

## RUBIG DIE FORGE

# Forged Chain Systems

So safe - So strong



RUBIG RUBIG





## **Chain Systems**

Detachable chains, developed and forged by RÜBIG, use particular steel grades and manufacturing processes which provide the basis for their durability and toughness. Their good weldability makes them ideal for the individual manufacture of cost-effective, resilient conveyor belts for demanding environments.

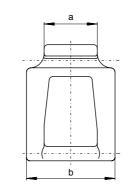
## Chain system "Classical"

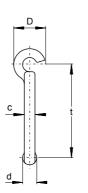


The ideal chain for an harsh operating environment

The detachable chain, developed and forged by RÜBIG, has a particularly beneficial fiber- and fabric-structure which provides, besides its innovative design, the basis for its durability and toughness. Advantages are:

- → Reliability
- → Good weldability
- → High wear resitance
- → Easy to assemble and disassemble by hand
- → Highly resitant to mechanical damage





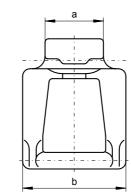
pitch	dimensions in mm					
t	а	b	d	С	D	
29,3	17,5	30	6	4	15	
35	19,5	32	6	4	15	
39	20,5	36	7	5,5	16,5	
41,3	20,5	36	7	5,5	16,5	
44	23,0	43	8	5	18,5	
49	20,5	36	7	5,5	16,5	
57	20,5	36	7	5,5	16,5	
59 "S"	20,5	36	7	5,5	16,5	
59	28	49	7,5	5	19	
67	37	62	10	7	25	
67 "B"	37	67	10	8	25	
78,5	47	82	13	8	32	
100	49	85	14	10	35	
125	50	85	16	11,5	40	

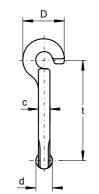
### **Chain C series**



The C series is an extension of the proven RÜBIG chain system

The C series is based on the popular RÜBIG chain system. In response to customer requirements, we've increased the hook wrapping in comparison to our Classic version. All other dimensions remain unchanged, which means that C series chains fit the existing sprockets in our Classic series. It is not possible, however, to combine chain links of the C series with Classic links of the same size (without a corresponding transition element).





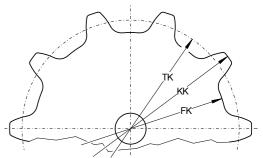
	pitch	dimensions in mm				
type	t	а	b	d	С	D
C6	60,6	37	62	10	7	25
C7	67	37	62	10	7	25
C8	78,5	47	82	13	8	32
C10	100	49	85	14	10	35
C12	125	50	85	16	11,5	40

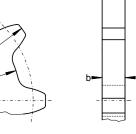
## **Sprockets**



The original sprockets together with the proper RÜBIG chain insure, as a result of their special tooth form, smoth running, low wear and safe transmission of force - even after prolonged

Available as blanks or machined sockets.





Extract from our sprocket list (further sizes available on request)

pitch	teeth	dimensions in mm				
t	z	TK	FK	KK	b	
29,3	6	58,6	43,6	73,6	15	
39	6	78,0	60,9	94,0	18	
44	6	88,0	67,4	106,0	20	
49	6	98,0	80,5	114,0	18	
59	6	118,0	97,0	136,0	22	
59	8	154,2	132,8	172,0	22	
67	6	134,0	108,0	158,0	25	
67	8	175,1	148,7	199,1	25	
78,5	6	157,0	120,4	187,0	30	
78,5	8	205,1	168,5	235,1	30	
100	5	170,1	131,7	205,1	35	
100	6	200,0	161,6	235,0	35	
125	5	212,7	168,7	257,7	35	
125	6	250,0	206,0	295,0	35	

We supply sprockets ready for installation (with hubs, bore, keyway, thread, bearings, hardened contour,...) according your drawing, sketch or sample, too. Please send your inquiry to st.office@rubiq.com

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## **Applications**

#### **Cleaning systems**

Since RÜBIG chains are proven to be largely insensitive to weather, dampness and dirt, they are ideal chains for the use in rough cleaning facilities and small hydropower-power stations.

#### **Recycling plant**

The removal of material under the crusher is taken care of by a specially for recycling-conveyor developed scraper-chain. With the help of the RÜBIG chain T100HV, broken material such as rubble, stones, earth etc. is continually pulled out from underneath the crusher.

#### Shredder plant

The applied RÜBIG chain is welded together with cross bars to a robust, collapsible conveyor belt. This band ensures safe transport of organic waste such as hedge cuttings, leaves, bark and root-waste to a shredder.

#### **Band filter**

Gravitybelt driven filters are used for the continuous purification of liquids, especially of metal working fluids, cooling waters and rolling emulsions. In doing so, a flow filter lying on a conveyor belt keeps the impurities back. In this example, the support tape connected to two sideways-running RÜBIG T49 INOX chains is beeing simultaneously performed, excited and driven.

#### Cutters

Cutters using RÜBIG chains - finished in HV, insure a much longer operating lifespan as compared to other types of chains. The stripping of chains by hand provides excellent handling during maintenance, especially of systems with welded blades and broaches. Easy handling is also guaranteed when adding or removing individual links for reasons of best alignment.

#### Manure spreader

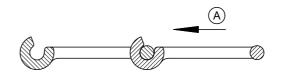
RÜBIG chains prove to be ideal in highly polluted environments, like on fertilizer or manure spreaders. Further, the broad design of the joints of the chain prevent rapid wear and tear

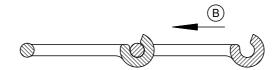
## Max. Chain Speed

The chain-speeds (table below) apply only for normal operating conditions dependent on the number of teeth, chains without bars, cups and plates. If the requirements are not met, the number of teeth needs to be reduced accordingly.

m/sec.	teeth					
division	6	7	8-9	10-12	12-14	15+
T29,3	1,5	1,7	2,0	2,5	3,0	3,5
T35	1,5	1,7	2,0	2,5	3,0	3,5
T39/T41,3	1,3	1,5	1,8	2,2	2,6	3,2
T44	1,2	1,4	1,7	2,0	2,5	3,0
T49	1,2	1,4	1,7	2,0	2,5	3,0
T57	1,1	1,3	1,5	1,8	2,3	2,8
T59S	1,1	1,3	1,5	1,8	2,3	2,8
T59	1,0	1,2	1,4	1,7	2,2	2,7
T60,6	1,0	1,2	1,4	1,7	2,2	2,7
T67	0,9	1,1	1,3	1,6	2,0	2,5
T67B	0,9	1,1	1,3	1,6	2,0	2,5
T78,5	0,8	0,9	1,0	1,3	1,7	2,2
T100	0,5	0,6	0,7	1,0	1,4	1,8
T125	0,5	0,6	0,7	0,9	1,3	1,6

## **Running direction**





The RÜBIG - chain can be run in both directions, however, if contaminated it is best when the flaps point in the running direction. In situations where large tensile forces reach 20% or more of the break load it is best to mount the chain the other way around in order to be able to remove individual links easier from the drive wheels if needed. Chains should only be mounted on sprockets having their flap openings pointing away from it. The drive should be located wherever possible on the tension side / in the desired transport direction.

#### Chain tensioner

- → Unilateral spring deflection wheels
- → Retensionable deflection wheels

The axle suspension offers advantages in situations where foreign particles could come between wheel and chain.

#### Weldability

RÜBIG chains are well weldable. Note however, that by welding plugs on the surfaces which are to be joint, they should not be heated above 250°C and the welding direction should always lead from the thinner to the thicker part of the

chain link. Before welding on the second side, let the chain link cool down in still air! When welding parts on to the "HV" chains at 190°C - 200°C, we recommend to relax the chain for about an hour. If it is not possible to do so because of its size or cross-section and the chain overheats, it can be sent back to us (after welding) to get it heat treated.

#### Chain pads - bridge mounting

Well suited, as pads are special steel rails made of "Robalon". The chain should be welded on to the catch so that the catch runs on the bad and the chain does not come into contact with the bad.

#### Overload clutch

For safety reasons and trouble-free operations we recommend the installation of a mechanical overload clutch. Alternatively shear pins, electrical overload protections, belt-driven hydraulic motors or hydraulic limitations (if appropriately designed and set-up) suitable for overload protections.

#### Parallel running chains

If two or more chains are running side by side and are connected in parallel with the driver strip, you get the chains on request, equal in length mounted and bundled in pairs at no extra charge.

#### Maintenance / Care

It is possible to operate the RÜBIG chains without special maintenance. However, the durability is reduced if not maintained properly. We therefore recommend the use of biodegradable chain oil (chainsaw oil). Especially before running the chains under an conveyer or if the chains are not used for some time (ending season), they should be thoroughly cleaned, oiled and dried.

#### Axles

The suspension of the axle is always an advantage if you get a foreign body between the wheel and chain.



Technical details are subject to change. ©RÜBIG 2017