

# OIL FIELD CHAIN

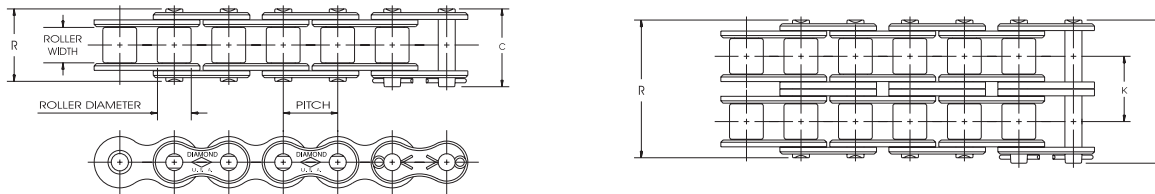
## Chain Descriptions and Dimensions

Roller chains used in the oil and natural gas industries are subjected to some of the greatest loads and harshest environments. These conditions are far more severe than usually found in industrial applications. These "Oil Field" chains can be either single strand or multiple strand and are typically constructed using Heavy Series components.

We produce our Oil Field chains with the same attention to detail that goes into all our products, but additionally these models are subjected to the most up to date API (American Petroleum Institute) Specification 7F performance testing. By examining the label on the box which proudly displays the API logo, users of our chains can be certain they are receiving the highest quality, best-performing product available. Only those companies which have established quality systems, approved and routinely audited, are authorized to display this symbol.



The following list of chain sizes and configurations are those which meet or exceed the performance criteria defined in API Specification 7F. It is highly recommended that multiple strand chains used in oil field applications be constructed with press-fit center plates. More information about press-fit construction is available in the Multiple Strand section of this product guide.



Dimensions in Inches and Pounds

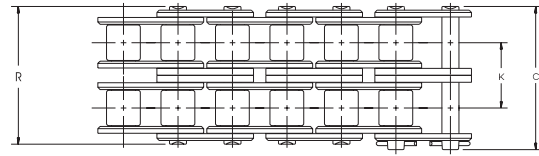
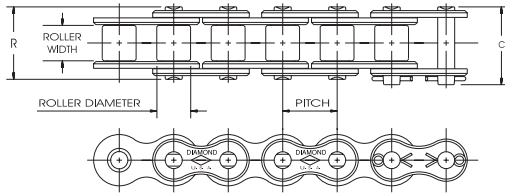
ASME/ANSI Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	K	Weight Per Foot	Average Tensile Strength
40	1/2	5/16	.312	.156	.060	.72	.67	—	.41	4000
40-2	1/2	5/16	.312	.156	.060	1.29	1.24	.566	.80	8000
40-3	1/2	5/16	.312	.156	.060	1.85	1.80	.566	1.20	12000
40-4	1/2	5/16	.312	.156	.060	2.42	2.37	.566	1.60	16000
40-6	1/2	5/16	.312	.156	.060	3.56	3.51	.566	2.42	24000
50	5/8	3/8	.400	.200	.080	.89	.83	—	.68	6600
50-2	5/8	3/8	.400	.200	.080	1.60	1.55	.713	1.32	13200
50-3	5/8	3/8	.400	.200	.080	2.31	2.26	.713	1.98	19800
50-4	5/8	3/8	.400	.200	.080	3.03	2.97	.713	2.64	26400
50-5	5/8	3/8	.400	.200	.080	3.75	3.69	.713	3.30	33000
50-6	5/8	3/8	.400	.200	.080	4.46	4.40	.713	3.96	39600
50-8	5/8	3/8	.400	.200	.080	5.89	5.83	.713	5.30	52800
50-10	5/8	3/8	.400	.200	.080	7.32	7.26	.713	6.62	66000
60	3/4	1/2	.469	.234	.094	1.11	1.04	—	.99	8500
60H	3/4	1/2	.469	.234	.125	1.24	1.17	—	1.18	8500
60-2	3/4	1/2	.469	.234	.094	2.01	1.94	.897	1.95	17000
60H-2	3/4	1/2	.469	.234	.125	2.27	2.20	1.028	2.33	17000
60-3	3/4	1/2	.469	.234	.094	2.91	2.84	.897	2.88	25500
60H-3	3/4	1/2	.469	.234	.125	3.31	3.24	1.028	3.47	25500
60-4	3/4	1/2	.469	.234	.094	3.81	3.74	.897	3.90	34000
60H-4	3/4	1/2	.469	.234	.125	4.34	4.26	1.028	4.61	34000
60-5	3/4	1/2	.469	.234	.094	4.71	4.64	.897	4.97	42500
60-6	3/4	1/2	.469	.234	.094	5.60	5.53	.897	5.96	51000
60-8	3/4	1/2	.469	.234	.094	7.40	7.33	.897	7.94	68000
60-10	3/4	1/2	.469	.234	.094	9.19	9.12	.897	9.92	85000

ASME/ANSI 60 and larger chains are available as cottered or riveted type design. Multiple strand chains are available with slip-fit (standard) or press-fit center plates.

Chart continues on next page.

# OIL FIELD CHAIN

## Chain Descriptions and Dimensions



Dimensions in Inches and Pounds

Chart continued from previous page.

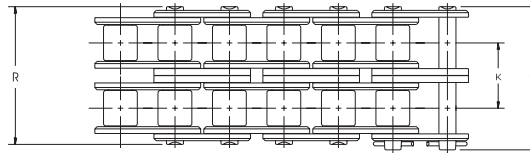
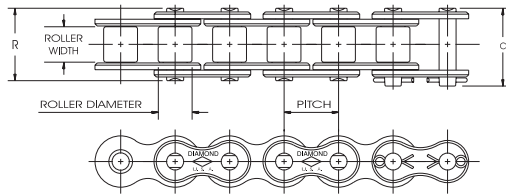
ASME/ANSI Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	K	Weight Per Foot	Average Tensile Strength
80	1	5/8	.625	.312	.125	1.44	1.32	—	1.73	14500
80H	1	5/8	.625	.312	.156	1.57	1.45	—	2.02	14500
80-2	1	5/8	.625	.312	.125	2.59	2.47	1.153	3.37	29000
80H-2	1	5/8	.625	.312	.156	2.84	2.72	1.283	3.93	29000
80-3	1	5/8	.625	.312	.125	3.74	3.62	1.153	5.02	43500
80H-3	1	5/8	.625	.312	.156	4.14	4.02	1.283	5.92	43500
80-4	1	5/8	.625	.312	.125	4.90	4.79	1.153	6.73	58000
80H-4	1	5/8	.625	.312	.156	5.42	5.30	1.283	7.87	58000
80-5	1	5/8	.625	.312	.125	6.06	5.94	1.153	8.40	72500
80-6	1	5/8	.625	.312	.125	7.22	7.10	1.153	10.07	87000
80-8	1	5/8	.625	.312	.125	9.53	9.40	1.153	13.41	116000
100	1 1/4	3/4	.750	.375	.156	1.73	1.61	—	2.51	24000
100H	1 1/4	3/4	.750	.375	.187	1.86	1.74	—	2.82	24000
100-2	1 1/4	3/4	.750	.375	.156	3.14	3.02	1.408	4.91	48000
100H-2	1 1/4	3/4	.750	.375	.187	3.41	3.28	1.539	5.58	48000
100-3	1 1/4	3/4	.750	.375	.156	4.56	4.43	1.408	7.40	72000
100H-3	1 1/4	3/4	.750	.375	.187	4.95	4.82	1.539	8.32	72000
100-4	1 1/4	3/4	.750	.375	.156	5.97	5.84	1.408	9.80	96000
100H-4	1 1/4	3/4	.750	.375	.187	6.49	6.37	1.539	11.04	96000
100-5	1 1/4	3/4	.750	.375	.156	7.38	7.25	1.408	12.20	120000
100-6	1 1/4	3/4	.750	.375	.156	8.78	8.66	1.408	14.60	144000
100-8	1 1/4	3/4	.750	.375	.156	11.60	11.48	1.408	19.40	192000
120	1 1/2	1	.875	.437	.187	2.14	2.00	—	3.69	34000
120H	1 1/2	1	.875	.437	.219	2.27	2.13	—	4.08	34000
120-2	1 1/2	1	.875	.437	.187	3.93	3.79	1.789	7.35	68000
120H-2	1 1/2	1	.875	.437	.219	4.20	4.06	1.924	8.04	68000
120-3	1 1/2	1	.875	.437	.187	5.72	5.58	1.789	11.10	102000
120H-3	1 1/2	1	.875	.437	.219	6.13	5.99	1.924	11.99	102000
120-4	1 1/2	1	.875	.437	.187	7.52	7.38	1.789	14.70	136000
120H-4	1 1/2	1	.875	.437	.219	8.06	7.92	1.924	15.94	136000
120-5	1 1/2	1	.875	.437	.187	9.31	9.17	1.789	18.43	170000
120-6	1 1/2	1	.875	.437	.187	11.10	10.96	1.789	22.11	204000
120H-6	1 1/2	1	.875	.437	.219	11.91	11.77	1.924	23.84	204000
120-8	1 1/2	1	.875	.437	.187	14.68	14.54	1.789	29.47	272000
120-10	1 1/2	1	.875	.437	.187	18.26	18.12	1.789	36.83	340000
140	1 3/4	1	1.000	.500	.219	2.31	2.14	—	5.00	46000
140H	1 3/4	1	1.000	.500	.250	2.44	2.28	—	5.40	46000
140-2	1 3/4	1	1.000	.500	.219	4.24	4.07	1.924	9.65	92000
140H-2	1 3/4	1	1.000	.500	.250	4.50	4.34	2.055	10.65	92000
140-3	1 3/4	1	1.000	.500	.219	6.16	6.00	1.924	14.30	138000
140H-3	1 3/4	1	1.000	.500	.250	6.56	6.39	2.055	15.90	138000
140-4	1 3/4	1	1.000	.500	.219	8.09	7.93	1.924	18.95	184000
140H-4	1 3/4	1	1.000	.500	.250	8.62	8.45	2.055	21.10	184000
140-6	1 3/4	1	1.000	.500	.219	11.94	11.78	1.924	28.25	276000

ASME/ANSI 60 and larger chains are available as cottered or riveted type design. Multiple strand chains are available with slip-fit (standard) or press-fit center plates.

Chart continues on next page.

# OIL FIELD CHAIN

## Chain Descriptions and Dimensions



Dimensions in Inches and Pounds

Chart continued from previous page.

ASME/ANSI Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	K	Weight Per Foot	Average Tensile Strength
160	2	1¼	1.125	.562	.250	2.73	2.54	—	6.53	58000
160H	2	1¼	1.125	.562	.281	2.86	2.68	—	7.03	58000
160-2	2	1¼	1.125	.562	.250	5.04	4.85	2.305	12.83	116000
160H-2	2	1¼	1.125	.562	.281	5.30	5.12	2.436	13.88	116000
160-3	2	1¼	1.125	.562	.250	7.35	7.16	2.305	19.03	174000
160H-3	2	1¼	1.125	.562	.281	7.75	7.56	2.436	20.68	174000
160-4	2	1¼	1.125	.562	.250	9.66	9.47	2.305	25.60	232000
160H-4	2	1¼	1.125	.562	.281	10.17	10.00	2.436	27.62	232000
160-6	2	1¼	1.125	.562	.250	14.27	14.09	2.305	37.78	348000
180	2¼	1 <sup>13</sup> / <sub>32</sub>	1.406	.687	.281	3.15	2.88	—	9.06	76000
180H	2¼	1 <sup>13</sup> / <sub>32</sub>	1.406	.687	.312	3.28	3.01	—	9.59	76000
180-2	2¼	1 <sup>13</sup> / <sub>32</sub>	1.406	.687	.281	5.75	5.48	2.592	17.67	152000
180H-2	2¼	1 <sup>13</sup> / <sub>32</sub>	1.406	.687	.312	6.00	5.73	2.723	18.86	152000
180-3	2¼	1 <sup>13</sup> / <sub>32</sub>	1.406	.687	.281	8.34	8.07	2.592	26.20	228000
180H-3	2¼	1 <sup>13</sup> / <sub>32</sub>	1.406	.687	.312	8.73	8.46	2.723	28.14	228000
200	2½	1½	1.562	.781	.312	3.44	3.12	—	10.65	95000
200H	2½	1½	1.562	.781	.375	3.71	3.39	—	13.38	110000
200-2	2½	1½	1.562	.781	.312	6.26	5.94	2.817	21.50	190000
200H-2	2½	1½	1.562	.781	.375	6.79	6.48	3.083	26.38	220000
200-3	2½	1½	1.562	.781	.312	9.08	8.76	2.817	32.30	285000
200H-3	2½	1½	1.562	.781	.375	9.88	9.56	3.083	40.85	330000
200-4	2½	1½	1.562	.781	.312	11.90	11.58	2.817	42.90	380000
200-6	2½	1½	1.562	.781	.312	17.52	17.21	2.817	64.50	570000
240	3	1⅞	1.875	.937	.375	4.32	3.83	....	17.03	157600
240H	3	1⅞	1.875	.937	.500	4.85	4.35	....	21.08	157600
240-2	3	1⅞	1.875	.937	.375	7.77	7.27	3.458	33.44	315200
240-3	3	1⅞	1.875	.937	.375	11.23	10.73	3.458	49.77	472800

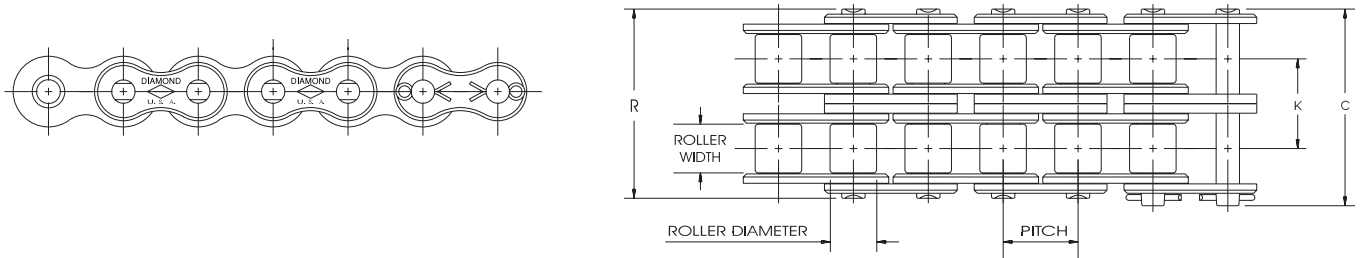
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# OIL FIELD CHAIN

## Chain Descriptions and Dimensions



Additionally, Diamond produces a narrow width 1-½" pitch roller chain for some of the older rigs and associated equipment as well as 2-½" pitch chain with a special larger pin diameter. These chains do not fall under the ASME/ANSI standards and therefore are not covered by API. Diamond still produces these non-standard chain to the highest quality standards, ensuring its superior performance.

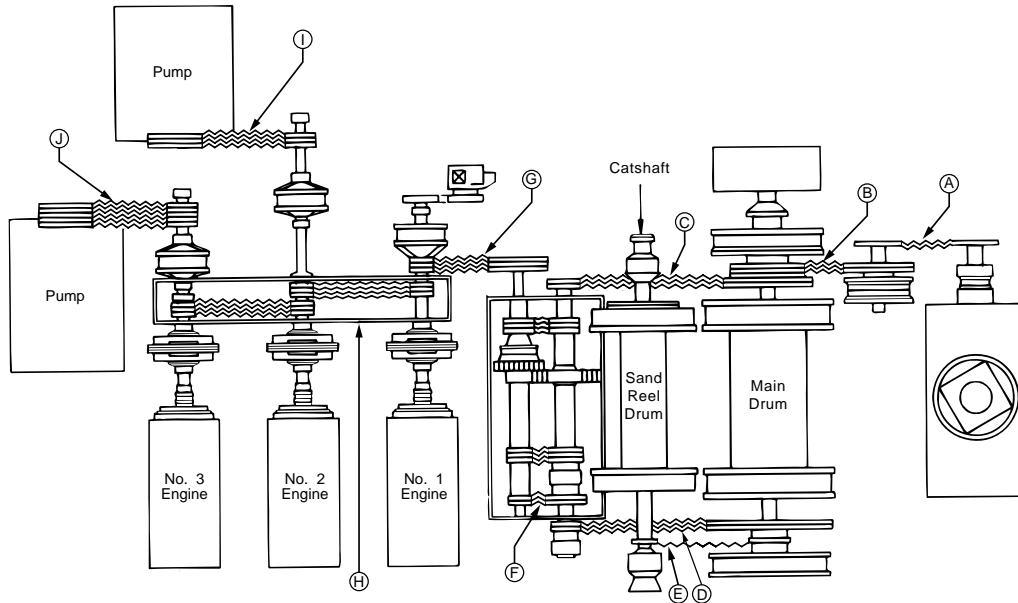


Dimensions in Inches and Pounds

Diamond Number	Other ID	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	K	Weight Per Foot	Average Tensile Strength
472	....	1½	¾	.875	.437	.187	1.93	1.80	....	3.41	34000
472-2	....	1½	¾	.875	.437	.187	3.45	3.30	1.55	6.76	68000
472-3	....	1½	¾	.875	.437	.187	5.00	4.85	1.55	10.08	102000
472-4	....	1½	¾	.875	.437	.187	6.55	6.41	1.55	13.40	136000
264	64S	2½	1½	1.562	.875	.375	3.71	3.39	...	13.68	148500
264-3	64S-3	2½	1½	1.562	.875	.375	9.88	9.56	3.083	40.92	445500

# OIL FIELD CHAIN

## Chain Descriptions and Dimensions



Chain Drive	Rig Horsepower						
	4000	3000	2000	1500	1000	750	500
A. Rotary Table	160-2	160-2 200H-1	160-2	160-2 140-2	140-2 160-1	140-2 160-1	140-1 120-1
B. Rotary Countershaft	160-2	160-2 200H-1	160-2	160-2 140-2	140-2 160-1	140-2 160-1	140-1 120-1
C. High Drum	240-3	200H-3	160-4	160-3	140-3 160-2	160-2 140-2	120-3 140-2
D. Low Drum	240-3	200H-3	160-4	160-3	140-3 160-2	160-2 140-3	120-3 140-2
E. Catshaft	160-2	160-2 200H-1	160-2	160-1 140-2	160-1 140-2	160-1 140-2	140-1 120-1
F. Transmission	140-8	160-4 200H-3	160-4 160-3	160-3	160-2 140-3	140-2	120-2 100-3
G. Drawworks Input	140-8	120-8	120-6	120-4	120-3 120-4	100-4	100-3 100-4
H. Compound	140-8	120-8	120-6	120-4	120-3 120-4	100-4	100-3
I. & J. Mud Pump Drives	140-8	120-8	120-8 120-6	120-6 120-4	120-4 120-3	100-6 100-4	100-4 100-3