecting Links	Clear Width	Roller	Plates				Pin				Centre Distance	Breaking Force		Weight
	P			W min	Ø R max	H1 max	H2 max	T1 max	T2 max	Ø D max	F max	G max	G1 max	C	DIN	Ø FB	
	(inch)	(mm)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(N)	(N)	
12B-1H	¾"	19,050	SG, CG, NG, KG	11,68	12,07	16,00	16,00	2,35	2,35	6,10	12,28	13,73	14,38	-	29.000	45.000	1,60
16B-1H	1"	25,400	SG, CG, NG, KG	17,02	15,88	24,10	24,10	3,50	4,50	8,90	18,50	21,05	22,00	-	78.000	96.000	3,00
16B-2H	1"	25,400	SG, NG, KG	17,02	15,88	24,00	24,00	3,20	4,00	9,00	34,00	-	39,40	31,88	106.000	180.000	6,25
24B-1H	1½"	38,100	SG, NG, KG	25,40	25,40	36,20	36,20	6,00	7,50	14,63	29,30	-	34,10	-	225.000	239.000	7,80
60-1HGL*	¾"	19,050	SG, CG, NG, KG	12,57	11,91	18,00	18,00	3,25	3,25	5,94	14,65	16,35	17,05	-	31.300	40.000	1,60

*with straight side plates. Other dimensions available on request.

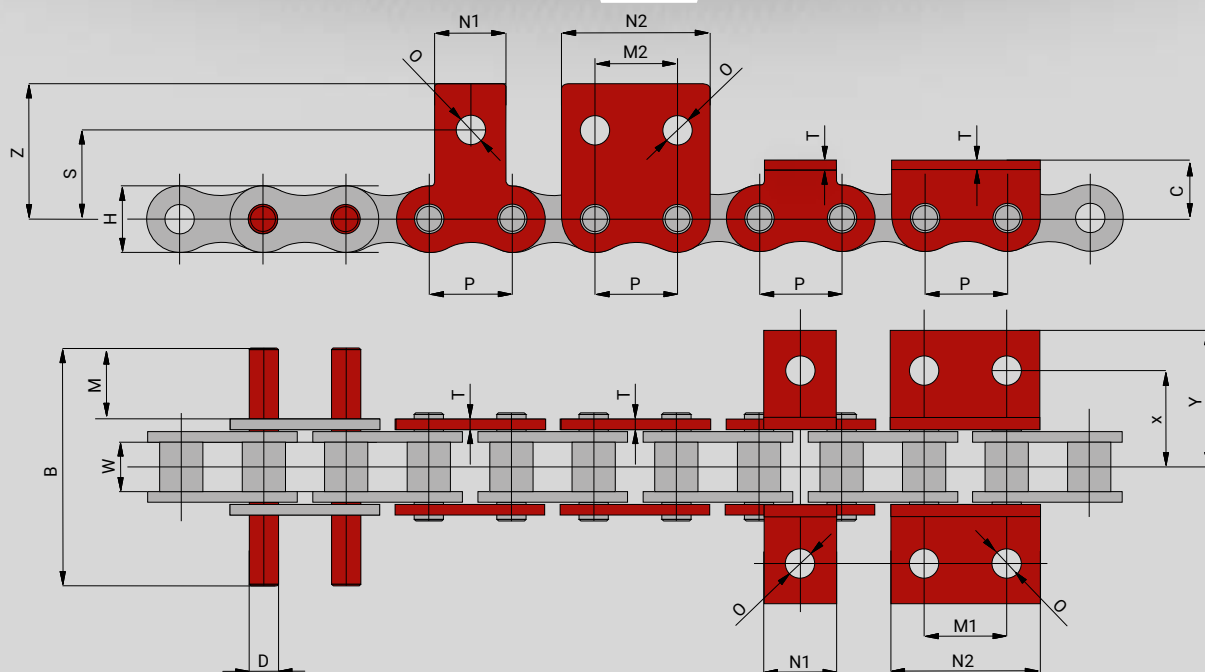
MATERIALS, HEAT TREATMENTS AND MANUFACTURING PROCESSES



	Pins	Bushes	Rollers	Plates
Materials:	alloy steels	Carbon steels (C-steels)	Carbon steels (C-steels)	Carbon steels (C-steels)
Heat treatment:	hardened or hardened and tempered*	case-hardened	hardened or hardened and tempered*	hardened and tempered
Production:	deburred, centreless ground or mirror-polished, 2/4-point riveted*	seamlessly cold-pressed, deburred, centreless ground	seamlessly cold-pressed, deburred, centreless ground	precision punched plate holes, double or triple punched*, tumbled and shot-peened

*depending on chain size and application





Part Number	Pitch		Inside Diameter	Plates		Flat Plates – L-shaped Plates										
	P			W min	H	T	M1	M2	N1	N2	O Ø	C	X	Y	S	Z
	(inch)	(mm)														
06B-1	⅜"	9,525	5,72	8,10	1,30	-	-	8,00	-	3,00	6,70	9,70	14,70	10,00	14,50	
08B-1	½"	12,700	7,75	11,80	1,50	12,70	12,70	11,00	22,90	4,30	8,90	13,80	20,85	13,70	20,80	
10B-1	⅝"	15,875	9,65	14,60	1,65	15,88	15,88	14,00	28,95	5,30	10,30	15,90	24,80	16,50	24,90	
12B-1	¾"	19,050	11,68	16,00	1,80	19,05	19,05	18,00	36,00	6,60	12,20	17,60	26,35	18,50	28,20	
12B-1 M2	¾"	19,050	11,68	16,00	1,80	-	19,00	-	35,4	6,60	-	-	-	21,00	28,20	
16B-1	1"	25,400	17,02	20,80	3,20	25,40	25,40	24,00	45,70	8,40	17,00	29,00	41,90	27,40	39,70	
16B-1 PA1604	1"	25,400	17,02	20,80	3,10	-	-	24,00	-	9,00	-	-	-	27,20	40,00	
16B-1 PA1610	1"	25,400	17,02	20,80	3,10	-	25,40	-	45,70	8,40	-	-	-	27,20	40,00	
16B-1 E2	1"	25,400	17,02	20,80	3,10	-	25,40	-	46,40	8,40	-	-	-	28,60	41,50	
16B-1 L9I*	1"	25,400	17,02	20,80	4,10	-	25,40	-	47,00	9,00	-	-	-	31,10	39,10	
16B-1 WA1604	1"	25,400	17,02	20,80	3,10	-	-	24,00	-	9,00	17,00	28,80	41,30	-	-	
16B-1 WA1612	1"	25,400	17,02	20,80	3,10	-	-	-	45,70	8,40	17,00	28,90	41,30	-	-	
16B-1 WA1614	1"	25,400	17,02	20,80	3,10	25,40	-	-	45,70	8,40	17,00	28,90	41,30	-	-	
20B-1	1 ¼"	31,750	19,56	26,00	3,50	-	-	45,00	-	10,50	21,50	32,80	46,80			
20B-1 PA2010	1 ¼"	31,750	19,56	26,00	3,50	-	31,75	-	58,15	10,50	-	-	-	33,00	47,50	
20B-1 (PA2010)	1 ¼"	31,750	19,56	26,00	3,50	-	31,75	-	58,15	10,50	-	-	-	36,00	47,50	
24B-1	1 ½"	38,100	25,40	33,00	6,00	-	-	54,00	-	12,50	25,00	39,20	55,20	36,50	52,50	

Also available WITHOUT holes. Flat and bent attachments can be mounted on one or both sides and are designed as outer links by default (*16B-1L9I flat attachment on the inner link). Other dimensions or designs available upon request.

Part Number	Pitch		Inside Diameter	Plates		Extended Pins				
	P		W min	H	T	M		B		D
	(inch)	(mm)	(mm)	(mm)	(mm)	(mm)		(mm)		(mm)
06B-1	⅜"	9,525	5,72	8,10	1,30	11,60	21,80	23,70	33,90	3,28
08B-1	½"	12,700	7,75	11,80	1,50	15,00	28,80	30,90	44,80	4,45
10B-1	⅝"	15,875	9,65	14,60	1,65	17,80	34,50	35,70	52,30	5,08
12B-1	¾"	19,050	11,68	16,00	1,80	21,10	40,60	42,10	61,60	5,72
16B-1	1"	25,400	17,02	20,80	3,20	33,80	65,50	67,10	98,80	8,28
20B-1	1 ¼"	31,750	19,56	26,00	3,50	38,20	74,70	76,80	113,30	10,19
24B-1	1½"	38,100	25,40	33,00	6,00	49,90	98,90	100,90	149,90	14,63

Extended stud also available with circlip groove or drilled holes. Other dimensions or designs available upon request.

WE OFFER A WIDE RANGE OF ATTACHMENTS:

- Angle attachments
- Flat or guide attachments
- Serrated chain attachments
- Extended pins (single- or double-sided projection)
- Plastic components
- Brackets with vulcanised rubber
- Bolted-on attachments
- Custom-made parts (laser, plasma, machining)
- Many specialised designs based on your specifications

Attachments are fitted ready for installation, tailored to the specific system. Design, attachment spacing, and mounting positions (single- or double-sided) are precisely adapted to your requirements.

Our high-performance roller chains and attachments are also available with various **corrosion-resistant** coatings or in **stainless steel** versions, if required.

ANGLE PLATE DESIGNS



EXTENDED PLATE DESIGNS



EXTENDED PINS





CORROSION RESISTANT CHAINS

WITH GEOMET® COATING

Stainless steel chains are very expensive, and their fatigue strength, breaking load, and wear resistance are significantly lower than those of ISO roller chains.

Chains with an abrasion-resistant coating and improved initial lubrication offer a cost-effective alternative for use in corrosive environments.



The GEOMET® surface coating is sustainable, environmentally friendly, and free from hexavalent chromium. Furthermore, it complies with the environmental regulations of the European Parliament (2000/53/EC and 2011/65/EU).

Stress test:

600 hours in salt spray test (ASTM B117)



Before the test:



After the test:

ADVANTAGES



Completely chromium-free, water-based coating

Free from heavy metals; no nickel, cadmium, lead, barium, or mercury is used in the coating process



High strength, load-bearing capacity, and durability

Fatigue strength, wear resistance, and breaking strength exceed DIN standards; the chains offer excellent chemical and mechanical resistance



Ideal resistance at maximum operating temperatures

CRF GEOMET® chains withstand extreme temperatures ranging from -30°C to +250°C over extended periods



Easily over paintable and non-electrolytic

The thin coating ensures electrical conductivity suitable for most applications, and the silver coating can be easily painted over



No risk of hydrogen embrittlement

GEOMET® coatings do not cause hydrogen embrittlement



Reduced coefficient of friction

The coefficient of friction ranges from 0.06 to 0.18 (ISO 16047), making it 25–30% lower than that of comparable ISO chains



FB SHEAR PIN SPROCKETS

Better, faster, safer, more sustainable—and more cost-effective, too. Sound too good to be true?

Not with FB Chain. We offer an innovative solution in the form of our shear-pin sprockets, which feature split, individually replaceable tooth segments and have been proven in real-world applications. This allows you to avoid or significantly reduce the need for hazardous work at heights (such as on silos) and the rental of mobile cranes, while also cutting high spare-part costs and massive inventory values.



ADVANTAGES



Low weight

No mobile crane required, as individual tooth segments weigh only approx. 15–25 kg. Also reduces the risk of accidents during disassembly or assembly



Cost-effective

Individual tooth segments are more cost-effective than complete sprockets – reducing your spare parts costs and inventory value



Time savings

Significantly less time required to replace tooth segments compared to complete sprockets



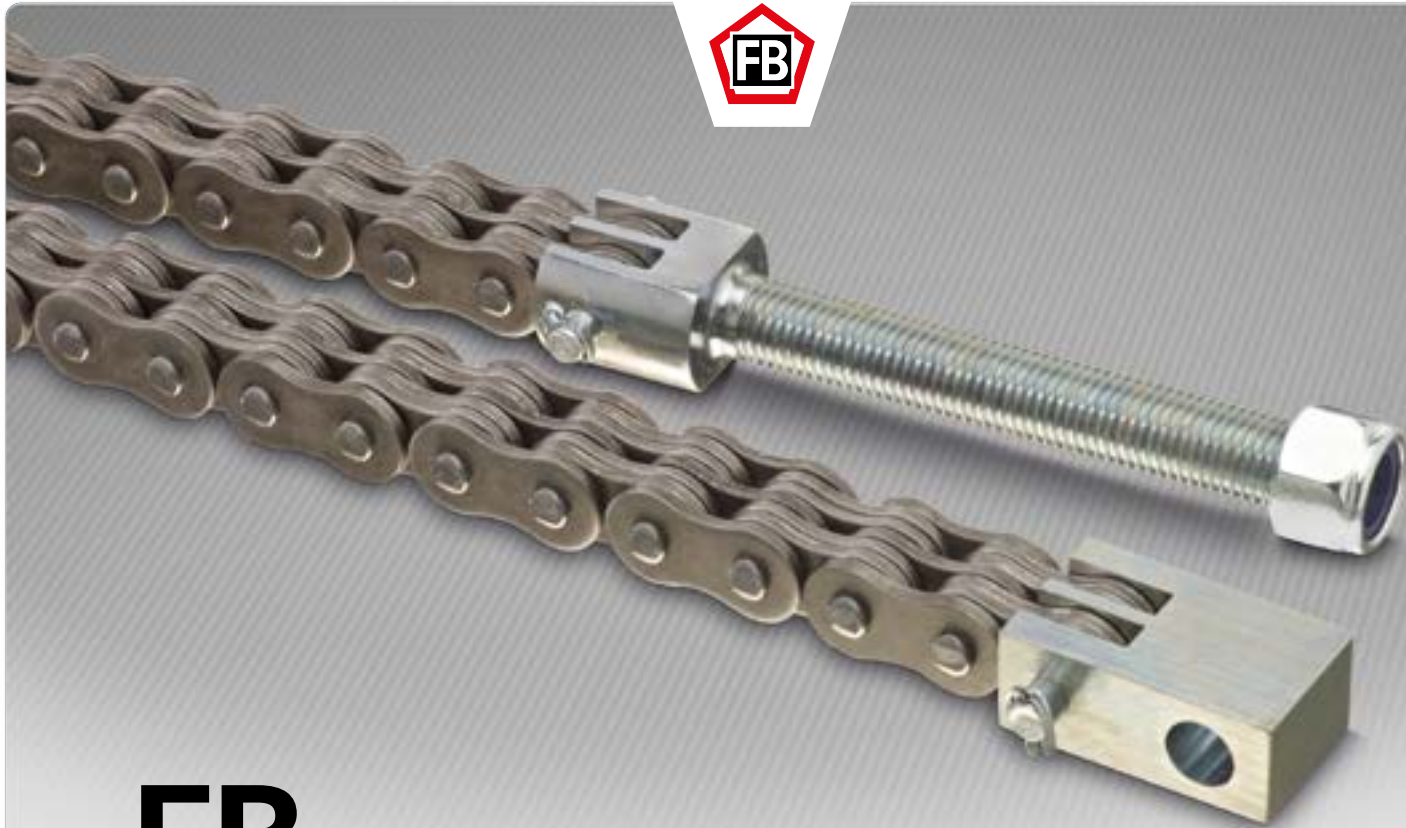
Conversion of existing sprockets possible

Conversion of existing shear-pin sprockets and internal standardisation possible



Long service life

Extended service life of the teeth and chains due to induction-hardened tooth flanks



FB LEAF CHAINS

DIN 8152, ISO 4347, ANSI B29.8

Leaf chains can transmit very high tensile forces despite their compact size and are considered safety-critical components. They are most frequently used in industrial trucks, forklifts, lifting equipment, lift tables, machine tools, packaging systems, and warehouse systems, or as hold-down chains in timber grapples. FB leaf chains achieve breaking loads and fatigue strengths that far exceed DIN-ISO standards.



High operational reliability and system availability

Fatigue strength and breaking loads exceeding DIN-ISO specifications



High quality and long service life

High-grade steels, optimised chain design, process-controlled component manufacturing and heat treatment, as well as fully automated chain assembly, ensure consistent high-level quality



Special chains

We manufacture many leaf chains with dimensions and link plate designs that deviate from DIN-ISO standards

ADVANTAGES



High fatigue strength and durability

Precisely punched link plates, optimised press fits, large bearing areas, high-strength materials, and heat treatments



Reduced initial elongation

Fully automatic dynamic pre-stretching



Consistent quality

We monitor and control every production step. In addition to our in-process quality checks, we have our chains regularly tested by external testing institutes



Short delivery times

Also, for Leaf chains with plastic attachments



Resource-efficient, sustainable, and cost-saving

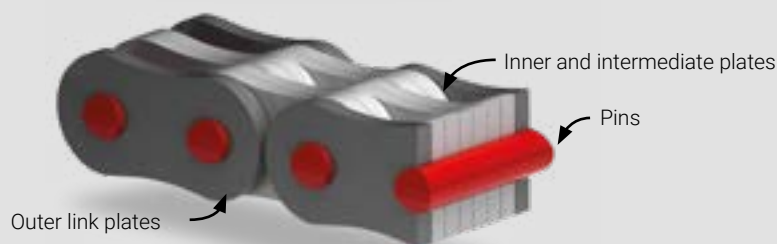
FB chain cutting service – we cut to length quickly according to your specifications; you benefit from less waste, lower costs, and reduced workload



Ready-to-install complete packages

We supply ready-to-install complete solutions: Leaf chains, chain anchors, chain holders, connecting pins, and sheaves

MATERIALS, HEAT TREATMENTS AND MANUFACTURING PROCESSES



	Pins	Outer Plates	Inner and intermediate plates
Materials:	alloy steels	Carbon steels (C-steels)	
Heat Treatment:	hardened	hardened and tempered	
Manufacturing:	centreless ground	Precision punched plate holes, double or triple punched (depending on chain dimension and application), shot-peened, assembled with optimised press fit and riveted	Double or triple punched (depending on chain dimensions and application), shot-peened, mounted with slip-fit and rotating on pin



Batch identification for traceability



Optical Component Inspection

All components and assembled chains are inspected using automated imaging technology. Missing components, pins that are too short, poor riveting, or other potential issues and defects are immediately flagged and sorted out at this stage. Our optical image recognition systems (CCD = Charge- Coupled Device) are integrated into the assembly lines and, following years of continuous improvement, have replaced virtually all manual or mechanical inspection methods.



FB Tools

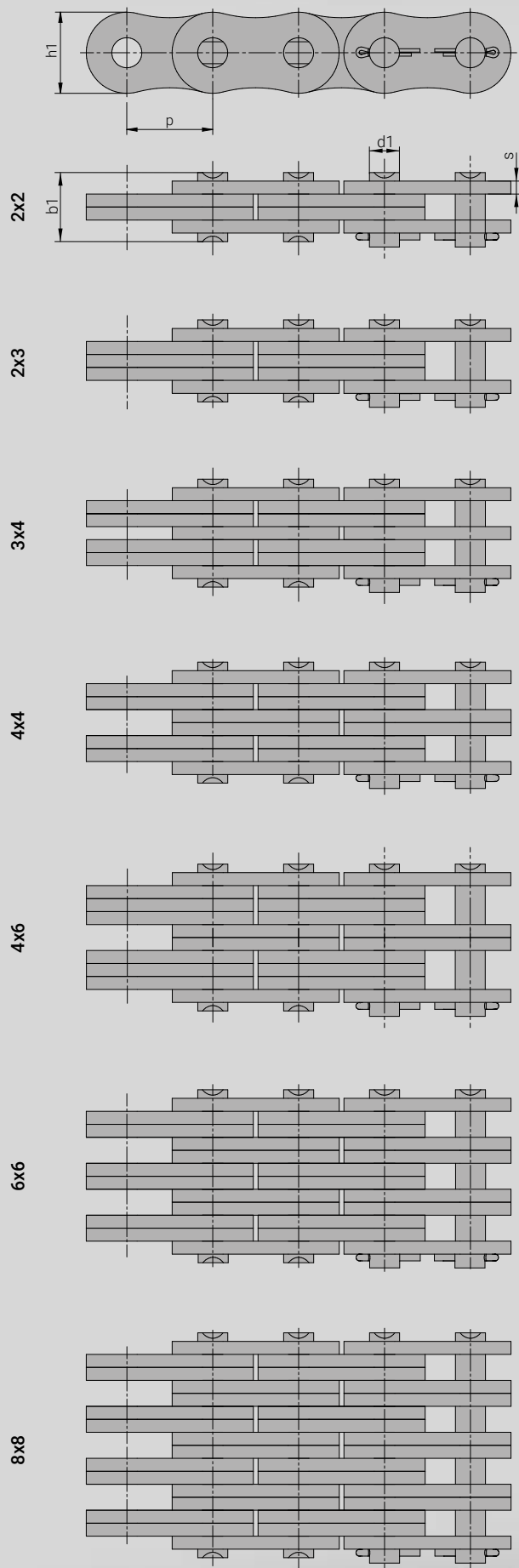
The most accurate and suitable measuring tool for determining chain wear is the chain wear gauge developed by FB technicians. It can be used for chains ranging from 3/8" to 3" and provides a visual indication of the wear status. Chain breakers and chain brushes are also available, featuring the proven FB quality.



Initial Lubrication

FB leaf chains are supplied with an optimised initial lubrication. During the lubrication process, the chain joints are moved to ensure the oil effectively reaches the lubrication points (inside the chain joint). The lubricant protects against corrosion and minimises wear.

FB LEAF CHAIN VARIANTS



Batch identification for traceability



Leaf chains with plastic attachments



Leaf chains and chain anchors



Deflection pulley with brass bushes



FB LEAF CHAINS – HEAVY-DUTY BL (LH) SERIES

Item Number	Alternative Name	Plate Combination	Pitch		Plates		Pins		Breaking Force		Weight
			p		h ₁ max	s max	Ø d ₁ max	b ₁ max	DIN	Ø FB	
			(inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(N)	(N)	(kg/m)
BL422	LH0822	2x2	1/2"	12,700	12,00	2,00	5,06	10,60	22.200	29.400	0,69
BL423	LH0823	2x3	1/2"	12,700	12,00	2,00	5,06	12,60	22.200	29.400	0,77
BL434	LH0834	3x4	1/2"	12,700	12,00	2,00	5,06	16,80	33.400	44.100	1,07
BL444	LH0844	4x4	1/2"	12,700	12,00	2,00	5,06	18,90	44.500	58.900	1,19
BL446	LH0846	4x6	1/2"	12,700	12,00	2,00	5,06	23,10	44.500	58.900	1,48
BL466	LH0866	6x6	1/2"	12,700	12,00	2,00	5,06	27,20	66.700	88.300	1,80
BL523	LH1023	2x3	5/8"	15,875	14,85	2,40	5,95	15,20	33.400	44.100	1,13
BL534	LH1034	3x4	5/8"	15,875	14,85	2,40	5,95	20,10	48.900	66.700	1,56
BL544	LH1044	4x4	5/8"	15,875	14,85	2,40	5,95	22,65	66.700	88.300	1,78
BL546	LH1046	4x6	5/8"	15,875	14,85	2,40	5,95	27,50	66.700	88.300	2,22
BL566	LH1066	6x6	5/8"	15,875	14,85	2,40	5,95	32,50	100.100	132.400	2,74
BL623	LH1223	2x3	3/4"	19,050	17,90	3,15	7,94	19,35	48.900	68.700	1,82
BL634	LH1234	3x4	3/4"	19,050	17,90	3,15	7,94	25,95	75.600	103.000	2,52
BL644	LH1244	4x4	3/4"	19,050	17,90	3,15	7,94	29,50	97.900	137.300	2,87
BL646	LH1246	4x6	3/4"	19,050	17,90	3,15	7,94	36,00	97.900	137.300	3,57
BL666	LH1266	6x6	3/4"	19,050	17,90	3,15	7,94	42,35	146.800	206.000	4,27
BL822	LH1622	2x2	1"	25,400	24,00	3,90	9,52	21,11	84.500	117.700	2,30
BL823	LH1623	2x3	1"	25,400	24,00	3,90	9,52	25,25	84.500	117.700	3,15
BL834	LH1634	3x4	1"	25,400	24,00	3,90	9,52	33,53	129.000	176.600	4,37
BL844	LH1644	4x4	1"	25,400	24,00	3,90	9,52	37,67	169.000	235.400	4,98
BL846	LH1646	4x6	1"	25,400	24,00	3,90	9,52	45,95	169.000	235.400	6,20
BL866	LH1666	6x6	1"	25,400	24,00	3,90	9,52	54,23	253.600	353.200	7,50
BL1023	LH2023	2x3	1 1/4"	31,750	30,10	4,70	11,10	29,70	115.600	157.000	3,85
BL1034	LH2034	3x4	1 1/4"	31,750	30,10	4,70	11,10	39,50	182.400	235.400	5,84
BL1044	LH2044	4x4	1 1/4"	31,750	30,10	4,70	11,10	44,40	231.300	313.900	7,20
BL1046	LH2046	4x6	1 1/4"	31,750	30,10	4,70	11,10	54,20	231.300	313.900	8,24
BL1066	LH2066	6x6	1 1/4"	31,750	30,10	4,70	11,10	64,00	347.000	470.900	10,63
BL1222	LH2422	2x2	1 1/2"	38,100	35,00	4,70	12,70	29,05	151.200	201.100	4,83
BL1223	LH2423	2x3	1 1/2"	38,100	35,00	4,70	12,70	34,85	151.200	201.100	6,54
BL1234	LH2434	3x4	1 1/2"	38,100	35,00	5,60	12,70	46,50	244.600	301.700	9,10
BL1244	LH2444	4x4	1 1/2"	38,100	35,00	5,60	12,70	52,30	302.500	402.200	10,39
BL1246	LH2446	4x6	1 1/2"	38,100	35,00	5,60	12,70	63,95	302.500	402.200	12,01
BL1266	LH2466	6x6	1 1/2"	38,100	35,00	5,60	12,70	75,60	453.700	603.300	14,58
BL1422	LH2822	2x2	1 3/4"	44,450	42,00	6,40	14,28	32,90	191.300	225.600	7,20
BL1423	LH2823	2x3	1 3/4"	44,450	42,00	6,40	14,28	39,40	191.300	225.600	9,05
BL1434	LH2834	3x4	1 3/4"	44,450	42,00	6,40	14,28	52,60	315.800	372.800	12,60
BL1444	LH2844	4x4	1 3/4"	44,450	42,00	6,40	14,28	59,30	382.600	451.300	14,41
BL1446	LH2846	4x6	1 3/4"	44,450	42,00	6,40	14,28	72,40	382.600	451.300	17,98
BL1466	LH2866	6x6	1 3/4"	44,450	42,00	6,40	14,28	85,70	578.300	676.900	21,52
BL1488	LH2888	8x8	1 3/4"	44,450	42,00	6,40	14,28	112,00	765.100	902.500	28,59
BL1622	LH3222	2x2	2"	50,800	48,00	7,20	17,45	36,70	289.100	343.400	9,72
BL1623	LH3223	2x3	2"	50,800	48,00	7,20	17,45	44,10	289.100	343.400	12,11
BL1634	LH3234	3x4	2"	50,800	48,00	7,20	17,45	59,70	440.400	539.600	16,86
BL1644	LH3244	4x4	2"	50,800	48,00	7,20	17,45	67,40	578.300	686.700	19,22
BL1646	LH3246	4x6	2"	50,800	48,00	7,20	17,45	82,55	578.300	686.700	23,92
BL1666	LH3266	6x6	2"	50,800	48,00	7,20	17,45	98,05	867.400	1.030.100	28,71
BL1688	LH3288	8x8	2"	50,800	48,00	7,20	17,45	128,40	1.156.500	1.373.400	38,19



FB LEAF CHAINS – LIGHT SERIES LL (EL)



Item Number	Alternative Name	Plate Combination	Pitch		Plates		Pins		Breaking Force		Weight
			p		h ₁ max	s max	Ø d ₁ max	b ₁ max	DIN	Ø FB	
			(inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(N)	(N)	
LL0822	EL422	2x2	1/2"	12,700	10,20	1,50	4,44	8,25	18.000	17.800	0,36
LL0844	EL444	4x4	1/2"	12,700	10,20	1,50	4,44	14,50	36.000	36.400	0,69
LL0866	EL466	6x6	1/2"	12,700	10,20	1,50	4,44	20,75	54.000	54.600	1,05
LL1022	EL522	2x2	5/8"	15,875	13,00	1,65	5,06	9,00	22.000	25.500	0,50
LL1044	EL544	4x4	5/8"	15,875	13,00	1,65	5,06	15,90	44.000	51.000	1,00
LL1066	EL566	6x6	5/8"	15,875	13,00	1,65	5,06	22,77	66.000	78.500	1,48
LL1088	EL588	8x8	5/8"	15,875	13,00	1,65	5,06	29,60	89.000	104.000	1,95
LL1222	EL622	2x2	3/4"	19,050	16,00	1,80	5,72	10,10	29.000	39.200	0,74
LL1244	EL644	4x4	3/4"	19,050	16,00	1,80	5,72	17,70	58.000	65.000	1,45
LL1266	EL666	6x6	3/4"	19,050	16,00	1,80	5,72	25,30	87.000	97.000	2,16
LL1622	EL822	2x2	1"	25,400	20,80	3,20	8,27	16,65	60.000	78.500	1,57
LL1644	EL844	4x4	1"	25,400	20,80	3,20	8,27	30,05	120.000	157.000	3,09
LL1666	EL866	6x6	1"	25,400	20,80	3,20	8,27	43,10	180.000	235.400	4,60
LL2022	EL1022	2x2	1 1/4"	31,750	26,00	3,50	10,18	19,20	95.000	117.700	2,01
LL2044	EL1044	4x4	1 1/4"	31,750	26,00	3,50	10,18	34,00	190.000	235.400	3,93
LL2066	EL1066	6x6	1 1/4"	31,750	26,00	3,50	10,18	48,80	285.000	315.000	5,86
LL2088	EL1088	8x8	1 1/4"	31,750	26,00	3,50	10,18	63,60	380.000	471.000	8,20
LL2422	EL1222	2x2	1 1/2"	38,100	33,00	5,20	14,62	26,15	170.000	176.600	4,18
LL2444	EL1244	4x4	1 1/2"	38,100	33,00	5,20	14,62	47,95	340.000	353.200	8,48
LL2466	EL1266	6x6	1 1/2"	38,100	33,00	5,20	14,62	69,75	510.000	529.700	12,20
LL2488	EL1288	8x8	1 1/2"	38,100	33,00	5,20	14,62	91,55	680.000	706.300	16,00
LL2822	EL1422	2x2	1 3/4"	44,450	37,00	6,40	15,89	31,35	200.000	224.600	5,20
LL2844	EL1444	4x4	1 3/4"	44,450	37,00	6,40	15,89	57,95	400.000	448.300	10,10
LL2866	EL1466	6x6	1 3/4"	44,450	37,00	6,40	15,89	84,55	600.000	673.000	14,90
LL2888	EL1488	8x8	1 3/4"	44,450	37,00	6,40	15,89	111,15	800.000	896.600	19,80
LL3222	EL1622	2x2	2"	50,800	42,20	6,40	17,81	32,50	260.000	291.200	7,20
LL3244	EL1644	4x4	2"	50,800	42,20	6,40	17,81	58,50	520.000	582.400	12,86
LL3266	EL1666	6x6	2"	50,800	42,20	6,40	17,81	84,50	780.000	873.600	18,43
LL3288	EL1688	8x8	2"	50,800	42,20	6,40	17,81	110,70	1.050.000	1.176.000	25,37
LL3244FB(T6)	EL1644FB-6	4x4	2"	50,800	42,00	6,00	17,81	57,00	520.000	540.400	12,50
LL3266FB(T6)	EL1666FB-6	6x6	2"	50,800	42,00	6,00	17,81	110,00	1.050.000	1.080.800	25,00



FB LEAF CHAINS AL, ANSI B29.8



Item Number	Plate	Pitch		Plates		Pins		Breaking Force		Weight
		p		h ₁ max	s max	Ø d ₁ max	b ₁ max	DIN	Ø FB	
		(inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(N)	(N)	(kg/m)
AL422	2x2	1/2"	12,700	10,20	1,50	3,96	8,05	15.000	17.700	0,36
AL444	4x4	1/2"	12,700	10,20	1,50	3,96	14,35	30.000	35.300	0,71
AL466	6x6	1/2"	12,700	10,20	1,50	3,96	20,70	45.000	53.000	1,22
AL522	2x2	5/8"	15,875	13,00	2,00	5,06	10,60	25.000	30.400	0,63
AL523	2x3	5/8"	15,875	13,00	2,00	5,06	12,70	25.000	30.400	0,78
AL544	4x4	5/8"	15,875	13,00	2,00	5,06	19,00	50.000	60.800	1,23
AL566	6x6	5/8"	15,875	13,00	2,00	5,06	27,40	75.000	91.200	2,10
AL588	8x8	5/8"	15,875	13,00	2,00	5,06	35,85	100.000	121.600	2,46
AL622	2x2	3/4"	19,050	15,50	2,35	5,95	12,40	34.000	44.100	0,90
AL623	2x3	3/4"	19,050	15,50	2,35	5,95	14,85	34.000	44.100	1,12
AL644	4x4	3/4"	19,050	15,50	2,35	5,95	22,30	68.000	88.300	1,78
AL646	4x6	3/4"	19,050	15,50	2,35	5,95	27,30	68.000	88.300	2,25
AL666	6x6	3/4"	19,050	15,50	2,35	5,95	33,25	102.000	132.400	3,03
AL688	8x8	3/4"	19,050	15,50	2,35	5,95	42,20	136.000	176.600	3,60
AL822	2x2	1"	25,400	20,40	3,10	7,94	15,65	59.000	76.500	1,48
AL844	4x4	1"	25,400	20,40	3,10	7,94	28,45	118.000	153.000	2,92
AL866	6x6	1"	25,400	20,40	3,10	7,94	41,25	177.000	229.600	4,97
AL888	8x8	1"	25,400	20,40	3,10	7,94	54,05	236.000	306.000	5,78
AL1022	2x2	1 1/4"	31,750	24,80	3,90	9,52	21,11	86.000	117.700	2,35
AL1044	4x4	1 1/4"	31,750	24,80	3,90	9,52	37,67	172.000	235.400	4,61
AL1066	6x6	1 1/4"	31,750	24,80	3,90	9,52	54,23	258.000	353.200	7,88
AL1088	8x8	1 1/4"	31,750	24,80	3,90	9,52	70,79	344.000	470.900	9,23
AL1222	2x2	1 1/2"	38,100	30,00	4,70	11,10	24,60	122.500	157.000	3,40
AL1244	4x4	1 1/2"	38,100	30,00	4,70	11,10	44,20	245.000	314.000	6,65
AL1266	6x6	1 1/2"	38,100	30,00	4,70	11,10	63,80	367.500	471.000	10,14
AL1444	4x4	1 3/4"	44,450	36,20	5,60	12,70	52,30	309.000	402.200	10,34
AL1466	6x6	1 3/4"	44,450	36,20	5,60	12,70	75,60	463.500	608.200	15,16
AL1644	4x4	2"	50,800	41,40	6,40	14,28	59,55	390.000	539.600	12,98
AL1666	6x6	2"	50,800	41,40	6,40	14,28	86,15	585.000	804.400	19,41
AL1688	8x8	2"	50,800	41,40	6,40	14,28	112,75	780.000	1.079.100	25,84



PROFESSIONAL CHAIN WEAR GAUGE

How do I know if I need to replace my roller or leaf chains?



Leaf chains and roller chains must be replaced when the chains have elongated by 2–3%. They can no longer be used safely at this point, as their fatigue strength and minimum breaking load are drastically reduced once this level of wear is reached. At 3% elongation, leaf and roller chains must be replaced

immediately, as they offer reduced operational safety and no longer provide protection against shock loads or overloading.

The patented FB chain wear gauge is the most accurate and suitable tool for checking wear on your imperial-pitch leaf and roller chains. It covers a range of 3/8" to 3" and measures joint wear in 0.25% increments from 0% to 4%.

A red warning window appears at the 2% mark. This allows you to identify potential safety risks before the next scheduled maintenance. This is also the key difference compared to wear gauges from other manufacturers, which simply indicate whether or not a chain is worn. Create a safe working environment with the FB chain wear gauge.

ADVANTAGES



Quick and easy

The FB chain wear gauge is very simple to use. Set the chain pitch (e.g., 1 3/4"), read the elongation, and you're done—no complex calculations required



Safe and accurate

The FB chain wear gauge is the most accurate instrument for measuring chain elongation. It ensures that leaf chains and roller chains function perfectly



Easy to clean

The FB chain wear gauge can be easily cleaned using water and a little dish soap



Robust and durable

The FB chain wear gauge is available in two versions: stainless steel and high-quality PVC



Multilingual availability

We offer the stainless steel version in German and English. The PVC version is also available in French and Italian



PITCH CIRCLE DIAMETER – INCH PITCH

Pitch circle diameter Td (mm) = n*p

Number of teeth		Pitch p (mm)											
		06B 06C	08B ASA40	10B ASA50	12B ASA60	16B ASA80	20B ASA100	24B ASA120	28B ASA140	32B ASA160	40B ASA200	48B ASA240	56B
Z	n	9,525	12,700	15,875	19,050	25,400	31,750	38,100	44,450	50,800	63,500	76,200	88,900
6	2,0000	19,05	25,40	31,75	38,10	50,80	63,50	76,20	88,90	101,60	127,00	152,40	177,80
7	2,3048	21,95	29,27	36,59	43,91	58,54	73,18	87,81	102,45	117,08	146,35	175,62	204,89
8	2,6131	24,89	33,19	41,48	49,78	66,37	82,97	99,56	116,15	132,75	165,93	199,12	232,31
9	2,9238	27,85	37,13	46,42	55,70	74,26	92,83	111,40	129,96	148,53	185,66	222,79	259,93
10	3,2361	30,82	41,10	51,37	61,65	82,20	102,75	123,29	143,84	164,39	205,49	246,59	287,69
11	3,5495	33,81	45,08	56,35	67,62	90,16	112,70	135,23	157,77	180,31	225,39	270,47	315,55
12	3,8637	36,80	49,07	61,34	73,60	98,14	122,67	147,21	171,74	196,28	245,35	294,41	343,48
13	4,1786	39,80	53,07	66,33	79,60	106,14	132,67	159,20	185,74	212,27	265,34	318,41	371,48
14	4,4940	42,80	57,07	71,40	85,61	114,15	142,68	171,22	199,76	228,29	285,37	342,44	399,51
15	4,8097	45,81	61,08	76,35	91,63	122,17	152,71	183,25	213,79	244,33	305,42	366,50	427,59
16	5,1258	48,82	65,10	81,37	97,65	130,20	162,75	195,29	227,84	260,39	325,49	390,59	455,69
17	5,4422	51,84	69,12	86,39	103,67	138,23	172,79	207,35	241,91	276,46	345,58	414,69	483,81
18	5,7588	54,85	73,14	91,42	109,70	146,27	182,84	219,41	255,98	292,55	365,68	438,82	511,95
19	6,0755	57,87	77,16	96,45	115,74	154,32	192,90	231,48	270,06	308,64	385,80	462,96	540,11
20	6,3925	60,89	81,18	101,48	121,78	162,37	202,96	243,55	284,14	324,74	405,92	487,10	568,29
21	6,7095	63,91	85,21	106,51	127,82	170,42	213,03	255,63	298,24	340,84	426,05	511,26	596,48
22	7,0267	66,93	89,24	111,55	133,86	178,48	223,10	267,72	312,34	356,96	446,19	535,43	624,67
23	7,3439	69,95	93,27	116,59	139,90	186,54	233,17	279,80	326,44	373,07	466,34	559,61	652,88
24	7,6613	72,97	97,30	121,62	145,95	194,60	243,25	291,90	340,54	389,19	486,49	583,79	681,09
25	7,9787	76,00	101,33	126,66	151,99	202,66	253,32	303,99	354,65	405,32	506,65	607,98	709,31
26	8,2962	79,02	105,36	131,70	158,04	210,72	263,41	316,09	368,77	421,45	526,81	632,17	737,53
27	8,6138	82,05	109,40	136,74	164,09	218,79	273,49	328,19	382,88	437,58	546,98	656,37	765,77
28	8,9314	85,07	113,43	141,79	170,14	226,86	283,57	340,29	397,00	453,72	567,14	680,57	794,00
29	9,2491	88,10	117,46	146,83	176,19	234,93	293,66	352,39	411,12	469,85	587,32	704,78	822,24
30	9,5668	91,12	121,50	151,87	182,25	243,00	303,75	364,49	425,24	485,99	607,49	728,99	850,49

Z	n	Z	n	Z	n	Z	n	Z	n	Z	n
31	9,8845	45	14,3356	59	18,7892	73	23,2438	87	27,6990	101	32,1545
32	10,2023	46	14,6536	60	19,1073	74	23,5620	88	28,0172	102	32,4727
33	10,5201	47	14,9717	61	19,4255	75	23,8802	89	28,3355	103	32,7910
34	10,8380	48	15,2898	62	19,7437	76	24,1984	90	28,6537	104	33,1093
35	11,1558	49	15,6079	63	20,0618	77	24,5167	91	28,9720	105	33,4275
36	11,4737	50	15,9260	64	20,3800	78	24,8349	92	29,2902	106	33,7458
37	11,7916	51	16,2441	65	20,6982	79	25,1531	93	29,6085	107	34,0641
38	12,1096	52	16,5622	66	21,0164	80	25,4713	94	29,9267	108	34,3823
39	12,4275	53	16,8803	67	21,3346	81	25,7896	95	30,2450	109	34,7006
40	12,7455	54	17,1984	68	21,6528	82	26,1078	96	30,5632	110	35,0188
41	13,0635	55	17,5166	69	21,9710	83	26,4260	97	30,8815		
42	13,3815	56	17,8347	70	22,2892	84	26,7443	98	31,1997		
43	13,6995	57	18,1529	71	22,6074	85	27,0625	99	31,5180		
44	14,0175	58	18,4710	72	22,9256	86	27,3807	100	31,8362		

Pitch circle diameter Td (mm) = n*p

Number of teeth		Pitch p (mm)	
		06B 06C	
Z	n	9,525	
6	2,0000	19,05	

$$\varnothing = n \times p$$

Calculate the pitch circle diameter.

To do this, multiply the value n by the desired value p.

Example: $\varnothing = n \times p$
 $19,05 = 2,0000 \times 9,525$



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