

SPECIAL APPLICATION CHAIN

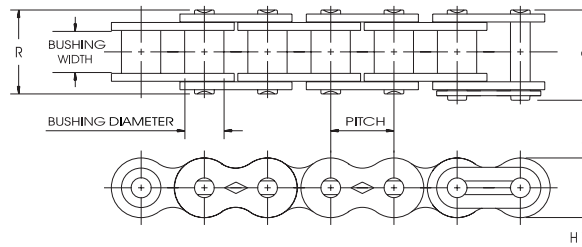
Chain Descriptions and Dimensions



Micropitch® Chain

Micropitch chain, originally developed for use in electronic equipment for the aircraft industry, is made using standard bushing type construction which offers a large joint bearing area. This larger area permits greater loads and speeds. Micropitch chain is constructed entirely of non-magnetic stainless steel and is well suited for precision applications such as instrumentation devices and printers/plotters.

Micropitch chain is applied on the basis of maximum working loads imposed in the drive. For chain speed less than 100 feet per minute, maximum working load should not exceed 20 pounds. For speeds greater than 100 feet per minute, the maximum working load should be reduced depending upon the specifics of the drive. As a general rule, working loads should not exceed 12 pounds for chain speed greater than 500 feet per minute. Contact Diamond's applications engineering department for more information.



Dimensions in Inches and Pounds

Diamond Number	Pitch Inches	Bushing Width	Bushing Diameter	Pin Diameter	Link Plate Thickness	H	C	R	Average Tensile Strength
47SS	.147	.072	.090	.062	.015	.138	.250	.220	180

Powersports Chain

Diamond's Powersports chains are designed to meet the individual needs of the powersports enthusiast for ATVs, go-karts, motorcycles and snowmobiles. Multi-Service chains, Duralube® chains and RING LEADER® O-ring chains each offer specific functional advantages for your street, farm, track or trail applications.

MULTI-SERVICE chains – though referred to as standard chain – are anything but. Multi-Service chains offer Diamond's superior manufacturing parts processing technology which includes material selection, precise component fabrication, exacting heat treatment and assembly techniques.

DURALUBE® chains eliminate "hit or miss" lubrication. This chain is constructed using a one-piece powdered metal bushing/roller combination which has lubricant drawn in under vacuum. In service, this lubricant is released and provides supplemental lubrication to the pin/bushing joint between regularly scheduled maintenance.

RING LEADER® O-ring chains are top of the line chains offering allowable working loads that provide extra load carrying capability and up to four times the service life of regular chains. O-ring lubrication system seals in lubricant and seals out foreign contaminants. Appearance options on some models include:

Brass Plated chains for the flashy high-end "gold look" shine and rust resistant finish.

Nickel Plated chains for the classy "chrome or silver look" shine and rust resistant finish.

Standard steel chains for the "back to basics look."

SPECIAL APPLICATION CHAIN

Chain Descriptions and Dimensions

PowerSports Chain

Dimensions in Inches and Pounds

Diamond Number	Plating	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	K	Weight Per Foot	Average Tensile Strength
35MS	....	3/8	3/16	*.200	.141	.050	.56	.50	....	.210	2000
35MS BR	Brass	3/8	3/16	*.200	.141	.050	.56	.50	....	.210	2000
35-2MS	....	3/8	3/16	*.200	.141	.050	.96	.90	.399	.450	4200
35-3**	....	3/8	3/16	*.200	.141	.050	1.36	1.31	.399	.770	6300
41MS	....	1/2	1/4	.306	.141	.050	.65	.57	....	.260	2400
40 DL	....	1/2	5/16	.312	.156	.060	.72	.67	....	.400	3300
40MS	....	1/2	5/16	.312	.156	.060	.72	.67	....	.410	4000
428MS	....	1/2	5/16	.335	.174	.060	.72	.67	....	.430	4200
428-2	....	1/2	5/16	.335	.174	.060	1.29	1.24	.566	.880	8400
520MS	....	5/8	1/4	.400	.200	.080	.77	.71	....	.590	6600
520H	Brass	5/8	1/4	.400	.214	.094	.80	.74	....	.820	9300
520XLO	....	5/8	1/4	.400	.214	.094	.89	.83	....	.850	9300
520XLO NI	Nickel	5/8	1/4	.400	.214	.094	.89	.83	....	.860	9300
520XLO BP	Brass	5/8	1/4	.400	.214	.094	.89	.83	....	.860	9300
530MS	....	5/8	3/8	.400	.200	.080	.89	.83	....	.680	6600
530ENP	Nickel	5/8	3/8	.400	.200	.080	.89	.83	....	.690	6600
530BP	Brass	5/8	3/8	.400	.200	.080	.89	.83	....	.680	6600
530DL	....	5/8	3/8	.400	.200	.086	.89	.83	....	.650	6600
530XLO	....	5/8	3/8	.400	.214	.094	1.02	.96	....	.930	9300
530XLO BP	Brass	5/8	3/8	.400	.214	.094	1.02	.96	....	.930	9300
630MS	....	3/4	3/8	.469	.234	.094	.98	.91	....	.910	8500
630BP	Brass	3/4	3/8	.469	.234	.094	.98	.91	....	.910	8500

* These chains are rollerless – dimension shown is bushing diameter.

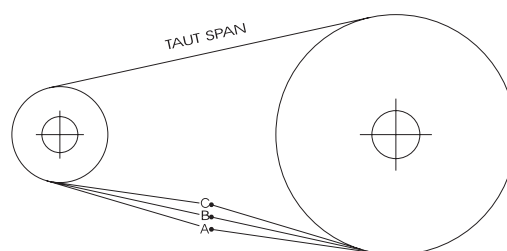
** Chain uses oval contour sideplates and is supplied riveted endless.

Maintenance and Lubrication

Diamond exercises rigid controls and surveillance throughout production to ensure uniformity of all component parts. Of course, no matter how superior a roller chain, its full potential will not be realized if it's not properly installed and maintained.

Tensioning

If the chain is too tight or too loose, service life will suffer. A chain that is too tight creates unnecessary wear. A chain that is too slack can easily top the sprocket teeth and quickly cause a failure. Consult powersports equipment manufacturer's manual for proper tensioning and mid-span movement.



MID-SPAN MOVEMENT

Cleaning and Re-lubrication

Perhaps the largest contributor to shortened chain life is inadequate lubrication. All working parts of a chain should be lubricated uniformly. The use of the highest viscosity oil that allows for flow between the link plates and coats pin-bushing areas will normally provide the greatest wear resistance. Clean and lubricate chain periodically as riding situations warrant.