

Minimum structure, universal function

Novel principles in simple, elementary mechanisms are seldom in technology.

Our ROLL-RING chain tensioners are such an elementary mechanism. They are technically seen minimal mechanisms and their new principle of function is fantastically simple.

The product series on this innovation was awarded the Innovation Prize of the State of Saxony, Germany.

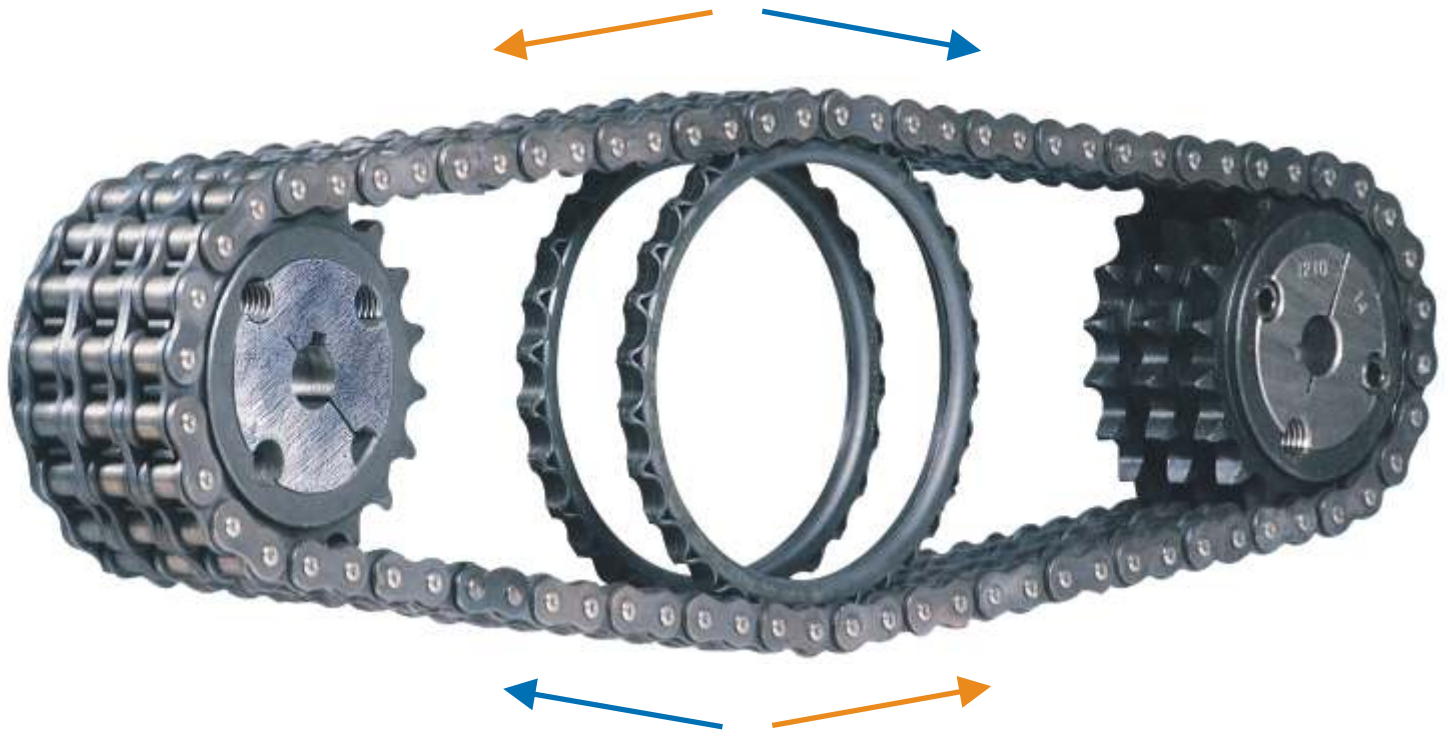
The ROLL-RING chain tensioners are protected by German and international patents and trademark.



elastic, inside-ventilated tooth profile

independent of rotational direction symmetric

polymer high performance material



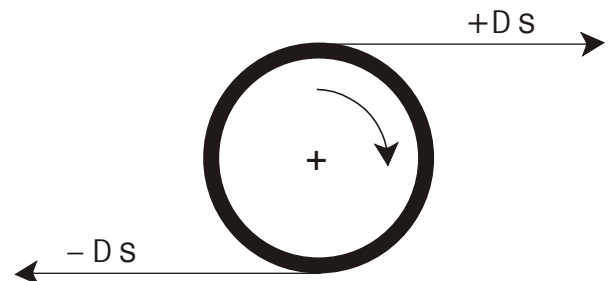
exact diametrical tension on load strand and un-load strand

The new principle:

The principle of ROLL-RING chain tensioners is based on two simple effects:

The elastic ring engages with the chain strands and rolls between them in a pre-stressed condition taking up the shape of an ellipse.

The constantly opposing movements of the load and un-load strands cancel each other out, to the "zero sum movement", thereby holding the ROLL-RING in position.



That guarantees the independent position and the reversibility of the ROLL-RING chain tensioners.

It is so easy ...

In the same time you take to read this sentence you can improve the quality of your chain drive, as **ROLL-RING** chain tensioners are mounted within seconds.

Normal supports as a basis for installation for chain drives, e.g. plates, struts, flanges, thread holes, ... are no longer necessary.

They are pre-tensioned manually in the shape of an ellipse without requiring any tool, positioned between the chain strands and released.

That makes them highly functional without requiring any tool and without any alignment or adjustment.

... to improve the quality of your chains.

ROLL-RING chain tensioners offer complex functional advantages, as they are chain tensioners and dampers in one.

The chain tensioner is easily installed where space limitations prohibit the use of conventional chain tensioners.

As a result of their tensioning effect on both strands the **ROLL-RING** chain tensioner prevents a mutual deformation of the chain elements due to overrunning impact also in the load strand and the fluctuating distances between the joints.

The chain is prevented from moving onto the tooth flanks.

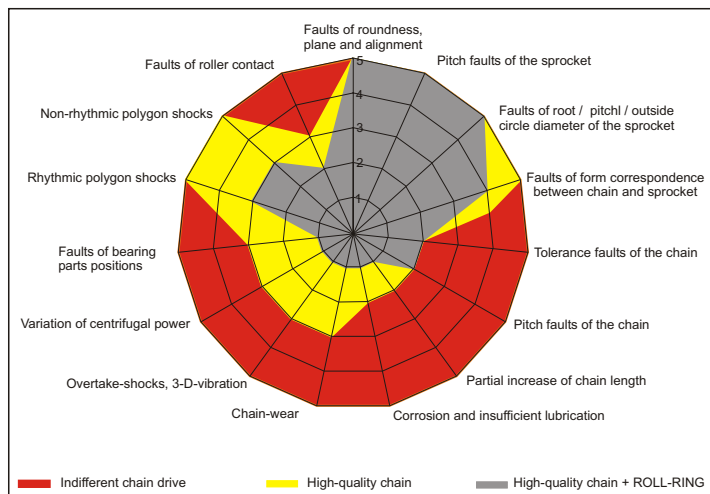
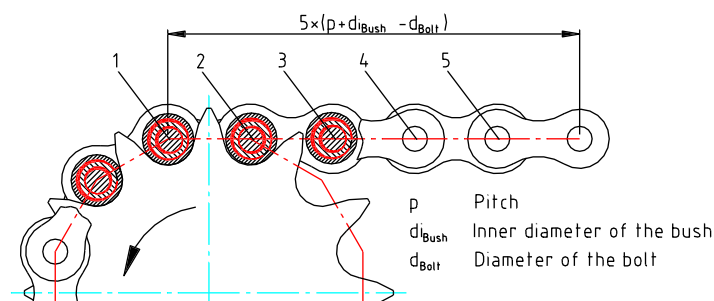
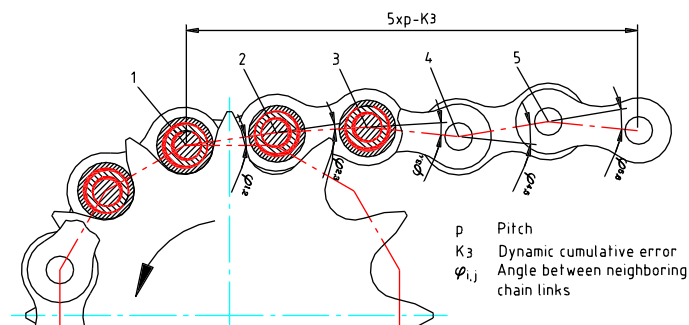
The **ROLL-RING** chain tensioners therefore improve the chain intake and the distribution of the whole load-force onto the teeth on the sprocket.

They take effect against the total of chain drive errors resulting from assembly, the sprocket and the chain, maintenance and dynamic of the chain drive. If the cumulative error of a chain drive of average quality is reduced to about 50% as a result of using quality chains and quality sprockets, the installation of a **ROLL-RING** chain tensioner additionally reduces this cumulative error to about 35% [1].

That improves the precision and the life of the chain drive considerably. At the same time the noise level of the chain drive is reduced by 2 to 5 dB(A), in the critical area with regard to industrial medicine by 85 dB(A).

[1] "antriebstechnik" (drive engineering), No. 10/99, page 34

ROLL-RING chain tensioners do not require any time for maintenance or adjustment; they are automatic, always exactly diametrical and self-lubricating in chain operation.



The parameters comply with the practical requirements

Via the material and the cross-sections of the rings we have set the tension required for our practical application case.

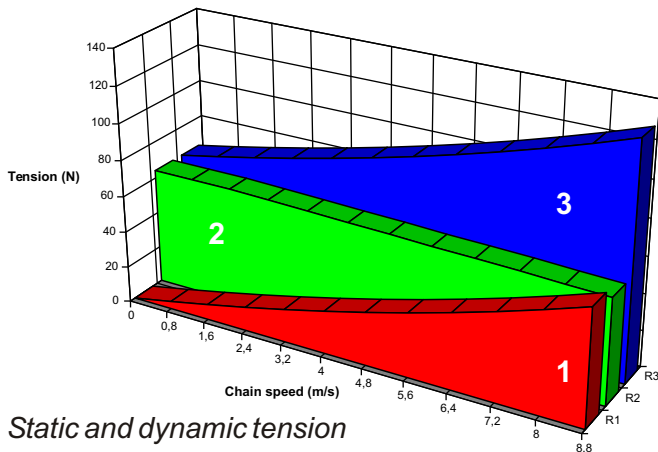
ROLL-RING chain tensioners are available for roller chains in compliance with DIN 8187, ISO 05 B-1 to ISO 20 B-1 and with ANSI Standard B29, 1, No. 35 to 100.

If the chain drives with these standardized chains meet the desired installation requirements with regard to the number of teeth on the sprockets, the center distance and the number of chain elements, then you can be sure that sufficient tensing and damping as well as the reliable positioning and reversibility will be given.

ROLL-RING chain tensioners prestress the chains with static tension from the resilience of the elastic ring with additional dynamic resilience from the speed-related damping of the material.

The ROLL-RING chain tensioners provide as much tension as necessary at low chain speeds and have reserves of tensioning and damping capacity for higher chain speeds.

Dynamic (1), static (2) and resulting tension (3) for ROLL-RING 112 030 01



Static and dynamic tension

With regard to the chain speed all ROLL-RING chain tensioners can be used up to the maximum speed limits specified by the chain manufacturers for manual lubrication and for drip lubrication for their high-performance chains.

The laterally opened teeth on the toothed cog of the ROLL-RING chain tensioners dampen the roll impact in the chain intake.

Moreover, because of an elastic closing movement, they prevent a direct contact of the chain with the bottom area of the roll bed. This prevents a transmission of heat from the warm chain to the plastic ring.

The teeth are aired and function with increasing speed similar to a cooling fan deducting the air from chain contact.

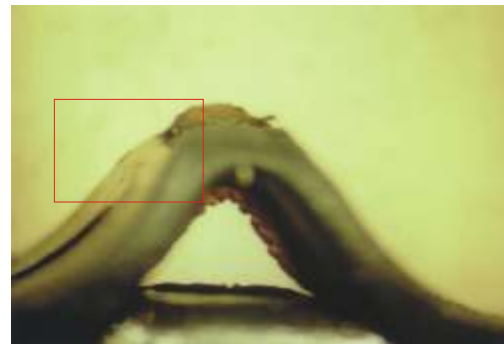
With the material mixture and the manufacturing technology we have therefore given the ROLL-RING chain tensioners a high chemical resistance, flexibility in cold temperatures, stability in warm temperatures and stability against ultra-violet radiation.

Our product series "ROLL-RING General Mechanical Engineering" (UV stable) and ROLL-RING "Agricultural Machines/Communal Engineering" (enhanced UV stability) result from this technology.

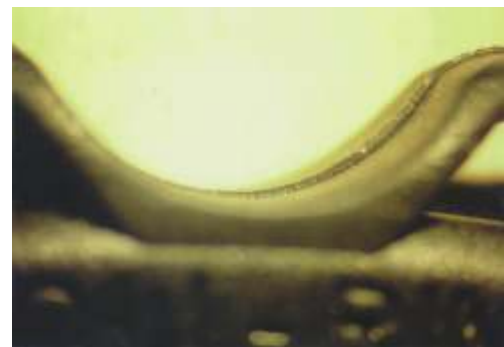
The ROLL-RING chain tensioners are extremely resistant to wear and tear.

In permanent tensile tests the bases of technical reliability and the quality of these innovative products were realized prior to launching the product on the market in 1995.

These tests have led to products, which hardly reflect any measurable or visible wear and tear in long-year permanent operation.



Wear and tear on the mould parting edge of a ROLL-RING 108 030 01, after 31,500 h of permanent operation on a luggage conveyor drive at the Frankfurt/Main Airport. No further wear and tear is visible.



Cut-out section of an unused comparison part from the same production batch.

In comparison with the unused ROLL-RING from the same production batch the used ROLL-RING only reflects a spring constant, which is 3.0 % higher after 31,500 operating hours due to the slightly hygroscopic material.

There are no indications to indicate the end of life as a result of wear and tear.

Fields of application

ROLL-RING chain tensioners can be applied in a wide variety of fields of mechanical engineering. They fulfill their functions in a multitude of applications.

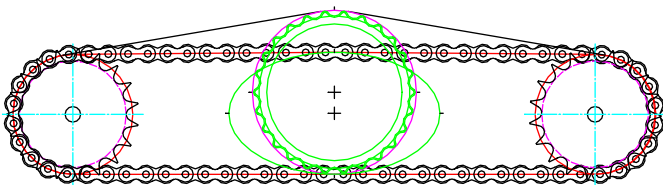
Our regular clients comprise initial fitters and retrofitters.

ROLL-RING chain tensioners have been reliably operating in printing machines, luggage conveyor drives/transportation systems at airports, cleaning and filling systems in breweries, roller conveyors in aluminum pressing plants, but also in chain drives on vibratory plates, in automatic sand blasting machines and in agricultural machines with heavy duty chain drives, for example, dung strewers. You will find a selection of application examples on page 15.

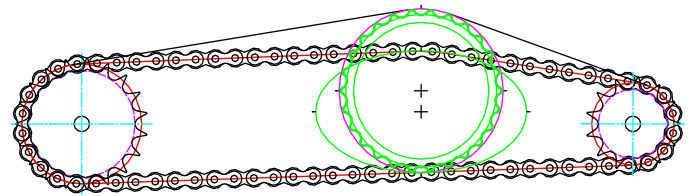
Arrangement of ROLL-RING chain tensioners in the chain drive

ROLL-RING chain tensioners can be installed in chain drives with standard chains. Prerequisite is a working area with a strand distance which is smaller than the pitch circle of the chain tensioner and a sufficient distance between the sprockets. In any case it is necessary to exclude any contact with the sprockets even in the largest ellipse-shaped deformation.

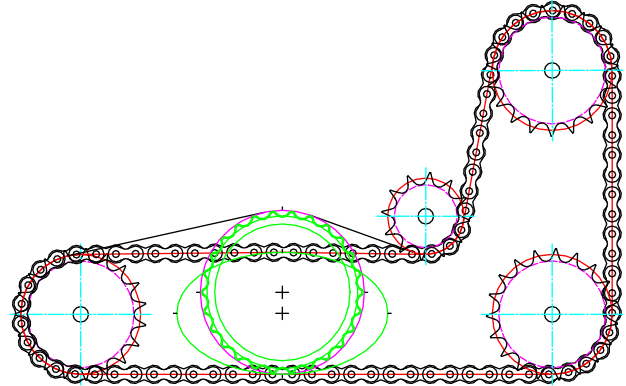
Examples:



Central arrangement in chain drives with transmission ratio $i=1$.



Asymmetric arrangement in chain drives with transmission ratio $i \neq 1$



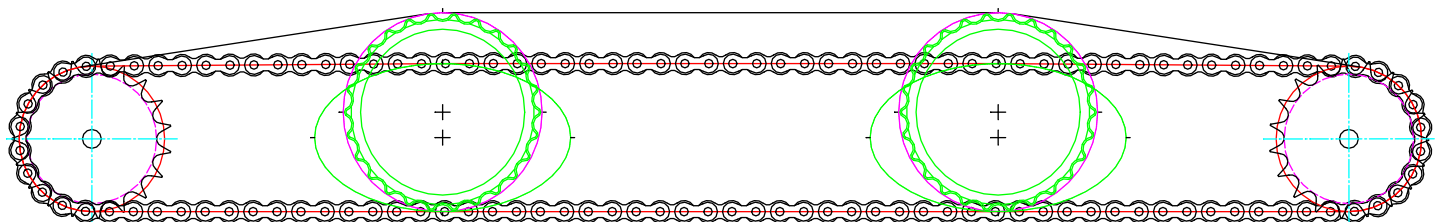
Arrangement in deflected chain drives

In multi-strand chain drives the ROLL-RING chain tensioners are arranged between the sprockets as in single-strand chain drives.

The arrangement into the chain strands is in the case of double-strand chains in every chain strand and parallel.

In treble-strand chains it is sufficient to tension only strand 1 and strand 2, if chain drives with lower axial distance are used (see photo on page 2).

If the weight of the slack strand is greater than the total tension of 2 ROLL-RING chain tensioners, then it is necessary to arrange the 3 chain tensioners in parallel.



Arrangement in chain drives with larger axial distance

Individual selection of the type for assembly in the existing chain drive ANSI Series

If you desire to select the ROLL-RING chain tensioner for an already existing chain drive, independent of the transmission ratio, we recommend you to proceed as follows:

Measure in the area of the intersection between the inner crossing tangents of the chain drive the widest distance of the strands which have been pulled apart, via the centers of the chain joints (e.g.: $D^* = 3.347''$).

Measure the inner width between the sprockets (e.g.: $A^* = 12.205''$)

Determine the ANSI No. of the chain (e.g. 40).

Enter with this ANSI No. in the table "Installation and final dimensions for ROLL-RING chain tensioners/series ANSI" (to the right).

Select the appropriate group in the column "ANSI No." (e.g. 40).

Specify the article group (108 026 01, 108 030 01, 108 034 01).

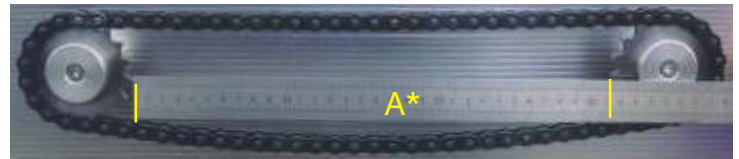
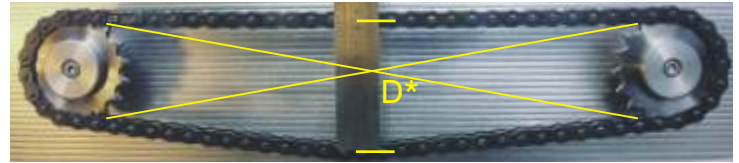
Check **within this article group** to determine which of the articles fulfils the following values measured by you for A^* and D^* of the chain drive:

$D^* > D$ and $D^* < d_o$ (self-holding restriction) and $A^* \geq A$ (working area restriction).

Articles fulfilling this condition are suitable for your chain drive. For example the article 108 026 01 fulfills these conditions.

This means that you have determined the matching article. If there are several types with various numbers of teeth within the article group, you should decide in favor of the article with the largest number of teeth.

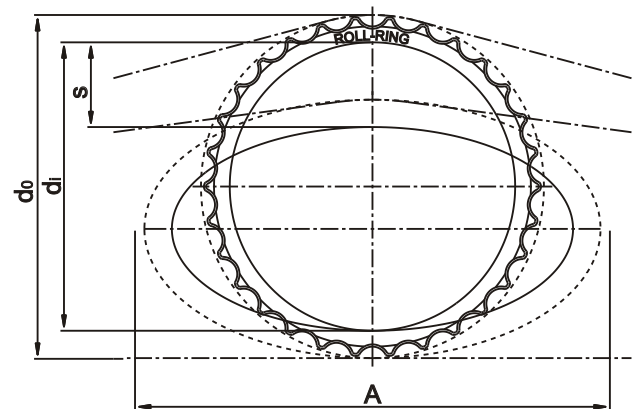
The ideal assembly position is in the area of the intersection of the inner tangents.



Installation and final dimensions for the ROLL-RING chain tensioner/series ANSI:

ANSI-No.	Article	d_o	d_i	s	A	$D = d_o - s$
35	806 030 01	3.539	3.024	1.063	4.449	2.476
40	108 026 01	4.154	3.445	1.063	5.346	3.091
40	108 030 01	4.783	4.000	1.181	6.362	3.602
40	108 034 01	5.413	4.543	1.181	6.496	4.232
41	108 430 01	4.783	4.000	1.181	6.362	3.602
41	108 436 01	5.736	4.811	1.260	7.362	4.476
50	110 026 01	5.055	4.134	1.102	6.024	3.953
50	110 030 01	5.827	4.906	1.299	6.969	4.528
50	110 034 01	6.693	5.551	1.496	8.543	5.197
60	112 026 01	6.102	5.024	1.378	8.248	4.724
60	112 030 01	7.173	6.028	1.772	9.528	5.401
60	112 034 01	8.169	6.673	1.772	10.433	6.397
80	116 026 01	8.150	6.575	1.772	10.591	6.378
80	816 030 01	9.528	7.874	1.969	12.402	7.559
100	120 030 01	11.957	10.094	2.560	15.354	9.397

All values in inches.
Value "A" includes a safety distance to the sprockets



Individual selection of the type for assembly in the existing chain drive ISO B Series

If you desire to select the **ROLL-RING** chain tensioner for an already existing chain drive, independent of the transmission ratio, we recommend you to proceed as follows:

Measure in the area of the intersection between the inner crossing tangents of the chain drive the widest distance of the strands which have been pulled apart, via the centers of the chain joints (e.g.: $D^* = 85 \text{ mm}$).

Measure the inner width between the sprockets (e.g.: $A^* = 310 \text{ mm}$).

Determine the ISO No. of the chain (e.g. **08 B-1**).

Enter with this ISO No. in the table "Installation and final dimensions for ROLL-RING chain tensioners/series ISO B" (to the right).

Select the appropriate group in the column "ISO No." (e.g. **08 B**).

Specify the article group (**108 026 01**, **108 030 01**, **108 034 01**).

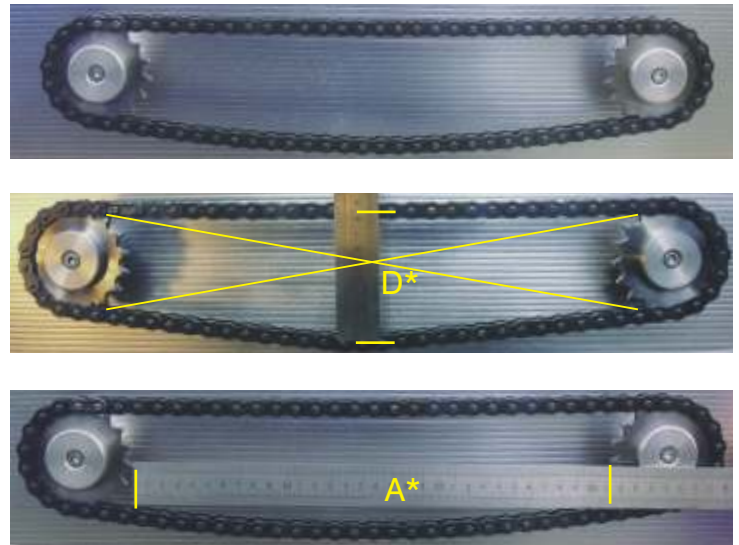
Check **within this article group** to determine which of the articles fulfils the following values measured by you for A^* and D^* of the chain drive:

$D^* > D$ and $D^* < d_o$ (self-holding restriction) and $A^* \geq A$ (working area restriction).

Articles fulfilling this condition are suitable for your chain drive. For example the article 108 026 01 fulfills these conditions.

This means that you have determined the matching article. If there are several types with various numbers of teeth within the article group, you should decide in favor of the article with the largest number of teeth.

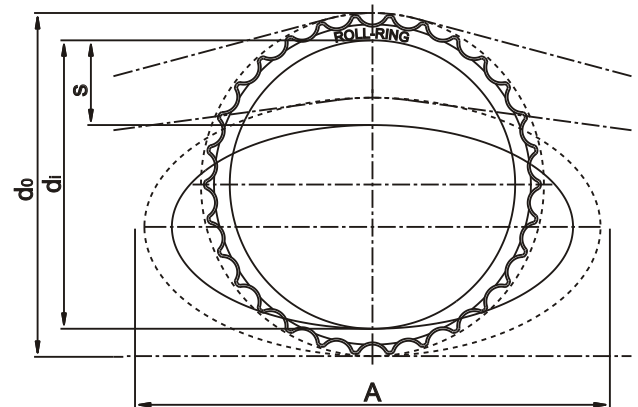
The ideal assembly position is in the area of the intersection of the inner tangents.



Installation and final dimensions for the ROLL-RING chain tensioner/series ISO B:

ISO-Nr.	Artikel	d_o	d_i	s	A	$D=d_o-s$
05 B	105 030 01	76,5	65,0	20,0	104,0	56,5
06 B	106 030 01	91,1	73,0	25,0	122,0	66,1
06 B	106 036 01	109,0	89,0	25,0	143,0	84,0
08 B	108 026 01	105,5	87,5	27,0	135,8	78,5
08 B	108 030 01	121,5	101,6	30,0	161,6	91,5
08 B	108 034 01	137,5	115,4	30,0	165,0	107,5
081	108 430 01	121,5	101,6	30,0	161,6	91,5
081	108 436 01	145,7	122,2	32,0	187,0	113,7
10 B	110 026 01	128,4	105,0	28,0	153,0	100,4
10 B	110 030 01	148,0	124,6	33,0	177,0	115,0
10 B	110 034 01	170,0	141,0	38,0	217,0	132,0
12 B	112 026 01	155,0	127,6	35,0	209,5	120,0
12 B	112 030 01	182,2	153,1	45,0	242,0	137,2
12 B	112 034 01	207,5	169,5	45,0	265,0	162,5
16 B	116 026 01	207,0	167,0	45,0	269,0	162,0
16 B	116 030 01	245,8	202,0	50,0	306,0	195,8
20 B	120 030 01	303,7	256,4	65,0	390,0	238,7

All values in mm
Value "A" includes a safety distance to the sprockets



Article No. 01	Dimension	ANSI Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (Lbs)**	Maximum Chain Speed (ft/min)	Ambient Temperature (°F)	Weight (Lbs)
806 030 01	06 C 30	35	3/8 x 3/16	30	1.28	1024	-4 till +158	0.011
108 026 01	08 A 26	40	1/2 x 5/16	26	3.01	1476	-4 till +158	0.026
108 030 01	08 A 30	40	1/2 x 5/16	30	3.19	1693	-4 till +158	0.033
108 034 01	08 A 34	40	1/2 x 5/16	34	4.94	1732	-4 till +158	0.053
108 430 01	*	*	1/2 x 3/4/6mm	30	3.78	1476	-4 till +158	0.035
108 436 01	*	*	1/2 x 3/4/6mm	36	5.61	1834	-4 till +158	0.063
110 026 01	10 A 26	50	5/8 x 3/8	26	6.34	827	-4 till +158	0.055
110 030 01	10 A 30	50	5/8 x 3/8	30	5.17	1732	-4 till +158	0.066
110 034 01	10 A 34	50	5/8 x 3/8	34	10.14	1732	-4 till +158	0.121
112 026 01	12 A 26	60	3/4 x 1/2	26	8.81	1063	-4 till +158	0.099
112 030 01	12 A 30	60	3/4 x 1/2	30	7.24	1220	-4 till +158	0.115
112 034 01	12 A 34	60	3/4 x 1/2	34	15.84	1260	-4 till +158	0.212
116 026 01	16 A 26	80	1 x 5/8	26	21.51	1122	-4 till +158	0.254
816 030 01	16 A 30	80	1 x 5/8	30	23.15	1299	-4 till +158	0.348
120 030 01	20 A 30	100	1 1/4 x 3/4	30	18.09	1378	-4 till +140	0.514

(enhanced warmth-resistant)

Article No. 06	Dimension	ANSI Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (Lbs)**	Maximum Chain Speed (ft/min)	Ambient Temperature (°F)	Weight (Lbs)
806 030 06	06 C 30	35	3/8 x 3/16	30	1.71	886	+18 till+176	0.011
108 026 06	08 A 26	40	1/2 x 5/16	26	5.42	1004	+18 till+176	0.026
108 030 06	08 A 30	40	1/2 x 5/16	30	7.60	1142	+18 till+176	0.033
108 430 06	*	*	1/2 x 3/4/6mm	30	5.89	1004	+18 till+176	0.035
110 026 06	10 A 26	50	5/8 x 3/8	26	8.65	728	+18 till+176	0.055
110 030 06	10 A 30	50	5/8 x 3/8	30	7.69	1102	+18 till+176	0.066
112 026 06	12 A 26	60	3/4 x 1/2	26	10.09	689	+18 till+176	0.099
112 030 06	12 A 30	60	3/4 x 1/2	30	13.53	787	+18 till+176	0.115
116 026 06	16 A 26	80	1 x 5/8	26	31.42	689	+18 till+176	0.254
816 030 06	16 A 30	80	1 x 5/8	30	26.52	827	+18 till+176	0.348

(enhanced cold-flexible)

Article No. 08	Dimension	ANSI Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (Lbs)**	Maximum Chain Speed (ft/min)	Ambient Temperature (°F)	Weight (Lbs)
806 030 08	06 C 30	35	3/8 x 3/16	30	0.76	1457	-22 till+122	0.011
108 026 08	08 A 26	40	1/2 x 5/16	26	2.05	1732	-22 till+122	0.026
108 030 08	08 A 30	40	1/2 x 5/16	30	2.88	2008	-22 till+122	0.033
108 430 08	*	*	1/2 x 3/4/6mm	30	2.81	1575	-22 till+122	0.035
110 026 08	10 A 26	50	5/8 x 3/8	26	3.53	906	-22 till+122	0.055
110 030 08	10 A 30	50	5/8 x 3/8	30	4.49	1988	-22 till+122	0.066
112 026 08	12 A 26	60	3/4 x 1/2	26	7.53	1083	-22 till+122	0.099
112 030 08	12 A 30	60	3/4 x 1/2	30	12.47	1260	-22 till+122	0.115
116 026 08	16 A 26	80	1 x 5/8	26	12.23	1319	-22 till+122	0.254
816 030 08	16 A 30	80	1 x 5/8	30	19.78	1339	-22 till+122	0.348

* universal for chain width of 1/8" to 5/16"

** on 68 °F and maximum tensioning deformation;
without dynamic tensioning force proportional to the chain speed

This information is based on our current knowledge and experiences.

The user is not released from own trials and experiences due to possible application-specific requirements.

Product Range Agricultural Machines , Communal Engineering, Building Machines
according to ANSI 29.1 / ISO 606 A Series / DIN 8188

Article No. 01	Dimension	ANSI Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (Lbs)**	Maximum Chain Speed (ft/min)	Ambient Temperature (°F)	Weight (Lbs)
206 830 01	06 C 30	35	3/8 x 3/16	30	1.19	906	-4 till +158	0.011
208 026 01	08 A 26	40	1/2 x 5/16	26	2.58	1398	-4 till +158	0.026
208 030 01	08 A 30	40	1/2 x 5/16	30	2.97	1457	-4 till +158	0.033
208 034 01	08 A 34	40	1/2 x 5/16	34	4.58	1496	-4 till +158	0.053
208 430 01	*	*	1/2 x3/4/6 mm	30	3.46	1339	-4 till +158	0.035
208 436 01	*	*	1/2 x3/4/6 mm	36	5.61	1584	-4 till +158	0.063
210 026 01	10 A 26	50	5/8 x 3/8	26	5.71	768	-4 till +158	0.055
210 030 01	10 A 30	50	5/8 x 3/8	30	4.49	1535	-4 till +158	0.066
210 034 01	10 A 34	50	5/8 x 3/8	34	9.44	1535	-4 till +158	0.121
212 026 01	12 A 26	60	3/4 x 1/2	26	8.31	984	-4 till +158	0.099
212 030 01	12 A 30	60	3/4 x 1/2	30	5.80	1102	-4 till +158	0.115
212 034 01	12 A 34	60	3/4 x 1/2	34	12.67	1142	-4 till +158	0.212
216 026 01	16 A 26	80	1 x 5/8	26	24.99	1004	-4 till +158	0.254
216 830 01	16 A 30	80	1 x 5/8	30	20.34	1043	-4 till +158	0.348
220 030 01	20 A 30	100	1 1/4 x 3/4	30	15.46	1240	-4 till +140	0.514

(enhanced warmth-resistant)

Article No. 06	Dimension	ANSI Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (Lbs)**	Maximum Chain Speed (ft/min)	Ambient Temperature (°F)	Weight (Lbs)
206 830 06	06 C 30	35	3/8 x 3/16	30	1.60	748	+18 till+176	0.011
208 026 06	08 A 26	40	1/2 x 5/16	26	5.06	945	+18 till+176	0.026
208 030 06	08 A 30	40	1/2 x 5/16	30	6.34	1004	+18 till+176	0.033
208 430 06	*	*	1/2 x3/4/6 mm	30	5.08	906	+18 till+176	0.035
210 026 06	10 A 26	50	5/8 x 3/8	26	7.26	630	+18 till+176	0.055
210 030 06	10 A 30	50	5/8 x 3/8	30	7.08	1004	+18 till+176	0.066
212 026 06	12 A 26	60	3/4 x 1/2	26	9.55	610	+18 till+176	0.099
212 030 06	12 A 30	60	3/4 x 1/2	30	11.55	925	+18 till+176	0.115
216 026 06	16 A 26	80	1 x 5/8	26	26.65	883	+18 till+176	0.254
216 830 06	16 A 30	80	1 x 5/8	30	23.66	630	+18 till+176	0.348

(enhanced cold-flexible)

Article No. 08	Dimension	ANSI Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (Lbs)**	Maximum Chain Speed (ft/min)	Ambient Temperature (°F)	Weight (Lbs)
206 830 08	06 C 30	35	3/8 x 3/16	30	0.67	1220	-13 till+122	0.011
208 026 08	08 A 26	40	1/2 x 5/16	26	1.69	1614	-13 till+122	0.026
208 030 08	08 A 30	40	1/2 x 5/16	30	2.58	1772	-13 till+122	0.033
208 430 08	*	*	1/2 x3/4/6 mm	30	2.54	1437	-13 till+122	0.035
210 026 08	10 A 26	50	5/8 x 3/8	26	3.01	807	-13 till+122	0.055
210 030 08	10 A 30	50	5/8 x 3/8	30	4.00	1870	-13 till+122	0.066
212 026 08	12 A 26	60	3/4 x 1/2	26	7.08	1043	-13 till+122	0.099
212 030 08	12 A 30	60	3/4 x 1/2	30	10.65	1142	-13 till+122	0.115
216 026 08	16 A 26	80	1 x 5/8	26	22.94	1201	-13 till+122	0.254
216 830 08	16 A 30	80	1 x 5/8	30	18.70	1142	-13 till+122	0.348

* universal for chain width of 1/8" to 5/16"

** on 68 °F and maximum tensioning deformation;
without dynamic tensioning force proportional to the chain speed

This information is based on our current knowledge and experiences.
The user is not released from own trials and experiences due to possible application-specific requirements.

Article No. 01	Dimension	ISO Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (N)**	Maximum Chain Speed (m/s)	Ambient Temperature (°C)	Weight (kg)
105 030 01	05 B 30	ISO 05	8mm x 1/8"	30	2.9	5.0	-20 till +70	0.002
106 030 01	06 B 30	ISO 06	3/8 x 7/32"	30	15.2	5.2	-20 till +70	0.006
106 036 01	06 B 36	ISO 06	3/8 x 7/32"	36	28.5	5.2	-20 till +70	0.017
108 026 01	08 B 26	ISO 08	1/2 x 5/16"	26	13.4	7.5	-20 till +70	0.012
108 030 01	08 B 30	ISO 08	1/2 x 5/16"	30	14.2	8.6	-20 till +70	0.015
108 034 01	08 B 34	ISO 08	1/2 x 5/16"	34	22.0	8.8	-20 till +70	0.024
108 430 01	*	*	1/2 x 3/4/6mm	30	16.8	7.5	-20 till +70	0.016
108 436 01	*	*	1/2 x 3/4/6mm	36	25.1	9,3	-20 till +70	0,029
110 026 01	10 B 26	ISO 10	5/8 x 3/8"	26	28.2	4.2	-20 till +70	0.025
110 030 01	10 B 30	ISO 10	5/8 x 3/8"	30	23.0	8.8	-20 till +70	0.030
110 034 01	10 B 34	ISO 10	5/8 x 3/8"	34	45.1	8.8	-20 till +70	0.055
112 026 01	12 B 26	ISO 12	3/4 x 7/16"	26	39.2	5.4	-20 till +70	0.045
112 030 01	12 B 30	ISO 12	3/4 x 7/16"	30	32.2	6.2	-20 till +70	0.052
112 034 01	12 B 34	ISO 12	3/4 x 7/16"	34	70.5	6.4	-20 till +70	0.096
116 026 01	16 B 26	ISO 16	1" x 17 mm	26	95.7	5.7	-20 till +70	0.115
116 030 01	16 B 30	ISO 16	1" x 17 mm	30	108.5	6.2	-20 till +70	0.178
120 030 01	20 B 30	ISO 20	1 1/4 x 3/4"	30	80.5	7.0	-20 till +60	0.233

(enhanced warmth-resistant)

Article No. 06	Dimension	ISO Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (N)**	Maximum Chain Speed (m/s)	Ambient Temperature (°C)	Weight (kg)
106 030 06	06 B 30	ISO 06	3/8 x 7/32"	30	20.3	4.5	-8 till +80	0.006
108 026 06	08 B 26	ISO 08	1/2 x 5/16"	26	24.1	5.1	-8 till +80	0.012
108 030 06	08 B 30	ISO 08	1/2 x 5/16"	30	33.8	5.8	-8 till +80	0.015
108 430 06	*	*	1/2 x 3/4/6mm	30	26.2	5.1	-8 till +80	0.016
110 026 06	10 B 26	ISO 10	5/8 x 3/8"	26	38.5	3.7	-8 till +80	0.025
110 030 06	10 B 30	ISO 10	5/8 x 3/8"	30	34.2	5.6	-8 till +80	0.030
112 026 06	12 B 26	ISO 12	3/4 x 7/16"	26	44.9	3.5	-8 till +80	0.045
112 030 06	12 B 30	ISO 12	3/4 x 7/16"	30	60.2	4.0	-8 till +80	0.052
116 026 06	16 B 26	ISO 16	1" x 17 mm	26	139.8	3.5	-8 till +80	0.115
116 030 06	16 B 30	ISO 16	1" x 17 mm	30		4.0	-8 till +80	0.178

(enhanced cold-flexible)

Article No. 08	Dimension	ISO Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (N)**	Maximum Chain Speed (m/s)	Ambient Temperature (°C)	Weight (kg)
106 030 08	06 B 30	ISO 06	3/8 x 7/32"	30	11.4	7.4	-30 till +50	0.006
108 026 08	08 B 26	ISO 08	1/2 x 5/16"	26	9.1	8.8	-30 till +50	0.012
108 030 08	08 B 30	ISO 08	1/2 x 5/16"	30	12.8	10.2	-30 till +50	0.015
108 430 08	*	*	1/2 x 3/4/6mm	30	12.5	8.0	-30 till +50	0.016
110 026 08	10 B 26	ISO 10	5/8 x 3/8"	26	15.7	4.6	-30 till +50	0.025
110 030 08	10 B 30	ISO 10	5/8 x 3/8"	30	20.0	10.1	-30 till +50	0.030
112 026 08	12 B 26	ISO 12	3/4 x 7/16"	26	33.5	5.5	-30 till +50	0.045
112 030 08	12 B 30	ISO 12	3/4 x 7/16"	30	55.5	6.4	-30 till +50	0.052
116 026 08	16 B 26	ISO 16	1" x 17 mm	26	54.4	6.7	-30 till +50	0.115
116 030 08	16 B 30	ISO 16	1" x 17 mm	30		6.9	-30 till +50	0.178

* universal for chain width of 1/8" to 5/16"

** on 20 °C and maximum tensioning deformation;
without dynamic tensioning force proportional to the chain speed

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Changes concerning technical development are reserved.

Product Range Agricultural Machines , Communal Engineering, Building Machines
according to ISO 606 B Series / DIN 8187 / BS 228

Article No. 01	Dimension	ISO Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (N)**	Maximum Chain Speed (m/s)	Ambient Temperature (°C)	Weight (kg)
206 030 01	06 B 30	ISO 06	3/8 x 7/32"	30	13.2	4.6	-20 till +70	0.006
206 036 01	06 B 36	ISO 06	3/8 x 7/32"	36	25.0	4.6	-20 till +70	0.017
208 026 01	08 B 26	ISO 08	1/2 x 5/16"	26	11.5	7.1	-20 till +70	0.012
208 030 01	08 B 30	ISO 08	1/2 x 5/16"	30	13.2	7.4	-20 till +70	0.015
208 034 01	08 B 34	ISO 08	1/2 x 5/16"	34	20.4	7.6	-20 till +70	0.024
208 430 01	*	*	1/2 x3/4/6 mm	30	15.4	6.8	-20 till +70	0.016
208 436 01	*	*	1/2 x3/4/6 mm	36	25.1	8.0	-20 till +70	0.029
210 026 01	10 B 26	ISO 10	5/8 x 3/8"	26	25.4	3.9	-20 till +70	0.025
210 030 01	10 B 30	ISO 10	5/8 x 3/8"	30	20.0	7.8	-20 till +70	0.030
210 034 01	10 B 34	ISO 10	5/8 x 3/8"	34	42.0	7.8	-20 till +70	0.055
212 026 01	12 B 26	ISO 12	3/4 x 7/16"	26	37.0	5.0	-20 till +70	0.045
212 030 01	12 B 30	ISO 12	3/4 x 7/16"	30	25.8	5.6	-20 till +70	0.052
212 034 01	12 B 34	ISO 12	3/4 x 7/16"	34	56.4	5.8	-20 till +70	0.096
216 026 01	16 B 26	ISO 16	1" x 17 mm	26	111.2	5.1	-20 till +70	0.115
216 030 01	16 B 30	ISO 16	1" x 17 mm	30	100.6	5.8	-20 till +70	0.178
220 030 01	20 B 30	ISO 20	1 1/4 x 3/4"	30	68.8	6.3	-20 till +60	0.233

(enhanced warmth-resistant)

Article No. 06	Dimension	ISO Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (N)**	Maximum Chain Speed (m/s)	Ambient Temperature (°C)	Weight (kg)
206 030 06	06 B 30	ISO 06	3/8 x 7/32"	30	17.5	3.8	-8 till +80	0.006
208 026 06	08 B 26	ISO 08	1/2 x 5/16"	26	22.5	4.8	-8 till +80	0.012
208 030 06	08 B 30	ISO 08	1/2 x 5/16"	30	28.2	5.1	-8 till +80	0.015
208 430 06	*	*	1/2 x3/4/6 mm	30	22.6	4.6	-8 till +80	0.016
210 026 06	10 B 26	ISO 10	5/8 x 3/8"	26	32.3	3.2	-8 till +80	0.025
210 030 06	10 B 30	ISO 10	5/8 x 3/8"	30	31.5	5.1	-8 till +80	0.030
212 026 06	12 B 26	ISO 12	3/4 x 7/16"	26	42.5	3.1	-8 till +80	0.045
212 030 06	12 B 30	ISO 12	3/4 x 7/16"	30	51.4	4.7	-8 till +80	0.052
216 026 06	16 B 26	ISO 16	1" x 17 mm	26	118.6	4.5	-8 till +80	0.115
216 030 06	16 B 30	ISO 16	1" x 17 mm	30		3.7	-8 till +80	0.178

(enhanced cold-flexible)

Article No. 08	Dimension	ISO Chain-No.	Chain Dimension p x b1 (Inches)	Teeth ROLL-RING	Max. Static Expansive Force (N)**	Maximum Chain Speed (m/s)	Ambient Temperature (°C)	Weight (kg)
206 030 08	06 B 30	ISO 06	3/8 x 7/32"	30	9.3	6.2	-25 till +50	0.006
208 026 08	08 B 26	ISO 08	1/2 x 5/16"	26	7.5	8.2	-25 till +50	0.012
208 030 08	08 B 30	ISO 08	1/2 x 5/16"	30	11.5	9.0	-25 till +50	0.015
208 430 08	*	*	1/2 x3/4/6 mm	30	11.3	7.3	-25 till +50	0.016
210 026 08	10 B 26	ISO 10	5/8 x 3/8"	26	13.4	4.1	-25 till +50	0.025
210 030 08	10 B 30	ISO 10	5/8 x 3/8"	30	17.8	9.5	-25 till +50	0.030
212 026 08	12 B 26	ISO 12	3/4 x 7/16"	26	31.5	5.3	-25 till +50	0.045
212 030 08	12 B 30	ISO 12	3/4 x 7/16"	30	47.4	5.8	-25 till +50	0.052
216 026 08	16 B 26	ISO 16	1" x 17 mm	26	102.1	6.1	-25 till +50	0.115
216 030 08	16 B 30	ISO 16	1" x 17 mm	30		6.1	-25 till +50	0.178

* universal for chain width of 1/8" to 5/16"

** on 20 °C and maximum tensioning deformation;
without dynamic tensioning force proportional to the chain speed

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The user is not released from own trials and experiences due to possible application-specific requirements.

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