

# Hydro-Service®

*Superior corrosion resistance for chain*



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**RENOLD**

*Superior Chain Technology*

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# Renold Hydro-Service

## Superior corrosion resistance for chain

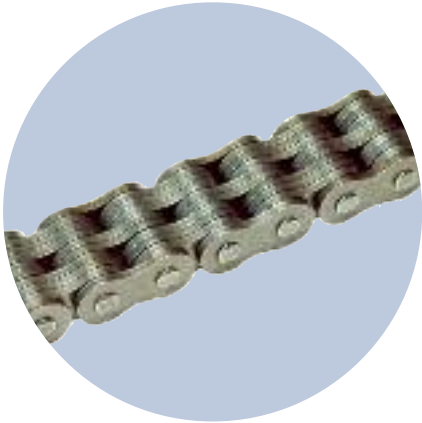
More and more applications demand chain that can withstand corrosion brought on by wash down or high moisture levels and the reassurance that the chain itself will not contaminate its immediate surroundings.

With conventional plating processes prone to chipping, flaking or peeling, there has to be a tough, durable solution that has all the right qualities. That's where Renold Hydro-Service® comes in.

Hydro-Service® is designed to resist corrosion and has been heavily used in packaging, bottling, food processing and wash down environments. Renold Hydro-Service® is treated with a mechanical zinc plating process with additional coatings applied for extra corrosion protection. The corrosion resistance of this coating in many wet, humid, saltwater or other moisture-related applications is far superior to standard nickel or zinc plating.

Unlike some products treated in a similar way for corrosion resistance, Hydro-Service® chain is hexavalent chrome-free, ensuring that it is safe and also environmentally friendly. This coating can be applied to standard or adapted, European (BS) or ANSI chain.





Remember, Hydro-Service® corrosion protection is available on roller chain, conveyor chain or leaf chain, European (BS) or ANSI, adapted or standard chain.

All components of the Hydro-Service® chain are treated prior to assembly in order to achieve full coverage and protection to all vital surfaces, not just external surfaces, ensuring a resistance to corrosion that's 30 times more effective than standard carbon steel chain. This helps to improve chain wear life and protect against corrosion-related pin and bush failures. Unlike conventional nickel or zinc platings, the Hydro-Service® treatment will not chip or peel. This extremely durable coating will continue to provide exceptional protection where other treatments fail.

#### Product features include:

- Excellent corrosion resistance
- Hexavalent chrome-free
- More than 30x the corrosion protection of conventional surface treatments
- No hydrogen embrittlement failures
- More economical than stainless steel chain
- Same strength and working load values as standard carbon steel chain

#### Potential Applications

- Saltwater environments
- Meat and poultry processing plants
- Vegetable processing plants
- Seafood processing plants
- Beverage plants
- Washdown equipment
- Outdoor applications



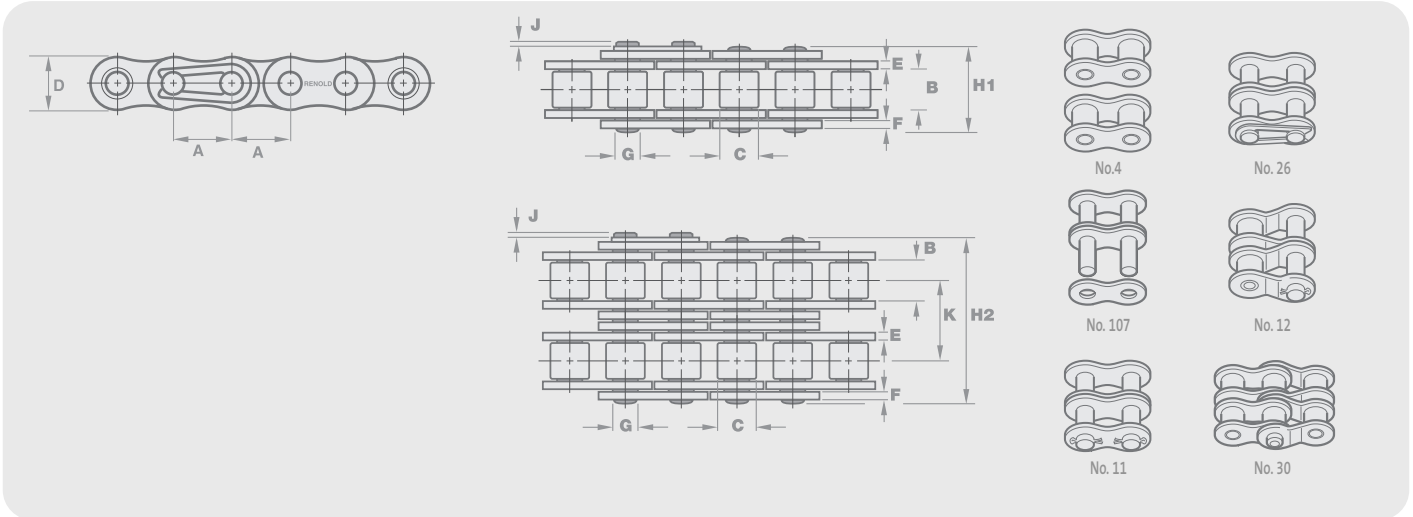
After 60 days of outdoor exposure, Hydro-Service® demonstrates the rust resistance that makes it the best choice for outdoor use.



After 14 days in and out of a 5% saltwater solution (equivalent to sea water) it can be seen that the Hydro-Service® coating will extend the chain life compared to conventional nickel plating or carbon steel in more challenging applications.



# Hydro-Service Standard Chain



Chain Ref.		Technical Details (mm)											Connecting Links							
Renold Chain No.	ISO Ref.	Pitch (inch)	Pitch (mm)	Inside Width	Roller Diam.	Plate Height	Plate Width Inner	Plate Width Outer	Pin Diam.	Pin Length	Conn. Link Extension	Transverse Pitch	ISO606 Tensile Strength (Newtons)	Weight (kg/m)	No. 4	No. 107	No. 11	No. 26	No. 12	No. 30
				MIN	MAX	MAX	MAX	MAX	MAX	MAX	MAX	NOM	MIN							

### European (BS) Standard - Simplex

		A	A	B	C	D	E	F	G	H1	J	K								
06B1HS	06B-1	0.375	9.525	5.720	6.350	8.260	1.300	1.040	3.280	13.500	3.300	-	8900	0.390	3	3	-	3	-	3
08B1HS	08B-1	0.500	12.700	7.750	8.510	11.810	1.550	1.550	4.450	17.000	3.900	-	17800	0.700	3	3	-	3	-	3
10B1HS	10B-1	0.625	15.875	9.650	10.160	14.730	1.550	1.550	5.080	18.800	1.300	-	22200	0.920	3	3	-	3	-	3
12B1HS	12B-1	0.750	19.050	11.680	12.070	16.130	1.800	1.800	5.720	21.900	1.100	-	28900	1.200	3	3	-	3	-	3
16B1HS	16B-1	1.000	25.400	17.020	15.880	21.080	4.120	3.100	8.280	36.100	5.400	-	60000	2.800	3	3	-	3	3	-
20B1HS	20B-1	1.250	31.750	19.560	19.050	26.420	4.620	3.610	10.190	43.200	6.100	-	95000	3.850	3	3	-	3	3	-
24B1HS	24B-1	1.500	38.100	25.400	25.400	33.400	6.100	5.080	14.630	53.400	6.600	-	160000	7.450	3	3	3	-	3	-

### European (BS) Standard - Duplex

		A	A	B	C	D	E	F	G	H2	J	K								
06B2HS	06B-2	0.375	9.525	5.720	6.350	8.260	1.300	1.040	3.280	23.000	1.300	10.240	16900	0.740	3	3	-	3	-	3
08B2HS	08B-2	0.500	12.700	7.750	8.510	11.810	1.550	1.550	4.450	30.400	1.500	13.920	31100	1.380	3	3	-	3	-	3
10B2HS	10B-2	0.625	15.875	9.650	10.160	14.730	1.550	1.550	5.080	35.400	1.300	16.590	44500	1.800	3	3	-	3	-	3
12B2HS	12B-2	0.750	19.050	11.680	12.070	16.130	1.800	1.800	5.720	41.400	1.100	19.460	57800	2.400	3	3	-	3	-	3
16B2HS	16B-2	1.000	25.400	17.020	15.880	21.080	4.120	3.100	8.280	68.000	5.400	31.880	106000	5.500	3	3	-	3	3	-
20B2HS	20B-2	1.250	31.750	19.560	19.050	26.420	4.620	3.610	10.190	76.700	2.700	36.450	170000	7.800	3	3	-	3	3	-
24B2HS	24B-2	1.500	38.100	25.400	25.400	33.400	6.100	5.080	14.630	101.300	6.800	48.360	280000	14.800	3	3	3	-	3	-

Chain Ref.		Technical Details (mm)											Connecting Links								
Renold Chain No.	ANSI Ref.	Pitch (inch)	Pitch (mm)	Inside Width	Roller Diam.	Plate Height	Plate Width Inner	Plate Width Outer	Pin Diam.	Pin Length	Conn. Link Extension	Transverse Pitch	ISO606 Tensile Strength (Newtons)	Weight (kg/m)	No. 4	No. 107	No. 11	No. 26	No. 58	No. 12	No. 30
				MIN	MAX	MAX	MAX	MAX	MAX	MAX	MAX	NOM	MIN								

### ANSI Standard - Simplex

		A	A	B	C	D	E	F	G	H1	J	K									
25A1HS	25-1	0.250	6.350	3.100	3.300	5.900	0.760	0.760	2.300	7.900	2.200	-	3500	0.130	3	3	-	3	-	-	3
35A1HS	35-1	0.375	9.525	4.680	5.080	9.050	1.300	1.300	3.590	12.000	1.100	-	7900	0.330	3	3	-	3	-	-	3
40A1HS	40-1	0.500	12.700	7.850	7.920	12.070	1.550	1.550	3.980	16.400	1.400	-	13900	0.600	3	3	3	3	-	-	3
50A1HS	50-1	0.625	15.875	9.400	10.160	15.090	2.030	2.030	5.090	20.400	1.100	-	21800	1.000	3	3	3	3	-	-	3
60A1HS	60-1	0.750	19.050	12.570	11.910	18.100	2.390	2.390	5.960	25.300	1.100	-	31300	1.470	3	3	3	3	-	-	3
80A1HS	80-1	1.000	25.400	15.750	15.880	24.130	3.250	3.250	7.940	32.700	3.000	-	55600	2.800	3	3	3	3	-	-	3
100A1HS	100-1	1.250	31.750	18.900	19.050	30.170	4.060	4.060	9.540	39.700	4.200	-	87000	4.200	3	3	3	3	-	-	3
120A1HS	120-1	1.500	38.100	25.230	22.230	36.200	4.800	4.800	11.110	49.300	5.300	-	125000	5.700	3	3	3	3	-	-	3

### ANSI Standard - Duplex

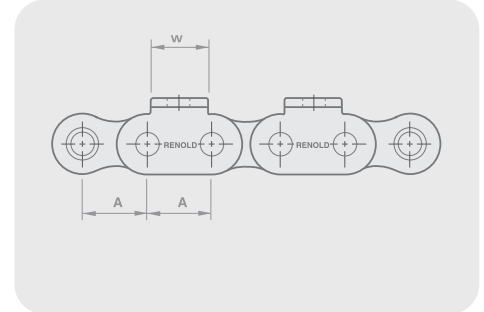
		A	A	B	C	D	E	F	G	H2	J	K									
25A2HS	25-2	0.250	6.350	3.100	3.300	6.020	0.760	0.760	2.300	15.500	2.200	6.400	7000	0.260	3	3	-	3	-	-	3
35A2HS	35-2	0.375	9.525	4.680	5.080	9.050	1.300	1.300	3.590	22.200	1.100	10.130	15800	0.650	3	3	-	3	-	-	3
40A2HS	40-2	0.500	12.700	7.850	7.920	12.070	1.550	1.550	3.980	30.800	1.400	14.380	27800	1.200	3	3	3	3	-	-	3
50A2HS	50-2	0.625	15.875	9.400	10.160	15.090	2.030	2.030	5.090	38.400	1.100	18.110	43600	2.100	3	3	3	3	-	-	3
60A2HS	60-2	0.750	19.050	12.570	11.910	18.100	2.390	2.390	5.960	48.100	1.100	22.780	62600	3.050	3	3	3	3	-	-	3
80A2HS	80-2	1.000	25.400	15.750	15.880	24.130	3.250	3.250	7.940	61.900	3.000	29.290	111200	5.500	3	3	3	3	-	-	3
100A2HS	100-2	1.250	31.750	18.900	19.050	30.170	4.060	4.060	9.540	75.400	4.200	35.760	174000	8.400	3	3	3	3	-	-	3
120A2HS	120-2	1.500	38.100	25.230	22.230	36.200	4.800	4.800	11.110	94.700	5.300	45.440	250000	11.000	3	3	3	3	-	-	3

# Hydro-Service

## Standard Chain Attachments

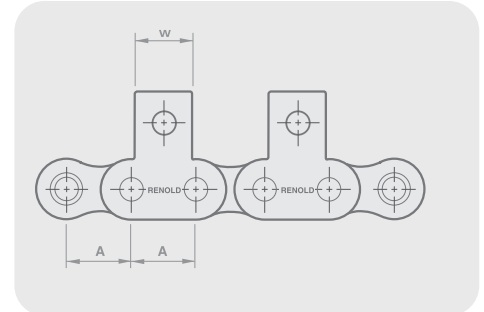
### European (BS) K1 attachments

Technical Details (mm)										
Chain No.	Pitch (inch)	Pitch (mm)								
	A	A	E	F	w	h	d	g	T	U
06B	0.375	9.525	1.250	1.000	8.000	6.700	3.300	4.100	19.600	28.500
08B	0.500	12.700	1.510	1.510	11.000	8.900	4.300	5.900	25.400	41.700
10B	0.625	15.875	1.510	1.510	14.000	10.300	5.300	6.800	31.800	49.600
12B	0.750	19.050	1.760	1.760	18.000	13.500	6.600	8.100	38.100	52.700
16B	1.000	25.400	3.700	3.000	24.000	15.900	6.600	10.500	50.800	85.600
20B	1.250	31.750	4.400	3.500	30.000	19.900	8.400	13.200	63.500	101.100
24B	1.500	38.100	5.400	5.000	36.000	28.000	10.500	16.700	88.000	124.700



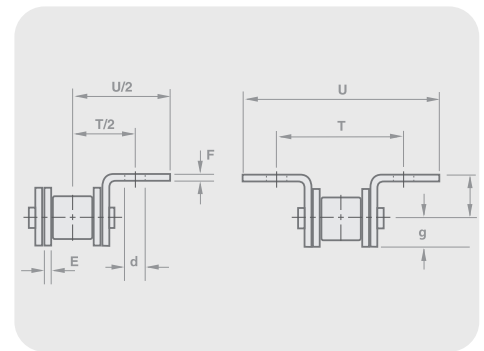
### European (BS) M1 attachments

Technical Details (mm)										
Chain No.	Pitch (inch)	Pitch (mm)								
	A	A	E	F	w	e	f	d	g	
06B	0.375	9.525	1.250	1.000	8.000	14.500	10.100	3.300	4.100	
08B	0.500	12.700	1.510	1.510	11.000	20.800	13.000	4.300	5.900	
10B	0.625	15.875	1.510	1.510	14.000	24.900	16.500	5.300	6.800	
12B	0.750	19.050	1.760	1.760	18.000	28.200	21.000	6.600	8.100	
16B	1.000	25.400	3.700	3.000	24.000	39.700	23.000	6.600	10.500	
20B	1.250	31.750	4.400	3.500	30.000	47.500	30.500	8.400	13.200	
24B	1.500	38.100	5.400	5.000	36.000	61.500	42.700	10.500	16.700	



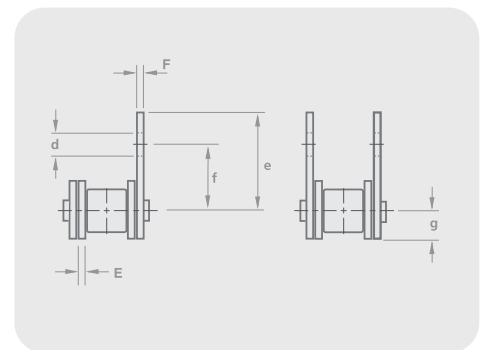
### ANSI standard K1 attachments

Technical Details (mm)										
Chain No.	Pitch (inch)	Pitch (mm)								
	A	A	E	F	w	h	d	g	T	U
35	0.375	9.525	1.270	1.270	8.001	6.350	2.794	4.318	19.050	28.194
40	0.500	12.700	1.521	1.521	9.507	7.906	3.202	6.015	25.319	35.327
50	0.625	15.875	2.032	2.032	12.710	10.308	5.204	7.546	31.824	46.055
60	0.750	19.050	2.392	2.392	15.912	12.149	5.204	9.047	38.129	54.271
80	1.000	25.400	3.152	3.152	19.064	15.887	6.735	11.439	50.839	70.133
100	1.250	31.750	3.962	3.962	25.400	19.837	8.357	14.808	63.500	86.665
120	1.500	38.100	4.673	4.673	28.778	23.012	10.363	17.424	76.200	111.887
140	1.750	44.450	5.563	5.563	34.925	28.575	11.913	20.447	88.900	126.238
160	2.000	50.800	6.350	6.350	38.100	31.750	13.894	23.368	101.600	143.662



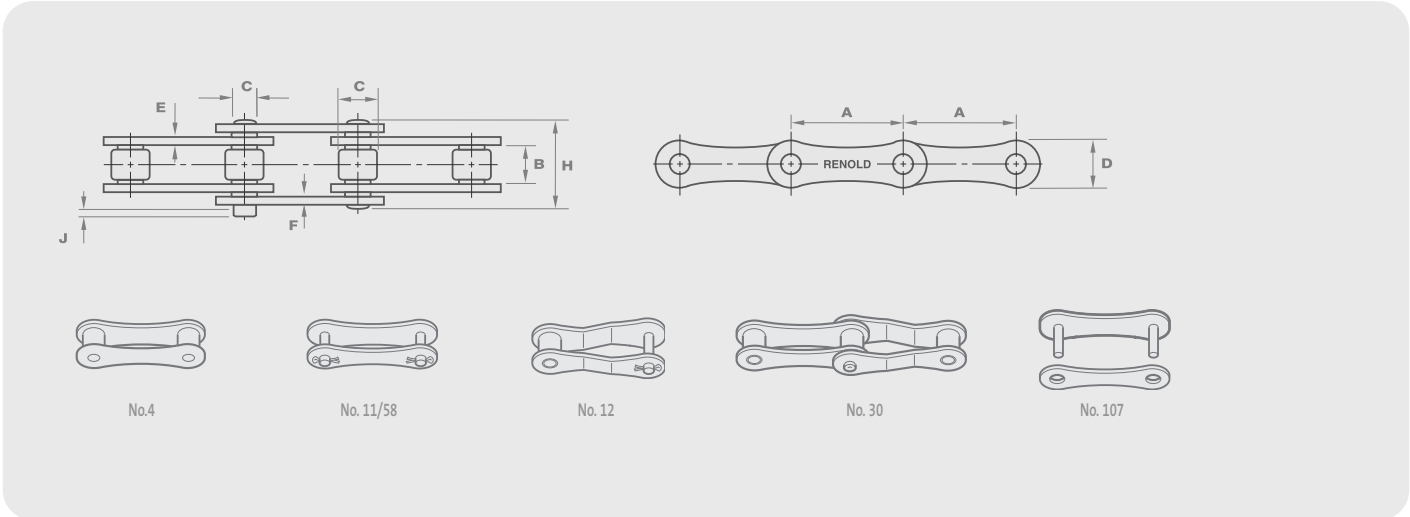
### ANSI standard M1 attachments

Technical Details (mm)										
Chain No.	Pitch (inch)	Pitch (mm)								
	A	A	E	F	w	e	f	d	g	
35	0.375	9.525	1.270	1.270	8.001	14.503	9.525	2.819	4.318	
40	0.500	12.700	1.521	1.521	9.507	17.413	12.429	3.202	6.015	
50	0.625	15.875	2.032	2.032	12.710	22.747	15.712	5.204	7.546	
60	0.750	19.050	2.392	2.392	15.912	26.380	18.204	5.204	9.047	
80	1.000	25.400	3.152	3.152	19.064	34.316	24.609	6.735	11.439	
100	1.250	31.750	3.988	3.988	25.400	43.180	31.750	8.357	14.808	
120	1.500	38.100	4.674	4.674	28.778	53.061	36.500	10.363	17.424	
140	1.750	44.450	5.563	5.563	34.925	63.094	44.450	12.598	20.447	
160	2.000	50.800	6.350	6.350	38.100	69.444	50.800	13.893	23.368	



# Hydro-Service

## Standard Double Pitch Chain



Chain Ref.		Technical Details (mm)													Connecting Links					
Renold Chain No.	ISO Ref.	Pitch (inch)	Pitch (mm)	Inside Width	Roller Diam.	Plate Height	Plate Width Inner	Plate Width Outer	Pin Diam.	Pin Length	Conn. Link Extension	Transverse Pitch	ISO606 Tensile Strength (Newtons)	Weight kg/m	No. 4	No. 107	No. 11	No. 12	No. 30	No. 58
				MIN	MAX	MAX	MAX	MAX	MAX	MAX	MAX	NOM	MIN							

### European (BS) Standard Double Pitch Chain - Conveyor Series

		A	A	B	C	D	E	F	G	H1	J	K									
533083	208B	1.000	25.400	7.750	8.510	11.430	1.550	1.550	4.450	16.600	3.900	-	17800	0.530	3	3	3	-	3	-	-
533103	210B	1.250	31.750	9.650	10.160	13.720	1.550	1.550	5.080	19.600	4.100	-	22200	0.660	3	3	3	-	3	-	-
533123	212B	1.500	38.100	11.680	12.070	15.880	1.800	1.800	5.720	22.700	4.600	-	28900	0.900	3	3	3	-	3	-	-

### European (BS) Standard Double Pitch Chain - Drive Series

		A	A	B	C	D	E	F	G	H2	J	K									
533168	216B-1	2.000	50.800	17.020	15.880	20.830	4.120	3.100	8.280	36.100	5.400	60000	1.800	3	3	3	-	3	-	-	
533203	220B-1	2.500	63.500	19.560	19.050	24.640	4.620	3.610	10.190	43.200	6.100	98070	2.450	3	3	3	3	-	-	-	
533243	224B-1	3.000	76.200	25.400	25.400	33.530	6.100	5.080	14.630	53.400	6.600	160000	4.800	3	3	3	3	-	-	-	
533323	232B-1	4.000	101.600	30.990	29.210	40.130	7.110	6.350	17.810	67.400	7.900	200000	5.950	3	3	3	-	-	-	-	

Chain Ref.		Technical Details (mm)													Connecting Links					
Renold Chain No.	ISO Ref.	Pitch (inch)	Pitch (mm)	Inside Width	Roller Diam.	Plate Height	Plate Width Inner	Plate Width Outer	Pin Diam.	Pin Length	Conn. Link Extension	Transverse Pitch	ISO606 Tensile Strength (Newtons)	Weight kg/m	No. 4	No. 107	No. 11	No. 12	No. 30	No. 58
				MIN	MAX	MAX	MAX	MAX	MAX	MAX	MAX	NOM	MIN							

### ANSI Standard Double Pitch Chain - Conveyor Series Standard Roller

		A	A	B	C	D	E	F	G	H1	J	K									
C2040HS	2040	1.000	25.400	7.850	7.950	11.800	1.500	1.500	3.970	16.400	3.900	-	14100	0.500	3	3	3	3	-	3	
C2050HS	2050	1.250	31.750	9.400	10.160	15.000	2.000	2.000	5.080	20.400	4.100	-	22200	0.840	3	3	3	3	-	3	
C2060HS	2060	1.500	38.100	12.570	11.910	17.800	3.170	3.170	5.950	28.600	4.600	-	38000	1.440	3	3	3	3	-	3	
C2080HS	2080	2.000	50.800	15.750	15.880	22.300	4.000	4.000	7.920	35.800	5.400	-	65000	2.350	3	3	3	3	-	3	
C2100HS	2100	2.500	63.500	19.000	19.050	28.800	4.750	4.750	9.540	42.400	4.300	-	137000	3.470	3	3	3	3	-	3	
C2120HS	2120	3.000	76.200	25.400	22.230	35.100	5.610	5.610	11.110	52.400	5.300	-	185900	4.930	3	3	3	3	-	3	
C2160HS	2160	4.000	101.600	31.500	28.580	47.900	7.300	7.300	14.290	65.600	6.700	-	305500	8.000	3	3	3	3	-	3	

### ANSI Standard Double Pitch Chain - Conveyor Series Large Roller

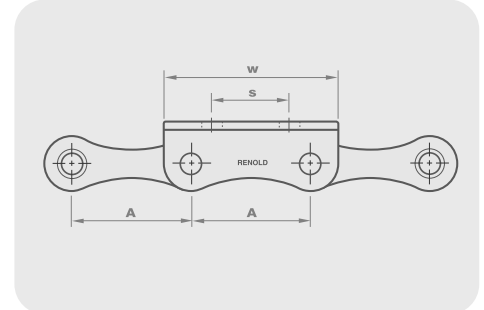
		A	A	B	C	D	E	F	G	H2	J	K									
C2042HS	2042	1.000	25.400	7.850	15.880	11.800	1.500	1.500	3.970	16.400	3.900	-	14100	0.820	3	3	3	3	-	3	
C2052HS	2052	1.250	31.750	9.400	19.050	15.000	2.000	2.000	5.090	20.400	4.100	-	22200	1.260	3	3	3	3	-	3	
C2062HS	2062H	1.500	38.100	12.570	22.230	17.800	3.170	3.170	5.950	28.600	4.600	-	38000	2.030	3	3	3	3	-	3	
C2082HS	2082H	2.000	50.800	15.750	28.580	22.300	4.000	4.000	7.920	35.800	5.400	-	65000	3.360	3	3	3	3	-	3	
C2102HS	2102	2.500	63.500	19.000	39.670	28.800	4.750	4.750	9.540	42.400	4.300	-	137000	5.650	3	3	3	3	-	3	
C2122HS	2122H	3.000	76.200	25.400	44.450	35.100	5.610	5.610	11.110	52.400	5.300	-	185900	7.900	3	3	3	3	-	3	
C2162HS	2162H	4.000	101.600	31.500	57.150	47.900	7.300	7.300	14.290	65.600	6.700	-	305500	12.800	3	3	3	3	-	3	

# Hydro-Service

## Standard Double Pitch Chain Attachments

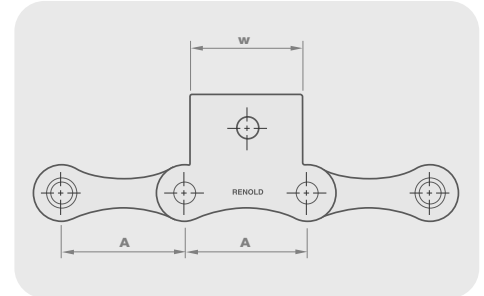
### European (BS) K1 attachments

Technical Details (mm)										
Chain No.	Pitch (inch)	Pitch (mm)								
	A	A	E	F	w	h	d	g	T	U
208B	1.000	25.400	1.510	1.510	23.800	8.500	4.300	5.800	27.600	42.500
210B	1.250	31.850	1.510	1.510	25.400	10.500	5.300	7.400	31.600	48.500
212B	1.500	38.100	1.760	1.760	20.000	12.200	6.400	8.200	35.200	54.800
216B	2.000	50.800	3.700	3.000	40.000	17.000	8.400	10.300	58.000	83.800
220B	2.500	63.500	4.400	4.100	40.000	21.000	10.500	11.300	69.000	98.700
224B	3.000	76.200	5.400	5.000	70.000	28.000	10.500	16.700	88.000	124.700
24B	1.500	38.100	5.400	5.000	36.000	28.000	10.500	16.700	88.000	124.700



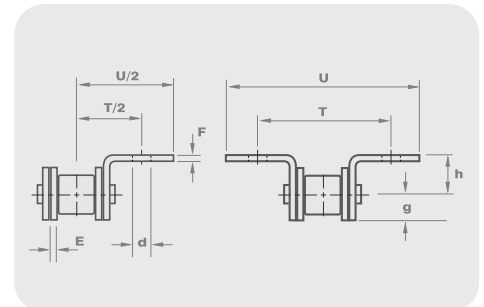
### European (BS) M1 attachments

Technical Details (mm)									
Chain No.	Pitch (inch)	Pitch (mm)							
	A	A	E	F	w	e	f	d	g
208B	1.000	25.400	1.510	1.510	23.800	20.800	13.700	4.300	5.800
210B	1.250	31.850	1.510	1.510	25.400	24.900	16.500	5.300	7.400
212B	1.500	38.100	1.730	1.730	20.000	28.300	18.500	6.400	8.200
216B	2.000	50.800	3.700	3.000	40.000	40.000	27.400	8.400	10.300
220B	2.500	63.500	4.400	4.100	40.000	48.700	33.000	10.500	11.300
224B	3.000	76.200	5.400	5.000	70.000	61.500	42.700	10.500	16.700



### ANSI standard K1 attachments

Technical Details (mm)									
Chain No.	Pitch (inch)	Pitch (mm)							
	A	A	E	F	w	e	f	d	g
C2040	1.000	25.400	1.524	1.524	19.050	19.888	11.100	5.309	5.740
C2050	1.250	31.750	2.007	2.007	23.800	24.613	14.300	7.112	7.391
C2060	1.500	38.100	3.175	3.175	28.600	30.201	17.501	8.407	8.788
C2080	2.000	50.800	3.988	3.988	38.100	40.488	22.200	10.389	10.287
C2100	2.500	63.500	4.750	4.750	47.625	50.394	31.750	13.894	14.300
C2120	3.000	76.200	5.563	5.563	57.150	54.762	37.313	15.875	17.475
C2160	4.000	101.600	7.137	7.137	76.200	76.200	50.800	21.031	23.825



### ANSI standard M1 attachments

Technical Details (mm)										
Chain No.	Pitch (inch)	Pitch (mm)								
	A	A	E	F	w	e	f	d	g	s
C2040	1.000	25.400	1.524	1.524	19.050	19.888	13.487	3.505	5.740	9.500
C2050	1.250	31.750	2.007	2.007	23.800	24.613	15.900	5.309	7.391	11.913
C2060	1.500	38.100	3.175	3.175	28.600	30.201	18.999	5.309	8.788	14.300
C2080	2.000	50.800	3.988	3.988	38.100	40.488	25.400	7.112	10.287	18.999
C2100	2.500	63.500	4.750	4.750	47.625	50.394	31.750	8.738	14.300	23.800
C2120	3.000	76.200	5.563	5.563	57.150	54.762	37.313	10.312	17.475	28.575
C2160	4.000	101.600	7.137	7.137	76.200	76.200	50.800	13.894	23.825	38.100

