Strong. Powerful. Performance.

The benefits are endless, the choice is black and white.

RENOLD Synergy

Simply the best.

Quality, performance, value and now even better.

Renold Synergy represents the biggest single innovation in power transmission technology since the bush roller chain was invented. Its wear resistance and performance capabilities are without equal.

At Renold our motivation is the constant pursuit of excellence. Even when we know that we are developing a truly exceptional design, we're not content to leave it at that. We haven't stopped our research and development of Renold Synergy since the day the idea was born. The expertise and experience of Renold's engineers and designers has brought about significant improvements to even this recognised world-beater!

Many thought there was no way to improve on such an innovative design but the latest development of Renold Synergy now represents a bold new evolution of a product that has already rewritten the rulebook!

Chain is too small a word to describe Renold Synergy. It has made, and continues to make, an unquestionable contribution to the improved performance and reliability of drive systems all over the world.

OPERATIONAL FEATURES AND BENEFITS – USER FRIENDLY

- → Renold Synergy is virtually dry to the touch therefore the lubricant stays in the chain, not on your hands.
- → Renold Synergy's special platinum coloured connecting link contrasts with the black surface of the other plates, making for easy identification, ensuring rapid disconnection of the chain.
- → Renold Synergy's unique soft pin ends allow quick and easy cutting to length without damaging the rest of the chain.
- → Because Renold Synergy lasts longer and is more resistant to shock loading, it is the most reliable product of its kind; just fit it and forget it.

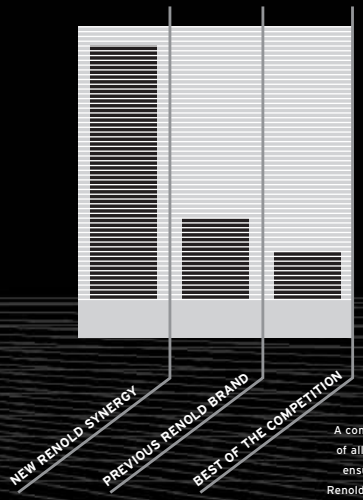
- → Precious initial lubricant is primarily in the chain not on the outside where it's not needed
- → All packaging is 100 % recyclable
- → All chain is 100 % recyclable
- → Renold Synergy is made in factories that fully conform with ISO 14001
- → All material waste in production is recycled

WEAR PERFORMANCE

Most correctly specified chain eventually has to be replaced due to elongation caused by wear between the pin and bush. Independent tests have shown that Renold Synergy outperformed the best of the recognised quality competitor chain by almost 6 times.

FATIGUE PERFORMANCE

Under conditions of continual heavy load or repeated shock loading, chain may need to be replaced due to breakage or fatigue. Tests have shown that Renold Synergy was, on average, 30 % better than leading competitive brands. This is especially true as the loose fit connecting link plates were specially treated to achieve the same fatigue performance as the chain. Renold Synergy fatigue performance is not only measured as a chain, but as a chain system.



A combination of all features ensured that Renold Synergy outlasts other chain brands by a factor of 6.

PRODUCT FEATURE AND BENEFITS – PLATES

- → Precision blanked profile optimises stress distribution.
- → Strict control of steel specification (including trace elements) to ensure very consistent heat treatment results.
- → Triple punch holing techniques maximises resistance to crack propagation and ensures controlled positional location of pin and bush for even wear.
- → Special coating gives improved corrosion and light acid resistance.
- → Connecting link plates are specially treated to ensure the same fatigue performance as the overall chain.

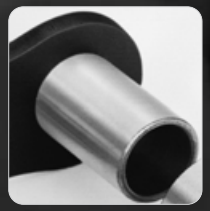
PRODUCT FEATURE AND BENEFITS – PIN AND BUSH

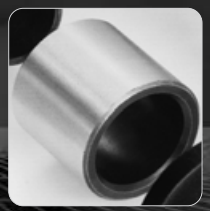
- → Optimised hardening to minimise wear but also prevent brittleness.
- → Unique bush bore profile to ensure full contact between pin and bush bore surfaces.
- → Three-stage pin surface treatment giving a unique combination of lubrication retention and extended wear life.
- → Exclusive 6-stage cold extrusion process giving concentricity and material grain flow, optimising shock load resistance.


PLATE PROFILE

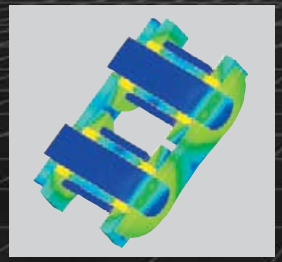

ACCURATE HOLING TECHNIQUES


PIN


BUSH


ROLLER

RENOLD SYNERGY



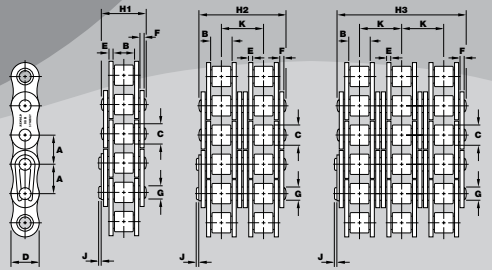
Renold uses the most sophisticated Finite Element Analysis techniques to identify the optimum balance of features to ensure the best possible result – Renold Synergy, a genuine example of the whole being greater than the sum of its parts. Not content with supplying the best chain, a worldwide network of Renold authorised distributors and agents – in addition to Renold's own organisations in 18 countries – provides unparalleled service, availability and advice.

RENOLD Synergy

RENOLD SYNERGY: THE BENEFITS ARE ENDLESS, THE CHOICE IS BLACK AND WHITE.

Visit www.renold.com Renold's comprehensive website offering information and advice on best practice as well as details of our wide range of chain products and accessories. For more information on specification advice and guidance on installation and maintenance, please refer to the Renold Transmission Chain catalogue.

www.renold.com/synergy




link no. 4


link no. 12


link no. 30


link no. 4


link no. 12


link no. 30


link no. 11


link no. 26


link no. 107


link no. 11


link no. 26


link no. 107

Renold Synergy European (BS) dimensions

Chain		Technical Details														Connecting Links						
Iso No	Renold Chain No	Pitch Inch	Pitch mm	Inside Width	Roller Dia	Plate Height	Plate Width Inner	Plate Width Outer	Pin Dia	Pin Len	Con Link Extra	Trans Pitch	ISO 606 Tensile Strength	Weight kg/m	No 4	No 107	No 11	No 26	No 12	No 30
Simplex		A	A	B	C	D	E	F	G	H1	J	K	(N)**							
06B-1	110038¬	0.375	9.525	5.72	6.35	8.26	1.30	1.04	3.28	13.50	3.3	-	8900	0.39	X	X	-	X	-	X
-	111044	0.500	12.700	3.30	7.75	9.90	1.10	0.95	4.09	9.80	3.9	-	8900	0.30	X	X	-	X	-	X
-	111046	0.500	12.700	4.88	7.75	9.90	1.10	0.95	4.09	11.40	3.9	-	8900	0.35	X	X	-	X	-	X
-	110044	0.500	12.700	5.21	8.51	11.81	1.55	1.55	4.45	14.20	3.9	-	17800	0.62	X	X	-	X	-	X
08B-1	110046	0.500	12.700	7.75	8.51	11.81	1.55	1.55	4.45	17.00	3.9	-	17800	0.70	X	X	-	X	-	X
-	110054	0.625	15.875	6.50	10.16	14.70	1.55	1.55	5.08	16.00	4.1	-	22200	0.81	X	X	-	X	-	X
10B-1	110056	0.625	15.875	9.65	10.16	14.70	1.55	1.55	5.08	18.80	4.1	-	22200	0.92	X	X	-	X	-	X
12B-1	110066	0.750	19.050	11.68	12.07	15.93	1.80	1.80	5.72	22.70	4.6	-	28900	1.20	X	X	-	X	-	X
16B-1	110088	1.000	25.400	17.02	15.88	20.57	4.12	3.10	8.28	36.10	5.4	-	60000	2.80	X	X	-	X	X	-
20B-1	110106	1.250	31.750	19.56	19.05	26.04	4.62	3.61	10.19	43.20	6.1	-	95000	3.85	X	X	-	X	X	-
24B-1	110127	1.500	38.100	25.40	25.40	33.40	6.10	5.08	14.63	53.40	6.6	-	160000	7.45	X	X	X	-	X	-
Duplex		A	A	B	C	D	E	F	G	H2	J	K	(N)**							
06B-2	114038¬	0.375	9.525	5.72	6.35	8.26	1.30	1.04	3.28	23.80	3.3	10.24	16900	0.74	X	X	-	X	-	-
08B-2	114046	0.500	12.700	7.75	8.51	11.81	1.55	1.55	4.45	31.00	3.9	13.92	31100	1.38	X	X	-	X	-	X
10B-2	114056	0.625	15.875	9.65	10.16	14.70	1.55	1.55	5.08	35.40	4.1	16.59	44500	1.80	X	X	-	X	-	X
12B-2	114066	0.750	19.050	11.68	12.07	15.93	1.80	1.80	5.72	42.20	4.6	19.46	57800	2.40	X	X	-	X	-	X
16B-2	114088	1.000	25.400	17.02	15.88	20.57	4.12	3.10	8.28	68.00	5.4	31.88	106000	5.50	X	X	-	X	X	-
20B-2	114106	1.250	31.750	19.56	19.05	26.04	4.62	3.61	10.19	79.70	6.1	36.45	170000	7.80	X	X	-	X	X	-
24B-2	114127	1.500	38.100	25.40	25.40	33.40	6.10	5.08	14.63	101.80	6.6	48.36	280000	14.80	X	X	X	-	X	-
Triplex		A	A	B	C	D	E	F	G	H3	J	K	(N)**							
06B-3	116038¬	0.375	9.525	5.72	6.35	8.26	1.30	1.04	3.28	34.00	3.3	10.24	24900	1.10	X	X	-	X	-	X
08B-3	116046	0.500	12.700	7.75	8.51	11.81	1.55	1.55	4.45	44.90	3.9	13.92	44500	2.06	X	X	-	X	-	X
10B-3	116056	0.625	15.875	9.65	10.16	14.70	1.55	1.55	5.08	52.80	4.1	16.59	66700	2.54	X	X	-	X	-	X
12B-3	116066	0.750	19.050	11.68	12.07	15.93	1.80	1.80	5.72	61.70	4.6	19.46	86700	3.60	X	X	-	X	-	X
16B-3	116088	1.000	25.400	17.02	15.88	20.57	4.12	3.10	8.28	99.90	5.4	31.88	160000	8.15	X	X	-	X	X	-
20B-3	116106	1.250	31.750	19.56	19.05	26.04	4.62	3.61	10.19	116.10	6.1	36.45	250000	11.65	X	X	-	X	X	-
24B-3	116127	1.500	38.100	25.40	25.40	33.40	6.10	5.08	14.63	150.20	6.6	48.36	425000	22.25	X	X	X	-	X	-

¬ Straight side plates

** Renold chain far exceeds the ISO 606 minimum tensile strength requirement, but Renold do not consider that this figure provides a useful indicator to the key chain performance areas of wear and fatigue.

Renold Synergy ANSI dimensions

Chain			Technical Details															Connecting Links							
Iso No	ANSI No	Renold Chain No	Pitch Inch	Pitch mm	Inside Width	Roller Dia	Plate Height	Plate Width Inner	Plate Width Outer	Pin Dia	Pin Len	Con Link Extra	Trans Pitch	ISO 606 Tensile Strength	Weight kg/m	No 4	No 107	No 11	No 26	No 58	No 12	No 30
Simplex			A	A	B	C	D	E	F	G	H1	J	K	(N)**								
06A-1	35	129037*	0.375	9.525	4.68	5.08*	8.66	1.30	1.30	3.59	15.50	3.3	-	7825	0.33	X	X	-	X	-	X	X
08A-1	40	119047	0.500	12.700	7.85	7.92	11.15	1.55	1.55	3.98	17.80	3.9	-	13800	0.63	X	X	X	X	-	X	X
10A-1	50	119057	0.625	15.875	9.40	10.16	14.55	2.03	2.03	5.07	21.80	4.1	-	21800	1.05	X	X	X	X	-	X	X
12A-1	60	119067	0.750	19.050	12.58	11.91	17.50	2.39	2.39	5.96	26.90	4.6	-	31100	1.55	X	X	X	X	-	X	X
16A-1	80	119087	1.000	25.400	15.75	15.88	24.05	3.25	3.25	7.93	33.50	5.4	-	55600	2.80	X	X	X	-	X	X	-
20A-1	100	119107	1.250	31.750	18.90	19.05	29.97	4.06	4.06	9.54	41.10	6.1	-	86700	4.20	X	X	X	-	X	X	-
24A-1	120	119127	1.500	38.100	25.23	22.23	35.89	4.80	4.80	11.11	50.80	6.6	-	124600	5.70	X	X	X	-	X	X	-
Duplex			A	A	B	C	D	E	F	G	H2	J	K	(N)**								
06A-2	35-2	125037*	0.375	9.525	4.68	5.08*	8.66	1.30	1.30	3.59	25.65	3.3	10.13	15650	0.65	X	X	-	X	-	X	X
08A-2	40-2	115047	0.500	12.700	7.85	7.92	11.15	1.55	1.55	3.98	32.20	3.9	14.38	27600	1.20	X	X	X	X	-	X	X
10A-2	50-2	115057	0.625	15.875	9.40	10.16	14.55	2.03	2.03	5.07	39.90	4.1	18.11	43600	2.10	X	X	X	X	-	X	X
12A-2	60-2	115067	0.750	19.050	12.58	11.91	17.50	2.39	2.39	5.96	49.80	4.6	22.78	62300	3.05	X	X	X	X	-	X	X
16A-2	80-2	115087	1.000	25.400	15.75	15.88	24.05	3.25	3.25	7.93	62.70	5.4	29.29	111200	5.50	X	X	X	-	X	X	-
20A-2	100-2	115107	1.250	31.750	18.90	19.05	29.97	4.06	4.06	9.54	77.00	6.1	35.76	173500	8.40	X	X	X	-	X	X	-
24A-2	120-2	115127	1.500	38.100	25.23	22.23	35.89	4.80	4.80	11.11	96.30	6.6	45.44	249100	11.00	X	X	X	-	X	X	-
Triplex			A	A	B	C	D	E	F	G	H3	J	K	(N)**								
06A-3	35-3	127037*	0.375	9.525	4.68	5.08*	8.66	1.30	1.30	3.59	34.03	3.3	10.13	23475	0.98	X	X	-	X	-	X	X
08A-3	40-3	117047	0.500	12.700	7.85	7.92	11.15	1.55	1.55	3.98	46.17	3.9	14.38	41400	1.85	X	X	X	X	-	X	X
10A-3	50-3	117057	0.625	15.875	9.40	10.16	14.55	2.03	2.03	5.07	57.90	4.1	18.11	65400	3.15	X	X	X	X	-	X	X
12A-3	60-3	117067	0.750	19.050	12.58	11.91	17.50	2.39	2.39	5.96	72.60	4.6	22.78	93400	4.55	X	X	X	X	-	X	X
16A-3	80-3	117087	1.000	25.400	15.75	15.88	24.05	3.25	3.25	7.93	91.90	5.4	29.29	166800	8.30	X	X	X	-	-	X	-
20A-3	100-3	117107	1.250	31.750	18.90	19.05	29.97	4.06	4.06	9.54	113.00	6.1	35.76	260200	12.60	X	X	X	-	-	X	-
24A-3	120-3	117127	1.500	38.100	25.23	22.23	35.89	4.80	4.80	11.11	141.70	6.6	45.44	373700	16.70	X	X	X	-	-	X	-

* Bush chain

** Renold chain far exceeds the ISO 606 minimum tensile strength requirement, but Renold do not consider that this figure provides a useful indicator to the key chain performance areas of wear and fatigue.

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