GENERAL CATALOG
LIFTING PRODUCTS

MILLER™
LIFTING PRODUCTS

High Quality Lifting Products since 1935

www.millerproducts.net

Product Line at a Glance

Ball Bearing Swivels (Y-Link)

54 standard types cover virtually every combination of shank and cap styles. Working loads from ½ to 1000 tons. All equipped with precision ground angular contact ball bearings for low torque under load, maximum reliability, efficiency, and long service life. Best in class.

See pages 11 - 18

Thrust Bearing Swivels (Econo-Link)

Our economy priced models are designed to minimize costs without sacrificing traditional Miller quality. Fitted with factory lubricated tapered roller thrust bearings and forged steel hooks. For rope sizes ½" to 1" and working loads to 15 tons. Available insulated 2,000VDC

See pages 19 - 20

Special Swivels

Many special adaptations are available for special environments and applications. These include water tightness, high pressure and pressure compensating and stainless steel models for marine or corrosive industrial environments, undersea construction, tailored end fitting combinations, heavy wall for demolition, line-stringing, extra overhaul weight, etc. HD-Link, G-Link, Hydro-Link….

See pages 21 - 34

Overhaul Balls/Split Balls

Featuring Miller angular contact bearing swivels, our overhaul balls help prevent wire rope twist and lengthen rope life. A wide variety of split balls and headache ball assemblies are available with eye, wedge, and clevis connection fittings. Standard overhaul weights to 1350 lbs. with larger models to suit.

See pages 35- 40

Economy Weight Balls

Low cost swivelers use Miller Econo-Link factory lubricated thrust bearing swivels and have overhaul weights to 575 lbs. For working loads of 3 to 15 tons, ½" to 1" wire rope. Extremely compact design maximizes lift range. Well suited for mobile applications.

See page 41

Hi-Lift Blocks and Sheaves

Miller Hi-Lift Crane Blocks' welded, super-rigid construction makes for the most rugged and dimensionally stable block available, providing for a long and reliable service life. Miller blocks come standard with DIN 15400 hooks. The integrated sheave guard guides the rope for easier threading and eliminates the possibility of the rope jumping the sheaves. Sheaves for our Hi-Lift Blocks are cast or roll forged and are equipped with cylindrical or tapered roller bearings, or bronze bushings by request.

See pages 42 - 52

Miller Mobile Crane Blocks

feature an extended design to allow reeving with the rope end fitting in place, DIN 15401 single or DIN 15402 duplex hooks with locking latches, and double-row full complement cylindrical roller bearings in the sheaves. Standard sizes to 80 tons with up to 7 sheaves with larger designs available on request.

See pages 53 - 60

Overhead Crane Blocks

Miller overhead crane blocks are produced to suit your application and are available to 300 tons WLL and for all CMAA service classes or to other requirements. Single and duplex hooks, locking hooks, insulated and motorized models available.

See pages 61 -62

Forged Hooks

Miller stocks a line of hooks certified to the DIN hook standards 15401 and 15402 for single and double hooks. The DIN standards are intricately detailed standards of German origin and DIN hooks are used worldwide by the very best names in the lifting equipment industry. Hooks are available in the raw forged state or machined with matching nut to safely and reliably suit your application.

Duplex, quad and custom-forged types are available. Also Eye Hooks to 400 tons WLL including ROV-ready.

See pages 63 - 74

Insulating Links - (ISO/Link) For Power Line Safety, and More

Insulating links on Miller Swivels and Miller Blocks, or our non-swiveling insulating link alone, fitted to your specific situation can help protect against injury or death caused by crane boom or wire line contact with overhead power lines. Miller pioneered this technology over 50 years ago with generations of design improvement. Miller's ISO/Link-AC provides for outdoor crane electrical safety with working loads to 60 tons. Our ISO/Link-DC with load ratings to 60 tons is made for industrial applications where isolation of high currents from the building grid, as in induction heating or industrial welding, is necessary.

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GLOSSARY

Important Terms Defined:

DESIGN (SAFETY) FACTOR: The Ultimate Load divided by the Working Load Limit expressed as a ratio, e.g., 5:1. The Design Safety Factor (or Design Factor) denotes a product's theoretical reserve capability and is not the load rating of the product. See Working Load Limit below.

MEAN BREAKING LOAD (MBL): Similar to Ultimate Load, also the average load at which the product no longer supports the load or fails, used more typically with respect to chain and chain-related hardware.

PROOF LOAD: The average load to which a product may be subjected before physical deformation occurs. This is also the average force applied during a Proof Load Test. Miller products in this catalog have a maximum Proof Load of twice the Working Load Limit, except where otherwise indicated.

PROOF LOAD TEST: A load test of the product conducted at the specified Proof Load for the purpose of detecting material or manufacturing defects.

SHOCK LOADING: A dynamic increase in loading on the product caused by the sudden take up of slack, shifting or jerking of the load, or impact on the load or the product resulting in a significant increase beyond the static load.

SHORT TON (TON) - The unit of mass on which most Miller Lifting Products' capacities, load limits, etc. are based. Commonly used throughout the U.S. and Canada, the short ton equals 2,000 lbs and differs from the "metric ton" (SI) which equals 2,205 lbs and the "long ton" (UK tonne) which equals 2,240 pounds.

METRIC TON (MT) - The SI unit of mass equal to 1000 kilograms or 2,205 lbs. Some Miller Lifting Products capacities, load limits, etc. are expressed in metric tons.

LONG TON (TONNE) - The traditional UK unit of mass equal to 2,240 lbs or 1016 kg. No Miller Lifting Products capacities, load limits, etc. are expressed in long tons. Rarely used outside the UK, the long ton ceased to be legal for trade in 1985.

STATIC LOAD: The load resulting from a constant applied force.

WORKING LOAD: The maximum load which the product is authorized to support in a specific application, equal to or less than the Working Load Limit (WLL).

WORKING LOAD LIMIT (WLL): The maximum static load the product is intended to support in general service with the load being applied uniformly in direct axial tension relative to the centerline of the product. Working Load Limits do not apply to shock loading, hook tip loading, side loading, bending, torsional or other non-axial loading. The Working Load Limit reflects Miller's engineering evaluation and should never be exceeded regardless of the size or strength of the wire rope, synthetic rope, chain, etc. This term is used interchangeably with the following terms:

- Safe Working Load (SWL)
- Safe Working Limit
- Rated Load Value
- Maximum Load Limit
- Resultant Working Load

ULTIMATE LOAD: The average load at which the product fails or no longer supports the load.

YIELD POINT: The point between the Proof Load and the Ultimate Load at which permanent deformation occurs. Note that this deformation may not be visible.

WARNINGS AND PRECAUTIONS

All ratings shown in any Miller literature are based on the products being in a new and unused condition. When selecting a product, consideration must be given to the greatest load the product will see, therefore, shock loading must be considered in the overall system design.

All products manufactured by Miller Products are sold with the express understanding that the customer is thoroughly familiar with the safe and proper use and application of the product.

In selecting a Miller product, such factors as extreme heat or cold, excess humidity, moisture, contaminated air, etc. must be considered since these may adversely affect longevity, performance and *Working Load Limit.*

Do not immerse any standard Miller product in water. Contact the factory for assistance in selecting the special product designed to meet fresh and saltwater applications.

Lift only those loads for which the Miller product is designed. Federal crane regulations prohibit the transport of personnel on any load or wire rope attachment (OSHA 1910, 180-h-3-v).

Miller products are generally designed for applications of tension or straight pull. Side loading must be avoided since it exerts additional force which the product is not designed to accommodate.

HOOK LATCHES - All Miller products that utilize hooks are equipped at the factory with hook latches. The only function of a hook latch is to retain loose slings or devices under slack conditions, i.e. no load. They are not intended to be anti-fouling devices, so caution should be used to prevent the latch from supporting any of the load. Routine inspection of the latches must be made to ensure their proper operating conditions. Hook applications might require other hook latches. Should you have any questions regarding hook latches, contact the factory.

WHENEVER WEDGE SOCKETS ARE UTILIZED THESE TWO PRECAUTIONS MUST BE TAKEN:
1. When installing wire rope always pre-load the wedge with the wire rope in place. Then attach the end of the rope to the main line with the first clip to be located directly above the socket. It is imperative that the clips and clamps be installed precisely as specified by the manufacturers and in the number and sizes approved by the fitting manufacturers.
2. Make allowance for the crimping effect common with all types of wedge sockets. Experience shows the *Maximum Load Limit* on a line will be reduced by 20% or more with this type of fitting.

NEVER WELD ON ANY MILLER PRODUCT. Should any modification or repairs be required on any Miller product, contact the factory for information.

INSPECT AND MAINTAIN REGULARLY. All Miller products are mechanical components and are subject to wear. Worn components do not have the same *Working Load Limit* as do new components. The total responsibility for the inspection, maintenance and continued use is entirely up to the purchaser/user. Remember, visual inspection may not be sufficient and examination methods such as X-ray, ultrasonic testing, magnetic particle inspection, dielectric resistance and others, might be required to establish the present integrity of the product. Check to see that your equipment is being inspected and tested in accordance with all applicable governmental rules and regulations. Should any Miller products become worn and in need of repair, the responsibility for the actual repair work will be borne solely by the party making such repairs. It is recommended that the factory be contacted should there be any questions whatsoever relating to a repair. See Maintenance and Inspection.

INSULATING LINKS – ELECTRICAL PERFORMANCE OF INSULATING LINKS DEGRADES WHEN LINKS ARE NOT KEPT FREE OF SURFACE DIRT AND CONTAMINATION. INSULATING LINK VOLTAGE RATINGS ASSUME CELAN AND DRY LINKS AND A DRY ENVIRONMENT. In the case of ELECTRICAL POWER LINE SAFETY use of an insulating link alone in the absence of other required measures is NOT ACCEPTABLE. OSHA power line safety requirements involving the use of cranes and derricks can be found in US federal regulation 29 CFR Part 1926, latest edition.

REMEMBER: External factors will affect the longevity of the product. There is no defined period for the useful life of any Miller product. It is the user's responsibility to maintain and check the product. Even after a short period of use circumstances may require the product to be withdrawn from service. Should any questions arise during the inspection of any Miller product that relate to its intended application or need for repair, promptly remove the product from service

PROOF LOAD – The recommended proof load on all items in this catalog is 2 times the Working Load Limit unless otherwise indicated.

SPARE PARTS - Use only new genuine Miller parts for replacement or repair.

PRODUCT LABELS – Per ANSI 535.4-1991 labels should be inspected and cleaned and safety related labels replaced when no longer legible. Contact Miller for replacements.

DIMENSIONS in this catalog are generally nominal dimensions in inches unless otherwise indicated. Where tolerance information is needed but is not indicated please contact Miller for applicable tolerances.

WEIGHTS in this catalog are generally in pounds unless otherwise indicated.

MAINTENANCE and INSPECTION

COMPANY POLICY: The following are the minimum suggested maintenance practices we recommend based upon normal use. Product application, environment and use may dictate a more stringent inspection and maintenance program than suggested. Also, governmental and/or industry regulations must be viewed and complied with when determining the maintenance program for your specific Miller product. Always remember to contact the factory should you need any assistance in establishing or maintaining your maintenance program.

Should any Miller product become worn or deficient, any attempt at repairs will be taken entirely at the risk and cost of the party making such repairs. We will accept any Miller product at the factory for evaluation, repair and/or replacement after the appropriate arrangements have been made with customer service.

NUTS, SET SCREWS, PINS, BOLTS AND RETAINERS

All nuts, set screws, pins, bolts and retainers should be checked for tightness every 14 to 30 days depending on the operating conditions and the product involved. High vibration applications such as pile driving, drilling and/or quarry work, will require more frequent inspections.

All set screws are staked at the factory. Should they attempt to back out, re-tighten as necessary and re-stake thoroughly. Where furnished, all other pins must remain in place. Replace any missing or damaged pins immediately.

LUBRICATION SCHEDULE

ITEM	LUBRICATION FREQUENCY		
	Under intermittent operating conditions	Under continuous operating conditions	Offshore or submerged conditions
Swivels and Swivel Overhaul Balls	14 days	24 hours	**
Blocks with Bronze Bushed Sheaves	14 days	8 hours	N/A
Blocks with Roller Bearing Sheaves	14 days	24 hours	N/A

Lubricant: Either sodium or lithium base greases may be used.
Soda soap base greases are more fibrous and cohesive.
Lithium soap base greases are particularly applicable where excessive moisture is present.

REMEMBER: These are the minimum suggested inspection requirements established based upon the general use of Miller products. Only you can and must establish the inspection and maintenance program consistent with your specific application. Always contact the factory should you have any question regarding a Miller product.

***For swivel applications in offshore or submerged conditions* a special high pressure, water-resistant grease with oxidation inhibitors is recommended. Please see the Miller website at www.millerproducts.net or contact Miller Customer Service for specific lubrication recommendations for this application type.

MAINTENANCE and INSPECTION (CONTINUED)

INSPECTION AND MAINTENANCE SCHEDULE/GENERAL

INSPECTION FREQUENCY	ITEM	WHAT TO CHECK FOR	APPROPRIATE ACTION
When used	Hook Latch	Missing or off center, bent, broken spring, missing or defective	Replace immediately
Daily or when used	Hooks, insulating links, and other fittings	Permanent deformation or stretching Cracks or other defects	A clear indication of overload. Take out of service immediately and replace. Any suspicion of fractures calls for an immediate investigation and, if necessary, the replacement of the defective part. ASME B30.10 Suggests that Hooks may require a nondestructive test as a result of detailed inspection findings. Insulator links should be returned to the factory yearly for dielectric retesting.
14 days under continuous conditions 30 days under intermittent operating conditions	Swivels	Increased or larger than usual gap Rough turning Elongated eye holes, bent clevis pins	Possible overload, Check for rough turning, elongated holes or bent clevis pins. Defective bearings. Remove from service immediately. Indicates overload. Remove for repairs.
	Sheaves	Misalignment, as evidenced by wobble or uneven groove flange wear Striations or corrugations in sheave groove	Indicates severe bearing wear. Remove from service and forward to factory for repairs estimate. Check for wear in bronze spacers where used. Result of rope wear. If serious, have factory replace.

AC INSULATING LINKS USED FOR POWER LINE ELECTRICAL SAFETY

INSPECTION FREQUENCY	INSPECTION ITEM	WHAT TO CHECK FOR	APPROPRIATE ACTION TO TAKE
EACH USE	CLEANLINESS VISUAL	DIRT, MUD, ANY CONTAMINANT	BRUSH AND WIPE 100% OF EXTERIOR SURFACES **CLEAN** WITH DAMP CLOTH AND THEN DRY CLOTH. **ELECTRICAL PERFORMANCE OF INSULATING LINK DEGRADES WHEN SURFACE IS DIRTY.**
DAILY	SET SCREWS	TIGHTNESS	ASSURE SETSCREWS WHICH SECURE UPPER AND LOWER FITTINGS ARE TIGHT AND STAKED.
DAILY	MECHANICAL INTEGRITY POLYMER	CRACKS OR OTHER DEFORMATION	PRESENCE OF ANY CRACKS OR DEFORMATION OF THE ORANGE EXTERIOR POLYMER JACKET REQUIRES THAT THE LINK BE REMOVED FROM SERVICE IMMEDIATELY.
DAILY	MECHANICAL INTEGRITY STRUCTURAL	CRACKS OR OTHER DEFORMATION	PRESENCE OF ANY CRACKS OR DEFORMATION OF METALLIC AREAS REQUIRES THAT THE LINK BE REMOVED FROM SERVICE IMMEDIATELY.
ANNUALLY	ELECTRICAL INTEGRITY	DIELECTRIC PERFORMANCE	PERFORM ANNUAL HIGH VOLTAGE TEST WITH CERTIFIED TEST REPORT BY UNIT SERIAL NUMBER.

LIMITED WARRANTY AND CONDITIONS OF SALE

Notice to Miller Customer:
Please read carefully. Terms and conditions given here contain disclaimers of warranties and strict limitation of liability and remedies.

Miller Products (A Division of GHM Industries, Inc.), as manufacturer, warrants to the original wholesale or O.E.M. purchaser and/or to the original retail purchaser only that the goods, equipment or merchandise described herein will be free from defects in material and workmanship for a period of 12 months from the date of manufacturer's shipment. Should the goods, equipment or merchandise prove defective within such 12 month period, Miller products will, at its option, repair or replace the same when returned to its plant, charges prepaid, provided that Miller Products is given written notice of any such claimed defect promptly and the merchandise is submitted, freight prepaid, within such 12 month period for examination. Repair and/or replacement at the option of Miller Products shall be the sole and exclusive remedy of the buyer for breach of the above express warranty.

Except as expressly set forth herein, Miller Products makes no warranty either express or implied, that the goods, equipment or merchandise shall be merchantable or fit for any particular purpose or use, nor does it make any other warranty, express, implied or statutory. Miller Products shall have no liability for incidental, consequential, special, general or other damages arising form the use of its product including, but not limited to, failure of the goods, equipment, or merchandise to perform any general or particular function or purpose whether such damage or failure is due to mistake or deficiency in design, formula, plan specifications, advertising material, printed instructions, defective materials, defective or improper assembly or otherwise; the sole liability of Miller Products being to replace or repair, at its option, defects in material or workmanship as stated in the preceding paragraph.

Miller will not have any responsibility or liability for damage in shipment, during assembly, installation, erection, or that arising from accidents, abuse or improper operation of goods, equipment or merchandise.

These terms and conditions shall supersede and, in case of conflict, shall have control over all and any terms or other provisions in any oral or written purchase order or other document pertaining to the goods, equipment or merchandise described herein, including any negotiations between parties or as suggested by any product catalog or descriptive literature. Nor does any distributor, dealer, franchisee, independent sales representative or other person, firm or corporation have authority to assume any other obligations or liability on behalf of Miller Products or to waive, modify or change these terms and conditions.

Engineering, product safety, inspection and maintenance information is included in the Miller Products General Catalog and is available upon request free of charge. Miller, in performing the work of any purchase order agrees not to discriminate against any employee for reasons of race or orientation, creed, color or national origin.

Force Majeure:
In the event of delay in shipment of items ordered by Miller customers due to causes beyond our control including but not limited to strike, fire, flood, accident, scarcity of labor, materials, power, fuel or transportation, war, public disorder, acts of public enemies or acts of God, deliveries hereunder may be suspended or partially suspended, during the continuance of such interruption.

By acceptance of our sales order acknowledgement copy the customer accepts all the terms and conditions heretofore set forth and agrees that the delivery of the merchandise described in said order shall be subject to no other terms or conditions whatsoever unless additional terms are made the subject of negotiation and are evidenced by separate written acceptance by Miller.

Receipt of the order acknowledgement by the customer without written objection to Miller within thirty days from the receipt of the merchandise described in said order shall constitute an acceptance of the terms hereof and an agreement that the delivery of the merchandise described in said order is subject to no other terms than those stated in this acceptance.

Complete agreement: This Warranty between the purchaser and Miller is complete. All prior contemporaneous discussions, representations, and/or understandings are merged into this warranty.

Choice of Law: Any dispute about the interpretation of this Warranty shall be governed by the laws of the State of Massachusetts.

Dispute Resolution: The purchaser and Miller expressly agree that any dispute arising out of the purchase, use or operation of the purchased product, upon written notice to the other party, be resolved through binding arbitration. The location of any arbitration shall be Boston, Massachusetts. The substantive laws of the State of Massachusetts shall govern the arbitration to the extent they are not in conflict with the then existing rules of the American Arbitration Association. In no event shall Miller be liable for incidental or consequential damages as part of the arbitration award. The award, decision, or filing rendered by the arbitration shall be final, and judgment may be entered upon it in accordance with the applicable law in any court having appropriate jurisdiction.

Terms- Miscellaneous:

Prices and discounts are subject to change without notice. Orders are accepted with the understanding that prices and discounts prevailing at the time of shipment will apply. All prices are F.O.B. Charlton, Massachusetts unless otherwise agreed, with written indication in our order acknowledgement.

Shipment quantity or other discrepancies must be documented and notification to Miller made within 15 days of receipt of shipment.

No merchandise shall be returned for credit consideration without prior written permission. Freight must be prepaid. For new merchandise in resalable condition, minimum restocking charge is 25% of the order value or $50.00, whichever is greater. Any transportation costs previously assumed by Miller will be charged back. Non-catalog (non-standard) items will be subject to cancellation charges of 25% of the order value or the actual cost of labor and material incurred, whichever is greater.

MILLER SWIVELS- TYPES, USE, SELECTION

With the largest product line of load handling swivels worldwide, and continuous leadership and innovation in the use of swivels since our founding in 1935 in Pomona, California, Miller provides users worldwide with proven solutions to everyday problems in the field, under the sea, in the air, in the factory and in space. Miller also has provided many custom swivel solutions tailored to specific operations in the construction, mining, petroleum and natural gas, foundation drilling, nuclear, communications and other industries.

The five general categories of Miller Swivels are:

- Y-Link, angular contact ball bearing swivels
- Econo-Link, tapered thrust bearing swivels
- Special application swivels (marine, stainless, insulated, demolition, drilling, line pulling)
- Custom-designed swivels for specific operational requirements

Y-Link Angular Contact Ball Bearing Swivels

Developed by Miller, angular contact ball bearing swivels provide the most efficient way to handle the heavy thrust loads encountered in crane operation and other lifting and pulling jobs. The precision-ground, precisely matched bearings assure longer service life, superior performance, and much longer wire rope life where rope twist must be reduced or eliminated. The thrust load is transferred from an overlapping shoulder on the bearing race through the balls to the diagonally opposed shoulder on the outer bearing race. This distributes the load to the outer part of the barrel.

The angular contact bearings are mounted in complements of two or more, depending on the load capacity of the swivel. They permit the load to rotate freely, yet they prevent the load from spinning. By permitting the wire rope to neutralize itself, they can extend the wire rope life multiple times.

The angular contact ball bearing swivel design results in highly reduced torque levels- 50% to 70% less than the torque levels found for traditional thrust bearing swivels, especially as load increases.

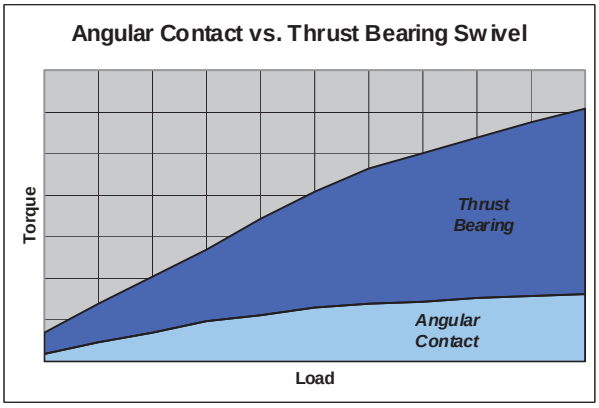
External parts of Miller Y-Link Angular Contact Ball bearings are machined from high quality alloy steel and are zinc plated for long-term corrosion protection. Working loads range from ½ to 1000 tons.

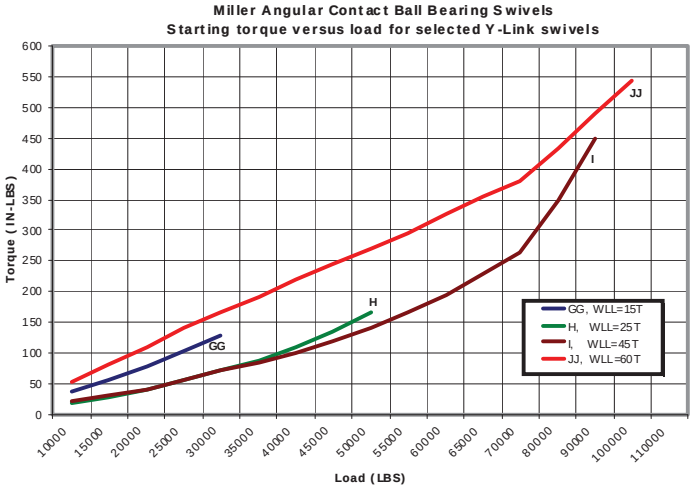
Econo-Link Thrust Bearing Swivels

Outstanding economy and good service are the hallmarks of Miller's traditional swivel model. Miller thrust bearing swivels are economically priced, yet are surpassed only by Miller's angular contact bearing swivels. Miller Econo-Link Thrust Bearing Swivels incorporate a single heavy duty tapered roller bearing housed in a steel retainer. External parts are steel castings with forged steel hooks when hooks are used. A close-fitting bronze bushing seals lubricant in and keeps dirt out of the bearing. For many applications Miller Econo-Link Thrust Bearing Swivels offer the most economical, yet dependable, service available. Working loads range from 3 to 15 tons.

Torque Considerations

Angular contact bearings allow much lower torque resistance. Starting torque under load for angular contact bearings is based on Miller testing and empirical data.





"General guide only, torque value may vary to a significant degree due to application conditions. Miller does not guarantee torque data shown, should specific torque performance be desired, contact Miller"

SPECIAL APPLICATION SWIVELS with Angular Contact Ball Bearings

Over the years Miller has developed a number of angular contact ball bearing swivels for given applications or environments. The following are the most common and those for which we have developed standard products available to order from Miller. All of these swivels are presented in the tables following in this section of the catalog.

Heavy Duty Swivels (HD-Link) – These swivels which feature heavy duty barrels are available to protect bearings and maximize swivel life under the heavy impact and abrasive environment of demolition work. Many other Miller swivels can be fitted with heavy duty barrels upon request.

Overhaul Swivels (g-Link) – Weighing from 2.5 to nearly 4 times as much as standard swivels of the same type, these special Miller Overhaul Swivels provide an excellent means of adding additional weight without increasing overall dimensions. Ideal for small truck cranes and hoists in applications where minimal additional overhaul weight is required.

Line Pulling Swivels (Miller-Pengo) – Designed specifically by Miller for the electrical distribution industry for stringing high tension wires and for pulling wires through conduit. They help to accommodate the inevitable twisting developed as lines are installed using sheaves over long distances. These swivels are not designed for general lifting applications. Please see Miller Y-Link and Econo-Link for lifting swivels.

Stainless Steel Swivels – These swivels are designed for cable and chain applications above the surface of the water where long term environmental considerations require the corrosion resistant qualities of stainless steel. In addition to above surface marine, other typical applications include chemical processing plants, nuclear plants, and applications with magnetic permeability restrictions.

MILLER SWIVELS- TYPES, USE, SELECTION

Stainless Steel, Underwater High Pressure Swivels – A unique pressure compensating, high pressure seal allows this series of swivels to operate reliably up to depths of 10,000 feet. These swivels find applications in oceanographic work, offshore mooring, cable laying, offshore oil and gas exploration, installation, operating activities, commercial fishing, defense and other marine applications. High pressure swivels are also available in non-stainless steel.

Insulated Swivels – Miller also produces a series of insulated swivels for working loads up to 120 tons. These swivel assemblies incorporate the Miller ISO/Link-AC or ISO/Link-DC for the personnel safety purposes of isolating the load from high voltage electrical current in case of boom contact with power lines or to prevent stray building grid currents in industrial applications where welding or induction melting occurs. Please refer to the Load Insulating section of the catalog for information on these high value swivels.

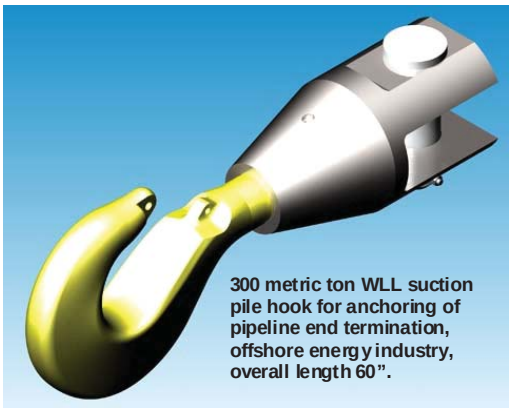
MILLER SWIVEL SELECTION GUIDE

SWIVEL MODEL	Y-Link	Y-Link/HP	Hydro-Link	Hydro-Link/HP	Econo-Link
DESIGN FACTOR	5 for WLL ≤ 35T • 4 for WLL > 35T				4
WLL RANGE*	.45 to 300T	.45 to 300T	.45 to 300T	.45 to 300T	3 to 15T
MBL RANGE	N/A	N/A	N/A	N/A	N/A
BEARING TYPE	Angular Contact	Angular Contact	Angular Contact	Angular Contact	Tapered Thrust
SEAL TYPE	O-ring	Pressure Compensating Spring-Energized Polymer	O-ring	Pressure Compensating Spring-Energized Polymer	Bronze Bushing
FEATURES	Machined Alloy Steel, Best All Around, 54 Configurations	Y-Link, Sealed for High Pressure Applications	Machined Stainless Steel Construction	Hydro-Link, Sealed for High Pressure	Cast Alloy Steel, Low Price, 6 Popular Configurations
LUBRICATION	Grease filled, E-Size and Up Include Zerk	Hot Poured Miller Lube, Oil Plug	Grease filled, E-Size and Up Include Zerk	Hot Poured Miller Lube, Oil Plug	Grease filled, No Zerk
REBUILDABLE	Yes	Yes	Yes	Yes	No
APPLICATIONS	Full Range Lifting, Custom End Configurations, Low Friction	Short Term Sub Sea to Depths of 10,000 ft, Offshore Oil and Gas	Above Surface Marine, Chemical and Nuclear Plants	Long Term Sub Sea to Depths of 10,000 ft, Offshore Oil and Gas	General lifting, Economical
SWIVEL MODEL	Econo Swiveler	g-Link	HD-Link	Pengo/Miller	
DESIGN FACTOR	4	5	5	3	
WLL RANGE*	3 to 15T	1.5 to 8.5T	5 to 35T	.9 to 50T	
MBL RANGE	N/A	N/A	N/A	N/A	
BEARING TYPE	Tapered Thrust	Angular Contact	Angular Contact	Angular Contact	
SEAL TYPE	Bronze Bushing	O-ring	O-ring	O-ring	
FEATURES	2 Configurations, 35 - 575 lbs Overhaul Weight	2.5 to 4 Times Overhaul weight Compared to Y-Links	Heavy Duty Barrel for Increased Bearing Protection and Service Life	For Tension Line Pulling, 90 Degree Connectors Available.	
LUBRICATION	Grease filled, No Zerk	Grease Filled, D-Size and Up have Zerk	Grease Filled, E-Size and Up have Zerk	Grease filled, No Zerk	
REBUILDABLE	No	Yes	Yes	No	
APPLICATIONS	Small Cranes, Low Head Room, Overhaul Weight	Small Truck Cranes, Low Head Room, Minimal Overhaul Weight	Demolition and High Impact	Electrical Distribution, Line Stringing / Pulling	
* For standard swivels. Custom swivel working loads available to 1000 tons					

MILLER CUSTOM SWIVELS

375 ton WLL narrow body with side load capability, for riser pull-in, offshore energy industry. 65”L x Ø13”

Miller has designed and manufactured swivels for specific high value lifting or handling projects in various industries including construction, offshore energy, aerospace and defense, nuclear and others. Following are just a few examples. Please contact us directly for information on custom swivel products.



300 metric ton WLL suction pile hook for anchoring of pipeline end termination, offshore energy industry, overall length 60”.

125T swivel, military transport

Insulated, 60T, NASA shuttle maintenance operations

375T offshore special for SCR pull-in

SWIVELS- Y-LINK, ANGULAR CONTACT BEARINGS

- First ever angular contact bearing swivel, USA patent 2,651,533
- Working Load Limits from 0.45 through 300 tons
- Multiple Angular Contact Bearing Design extends the life of the wire rope, and swivel life
- Low starting torque enables immediate swivel response
- Angular contact bearings endure higher rotational speeds
- Models 5 tons and up include lubrication fitting
- Durable structural parts are made from forged alloy steel- not cast
- Zinc plated inside and out for effective protection against corrosion
- Design Factor is 5:1 through 35 tons and 4:1 above 35 tons
- Proof Load is 2 x WLL
- See table of contents for stainless steel, high pressure, and other special models

SWIVELS- Y-LINK, ANGULAR CONTACT BEARINGS

Y-LINK MODEL NUMBER SYSTEM

MODEL	WLL	CAPS								BARRELS	SHANKS					
		CLEVIS	EYE	STUD	BULLET NOSE	SOCKET	THIMBLE	WEDGE	HOOK	EYE BOLT	STANDARD BARREL	CLEVIS	EYE	STUD	BULLET NOSE	HOOK	EYE BOLT
		1	2	3	4	5	6	7	8	9	1	1	2	3	4	5	6
A	0.5	✓	✓	✓	✓						✓	✓	✓	✓	✓		
BB	0.8	✓	✓	✓	✓						✓	✓	✓	✓	✓		
B	1.5	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
C	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EE	8.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G	10	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
GG	15	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
H	25	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
HH	35	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
I	45	✓	✓	✓	✓						✓	✓	✓		✓	✓	
J	50	✓	✓	✓							✓	✓	✓			✓	
JJ	60	✓	✓	✓							✓	✓	✓			✓	
K	75	✓	✓	✓							✓	✓	✓			✓	
KK	100	✓	✓	✓							✓	✓	✓			✓	
KKK	150	✓	✓								✓	✓	✓			✓	
L	200	✓	✓								✓	✓	✓			✓	
M	300	✓	✓								✓	✓	✓			✓	
MODEL		1	2	3	4	5	6	7	8	9	1	1	2	3	4	5	6
		CAPS									BARRELS	SHANKS					

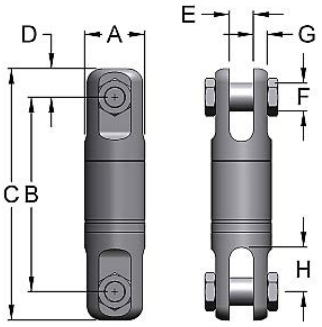
NOTE: ✓ CHECKED COMPONENTS ARE AVAILABLE AS STANDARD PRODUCTS. OTHERS MAY BE ADDED. FOR UNCHECKED, PLEASE CONTACT MILLER

MODEL NUMBER KEY:			
X	#	#	#
MODEL LETTER(S)	CAP NUMBER	BARREL NUMBER	SHANK NUMBER

EXAMPLE: D-115 = (D) 5 TON, (1) CLEVIS CAP, (1) STD. BARREL, (5) HOOK

SWIVELS- Y-LINK, ANGULAR CONTACT BEARINGS

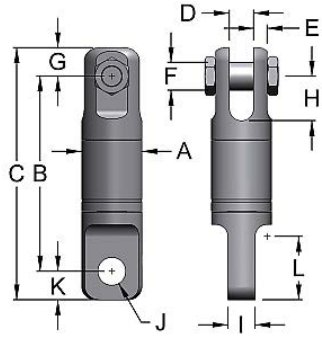
CLEVIS TO CLEVIS - TYPE 111



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	Weight Lbs.
0.45	A-111	1/8	0.88	2.38	3.13	0.38	0.25	0.25	0.19	0.41	0.37
0.75	BB-111	1/4	1.31	3.5	4.38	0.44	0.31	0.38	0.22	0.56	0.93
1.5	B-111	3/8	1.63	4.06	5.44	0.69	0.5	0.5	0.31	0.78	2
3	C-111	1/2	2	6.25	8.09	0.94	0.75	0.75	0.38	1.19	4.5
5	D-111	5/8	2.5	7.94	10.09	1.13	1	0.88	0.56	1.56	9.5
8.5	EE-111	3/4	2.88	9.63	12.31	1.34	1.56	1.19	0.53	2.09	15.25
10	G-111	7/8	4	14	17.5	1.75	1.75	1.5	0.81	3.5	40
15	GG-111	1	4	14	17.5	1.75	1.75	1.5	0.81	3.5	40
25	H-111	1 1/4	5	15.94	20.69	2.38	2	2	1.13	3.69	78
35	HH-111	1 1/2	5	15.94	20.69	2.38	2	2	1.13	3.69	78
45	I-111		6	20.06	26.06	3	2.5	2.25	1.25	4	146
50	J-111		7	20.94	27.94	3.5	3	2.5	1.5	4.5	207
60	JJ-111		7	20.94	27.94	3.5	3	2.5	1.5	4.5	207
75	K-111		8	24	32	4	3.5	3	1.75	5	300
100	KK-111		10	32.88	43.88	5.5	4.06	4	2	6.75	692
150	KKK-111		10	32.88	43.88	5.5	4.06	4	2	6.75	692
200	L-111		11.5	36.52	48.02	5.75	5.06	4.5	2.56	7.75	985
300	M-111		14	43.95	58.95	7.5	6.13	4.75	3.94	9.5	1680

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

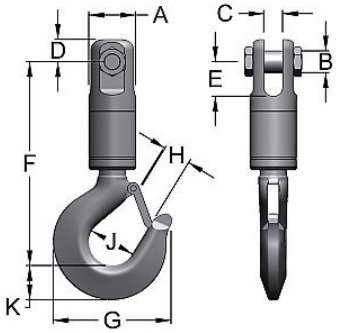
CLEVIS TO EYE - TYPE 112



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
0.45	A-112	1/8	0.88	2.5	3.25	0.25	0.19	0.25	0.38	0.41	0.25	.26	0.38	0.75	0.31
0.75	BB-112	1/4	1.31	3.56	4.44	0.31	0.22	0.38	0.44	0.56	0.31	0.38	0.44	0.94	0.94
1.5	B-112	3/8	1.63	4.13	5.38	0.5	0.31	0.5	0.69	0.78	0.5	0.66	0.63	1.34	1.94
3	C-112	1/2	2	6.19	8.13	0.75	0.38	0.75	0.94	1.19	0.75	0.91	1	1.94	4.25
5	D-112	5/8	2.5	7.88	10.19	1	0.56	0.88	1.13	1.56	1	1.28	1.19	2.5	8.94
8.5	EE-112	3/4	2.88	9.5	12.34	1.56	0.53	1.19	1.34	2.19	1.25	1.41	1.5	3.13	15.25
10	G-112	7/8	4	13.94	17.5	1.75	0.81	1.5	1.75	3.5	1.72	1.66	1.81	4.66	39
15	GG-112	1	4	13.63	17.5	1.75	0.81	1.5	1.75	3.5	1.94	2.03	2.13	4.91	40
25	H-112	1 1/4	5	15.94	20.69	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	75
35	HH-112	1 1/2	5	15.94	20.69	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	75
45	I-112		6	20.06	26.06	2.5	1.25	2.25	3	4	2.5	2.53	3	7	139
50	J-112		7	20.94	27.94	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	205
60	JJ-112		7	20.94	27.94	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	205
75	K-112		8	24	32	3.5	1.75	3	4	5	3.5	3.38	4	8.13	305
100	KK-112		10	32.88	43.88	4.06	2	4	5.5	6.75	4.5	4.03	5.5	11.38	647
150	KKK-112		10	32.88	43.88	4.06	2	4	5.5	6.75	4.5	4.28	5.5	11.38	647
200	L-112		11.5	35.52	47.27	5.06	2.56	4.5	5.75	7.75	5	4.81	6	13	925
300	M-112		14	43.45	58.95	6.13	3.94	4.75	7.5	9.5	6	6.06	8	17	1645

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

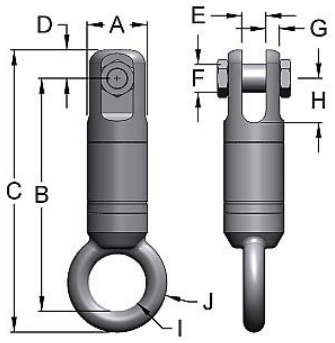
CLEVIS TO HOOK - TYPE 115



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	J	K	Weight Lbs.
1.5	B-115	3/8	1.63	0.5	0.5	0.69	0.78	5.88	3.63	1	1.63	1	2.31
3	C-115	1/2	2	0.75	0.75	0.94	1.19	8.56	4.88	1.34	2	1.38	5.94
5	D-115	5/8	2.5	0.88	1	1.13	1.56	10.81	6.5	1.34	2.5	1.81	11.81
8.5	EE-115	3/4	2.88	1.19	1.56	1.34	2.09	13.75	8.69	2.25	3.25	2.59	24
10	G-115	7/8	4	1.5	1.75	1.75	3.5	17.88	11	3	3.25	3	53
15	GG-115	1	4	1.5	1.75	1.75	3.5	17.88	11	3	4.25	3	53
25	H-115	1 1/4	5	2	2	2.38	3.69	23.01	12.02	3.54	4.41	4.21	131
35	HH-115	1 1/2	5	2	2	2.38	3.69	23.01	12.02	3.54	4.41	4.21	131
45	I-115		6	2.25	2.5	3	4	27.65	13.46	3.94	4.92	4.69	211
50	J-115		7	2.5	3	3.5	4.5	29.34	15.12	4.41	5.51	5.26	293
60	JJ-115		7	2.5	3	3.5	4.5	29.34	15.12	4.41	5.51	5.26	293
75	K-115		8	3	3.5	4	5	33.36	17	4.92	6.3	5.97	411
100	KK-115		10	4	4.06	5.5	6.75	45.31	21.34	6.3	7.87	7.55	922
150	KKK-115		10	4	4.06	5.5	6.75	45.31	21.34	6.3	7.87	7.5	907
200	L-115		11.5	4.5	5.06	5.75	7.75	50.48	26.95	7.87	9.84	9.29	1510
300	M-115		14	4.75	6.13	7.5	9.5	63.13	33.69	9.17	12.4	11.81	2800

SWIVELS- Y-LINK, ANGULAR CONTACT BEARINGS

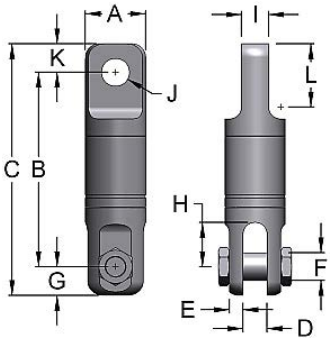
CLEVIS TO EYE BOLT - TYPE 116



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	Weight Lbs.
1.5	B-116	3/8	1.63	5.44	6.75	0.69	0.5	0.5	0.31	0.78	1.5	2.75	2.19
3	C-116	1/2	2	7.47	9.16	0.94	0.75	0.75	0.38	1.19	1.75	3.5	4.5
5	D-116	5/8	2.5	9.31	11.44	1.13	1	0.88	0.56	1.56	2	4	9.56
8.5	EE-116	3/4	2.88	11.09	13.44	1.34	1.56	1.19	0.53	2.09	2.5	4.5	14.75
10	G-116	7/8	4	15.91	19.47	1.75	1.75	1.5	0.81	3.5	3.25	6.88	43
15	GG-116	1	4	15.91	19.47	1.75	1.75	1.5	0.81	3.5	3.25	6.88	43

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

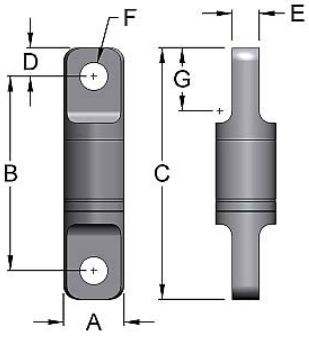
EYE TO CLEVIS - TYPE 211



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
0.45	A-211	1/8	0.88	2.5	3.25	0.25	0.19	0.25	0.38	0.41	0.25	.26	0.38	0.75	0.38
0.75	BB-211	1/4	1.31	3.63	4.5	0.31	0.22	0.38	0.44	0.44	0.31	.39	0.44	0.94	0.94
1.5	B-211	3/8	1.63	4.13	5.44	0.5	0.31	0.5	0.69	0.78	0.5	0.66	0.63	1.34	1.88
3	C-211	1/2	2	6.19	8.13	0.75	0.38	0.75	0.94	1.19	0.75	0.91	1	1.94	4.31
5	D-211	5/8	2.5	7.88	10.19	1	0.56	0.88	1.13	1.56	1	1.28	1.19	2.5	9.06
8.5	EE-211	3/4	2.88	9.5	12.34	1.56	0.53	1.19	1.34	2.19	1.25	1.41	1.5	3.13	14.75
10	G-211	7/8	4	13.94	17.5	1.75	0.81	1.5	1.75	3.5	1.72	1.66	1.81	4.66	39
15	GG-211	1	4	13.63	17.5	1.75	0.81	1.5	1.75	3.5	1.94	2.03	2.13	4.91	40
25	H-211	1 1/4	5	15.94	20.69	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	75
35	HH-211	1 1/2	5	15.94	20.69	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	75
45	I-211		6	20.06	26.06	2.5	1.25	2.25	3	4	2.5	2.53	3	7	139
50	J-211		7	20.94	27.94	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	211
60	JJ-211		7	20.94	27.94	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	211
75	K-211		8	24	32	3.5	1.75	3	4	5	3.5	3.38	4	8.13	305
100	KK-211		10	32.88	43.88	4.06	2	4	5.5	6.75	4.5	4.03	5.5	11.38	678
150	KKK-211		10	32.88	43.88	4.06	2	4	5.5	6.75	4.5	4.28	5.5	11.38	678
200	L-211		11.5	36.67	48.42	5.06	2.56	4.5	5.75	7.75	5	4.81	6	13	960
300	M-211		14	43.45	58.95	6.13	3.94	4.75	7.5	9.5	6	6.06	8	17	1645

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

EYE TO EYE - TYPE 212

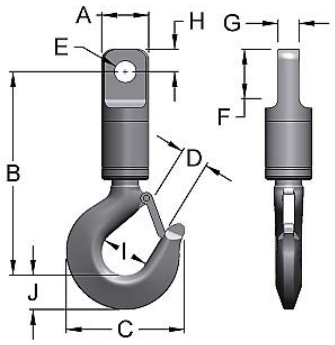


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
0.45	A-212	1/8	0.88	2.63	3.38	0.38	0.25	.26	0.75	0.31
0.75	BB-212	1/4	1.31	3.81	4.69	0.44	0.31	.39	0.94	0.93
1.5	B-212	3/8	1.63	4.13	5.38	0.63	0.5	0.66	1.34	1.87
3	C-212	1/2	2	6.13	8.13	1	0.75	0.91	1.94	4.06
5	D-212	5/8	2.5	7.81	10.19	1.19	1	1.28	2.5	8.5
8.5	EE-212	3/4	2.88	9.31	12.31	1.5	1.25	1.41	3.13	14.75
10	G-212	7/8	4	13.88	17.5	1.81	1.72	1.66	4.66	37
15	GG-212	1	4	13.25	17.5	2.13	1.94	2.03	4.91	39
25	H-212	11/4	5	15.94	20.69	2.38	2.25	2.31	5.25	72
35	HH-212	1 1/2	5	15.94	20.69	2.38	2.25	2.31	5.25	72
45	I-212		6	20.06	26.06	3	2.5	2.53	7	132
50	J-212		7	20.94	27.94	3.5	2.94	2.88	7	209
60	JJ-212		7	20.94	27.94	3.5	2.94	2.88	7	209
75	K-212		8	24	32	4	3.5	3.38	8.13	311
100	KK-212		10	32.88	43.88	5.5	4.5	4.03	11.38	653
150	KKK-212		10	32.88	43.88	5.5	4.5	4.28	11.38	657
200	L-212		11.5	35.67	47.67	6	5	4.81	13	900
300	M-212		14	42.95	58.95	8	6	6.06	17	1610

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- Y-LINK, ANGULAR CONTACT BEARINGS

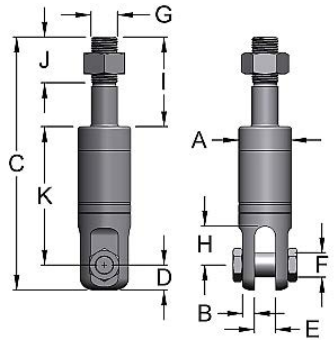
EYE TO HOOK - TYPE 215



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	Weight Lbs.
1.5	B-215	3/8	1.63	6.19	3.63	1	0.66	1.34	0.5	0.63	1.63	1	2.25
3	C-215	1/2	2	8.56	4.88	1.34	0.91	1.94	0.75	1	2	1.38	5.81
5	D-215	5/8	2.5	10.88	6.5	1.69	1.28	2.5	1	1.19	2.5	1.81	11.37
8.5	EE-215	3/4	2.88	13.63	8.69	2.25	1.41	3.13	1.25	1.5	3.25	2.59	23.5
10	G-215	7/8	4	17.81	11	3	1.66	4.66	1.72	1.81	3.25	3	52
15	GG-215	1	4	17.56	11	3	2.03	4.91	1.94	2.13	4.25	3	53
25	H-215	1 1/4	5	23.01	12.02	3.54	2.31	5.25	2.25	2.38	4.41	4.21	128
35	HH-215	1 1/2	5	23.01	12.02	3.54	2.31	5.25	2.25	2.38	4.41	4.21	128
45	I-215		6	27.65	13.46	3.94	2.53	7	2.5	3	4.92	4.69	205
50	J-215		7	29.34	15.12	4.41	2.88	7	2.94	3.5	5.51	5.26	289
60	JJ-215		7	29.34	15.12	4.41	2.88	7	2.94	3.5	5.51	5.26	289
75	K-215		8	33.36	17	4.92	3.38	8.13	3.5	4	6.3	5.97	423
100	KK-215		10	45.31	21.34	6.3	4.03	11.38	4.5	5.5	7.87	7.55	913
150	KKK-215		10	45.31	21.34	6.3	4.28	11.38	4.5	5.5	7.87	7.55	911
200	L-215		11.5	50.82	26.95	7.87	4.81	13	5	6	9.84	9.29	1485
300	M-215		14	63.13	33.69	9.17	6.06	17	6	8	12.4	8.63	2835

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

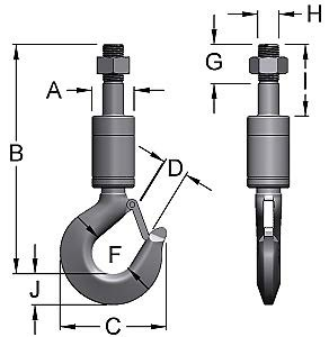
STUD TO CLEVIS - TYPE 311



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	Weight Lbs.
0.45	A-311	1/8	0.88	0.19	4.06	0.38	0.25	0.25	0.38	0.41	1.5	1.19	2.19	0.37
0.75	BB-311	1/4	1.31	0.22	5.63	0.44	0.31	0.38	0.63	0.56	2	1.5	3.19	1.06
1.5	B-311	3/8	1.63	0.31	6.06	0.69	0.5	0.5	0.75	0.78	2	1.5	3.75	1.87
3	C-311	1/2	2	0.38	9.19	0.94	0.75	0.75	0.88	1.19	3	2.63	5.25	4.5
5	D-311	5/8	2.5	0.56	11.19	1.13	1	0.88	1.25	1.56	3.5	3.13	6.56	9.75
8.5	EE-311	3/4	2.88	0.53	13.03	1.56	1.56	1.19	1.5	2.19	4	3	7.69	14.5
10	G-311	7/8	4	0.81	17.44	1.75	1.75	1.5	2	3.5	5.5	3	10.19	37
15	GG-311	1	4	0.81	17.44	1.75	1.75	1.5	2	3.5	5.5	3	10.19	37
25	H-311	1 1/4	5	1.13	23.31	2.38	2	2	2.5	3.69	8.5	4.25	12.44	78
35	HH-311	1 1/2	5	1.13	23.31	2.38	2	2	2.5	3.69	8.5	4.25	10.44	78
45	I-311		6	1.25	25.56	3	2.5	2.25	3	4	8	4	14.56	131
50	J-311		7	1.5	28.44	3.5	3	2.5	3.25	4.5	8	4	16.94	198
60	JJ-311		7	1.5	28.44	3.5	3	2.5	3.25	4.5	8	4	16.94	198
75	K-311		8	1.75	33.5	4	3.5	3	3.75	5	10	5	19.5	271
100	KK-311		10	2	51.13	5.5	4.06	4	6.5	6.75	20.5	7.25	25.13	648

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

STUD TO HOOK - TYPE 315

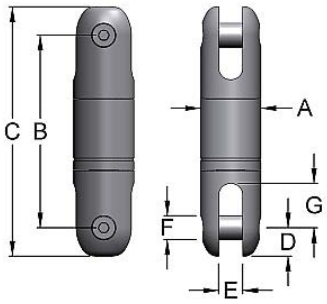


WLL* Tons	Model Number	Rope Size	A	B	C	D	F	G	H	I	J	Weight Lbs.
1.5	B-315	3/8	1.63	7.25	3.63	1	1.63	1.5	0.75	2	1	2.25
3	C-315	1/2	2	10.63	4.88	1.34	2	2.63	0.88	3	1.38	6
5	D-315	5/8	2.5	13	6.5	1.69	2.5	3.13	1.25	3.5	1.81	12.06
8.5	EE-315	3/4	2.88	15.81	8.69	2.25	3.25	3	1.5	4	2.59	23.25
10	G-315	7/8	4	19.59	11	3	3.25	3	2	5.5	3	50
15	GG-315	1	4	19.59	11	3	4.25	3	2	5.5	3	50
25	H-315	1 1/4	5	28.5	12.02	3.54	4.41	4.25	2.5	8.5	4.21	133
35	HH-315	1 1/2	5	28.5	12.02	3.54	4.41	4.25	2.5	8.5	4.21	133
45	I-315		6	30.13	13.46	3.94	4.92	4	3	8	4.69	188
50	J-315		7	33.34	15.12	4.41	5.51	4	3.25	8	5.26	278
60	JJ-315		7	33.34	15.12	4.41	5.51	4	3.25	8	5.26	278
75	K-315		8	38.82	17	4.92	6.3	5	3.75	10	5.97	403
100	KK-315		10	58.2	21.34	6.3	7.87	7.25	6.5	20.5	7.55	941

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- Y-LINK, ANGULAR CONTACT BEARINGS

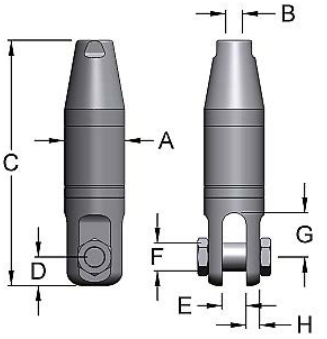
BULLET NOSE TO BULLET NOSE - TYPE 414



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
0.45	A-414	1/8	0.88	2.38	3.13	0.38	0.25	0.31	0.41	0.37
0.75	BB-414	1/4	1.31	3.56	4.44	0.44	0.31	0.38	0.56	1.12
1.5	B-414	3/8	1.63	4.06	5.19	0.56	0.5	0.44	0.81	1.81
3	C-414	1/2	2	5.44	7.06	0.81	0.75	0.63	0.94	3.87
5	D-414	5/8	2.5	7.88	10.19	1.13	1	0.88	1.56	8.06
8.5	EE-414	3/4	2.88	9.81	12.31	1.25	1.28	1	2.13	14.5
10	G-414	7/8	4	13.25	16.75	1.75	1.75	1.5	3.25	40
15	GG-414	1	4	13.25	16.75	1.75	1.75	1.5	3.25	40
25	H-414	1 1/4	5	15.91	20.66	2.38	2	2	3.69	84
35	HH-414	1 1/2	5	15.91	20.66	2.38	2	2	3.69	84
45	I-414		6	20.08	26.08	3	2.5	2.25	4	134

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

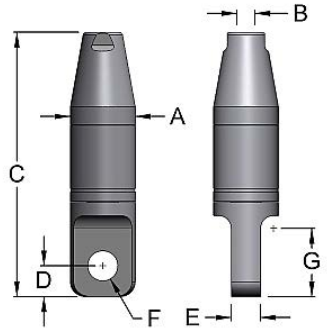
SOCKET TO CLEVIS - TYPE 511



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	Weight Lbs.
1.5	B-511	3/8	1.63	0.44	6.19	0.69	0.5	0.5	0.78	0.31	1.87
3	C-511	1/2	2	0.56	8.94	0.94	0.75	0.75	1.19	0.38	4.43
5	D-511	5/8	2.5	0.69	10.44	1.13	1	0.88	1.56	0.56	8.68
8.5	EE-511	3/4	2.88	0.81	12.75	1.34	1.56	1.19	2.09	0.53	14.5
10	G-511	7/8	4	0.97	16.25	1.75	1.75	1.5	3.5	0.81	33
15	GG-511	1	4	1.13	16.25	1.75	1.75	1.5	3.5	0.81	33
25	H-511	1 1/4	5	1.38	20.19	2.38	2	2	3.69	1.13	74
35	HH-511	1 1/2	5	1.63	20.19	2.38	2	2	3.69	1.13	74

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

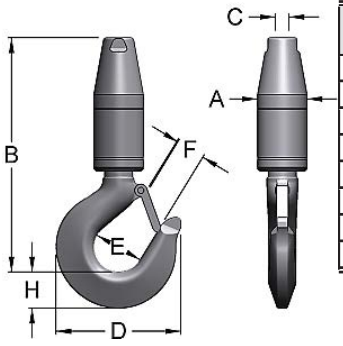
SOCKET TO EYE - TYPE 512



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	Weight Lbs.
1.5	B-512	3/8	1.63	0.44	6.19	0.63	0.5	0.66	1.87
3	C-512	1/2	2	0.56	8.94	1	0.75	0.91	4.43
5	D-512	5/8	2.5	0.69	10.44	1.19	1	1.28	8.68
8.5	EE-512	3/4	2.88	0.81	12.75	1.5	1.25	1.41	14.5
10	G-512	7/8	4	0.97	16.25	1.81	1.72	1.66	33
15	GG-512	1	4	1.13	16.25	2.13	1.94	2.03	33
25	H-512	1 1/4	5	1.38	20.19	2.38	2.25	2.31	74
35	HH-512	1 1/2	5	1.63	20.19	2.38	2.25	2.31	74

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SOCKET TO HOOK - TYPE 515

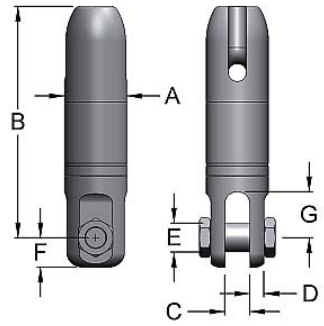


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	H	Weight Lbs.
1.5	B-515	3/8	1.63	7.38	0.44	3.63	1.63	1	1	2.18
3	C-515	1/2	2	10.38	0.56	4.88	2	1.34	1.38	5.87
5	D-515	5/8	2.5	12.19	0.69	6.5	2.5	1.69	1.81	11
8.5	EE-515	3/4	2.88	15.56	0.81	8.69	3.25	2.25	2.59	23.25
10	G-515	7/8	4	18.38	0.97	11	3.25	3	3	46
15	GG-515	1	4	18.38	1.13	11	4.25	3	3	46
25	H-515	1 1/4	5	24.88	1.38	12.02	4.41	3.54	4.21	125
35	HH-515	1 1/2	5	24.88	1.63	12.02	4.41	3.54	4.21	125

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- Y-LINK, ANGULAR CONTACT BEARINGS

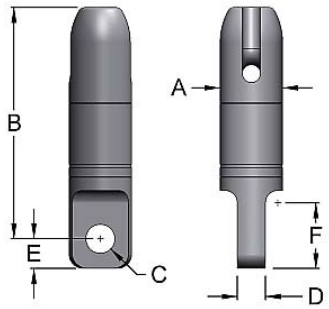
THIMBLE TO CLEVIS - TYPE 611



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
1.5	B-611	3/8	1.63	6	0.5	0.31	0.5	0.69	0.78	2.5
3	C-611	1/2	2	8.06	0.75	0.38	0.75	0.94	1.19	5.25
5	D-611	5/8	2.5	9.31	1	0.56	0.88	1.13	1.56	10
8.5	EE-611	3/4	2.88	11.38	1.56	0.53	1.19	1.34	2.09	16.5
10	G-611	7/8	4	15.38	1.75	0.81	1.5	1.75	3.5	42
15	GG-611	1	4	15.38	1.75	0.81	1.5	1.75	3.5	42
25	H-611	1 1/4	5	18.31	2	1.13	2	2.38	2.69	80
35	HH-611	1 1/2	5	18.31	2	1.13	2	2.38	2.69	80

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

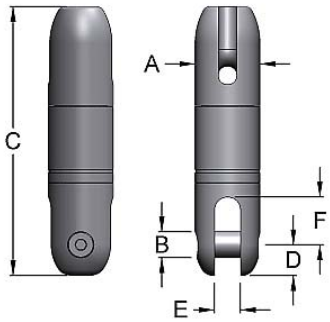
THIMBLE TO EYE - TYPE 612



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	Weight Lbs.
1.5	B-612	3/8	1.63	6.13	0.66	0.5	0.63	1.34	2.43
3	C-612	1/2	2	8	0.91	0.75	1	1.94	6
5	D-612	5/8	2.5	9.25	1.28	1	1.19	2.5	9.43
8.5	EE-612	3/4	2.88	11.31	1.41	1.25	1.5	3.13	16.5
10	G-612	7/8	4	15.44	1.66	1.72	1.81	4.66	41
15	GG-612	1	4	15.44	2.03	1.94	2.13	4.91	42
25	H-612	1 1/4	5	18.31	2.31	2.25	2.38	5.25	75
35	HH-612	1 1/2	5	18.31	2.31	2.25	2.38	5.25	75

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

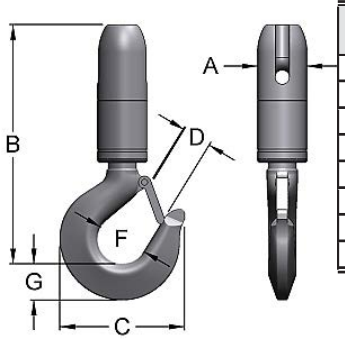
THIMBLE TO BULLET NOSE - TYPE 614



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	Weight Lbs.
1.5	B-614	3/8	1.63	0.44	6.61	1	0.5	1.5	2
3	C-614	1/2	2	0.63	8.55	1.34	0.75	2.63	6.06
5	D-614	5/8	2.5	0.88	10.44	1.69	1	3.13	9.5
8.5	EE-614	3/4	2.88	1	12.77	1.25	1.28	2.13	16.5
10	G-614	7/8	4	1.5	17.25	3	1.75	3	38.5
15	GG-614	1	4	1.5	17.25	3	1.75	3	38.5
25	H-614	1 1/4	5	2	20.69	3.63	2	4.25	76
35	HH-614	1 1/2	5	2	20.69	3.75	2	4.25	76

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

THIMBLE TO HOOK - TYPE 615

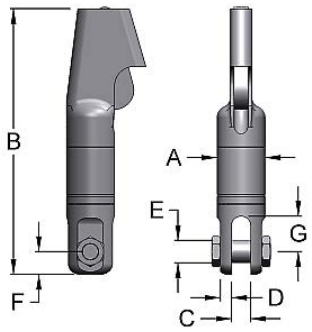


WLL* Tons	Model Number	Rope Size	A	B	C	D	F	G	Weight Lbs.
1.5	B-615	3/8	1.63	7.81	3.63	1	1.63	1	2.87
3	C-615	1/2	2	10.44	4.88	1.34	2	1.38	6.81
5	D-615	5/8	2.5	12.19	6.5	1.69	2.5	1.81	12.31
8.5	EE-615	3/4	2.88	15.56	8.69	2.25	3	2.59	25.25
10	G-615	7/8	4	19.38	11	3	3.25	3	55
15	GG-615	1	4	19.38	11	3	4.25	3	55
25	H-615	1 1/4	5	25.38	12.02	3.54	4.41	4.21	136
35	HH-615	1 1/2	5	25.38	12.02	3.54	4.41	4.21	136

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- Y-LINK, ANGULAR CONTACT BEARINGS

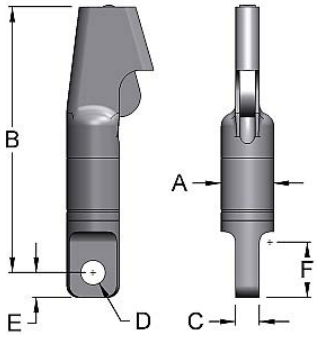
WEDGE TO CLEVIS - TYPE 711



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
3	C-711	1/2	2	10.25	0.75	0.38	0.75	0.94	1.19	6.31
5	D-711	1/2, 5/8	2.5	12.53	1	0.56	0.88	1.13	1.56	12.56
8.5	EE-711	1/2, 5/8, 3/4	2.88	14.44	1.56	0.53	1.19	1.34	2.09	20.5
10	G-711	3/4, 7/8, 1	4	19.75	1.75	0.81	1.5	1.75	3.5	47
15	GG-711	3/4, 7/8, 1	4	19.75	1.75	0.81	1.5	1.75	3.5	47
25	H-711	1 1/8, 1 1/4	5	27.31	2	1.13	2	2.38	3.69	98
35	HH-711	1 1/8, 1 1/4	5	27.31	2	1.13	2	2.38	3.69	98

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

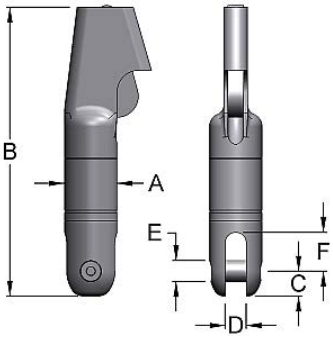
WEDGE TO EYE - TYPE 712



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	Weight Lbs.
3	C-712	1/2	2	10.25	0.75	0.91	1	1.94	6.06
5	D-712	1/2, 5/8	2.5	12.5	1	1.28	1.19	2.5	12
8.5	EE-712	1/2, 5/8, 3/4	2.88	14.25	1.25	1.41	1.5	3.13	20.5
10	G-712	3/4, 7/8, 1	4	19.69	1.72	1.66	1.81	4.66	45
15	GG-712	3/4, 7/8, 1	4	19.38	1.94	2.03	2.13	4.91	46
25	H-712	1 1/8, 1 1/4	5	25.43	2.25	2.31	2.38	5.25	94
35	HH-712	1 1/8, 1 1/4	5	25.43	2.25	2.31	2.38	5.25	94

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

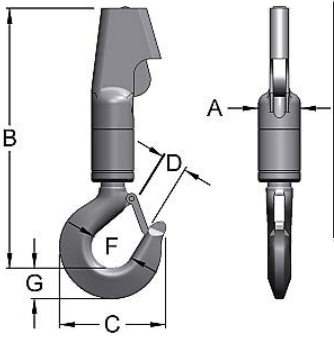
WEDGE TO BULLET NOSE - TYPE 714



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	Weight Lbs.
3	C-714	1/2	2	9.92	0.81	0.75	0.63	0.94	3.87
5	D-714	1/2, 5/8	2.5	12.42	1.13	1	0.88	1.56	8.06
8.5	EE-714	1/2, 5/8, 3/4	2.88	14.47	1.25	1.28	1	2.13	14.5
10	G-714	3/4, 7/8, 1	4	19.75	1.75	1.75	1.5	3.25	40
15	GG-714	3/4, 7/8, 1	4	19.75	1.75	1.75	1.5	3.25	40
25	H-714	1 1/8, 1 1/4	5	27.3	2.38	2	2	3.69	96
35	HH-714	1 1/8, 1 1/4	5	27.3	2.38	2	2	3.69	96

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

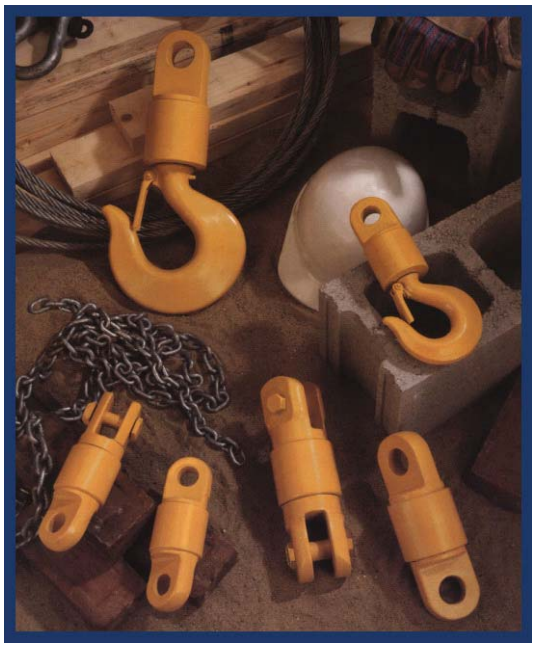
WEDGE TO HOOK - TYPE 715



WLL* Tons	Model Number	Rope Size	A	B	C	D	F	G	Weight Lbs.
3	C-715	1/2	2	12.63	4.88	1.34	2	1.38	7.81
5	D-715	1/2, 5/8	2.5	15.44	6.5	1.81	2.5	1.81	14.87
8.5	EE-715	1/2, 5/8, 3/4	2.88	18.56	8.81	2.25	3.25	2.59	29.25
10	G-715	3/4, 7/8, 1	4	23.63	11	3	3.25	3	60
15	GG-715	3/4, 7/8, 1	4	23.63	11	3	4.25	3	60
25	H-715	1 1/8, 1 1/4	5	32	12.02	3.54	4.41	4.21	145
35	HH-715	1 1/8, 1 1/4	5	32	12.02	3.54	4.41	4.21	145

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- ECONO-LINK, THRUST BEARING SWIVELER



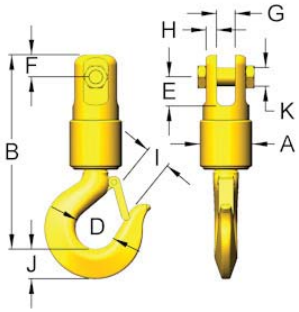
- Single tapered thrust bearing, factory lubricated
- Tight-fit bronze bushing acting as a seal, retains lubricant and protects bearing
- Load capacities from 3 to 15 tons
- Wire rope diameters from ½" to 1"
- Six popular clevis, hook, and eye configurations available
- Structural components from cast alloy steel
- Hook models with forged alloy steel hook and safety latch
- Finished with enamel coating
- 4:1 design factor, Proof Load is 2 x WLL

NEW! Insulated

Insulated Swivel for Suspended Welding & Other DC current protection applications

- Includes all the same, proven Econo-Link features, plus advanced electrical protection
- Rated for 2000 volts direct current (DC only)
- Electrical test certificates available
- To order, add suffix "-DC", e.g., 3E185-DC

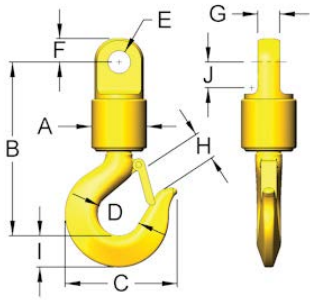
CLEVIS TO HOOK - TYPE 185



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	Weight Lbs.
3	3E185	1/2	2.63	8.09	4.94	2	1.38	1.19	1	0.5	1.5	1.44	.75	7
6	6E185	5/8	3.25	10.06	6.5	2.5	1.75	1.50	1.13	0.75	1.88	1.81	1	16
10	10E185	3/4	3.75	13.75	8.81	3.25	2.13	1.63	1.38	0.75	2.5	2.59	1.25	28
15	15E185	1	4.13	15.44	11	4.25	2.5	1.88	1.75	0.88	3.38	3	1.375	50

* Design factor 4:1

EYE TO HOOK - TYPE 285

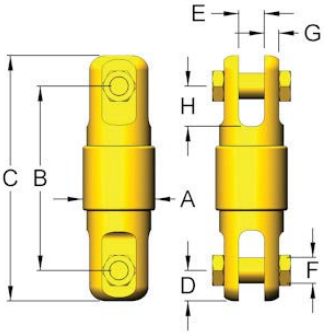


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	Weight Lbs.
3	3E285	1/2	2.63	7.66	4.94	2	1.06	1.13	1	1.5	1.44	1.13	7
6	6E285	5/8	3.25	9.75	6.5	2.5	1.41	1.50	1.19	1.88	1.81	1.38	16
10	10E285	3/4	3.75	13.75	8.81	3.25	1.66	1.63	1.44	2.5	2.59	2.38	28
15	15E285	1	4.13	15.81	11	4.25	2.06	2.00	1.94	3.38	3	2.63	50

* Design factor 4:1

SWIVELS- ECONO-LINK, THRUST BEARING SWIVELER

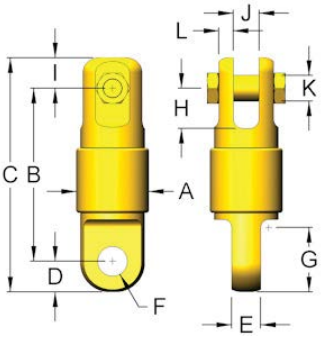
CLEVIS TO CLEVIS - TYPE 181



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	Weight Lbs.
3	3E181	1/2	2.63	6.31	8.69	1.19	1	.75	0.5	1.38	6
6	6E181	5/8	3.25	7.81	10.81	1.5	1.13	1	0.75	1.75	14
10	10E181	3/4	3.75	9.31	12.56	1.63	1.38	1.25	0.75	2.13	21
15	15E181	1	4.13	11.06	14.81	1.88	1.75	1.38	0.88	2.5	31

* Design factor 4:1

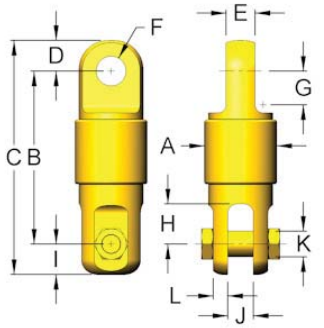
CLEVIS TO EYE - TYPE 182



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
3	3E182	1/2	2.63	5.94	8.25	1.13	1	1.06	1.13	1.38	1.19	1	.75	0.5	5
6	6E182	5/8	3.25	7.25	10.25	1.5	1.19	1.41	1.38	1.75	1.5	1.13	1	0.75	13
10	10E182	3/4	3.75	9.31	12.56	1.63	1.44	1.66	2.38	2.13	1.63	1.38	1.25	0.75	20
15	15E182	1	4.13	11.06	14.81	1.88	1.94	2.06	2.63	2.5	1.88	1.88	1.375	0.88	30

* Design factor 4:1

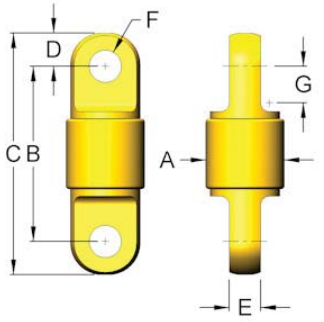
EYE TO CLEVIS - TYPE 281



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
3	3E281	1/2	2.63	5.94	8.25	1.13	1	1.06	1.13	1.38	1.19	1	.75	0.5	5
6	6E281	5/8	3.25	7.25	10.25	1.5	1.19	1.41	1.38	1.75	1.5	1.13	1	0.75	13
10	10E281	3/4	3.75	9.31	12.56	1.63	1.44	1.66	2.38	2.13	1.63	1.38	1.25	0.75	20
15	15E281	1	4.13	11.06	14.81	1.88	1.94	2.06	2.63	2.5	1.88	1.75	1.375	0.88	30

* Design factor 4:1

EYE TO EYE - TYPE 282



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
3	3E282	1/2	2.63	5.5	7.75	1.13	1	1.06	1.13	5
6	6E282	5/8	3.25	6.94	9.94	1.5	1.19	1.41	1.38	12
10	10E282	3/4	3.75	9.81	12.94	1.63	1.44	1.66	2.38	21
15	15E282	1	4.13	11.94	15.06	1.88	1.94	2.06	2.63	31

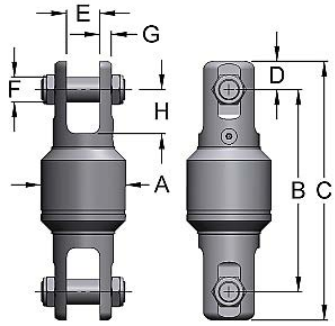
* Design factor 4:1

SWIVELS- HD-LINK, HEAVY DUTY (ANGULAR CONTACT)

- Heavy Duty (HD) barrel for maximized swivel life in rough conditions
- Thick-walled barrel protects bearings and seals from shock and dust
- Equipped with low torque angular contact ball bearings like Miller Y-Link
- Designed for high impact, abrassive environments as found in demolition, quarries, etc.
- Machined from solid forged alloy steel bar
- Zinc plating inside and out for effective protection against corrosion
- Grease fitting allows for easy, frequent lubrication
- For Working Loads from 5 to 35 tons and wire rope sizes 5/8" to 1 ½"
- Higher capacities are available upon request

For demolition, the swivel selected should be one size larger than the normally recommended size, should be lubricated daily, and should be installed 4-6 feet above the breaking ball overhaul weight.

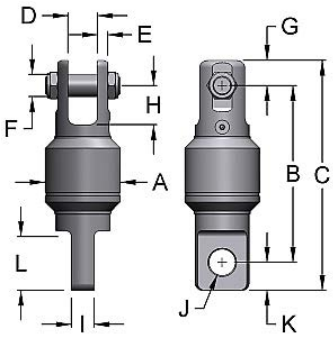
CLEVIS TO CLEVIS - TYPE 131



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	Weight Lbs.
5		5/8	3.5	7.94	10.19	1.13	1	.88	0.56	1.56	12
5	D-131	5/8	3.5	7.94	10.19	1.13	1	.88	0.56	1.56	12
8.5	EE-131	3/4	4	9.63	12.31	1.34	1.56	1.19	0.56	2.09	19.75
15	GG-131	1	5	14	17.5	1.75	1.75	1.5	0.81	3.5	50
35	HH-131	1 1/2	6	15.94	20.69	2.38	2	2	1.13	3.69	99
45	I-131		7	20.06	26.06	3	2.5	2.25	1.25	4	160

* Design factors for WLL=35T and below are 5:1; and 45T are 4:1

CLEVIS TO EYE - TYPE 132

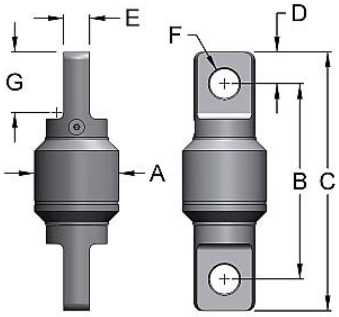


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
5	D-132	5/8	3.5	7.88	10.19	1	0.56	.88	1.13	1.56	1	1.28	1.19	2.5	11.38
8.5	EE-132	3/4	4	9.5	12.34	1.56	0.56	1.19	1.34	2.09	1.25	1.41	1.5	3.13	19.75
10	G-132	7/8	5	13.94	17.5	1.75	0.81	1.5	1.75	3.5	1.72	1.66	1.81	4.66	49
15	GG-132	1	5	13.63	17.5	1.75	0.81	1.5	1.75	3.5	2	2.03	2.13	4.91	50
35	HH-132	1 1/2	6	16.44	21.19	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	96
45	I-132		7	20.06	26.06	2.5	1.25	2.25	3	4	2.5	2.53	3	7	155

* Design factors for WLL=35T and below are 5:1; and 45T are 4:1

SWIVELS- HD-LINK, HEAVY DUTY (ANGULAR CONTACT)

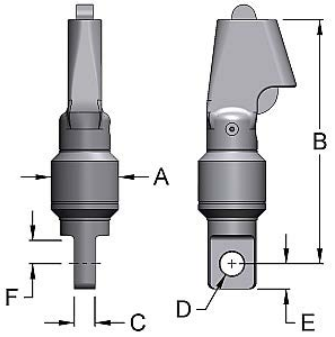
EYE TO EYE - TYPE 232



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
5	D-232	5/8	3.5	7.69	10.19	1.19	1	1.28	2.5	11
8.5	EE-232	3/4	4	9.31	12.34	1.5	1.25	1.41	3.13	19.25
10	G-232	7/8	5	13.88	17.5	1.81	1.72	1.66	4.66	47
15	GG-232	1	5	13.25	17.5	2.13	2	2.03	4.91	48
35	HH-232	1.5	6	16.5	21.19	2.38	2.25	2.31	5.25	93
45	I-232		7	20.06	26.06	3	2.5	2.53	7	150

* Design factors for WLL=35T and below are 5:1; and 45T are 4:1

WEDGE TO EYE - TYPE 732



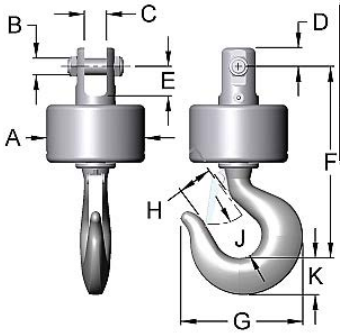
WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	Weight Lbs.
5	D-732	1/2, 5/8	3.5	12.5	1	1.28	1.19	1.31	15
8.5	EE-732	1/2, 5/8, 3/4	4	14.25	1.25	1.41	1.5	1.63	25
10	G-732	3/4, 7/8, 1	5	19.69	1.72	1.66	1.81	2.84	55
15	GG-732	3/4, 7/8, 1	5	19.38	2	2.03	2.13	2.78	56
25	H-732	1 1/8, 1 1/4	6	25.44	2.25	2.31	2.38	2.88	119
35	HH-732	1 1/8, 1 1/4	6	25.44	2.25	2.31	2.38	2.88	119

* Design factors for WLL=35T and below are 5:1; and 45T are 4:1

SWIVELS- g-LINK, OVERHAUL (ANGULAR CONTACT)

- Miller's **g-Link** overhaul swivels weigh 2 ½ to nearly four times as much standard swivels of the same type
- Adds overhaul weight without increasing overall length
- Ideal for small truck cranes and low head room applications where only minimal overhaul weight is required
- For 1.5 to 8.5 ton Working Loads
- Angular contact ball bearings for low torque swivel motion
- Machined from forged alloy steel bar
- Zinc plating inside and out for effective protection against corrosion.
- The g-Link is available with many of the other end fittings shown in this catalog. If you do not see your requirement in the following tables, please inquire.

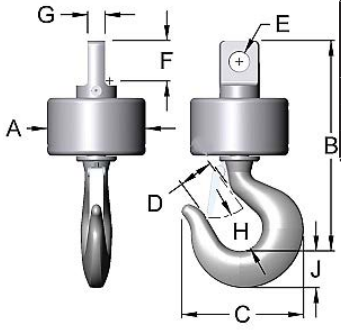
CLEVIS TO HOOK - TYPE 125



WLL* Tons	Model Number	Rope size	A	B	C	D	E	F	G	H	J	K	Weight Lbs.
1.5	B-125	3/8	4	0.5	0.5	.69	0.78	6.09	4.09	1.13	1.19	1.13	9
3	C-125	1/2	5	0.75	0.75	.94	1.19	8.38	4.94	1.34	1.38	1.48	17.94
5	D-125	5/8	7	0.88	1	1.13	1.56	12.63	6.5	1.69	1.75	1.81	43.81
8.5	EE-125	3/4	7	1.19	1.56	1.34	2.09	13.75	8.94	2.25	2.56	2.59	60

* Design factor 5:1 * Models 5 Ton and up include lubrication fitting.

EYE TO HOOK - TYPE 225

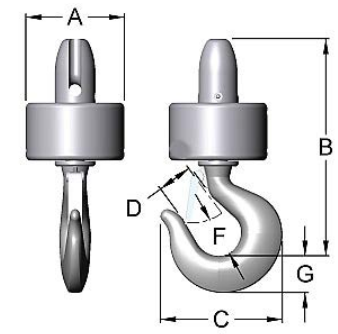


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	J	Weight Lbs.
1.5	B-225	3/8	4	6.25	4.09	1.13	0.66	1.38	0.5	1.19	1.13	9
3	C-225	1/2	5	9.75	4.81	1.34	0.91	1.88	0.75	1.38	1.44	17.94
5	D-225	5/8	7	12.5	6.5	1.69	1.28	2.5	1	1.75	1.81	43.81
8.5	EE-225	3/4	7	13.5	8.69	2.25	1.41	3.13	1.25	2.56	2.59	60

* Design factor 5:1 * Models 5 Ton and up include lubrication fitting.

SWIVELS- g-LINK, OVERHAUL (ANGULAR CONTACT)

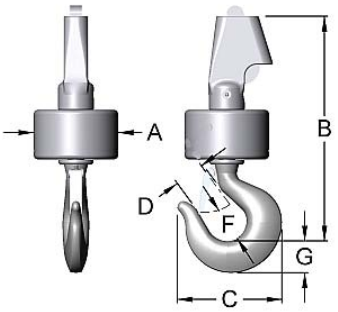
THIMBLE TO HOOK - TYPE 625



WLL* Tons	Model Number	Rope Size	A	B	C	D	F	G	Weight Lbs.
1.5	B-625	3/8	4	8.22	4.09	1.13	1.19	1.13	9.38
3	C-625	1/2	5	10.5	4.94	1.34	1.38	1.19	19.19
5	D-625	5/8	7	14.22	6.5	1.69	1.75	1.81	45.31
8.5	EE-625	3/4	7	15.5	8.69	2.25	2.19	2.59	56.25

* Design factor 5:1 * Models 5 Ton and up include lubrication fitting.

WEDGE TO HOOK - TYPE 725



WLL* Tons	Model Number	Rope Size	A	B	C	D	F	G	Weight Lbs.
3	C-725	1/2	5	12.69	4.94	1.34	1.13	1.19	20.38
5	D-725	1/2, 5/8	7	17.19	6.5	1.69	1.75	1.81	47.88
8.5	EE-725	1/2, 5/8, 3/4	7	18.5	8.69	2.25	2.56	2.59	65.25

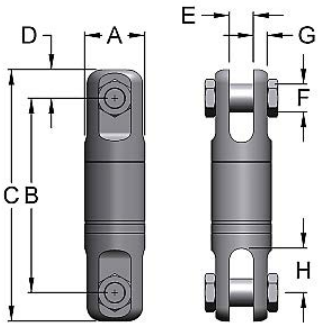
* Design factor 5:1 * Models 5 Ton and up include lubrication fitting.

SWIVELS- Y-LINK/HP, HIGH PRESSURE

Miller Y-Link alloy steel swivels are available in a high pressure version in six popular configurations, suitable for use in submerged environments where corrosion exposure from long term unattended deployments are not a major concern. These swivels are based on our Y-Link models and contain special pressure compensating seals for reliable operation to ocean depths of 10,000 feet. Y-Link/HP models are slightly longer than standard Y-Link models due to the addition of special high pressure seals.

- **Y-Link/HP** high pressure swivels contain special pressure compensating seals and oil-filled cavities for reliable operation to depths of 10,000 feet
- Working Load Limits from 0.75 to 600 tons
- Angular contact bearing design extends the life of the wire rope, and maximizes efficiency, reliability and service life
- Alloy steel structural components are zinc plated inside and out for corrosion protection
- Design Factor of 5 to 1 minimum for swivels 35 ton and below
- Design Factor of 4 to 1 minimum for swivels 45 tons and above
- Proof Load is 2 x WLL
- Models 8.5 tons and up include lubrication fitting
- Special designs are available

CLEVIS TO CLEVIS - TYPE 111HP

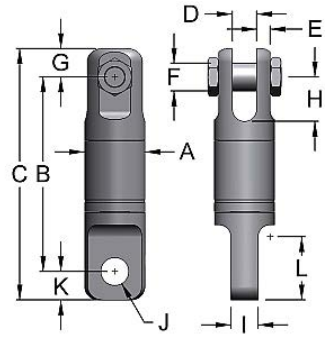


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	Weight Lbs.
0.75	BB-111HP	.25	1.31	3.69	5.56	.44	0.31	.38	0.22	0.56	1
1.5	B-111HP	.375	1.63	5	6.38	.69	0.5	.5	0.31	0.78	2
3	C-111HP	.5	2	5.44	9.31	.94	0.75	.75	0.38	1.19	5
5	D-111HP	.625	2.5	9.19	11.44	1.13	1	.88	0.56	1.56	10
8.5	EE-111HP	.75	3	10.38	13.06	1.34	1.56	1.19	0.53	2.03	15
15	GG-111HP	1	4	15.5	19	1.75	1.75	1.5	0.81	3.5	43
35	HH-111HP	1.5	5	18.19	22.94	2.38	2	2	1.13	3.69	85
45	I-111HP		6	22.56	28.56	3	2.5	2.25	1.25	4	156
60	JJ-111HP		7	24	31	3.5	3	2.5	1.5	4.5	229
75	K-111HP		8	27	35	4	3.5	3	1.75	5	328
100	KK-111HP		10	36.5	47.5	5.5	4.06	4	2	6.75	747
200	L-111HP		11.5	36.52	48.02	5.75	5.06	4.5	2.56	7.75	985
300	M-111HP		14	44.2	59.2	7.5	6.13	4.75	3.94	9.5	1680

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- Y-LINK/HP, HIGH PRESSURE

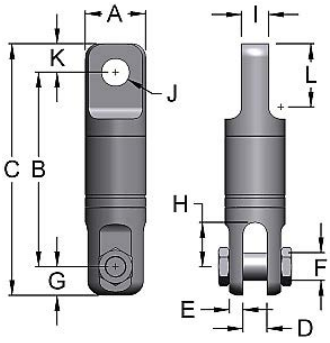
CLEVIS TO EYE - TYPE 112HP



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
0.75	BB-112HP	.25	1.31	4.75	5.56	.31	0.22	.38	0.44	0.56	.31	.38	.44	0.94	1
1.5	B-112HP	.375	1.63	5	6.31	0.5	0.31	.5	0.68	0.78	0.5	.66	.63	1.34	2
3	C-112HP	.5	2	7.31	9.31	0.75	0.38	.75	0.94	1.19	0.75	.91	1	1.94	5
5	D-112HP	.625	2.5	9.13	11.44	1	0.56	.88	1.13	1.56	1	1.28	1.19	2.5	11
8.5	EE-112HP	.75	3	10.25	13.09	1.56	0.53	1.19	1.34	2.09	1.25	1.41	1.5	3.13	16
15	GG-112HP	1	4	15.25	19.13	1.75	0.81	1.5	1.75	3.5	2	2.03	2.13	4.91	43
35	HH-112HP	1.5	5	18.19	22.94	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	82
45	I-112HP		6	22.56	28.56	2.5	1.25	2.25	3	4	2.5	2.53	3	7	149
60	JJ-112HP		7	24	31	3	1.5	2.5	3.5	4.5	3.5	2.88	3.5	7	226
75	K-112HP		8	27	35	3.5	1.75	3	4	5	3.5	3.38	4	8.13	333
100	KK-112HP		10	36.5	47.5	4.06	2	4	5.5	6.75	4.5	4.03	5.5	11.38	698
200	L-112HP		11.5	35.52	47.27	5.06	2.56	4.5	5.75	7.75	5	4.81	6	13	925
300	M-112HP		14	44.2	59.2	6.13	3.94	4.75	7.5	9.5	6	6.06	8	17	1645

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

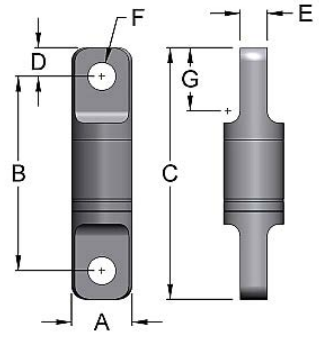
EYE TO CLEVIS - TYPE 211HP



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
0.75	BB-211HP	1/4	1.31	4.69	5.56	.31	0.22	.38	0.44	0.56	.31	.38	.44	0.94	1
1.5	B-211HP	3/8	1.63	5	6.31	0.5	0.31	.5	0.68	0.78	0.5	.66	.63	1.34	2
3	C-211HP	1/2	2	7.31	9.31	0.75	0.38	.75	0.94	1.19	0.75	.91	1	1.94	5
5	D-211HP	5/8	2.5	9.13	11.44	1	0.56	.88	1.13	1.56	1	1.28	1.19	2.5	10
8.5	EE-211HP	3/4	3	10.25	13.09	1.56	0.53	1.19	1.34	2.09	1.25	1.41	1.5	3.13	16
15	GG-211HP	1	4	15.25	19.13	1.75	0.81	1.5	1.75	3.5	2	2.03	2.13	4.91	43
35	HH-211HP	1 1/2	5	18.19	22.94	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	80
45	I-211HP		6	22.56	28.56	2.5	1.25	2.25	3	4	2.5	2.53	3	7	149
60	JJ-211HP		7	24	31	3	1.5	2.5	3.5	4.5	3.5	2.88	3.5	7	233
75	K-211HP		8	27	35	3.5	1.75	3	4	5	3.5	3.38	4	8.25	333
100	KK-211HP		10	36.5	47.5	4.06	2	4	5.5	6.75	4.5	4.03	5.5	11.38	731
200	L-211HP		11.5	36.67	48.42	5.06	2.56	4.5	5.75	7.75	5	4.81	6	13	960
300	M-211HP		14	44.2	59.2	6.13	3.94	4.75	7.5	9.5	6	6.06	8	17	1645

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

EYE TO EYE - TYPE 212HP

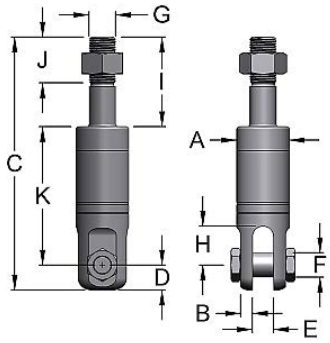


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
0.75	BB-212HP	1/4	1.31	4.94	5.88	.44	0.31	.39	0.94	1
1.5	B-212HP	3/8	1.63	5	6.25	.69	0.5	.66	1.34	2
3	C-212HP	1/2	2	7.31	9.31	1	0.75	.91	1.94	5
5	D-212HP	5/8	2.5	9.06	11.44	1.19	1	1.28	2.5	10
8.5	EE-212HP	3/4	3	10.13	13.06	1.5	1.25	1.41	3.13	16
15	GG-212HP	1	4	15.13	19.38	2.13	2	2.03	4.91	43
35	HH-212HP	1 1/2	5	18.19	22.94	2.38	2.25	2.31	5.25	79
45	I-212HP		6	22.56	28.56	3	2.5	2.53	7	142
60	JJ-212HP		7	24	31	3.5	3.5	2.88	7	231
75	K-212HP		8	27	35	4	3.5	3.38	8.25	340
100	KK-212HP		10	36.5	47.5	5.5	4.5	4.03	11.38	704
200	L-212HP		11.5	35.67	47.67	6	5	4.81	13	900
300	M-212HP		14	43.2	59.2	8	6	6.06	17	1600

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- Y-LINK/HP, HIGH PRESSURE

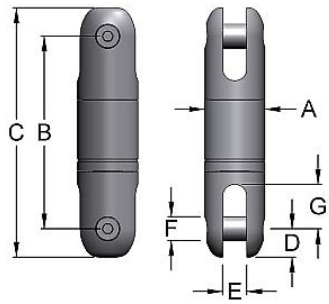
STUD TO CLEVIS - TYPE 311HP



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	Weight Lbs.
0.75	BB-311HP	1/4	1.31	0.22	5.81	.44	0.31	.38	0.63	0.56	2	1.5	4.38	1
1.5	B-311HP	3/8	1.63	0.31	7	.69	0.5	.5	0.75	0.78	2	1.5	4.31	2
3	C-311HP	1/2	2	0.38	10.44	.88	0.75	.75	0.88	1.19	3	2.63	5.25	5
5	D-311HP	5/8	2.5	0.56	11.19	1.13	1	.88	1.25	1.56	3.5	3.13	6.56	11
8.5	EE-311HP	3/4	3	0.53	13.78	1.34	1.56	1.19	1.5	2.09	4	3	8.44	15
15	GG-311HP	1	4	0.81	18.69	1.75	1.75	1.5	2	3.5	5.5	3	11.44	40
35	HH-311HP	1 1/2	5	1.13	25.56	2.38	2	2	2.5	3.69	8.5	4.25	14.69	84
45	I-311HP		6	1.25	28	3	2.5	2.25	3	4	8	4	17	141
60	JJ-311HP		7	1.5	31.5	3.5	3	2.5	3.25	4.5	8	4	20	219
75	K-311HP		8	1.75	36.5	4	3.5	3	3.75	5	10	5	22.5	295
100	KK-311HP		10	2	54.75	5.5	4.06	4	6.5	6.75	20.5	7.25	28.75	699

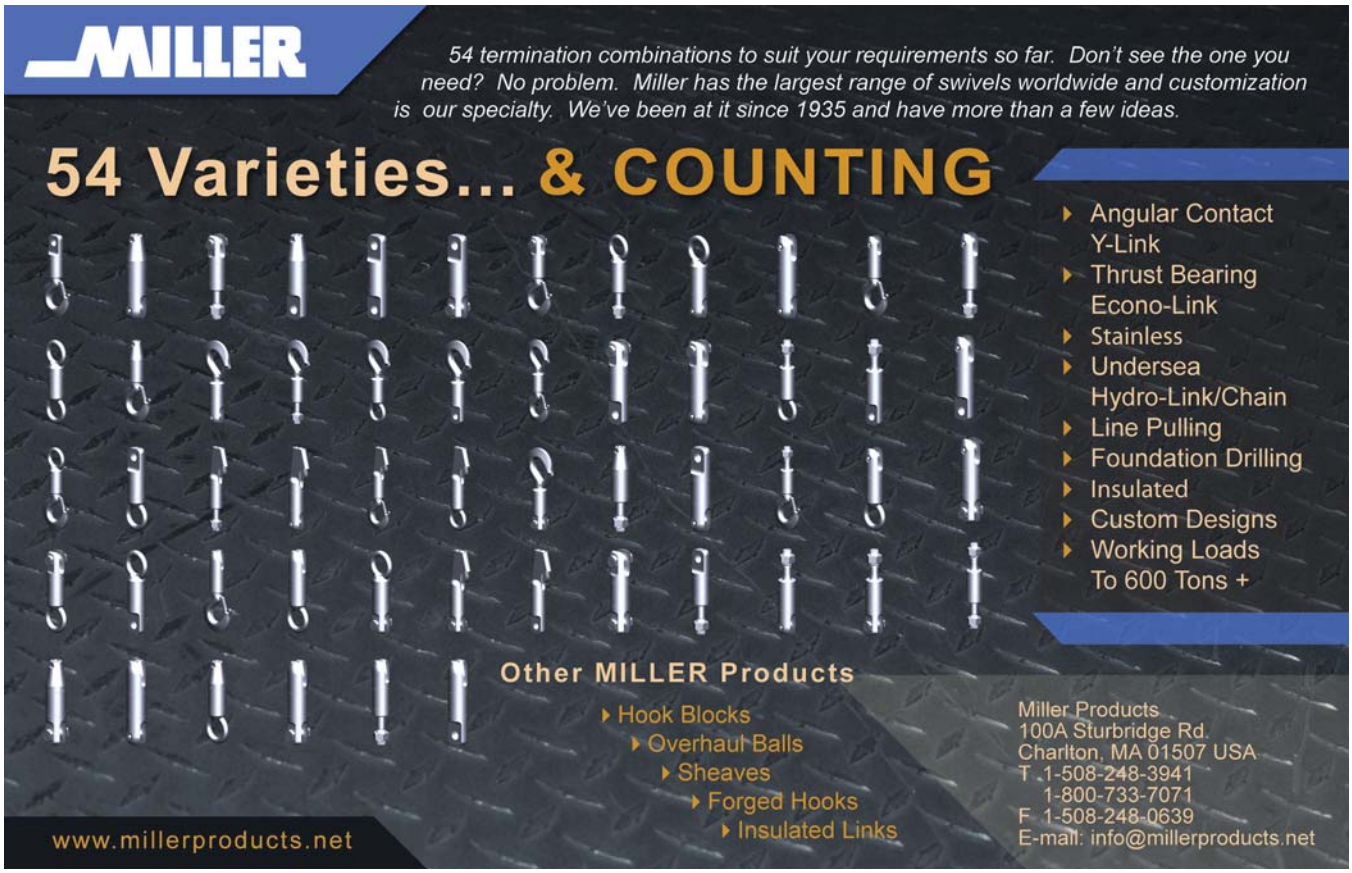
* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

BULLET NOSE TO BULLET NOSE - TYPE 414HP



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
0.75	BB-414HP	.25	1.31	4.88	5.63	.44	0.31	.38	0.56	1
1.5	B-414HP	3/8	1.63	5	6.25	.56	0.5	.44	0.81	2
3	C-414HP	3/8	2	6.5	8.13	.81	0.75	.63	0.94	4
5	D-414HP	5/8	2.5	9.25	11.38	1.13	1	.88	1.56	9
8.5	EE-414HP	3/4	3	10.56	13.13	1.25	1.28	1	2.13	16
15	GG-414HP	1	4	15	18.5	1.75	1.75	1.5	3.25	42
35	HH-414HP	1 1/2	5	18.16	22.91	2.38	2	2	3.69	87

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1



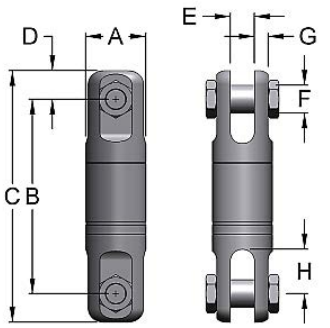
SWIVELS- HYDRO-LINK & HYDRO-LINK/HP

- Miller Hydro-Link swivels are machined from a special non-magnetic, austenitic stainless steel alloy of exceptionally high strength and corrosion resistance which maintains good mechanical properties at elevated and sub-zero temperatures.
- **Available in two configurations, standard Hydro-Link and high pressure Hydro-Link/HP**

- **Hydro-Link** swivels are intended for use with cable and chain in non-submerged corrosive environments such as sea air or harsh industrial environments
- **Hydro-Link/HP** high pressure swivels contain special pressure compensating seals and oil-filled cavities for reliable operation to depths of 10,000 feet
- Working Load Limits from 0.75 to 600 tons
- Angular contact bearing design extends the life of the wire rope, and maximizes efficiency, reliability and service life
- Stainless steel parts are passivated for added corrosion resistance
- Design Factor of 5 to 1 minimum for swivels 35 tons and below
- Design Factor of 4 to 1 minimum for swivels 45 tons and above
- Proof Load is 2 x WLL
- Models 8.5 tons and up include lubrication fitting
- Special designs available

SWIVELS- HYDRO LINK, STAINLESS STEEL

CLEVIS TO CLEVIS - TYPE 151, STAINLESS STEEL

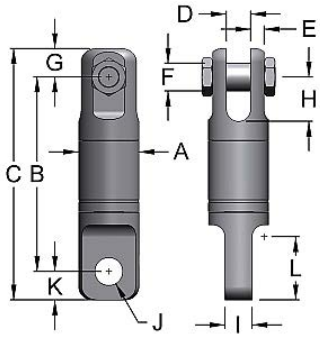


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	H	G	Weight Lbs.
0.75	BB-151	1/4	1.31	3.5	4.38	0.44	0.31	.38	.56	0.22	0.93
1.5	B-151	3/8	1.63	4.06	5.44	0.69	0.5	.5	.78	0.31	2
3	C-151	1/2	2.00	6.25	8.09	0.94	0.75	.75	1.19	0.38	4.5
5	D-151	5/8	2.5	7.94	10.09	1.13	1	.88	1.56	0.56	9.5
8.5	EE-151	3/4	2.88	9.63	12.31	1.34	1.56	1.19	2.09	0.53	15.25
10	G-151	7/8	4.00	14	17.5	1.75	1.75	1.5	3.5	0.81	40
15	GG-151	1	4.00	14	17.5	1.75	1.75	1.5	3.5	0.81	40
25	H-151	1 1/4	5.00	15.94	20.69	2.38	2	2	3.69	1.13	78
35	HH-151	1 1/2	5.00	15.94	20.69	2.38	2	2	3.69	1.13	78
45	I-151		6.00	20.06	26.06	3	2.5	2.25	4	1.25	146
50	J-151		7.00	20.94	27.94	3.5	3	2.5	4.5	1.5	207
60	JJ-151		7.00	20.94	27.94	3.5	3	2.5	4.5	1.5	207
75	K-151		8.00	24	32	4	3.5	3	5	1.75	300
100	KK-151		10.00	32.38	43.38	5.5	4.06	4	6.75	2	692
150	KKK-151		10	32.88	43.88	5.5	4.06	4	6.75	2	692
200	L-151		11.25	36.31	48.31	6	5.06	4.5	8.25	3.09	885
300	M-151		14	43.95	58.95	7.5	6.13	4.75	9.5	3.94	1680

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- HYDRO LINK, STAINLESS STEEL

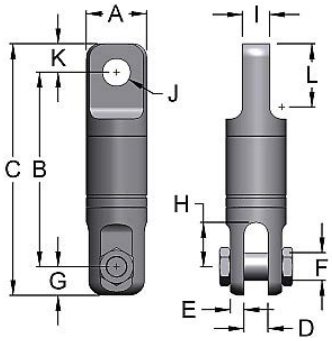
CLEVIS TO EYE - TYPE 152, STAINLESS STEEL



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
0.75	BB-152	1/4	1.31	3.56	4.44	0.31	0.22	.38	0.44	0.56	0.31	.38	.44	0.94	0.94
1.5	B-152	3/8	1.63	4.13	5.38	0.5	0.31	.5	0.69	0.78	0.5	.66	.63	1.34	1.94
3	C-152	1/2	2.0	6.19	8.13	0.75	0.38	.75	0.94	1.19	0.75	.91	1	1.94	4.25
5	D-152	5/8	2.5	7.88	10.19	1	0.56	.88	1.13	1.56	1	1.28	1.19	2.5	8.94
8.5	EE-152	3/4	2.88	9.5	12.34	1.56	0.53	1.19	1.34	2.19	1.25	1.41	1.5	3.13	15.25
10	G-152	7/8	4.0	13.94	17.5	1.75	0.81	1.5	1.75	3.5	1.72	1.66	1.81	4.66	39
15	GG-152	1	4.0	13.63	17.5	1.75	0.81	1.5	1.75	3.5	1.94	2.03	2.13	4.91	40
25	H-152	1 1/4	5.0	15.94	20.69	2	1.13	2.03	2.38	3.69	2.25	2.31	2.38	5.25	75
35	HH-152	1 1/2	5.0	15.94	20.69	2	1.13	2.03	2.38	3.69	2.25	2.31	2.38	5.25	75
45	I-152		6.0	20.06	26.06	2.5	1.25	2.25	3	4	2.5	2.53	3	7	139
50	J-152		7.0	20.94	27.94	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	205
60	JJ-152		7.0	20.94	27.94	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	205
75	K-152		8.0	24	32	3.5	1.75	3	4	5	3.5	3.38	4	8.13	305
100	KK-152		10.0	32.88	43.88	4.06	2	4	5.5	6.75	4.5	4.03	5.5	11.38	647
150	KKK-152		10	32.88	43.88	4.06	2	4	5.5	6.75	4.5	4.28	5.5	11.38	647
200	L-152		11.25	35.92	48.29	5.06	3.09	4.5	6	8.25	5	4.81	6.38	13.5	885
300	M-152		14	43.45	58.95	6.13	3.94	4.75	7.5	9.5	6	6.06	8	17	1645

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

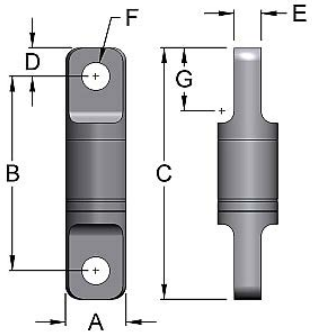
EYE TO CLEVIS - TYPE 251, STAINLESS STEEL



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
0.75	BB-251	1/4	1.31	3.63	4.5	0.31	0.22	.38	0.44	0.44	0.31	.39	.44	0.94	0.94
1.5	B-251	3/8	1.63	4.13	5.44	0.5	0.31	.5	0.69	0.78	0.5	.66	.63	1.34	1.88
3	C-251	1/2	2.0	6.19	8.13	0.75	0.38	.75	0.94	1.19	0.75	.91	1	1.94	4.31
5	D-251	5/8	2.5	7.88	10.19	1	0.56	.88	1.13	1.56	1	1.28	1.19	2.5	9.06
8.5	EE-251	3/4	2.88	9.5	12.34	1.56	0.53	1.19	1.34	2.19	1.25	1.41	1.5	3.13	14.75
10	G-251	7/8	4.0	13.94	17.5	1.75	0.81	1.5	1.75	3.5	1.72	1.66	1.81	4.66	39
15	GG-251	1	4.0	13.63	17.5	1.75	0.81	1.5	1.75	3.5	1.94	2.03	2.13	4.91	40
25	H-251	1 1/4	5.0	15.94	20.69	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	75
35	HH-251	1 1/2	5.0	15.94	20.69	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	75
45	I-251		6.0	20.06	26.06	2.5	1.25	2.25	3	4	2.5	2.53	3	7	139
50	J-251		7.0	20.94	27.94	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	211
60	JJ-251		7.0	20.94	27.94	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	211
75	K-251		8.0	24	32	3.5	1.75	3	4	5	3.5	3.38	4	8.13	305
100	KK-251		10.0	32.88	43.88	4.06	2	4	5.5	6.75	4.5	4.03	5.5	11.38	678
150	KKK-251		10	32.88	43.88	4.06	2	4	5.5	6.75	4.5	4.28	5.5	11.38	678
200	L-251		11.25	35.93	48.31	5.06	3.09	4.5	6	8.25	5	4.81	6.38	13.5	885
300	M-251		14	43.45	58.95	6.13	3.94	4.75	7.5	9.5	6	6.06	8	17	1645

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

EYE TO EYE - TYPE 252, STAINLESS STEEL

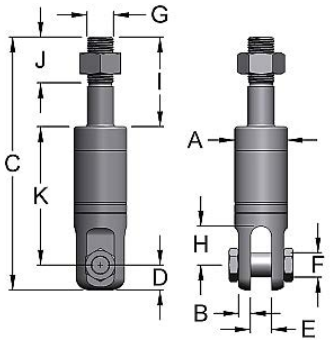


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
0.75	BB-252	1/4	1.31	3.81	4.69	0.44	0.31	.39	0.94	0.93
1.5	B-252	3/8	1.63	4.13	5.38	0.63	0.5	.66	1.34	1.87
3	C-252	1/2	2	6.13	8.13	1	0.75	.91	1.94	4.06
5	D-252	5/8	2.5	7.81	10.19	1.19	1	1.28	2.5	8.5
8.5	EE-252	3/4	2.88	9.31	12.31	1.5	1.25	1.41	3.13	14.75
10	G-252	7/8	4	13.88	17.5	1.81	1.72	1.63	4.66	37
15	GG-252	1	4	13.25	17.5	2.13	1.94	2.03	4.91	39
25	H-252	1 1/4	5	15.94	20.69	2.38	2.25	2.31	5.25	72
35	HH-252	1 1/2	5	15.94	20.69	2.38	2.25	2.31	5.25	72
45	I-252		6	20.06	26.06	3	2.5	2.53	7	132
50	J-252		7	20.94	27.94	3.5	2.94	2.88	7	209
60	JJ-252		7	20.94	27.94	3.5	2.94	2.88	7	209
75	K-252		8	24	32	4	3.5	3.38	8.13	311
100	KK-252		10	32.88	43.41	5.5	4.5	4.03	11.38	653
150	KKK-252		10	32.88	43.88	5.5	4.5	4.28	11.38	657
200	L-252		11.25	35.56	48.31	6.38	5	4.81	13.5	880
300	M-252		14	42.95	58.95	8	6	6.06	17	1610

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- HYDRO LINK, STAINLESS STEEL

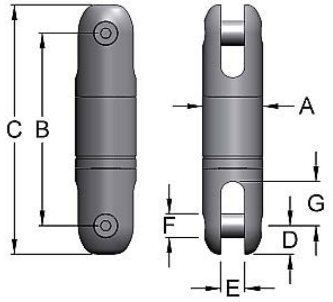
STUD TO CLEVIS - TYPE 351, STAINLESS STEEL



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	Weight Lbs.
0.75	BB-351	1/4	1.31	0.22	5.63	0.44	0.31	.38	0.63	0.56	2	1.5	3.19	1.06
1.5	B-351	3/8	1.63	0.31	6.06	0.69	0.5	.5	0.75	0.78	2	1.5	3.75	1.87
3	C-351	1/2	2	0.38	9.19	0.94	0.75	.75	0.88	1.19	3	2.63	5.25	4.5
5	D-351	5/8	2.5	0.56	11.19	1.13	1	.88	1.25	1.56	3.5	3.13	6.56	9.75
8.5	EE-351	3/4	2.88	0.53	13.03	1.56	1.56	1.19	1.5	2.19	4	3	7.69	14.5
10	G-351	7/8	4	0.81	17.44	1.75	1.75	1.5	2	3.5	5.5	3	10.19	37
15	GG-351	1	4	0.81	17.44	1.75	1.75	1.5	2	3.5	5.5	3	10.19	37
25	H-351	1 1/4	5	1.13	23.31	2.38	2	2	2.5	3.69	8.5	4.25	12.44	78
35	HH-351	1 1/2	5	1.13	23.31	2.38	2	2	2.5	3.69	8.5	4.25	10.44	78
45	I-351		6	1.25	25.56	3	2.5	2.25	3	4	8	4	14.56	131
50	J-351		7	1.5	28.44	3.5	3	2.5	3.25	4.5	8	4	16.94	198
60	JJ-351		7	1.5	28.44	3.5	3	2.5	3.25	4.5	8	4	16.94	198
75	K-351		8	1.75	33.5	4	3.5	3	3.75	5	10	5	19.5	271
100	KK-351		10	2	51.13	5.5	4.06	4	6.5	6.75	20.5	7.25	25.13	648

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

BULLET NOSE TO BULLET NOSE - TYPE 454, STAINLESS STEEL

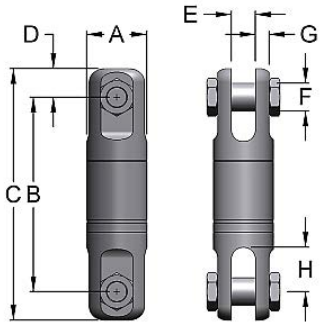


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
0.75	BB-454	1/4	1.31	3.56	4.44	0.44	0.31	.38	0.56	1.12
1.5	B-454	3/8	1.63	4.06	5.19	0.56	0.5	.44	0.81	1.81
3	C-454	1/2	2	5.44	7.06	0.81	0.75	.63	0.94	3.87
5	D-454	5/8	2.5	7.88	10.19	1.13	1	.88	1.56	8.06
8.5	EE-454	3/4	2.88	9.81	12.31	1.25	1.28	1	2.13	14.5
10	G-454	7/8	4	13.25	16.75	1.75	1.75	1.5	3.25	40
15	GG-454	1	4	13.25	16.75	1.75	1.75	1.5	3.25	40
25	H-454	1 1/4	5	15.91	20.66	2.38	2	2	3.69	84
35	HH-454	1 1/2	5	15.91	20.66	2.38	2	2	3.69	84

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- HYDRO LINK\HP, HIGH PRESSURE, STAINLESS STEEL

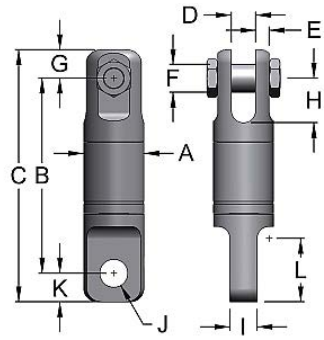
CLEVIS TO CLEVIS - TYPE 151HP, STAINLESS STEEL



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	Weight Lbs.
0.75	BB-151HP	1/4	1.31	3.69	5.56	.44	0.31	.38	0.22	0.56	1
1.5	B-151HP	3/8	1.63	5	6.38	.69	0.5	.5	0.31	0.78	2
3	C-151HP	1/2	2	5.44	9.31	.94	0.75	.75	0.38	1.19	5
5	D-151HP	5/8	2.5	9.19	11.44	1.13	1	.88	0.56	1.56	10
8.5	EE-151HP	3/4	3	10.38	13.06	1.34	1.56	1.19	0.53	2.03	15
15	GG-151HP	1	4	15.5	19	1.75	1.75	1.5	0.81	3.5	43
35	HH-151HP	1 1/2	5	18.19	22.94	2.38	2	2	1.13	3.69	85
45	I-151HP		6	22.56	28.56	3	2.5	2.25	1.25	4	156
60	JJ-151HP		7	24	31	3.5	3	2.5	1.5	4.5	229
75	K-151HP		8	27	35	4	3.5	3	1.75	5	328
100	KK-151HP		10	36.5	47.5	5.5	4.06	4	2	6.75	747
200	L-151HP		11.25	36.31	48.31	6	5.06	4.5	3.09	8.25	885
300	M-151HP		14	44.2	59.2	7.5	6.13	4.75	3.94	9.5	1680

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

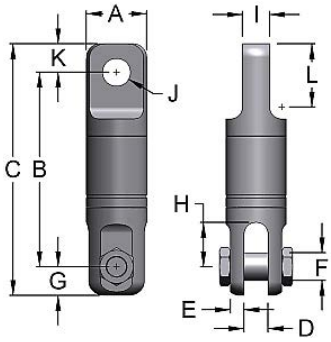
CLEVIS TO EYE - TYPE 152HP, STAINLESS STEEL



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
0.75	BB-152HP	1/4	1.31	4.75	5.56	.31	0.22	.375	0.44	0.56	.31	.38	.44	0.94	1
1.5	B-152HP	3/8	1.63	5	6.31	0.5	0.31	.5	0.68	0.78	0.5	.66	.63	1.34	2
3	C-152HP	1/2	2	7.31	9.31	0.75	0.38	.75	0.94	1.19	0.75	.91	1	1.94	5
5	D-152HP	5/8	2.5	9.13	11.44	1	0.56	.88	1.13	1.56	1	1.28	1.19	2.5	11
8.5	EE-152HP	3/4	3	10.25	13.09	1.56	0.53	1.06	1.34	2.09	1.25	1.41	1.5	3.13	16
15	GG-152HP	1	4	15.25	19.13	1.75	0.81	1.5	1.75	3.5	2	2.03	2.13	4.91	43
35	HH-152HP	1 1/2	5	18.19	22.94	2	1.13	2.03	2.38	3.69	2.25	2.31	2.38	5.25	82
45	I-152HP		6	22.56	28.56	2.5	1.25	2.25	3	4	2.5	2.53	3	7	149
60	JJ-152HP		7	24	31	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	226
75	K-152HP		8	27	35	3.5	1.75	3	4	5	3.5	3.38	4	8.13	333
100	KK-152HP		10	36.5	47.5	4.06	2	4	5.5	6.75	4.5	4.03	5.5	11.38	698
200	L-152HP		11.25	35.92	48.29	5.06	3.09	4.5	6	8.25	5	4.81	6.38	13.5	885
300	M-152HP		14	44.2	59.2	6.13	3.94	4.75	7.5	9.5	6	6.06	8	17	1645

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

EYE TO CLEVIS - TYPE 251HP, STAINLESS STEEL

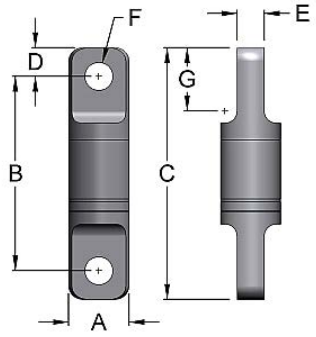


WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight Lbs.
0.75	BB-251HP	1/4	1.31	4.69	5.56	.31	0.22	.38	0.44	0.56	.31	.39	.44	0.94	1
1.5	B-251HP	3/8	1.63	5	6.31	0.5	0.31	.5	0.68	0.78	0.5	.66	.63	1.34	2
3	C-251HP	1/2	2	7.31	9.31	0.75	0.38	.75	0.94	1.19	0.75	.91	1	1.94	5
5	D-251HP	5/8	2.5	9.13	11.44	1	0.56	.88	1.13	1.56	1	1.28	1.19	2.5	10
8.5	EE-251HP	3/4	3	10.25	13.09	1.56	0.53	1.19	1.34	2.09	1.25	1.41	1.5	3.13	16
15	GG-251HP	1	4	15.25	19.13	1.75	0.81	1.5	1.75	3.5	2	2.03	2.13	4.91	43
35	HH-251HP	1 1/2	5	18.19	22.94	2	1.13	2	2.38	3.69	2.25	2.31	2.38	5.25	80
45	I-251HP		6	22.56	28.56	2.5	1.25	2.25	3	4	2.5	2.53	3	7	149
60	JJ-251HP		7	24	31	3	1.5	2.5	3.5	4.5	2.94	2.88	3.5	7	233
75	K-251HP		8	27	35	3.5	1.75	3	4	5	3.5	3.03	4	8.25	333
100	KK-251HP		10	36.5	47.5	4.06	2	4	5.5	6.75	4.5	4.03	5.5	11.38	731
200	L-251HP		11.25	35.93	48.31	5.06	3.09	4.5	6	8.25	5	4.81	6.38	13.5	885
300	M-251HP		14	44.2	59.2	6.13	3.94	4.75	7.5	9.5	6	6.06	8	17	1645

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

SWIVELS- HYDRO LINK\HP, HIGH PRESSURE, STAINLESS STEEL

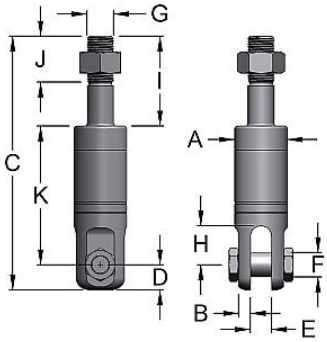
EYE TO EYE - TYPE 252HP, STAINLESS STEEL



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
0.75	BB-252HP	1/4	1.31	4.94	5.88	.44	0.31	.39	0.94	1
1.5	B-252HP	3/8	1.63	5	6.25	.69	0.5	.66	1.34	2
3	C-252HP	1/2	2	7.31	9.31	1	0.75	.91	1.94	5
5	D-252HP	5/8	2.5	9.06	11.44	1.19	1	1.28	2.5	10
8.5	EE-252HP	3/4	3	10.13	13.06	1.5	1.25	1.41	3.13	16
15	GG-252HP	1	4	15.13	19.38	2.13	2	2.03	4.91	43
35	HH-252HP	1 1/2	5	18.19	22.94	2.38	2.25	2.31	5.25	79
45	I-252HP		6	22.56	28.56	3	2.5	2.53	7	142
60	JJ-252HP		7	24	31	3.5	2.94	2.88	7	231
75	K-252HP		8	27	35	4	3.5	3.38	8.25	340
100	KK-252HP		10	36.5	47.5	5.5	4.5	4.03	11.38	704
200	L-252HP		11.25	35.56	48.31	6.38	5	4.81	13.5	875
300	M-252HP		14	43.2	59.2	8	6	6.06	17	1600

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

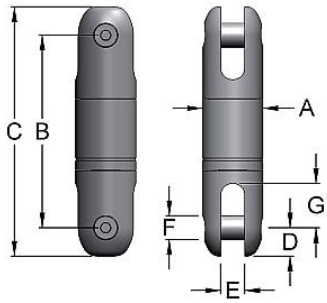
STUD TO CLEVIS - TYPE 351HP, STAINLESS STEEL



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	H	I	J	K	Weight Lbs.
0.75	BB-351HP	1/4	1.31	0.22	5.81	.44	0.31	.38	0.63	0.56	2	1.5	4.38	1
1.5	B-351HP	3/8	1.63	0.31	7	.69	0.5	.5	0.75	0.78	2	1.5	4.31	2
3	C-351HP	1/2	2	0.38	10.44	.88	0.75	.75	0.88	1.19	3	2.63	5.25	5
5	D-351HP	5/8	2.5	0.56	11.19	1.13	1	.88	1.25	1.56	3.5	3.13	6.56	11
8.5	EE-351HP	3/4	3	0.53	13.78	1.34	1.56	1.19	1.5	2.09	4	3	8.44	15
15	GG-351HP	1	4	0.81	18.69	1.75	1.75	1.5	2	3.5	5.5	3	11.44	40
35	HH-351HP	1 1/2	5	1.13	25.56	2.38	2	2	2.5	3.69	8.5	4.25	14.69	84
45	I-351HP		6	1.25	28	3	2.5	2.25	3	4	8	4	17	141
60	JJ-351HP		7	1.5	31.5	3.5	3	2.5	3.25	4.5	8	4	20	219
75	K-351HP		8	1.75	36.5	4	3.5	3	3.75	5	10	5	22.5	295
100	KK-351HP		10	2	54.75	5.5	4.06	4	6.5	6.75	20.5	7.25	28.75	699

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

BULLET NOSE TO BULLET NOSE - TYPE 454HP, STAINLESS STEEL



WLL* Tons	Model Number	Rope Size	A	B	C	D	E	F	G	Weight Lbs.
0.75	BB-454HP	1/4	1.31	4.88	5.63	.44	0.31	.38	0.56	1
1.5	B-454HP	3/8	1.63	5	6.25	.56	0.5	.44	0.81	2
3	C-454HP	1/2	2	6.5	8.13	.81	0.75	.63	0.94	4
5	D-454HP	5/8	2.5	9.25	11.38	1.13	1	.88	1.56	9
8.5	EE-454HP	3/4	3	10.56	13.13	1.25	1.28	1	2.13	16
15	GG-454HP	1	4	15	18.5	1.75	1.75	1.5	3.25	42
35	HH-454HP	1 1/2	5	18.16	22.91	2.38	2	2	3.69	87

* Design factors for WLL=35T and below are 5:1; for 45T and above 4:1

MILLER CUSTOM SWIVELS

CUSTOM Y-LINK SWIVEL QUOTE REQUEST

Requestor
Name:_____**Date:**_____**Quantity**_____
Company:_____ **Address:**_____
City:_____ **State:**_____ **Zip:**_____
Phone:_____ **E-mail:**_____

SWIVEL CONFIGURATION
CAP
CLEVIS__ EYE__ STUD__ BULLET__ SOCKET__ THIMBLE__ WEDGE__ HOOK__EYEBOLT__

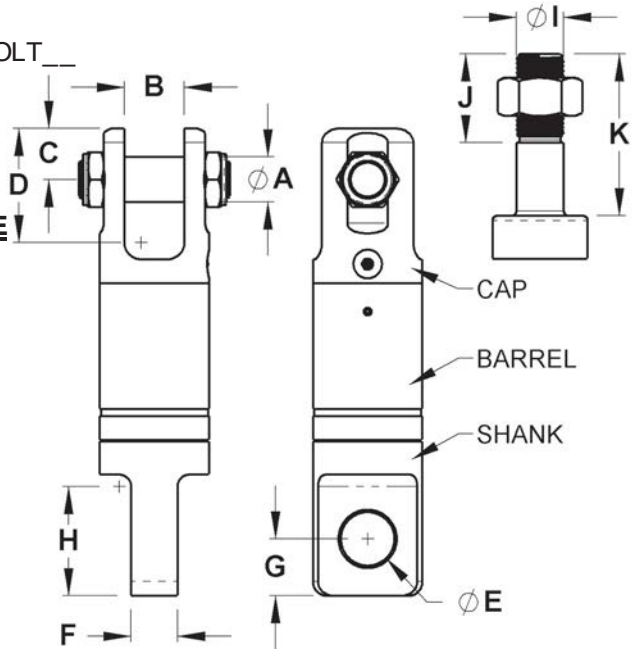
BARREL
STANDARD__ HEAVY DUTY__ HIGH PRESSURE__

SHANK
CLEVIS__ EYE__ STUD__ BULLET__ HOOK__ EYE BOLT__

SWIVEL MATERIAL
STANDARD___ STAINLESS STEEL___

SWIVEL CAPACITY & DIMENSIONS, WIRE ROPE
WORKING CAPACITY (LOAD LIMIT)_____
(INDICATE US / METRIC TONS)

DESIGN FACTOR_____ WIRE ROPE SIZE_____
CLEVIS DIMENSIONS A_____ B_____ C_____
D_____
EYE DIMENSIONS E_____ F_____ G_____
H_____
STUD DIMENSIONS I_____ J_____ K_____



OTHER REQUIEMENTS
ENVIRONMENT_____

SPECIAL TESTING, THIRD PARTY INSPECTION, ETC:

_____

_____

Miller Lifting Products
100A Sturbridge Rd.
Charlton, MA USA 01507
Tel.: (508) 248-3941 / Fax: (508) 248-0639
E-mail: sales@millerproducts.net
www.millerproducts.net

SWIVELS- PENGO-MILLER, FOR LINE STRINGING

PENGO-MILLER Swivels

- The original PENGO-MILLER tension line stringing swivels and 90° connectors.
- Designed specifically for horizontal pulling of tension lines and passage over sheaves, overhead or through conduit.
- Swivels have Working Loads up to 100,000 lbs. with a 3:1 design factor.
- Equipped with low friction angular contact ball bearings.
- Machined, heat treated from solid forged alloy steel bar. Single-piece shank.
- Zinc plating inside and out for effective protection against corrosion.
- Hex socket pins are standard. Optional slotted pins available for sizes A thru D.
- Factory lubricated and sealed with neoprene seals.
- 90° Connectors permit limited movement of connected cables in two perpendicular planes. Short, bullet shape accommodates passage though blocks. Mean Breaking Load up to 150,000 lbs.
- Order spare pins by type (hex or slotted), and by model number of the swivel or connector. For example, “two hex pins for A-13-L” or “two slotted pins for B-13-L-SL”.

90 degree connectors

Green Dot = Proof Load Tested

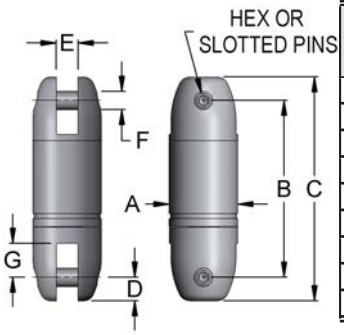
*****NEW*****

*****PROOF LOAD TESTED*****

All swivel models A-13-L, BB-13-L and B-13-L are individually proof load tested to 120% of their working load limit as indicated by a green proof test marking. Test certificates available. Other sizes tested upon request.

Safety Note: These swivels are designed for straight line pulling and will not support side loads as would be encountered traveling over a bull wheel. Miller line stringing swivels are not intended for general lifting applications. Swivel selection should be based on pulling line diameter, grip size, opening dimensions, pin sizes, working load, and sheave groove diameter. For general lifting applications, see Miller Y-Link and Miller Econo-Link Swivels.

LINE STRINGING SWIVELS



Model # Hex Pin	Model # Slotted Pin	WLL* Lbs.	A	B	C	D	E	F	G	Weight Lbs.
A13L	A13L-SL	1,800	.875	2.34	3.09	0.375	0.31	.31	0.47	0.38
BB13L	BB13L-SL	4,000	1.25	3.66	4.51	0.44	0.59	.38	0.69	1
B13L	B13L-SL	7,500	1.44	4	5.13	0.56	0.59	.44	0.81	1.38
C13L	C13L-SL	10,000	1.875	5.44	7.06	0.81	0.75	.62	0.94	3.63
D13L	D13L-SL	16,000	2.44	7.88	10.19	1.125	1	.88	1.56	8
EE13L	N/A	25,000	2.875	9.81	12.31	1.25	1.28	1	2.13	15
D13-4BL	N/A	30,000	2.5	8.91	11.16	1.125	1	.88	1.56	9
GG13L	N/A	50,000	3.875	13.25	16.75	1.75	1.75	1.5	3.5	40
HH13L	N/A	100,000	4.875	15.81	20.56	2.375	2	2	3.69	78

90° CONNECTORS

Model # Hex Pin	Model # Slotted Pin	MBL Lbs.	ROPE	A	B	C	D	E	F	G	Weight Lbs.
PL 1/4	PL 1/4-SL	5,400	1/4	.88	1.31	2.06	.38	0.31	.31	0.47	0.19
PL 3/8	PL 3/8-SL	12,000	3/8	1.25	1.75	2.63	.44	0.59	.38	0.69	0.38
PL 1/2	PL 1/2-SL	22,500	1/2	1.44	2.13	3.25	.56	0.59	.44	0.81	0.69
PL 5/8	PL 5/8-SL	30,000	5/8	1.88	2.5	4.13	.81	0.75	.62	0.94	1.69
PL 3/4	PL 3/4-SL	60,000	3/4	2.44	3.38	5.63	1.13	1	.88	1.31	3.75
PL 7/8	N/A	75,000	7/8	2.63	3.88	6.38	1.25	1	1	1.5	6.5
PL 1	N/A	150,000	1	3.88	8	11.5	1.75	1.75	1.5	3.5	18.5

OVERHAUL BALLS- SPLIT BALL

- **Miller's Split Headache Balls provide a convenient way to add weight to wire rope at any point.**
- Split halves bolt together for clamping on the rope.
- Sizes for rope from 3/8" to 7/8".
- Overhaul weights of 20, 50 and 100 lbs.
- Cast iron with Miller Yellow enamel finish

Model Number	Rope Size	Diameter (in.)	Weight Lbs.
HB20	3/8	5	20
HB50	1/2, 5/8	7	50
HB100	5/8, 3/4, 7/8	9	100

OVERHAUL BALLS- ASSEMBLIES Y-LINK

MILLER *SOLID-BALL*® TOP SWIVELING OVERHAUL BALL ASSEMBLIES

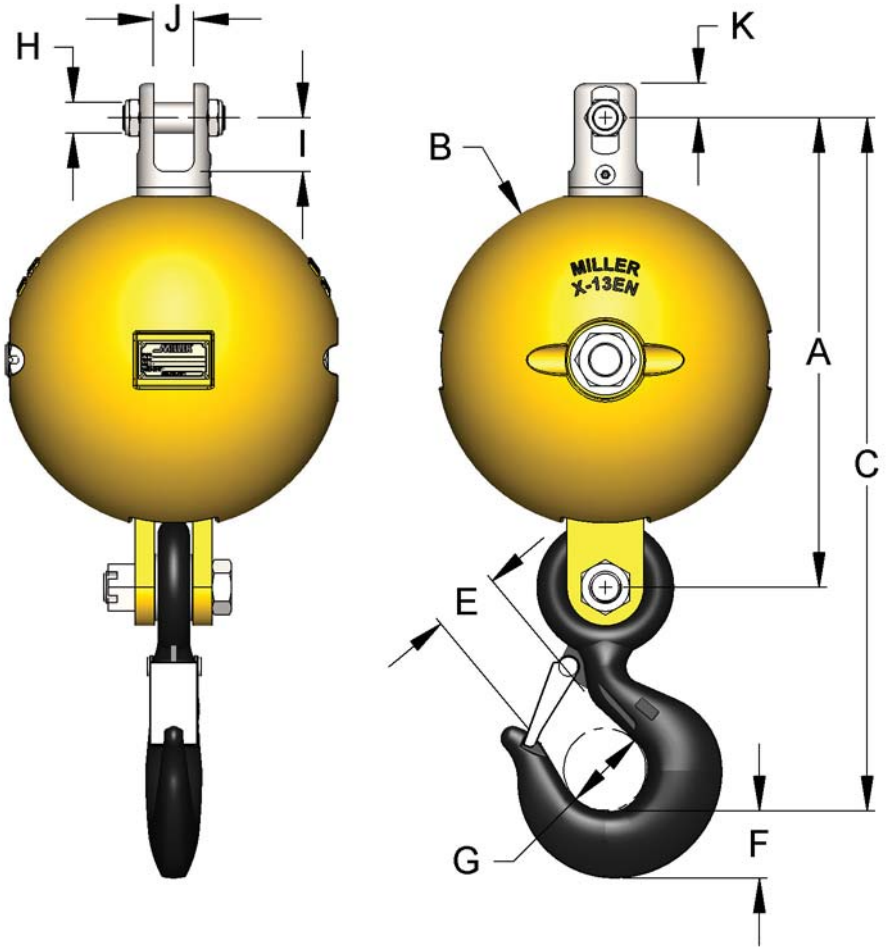
Miller's highest-performance overhaul ball assemblies are uniquely equipped with angular contact ball bearing (ACBB) swivels for maximum response to wire rope dynamics under load. The ACBB swivel contains a set of multiple, precision-matched bearings which respond with significantly lower friction and torque than do the basic thrust bearing overhaul balls found elsewhere. In addition to the improved responsiveness, long term durability is greatly enhanced due to longer bearing life.

- Working load capacities from 5 to 35 tons
- Design safety factor of 5:1
- Weights to 1450 lbs. for up to 1 ½" rope
- Features Miller Y-Link® ACBB swivel
- Swivel lubrication fitting
- Drop forged steel eye hook with safety latch
- Optional positive locking latch
- Heavier & bottom swiveling models available
- Integrated wedge socket or clevis fittings available
- Available in full conformance with API2C

Top Swivel Bottom Swivel 3000 lbs.

OVERHAUL BALLS- ASSEMBLIES Y-LINK

CLEVIS TO HOOK - TYPE 1

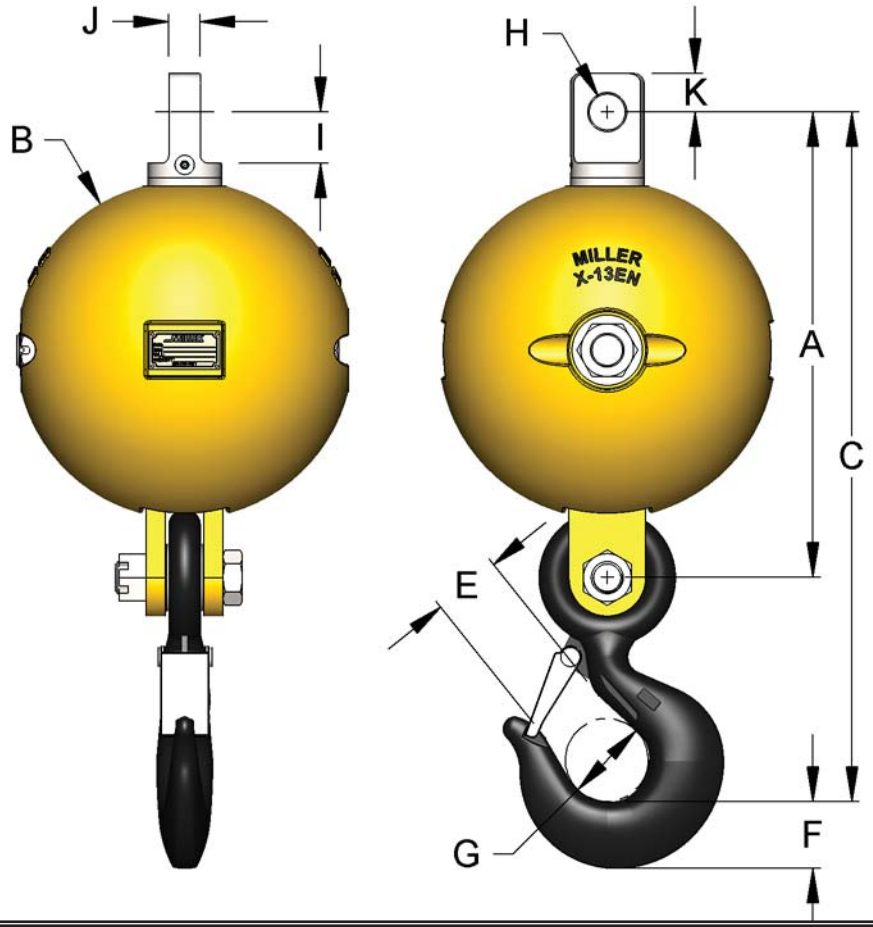


WLL* Tons	Model Number	Rope Size	A	B	C	E	F	G	H	I	J	K	Weight Lbs.	SWIVEL
5	HB7-1N	5/8	13.63	7	20.44	1.61	1.81	2.5	0.88	1.56	1	1.13	65	D-112
5	HB8-1N	5/8	13.63	8	20.44	1.61	1.81	2.5	0.88	1.56	1	1.13	100	D-112
8.5	HB9B-1N	3/4	16.5	9	25.75	2.27	2.59	3.25	1.19	2.19	1.56	1.34	130	EE-112
8.5	HB10B-1N	3/4	16.5	10	25.75	2.27	2.59	3.25	1.19	2.19	1.56	1.34	170	EE-112
8.5	HB11B-1N	3/4	17.38	11	26.63	2.27	2.59	3.25	1.19	2.19	1.56	1.34	215	EE-112
8.5	HB12-1N	3/4	17.38	12	26.63	2.27	2.59	3.25	1.19	2.19	1.56	1.34	265	EE-112
8.5	HB13B-1N	3/4	17.38	13	27.63	2.27	2.59	3.25	1.19	2.19	1.56	1.34	330	EE-112
10	HB13C-1N	7/8	22.13	13	32.88	3.02	3.00	4.25	1.5	3.5	1.75	1.75	364	GG-112
15	HB13D-1N	1	22.13	13	32.88	3.02	3.00	4.25	1.5	3.5	1.75	1.75	364	GG-112
25	HB13E-1N	1-1/2	25.44	13	37.75	3.25	3.62	5	2	3.69	2	2.38	416	H-112
35	HB13F-1N	1-1/2	25.44	13	41.5	3	4.56	5.38	2	3.69	2	2.38	490	HH-112
10	HB16-1N	7/8	24.63	16	35.38	3.02	3.00	4.25	1.5	3.5	1.75	1.75	600	GG-112
15	HB16B-1N	1	24.63	16	35.38	3.02	3.00	4.25	1.5	3.5	1.75	1.75	600	GG-112
25	HB16C-1N	1-1/2	26.94	16	39.63	3.25	3.62	5	2	3.69	2	2.38	650	H-112
35	HB16D-1N	1-1/2	26.94	16	44	3	4.56	5.38	2	3.69	2	2.38	720	HH-112
10	HB18G-1N	7/8	24.93	18	42.21	3.02	3.00	4.25	1.5	3.5	1.75	1.75	800	G-112
15	HB18GG-1N	1	24.93	18	42.21	3.02	3.00	4.25	1.5	3.5	1.75	1.75	800	GG-112
15	HB22GG-1N	1	30	22	40.78	3.02	3.00	4.25	1.5	3.5	1.75	1.75	1300	GG-112
25	HB22H-1N	1-1/2	32.19	22	44.5	3.25	3.62	5	2	3.69	2	2.38	1400	H-112
35	HB22HH-1N	1-1/2	32.19	22	48.13	3	4.56	5.38	2	3.69	2	2.38	1450	HH-112

* Design factor 5:1

OVERHAUL BALLS- ASSEMBLIES Y-LINK

EYE TO HOOK - TYPE 2

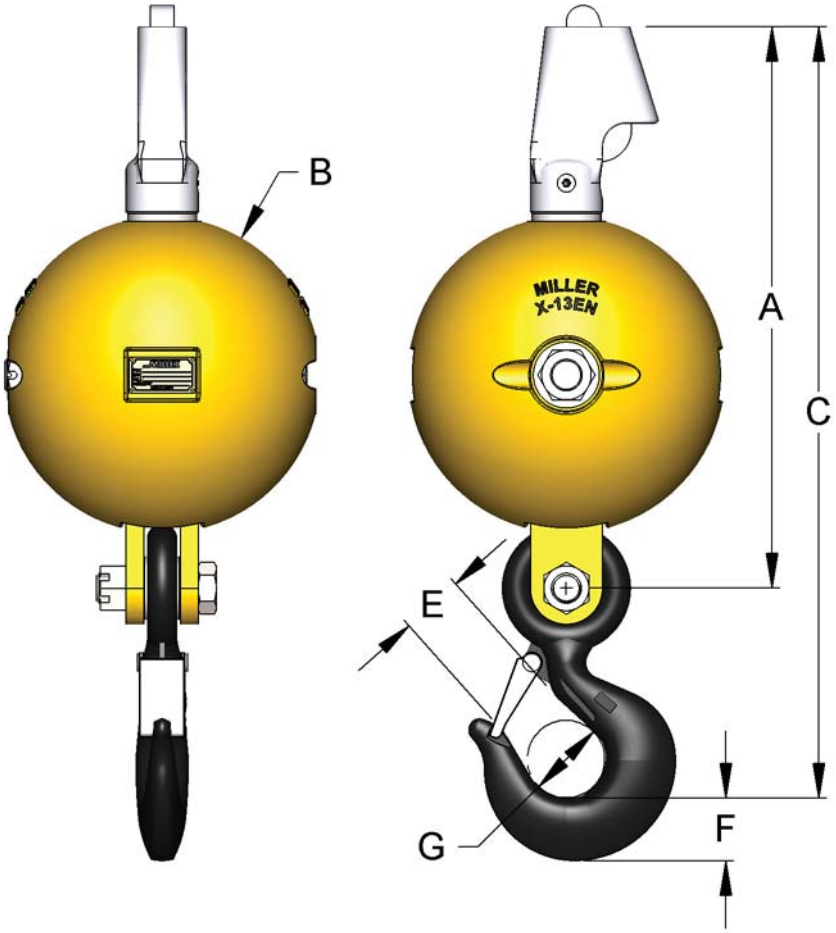


WLL* Tons	Model Number	Rope Size	A	B	C	E	F	G	H	I	J	K	Weight Lbs.	SWIVEL
5	HB7-2N	5/8	13.56	7	20.38	1.61	1.81	2.5	1.28	1.56	1	1.19	65	D-212
5	HB8-2N	5/8	13.56	8	20.38	1.61	1.81	2.5	1.28	1.56	1	1.19	100	D-212
8.5	HB9B-2N	3/4	16.31	9	25.56	2.27	2.59	3.25	1.41	1.94	1.25	1.50	130	EE-212
8.5	HB10B-2N	3/4	16.31	10	25.56	2.27	2.59	3.25	1.41	1.94	1.25	1.50	170	EE-212
8.5	HB11B-2N	3/4	17.19	11	26.44	2.27	2.59	3.25	1.41	1.94	1.25	1.50	215	EE-212
8.5	HB12-2N	3/4	17.19	12	26.44	2.27	2.59	3.25	1.41	1.94	1.25	1.50	265	EE-212
8.5	HB13B-2N	3/4	18.19	13	27.44	2.27	2.59	3.25	1.41	1.94	1.25	1.50	330	EE-212
10	HB13C-2N	7/8	22.06	13	32.81	3.02	3.00	4.25	1.66	2.84	1.72	1.81	363	G3GG
10	HB13-2GN	9/16 THRU 1-1/4	21.84	13	32.59	3.02	3	4.25	1.78	2.75	1.25	2.00	363	G-212-2
15	HB13-2GGN	9/16 THRU 1-1/4	21.88	13	32.63	3.02	3	4.25	1.78	2.75	1.25	2.00	363	GG-212-2
15	HB13D-2N	1	21.75	13	32.5	3.02	3.00	4.25	2.03	2.78	1.94	2.13	363	GG-212
25	HB13E-2N	1-1/2	25.56	13	37.75	3.25	3.62	5	2.31	2.88	2.25	2.38	413	H-212
35	HB13F-2N	1-1/2	25.56	13	41.5	3	4.56	5.38	2.31	2.88	2.25	2.38	487	HH-212
10	HB16-2N	7/8	24.56	16	35.31	3.02	3.00	4.25	1.66	2.84	1.72	1.81	600	G3GG
10	HB16-2GN	9/16 THRU 1-1/4	24.34	16	35.09	3.02	3	4.25	1.78	2.75	1.25	2.00	600	G-212-2
15	HB16-2GGN	9/16 THRU 1-1/4	24.38	16	35.13	3.02	3	4.25	1.78	2.75	1.25	2.00	600	GG-212-2
15	HB16B-2N	1	24.25	16	35	3.02	3.00	4.25	2.03	2.78	1.94	2.13	600	GG-212
25	HB16C-2N	1-1/2	26.94	16	39.63	3.25	3.62	5	2.31	2.88	2.25	2.38	650	H-212
35	HB16D-2N	1-1/2	26.94	16	44	3	4.56	5.38	2.31	2.88	2.25	2.38	720	HH-212
10	HB18G-2N	7/8	25.19	18	37.71	3.02	3.00	4.25	1.66	2.84	1.72	1.81	800	G3GG
10	HB18-2GN	9/16 THRU 1-1/4	24.97	18	37.49	3.02	3	4.25	1.78	2.75	1.25	2.00	800	G-212-2
15	HB18GG-2N	1	24.87	18	37.4	3.02	3.00	4.25	2.03	2.78	1.94	2.13	800	GG-212
15	HB18-2GGN	9/16 THRU 1-1/4	25	18	37.53	3.02	3	4.25	1.78	2.75	1.25	2.00	800	GG-212-2
15	HB22GG-2N	1	29.25	22	40.03	3.02	3.00	4.25	2.03	2.78	1.94	2.13	1300	GG-212
15	HB22-2GGN	9/16 THRU 1-1/4	29.38	22	40.16	3.02	3	4.25	1.78	2.75	1.25	2.00	1300	GG-212-2
25	HB22H-2N	1-1/2	32.19	22	44.5	3.25	3.62	5	2.31	2.88	2.25	2.38	1400	H-212
35	HB22HH-2N	1-1/2	32.19	22	48.13	3	4.56	5.38	2.31	2.88	2.25	2.38	1450	HH-212

* Design factor 5:1

OVERHAUL BALLS- ASSEMBLIES Y-LINK

WEDGE TO HOOK - TYPE 3

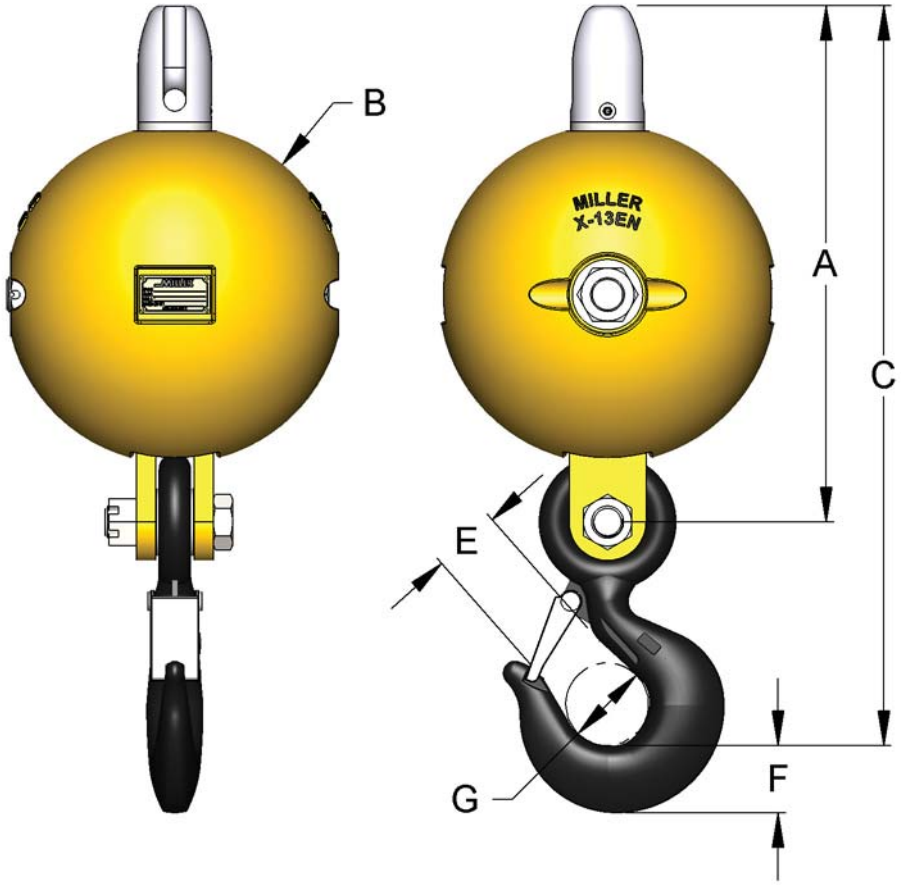


WLL* Tons	Model Number	Rope Size	A	B	C	E	F	G	Weight Lbs.	SWIVEL
5	HB7-3N	1/2, 5/8	18.25	7	25.06	1.61	1.81	2.5	65	D-712
5	HB8-3N	1/2, 5/8	18.25	8	25.06	1.61	1.81	2.5	100	D-712
8.5	HB9B-3N	1/2, 5/8, 3/4	21.25	9	30.5	2.27	2.59	3.25	130	EE-712
8.5	HB10B-3N	1/2, 5/8, 3/4	21.25	10	30.5	2.27	2.59	3.25	170	EE-712
8.5	HB11B-3N	1/2, 5/8, 3/4	22.13	11	31.38	2.27	2.59	3.25	215	EE-712
8.5	HB12-3N	1/2, 5/8, 3/4	22.13	12	31.38	2.27	2.59	3.25	265	EE-712
8.5	HB13B-3N	1/2, 5/8, 3/4	23.13	13	32.38	2.27	2.59	3.25	336	E-712
10	HB13C-3N	3/4, 7/8, 1	27.88	13	38.63	3.02	3.00	4.25	370	GG-712
15	HB13D-3N	3/4, 7/8, 1	27.88	13	38.63	3.02	3.00	4.25	370	GG-712
25	HB13E-3N	1 1/8, 1 1/4	34.31	13	46.63	3.25	3.62	5	439	H-712
35	HB13F-3N	1 1/8, 1 1/4	34.31	13	50.38	3	4.56	5.38	513	HH-712
10	HB16-3N	3/4, 7/8, 1	28.31	16	39.56	3.02	3.00	4.25	600	GG-712
15	HB16B-3N	3/4, 7/8, 1	28.31	16	39.56	3.02	3.00	4.25	600	GG-712
25	HB16C-3N	1 1/8, 1 1/4	35.94	16	48.5	4	3.62	5	640	GG-712
35	HB16D-3N	1 1/8, 1 1/4	35.94	16	52.37	4.25	4.56	5.38	690	GG-712
10	HB18G-3N	3/4, 7/8, 1	24.93	18	45.03	3.02	3.00	4.25	800	G-712
15	HB22GG-3N	3/4, 7/8, 1	33.88	22	44.66	3.02	3.00	4.25	1300	GG-712
25	HB22H-3N	1 1/8, 1 1/4	41.68	22	53.99	3.25	3.62	5	1400	H-712
35	HB22HH-3N	1 1/8, 1 1/4	41.68	22	57.62	3	4.56	5.38	1450	HH-712

* Design factor 5:1

OVERHAUL BALLS- ASSEMBLIES Y-LINK

THIMBLE TO HOOK - TYPE 4

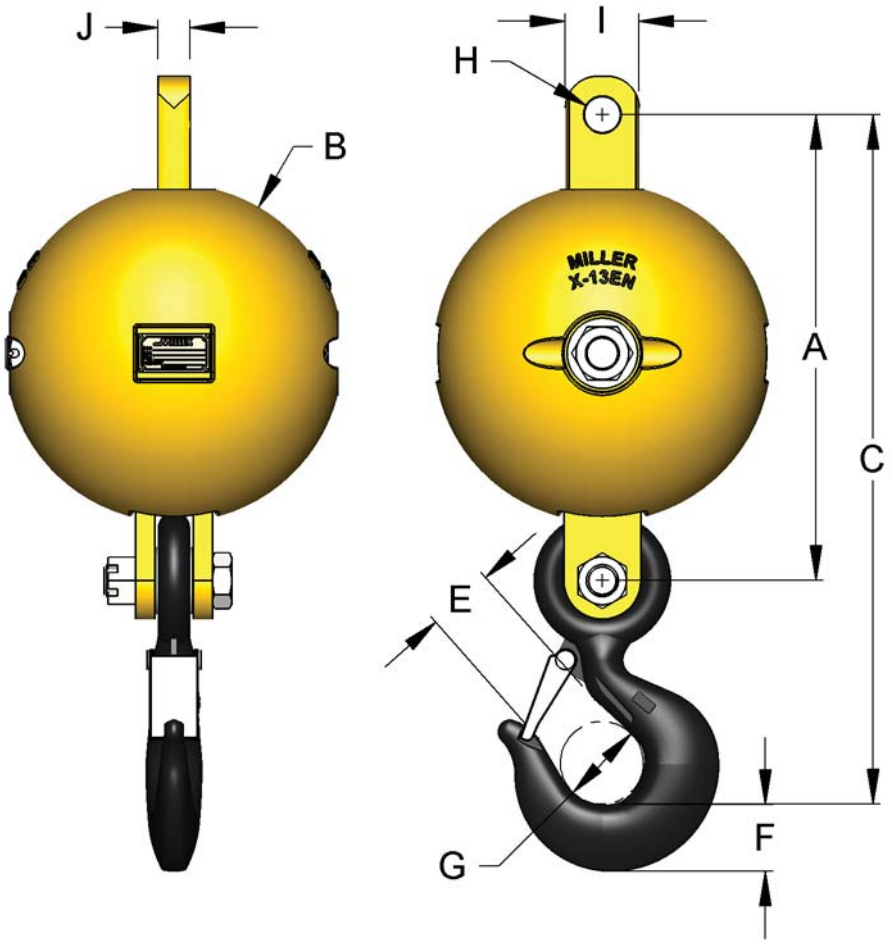


WLL* Tons	Model Number	Rope Size	A	B	C	E	F	G	Weight Lbs.	SWIVEL
5	HB7-4N	5/8	15	7	23.38	1.61	1.81	2.5	65	D-612
5	HB8-4N	5/8	15	8	23.38	1.61	1.81	2.5	100	D-612
8.5	HB9B-4N	3/4	18.44	9	27.1	2.27	2.59	3.25	130	EE-612
8.5	HB10B-4N	3/4	18.44	10	27.1	2.27	2.59	3.25	170	EE-612
8.5	HB11B-4N	3/4	19.19	11	27.85	2.27	2.59	3.25	215	EE-612
8.5	HB12-4N	3/4	19.44	12	28.1	2.27	2.59	3.25	265	EE-612
8.5	HB13B-4N	3/4	20.19	13	28.85	2.27	2.59	3.25	332	EE-612
10	HB13C-4N	7/8	23.63	13	34.38	3.02	3.00	4.25	366	G-612
15	HB13D-4N	1	23.63	13	34.38	3.02	3.00	4.25	366	GG-612
25	HB13E-4N	1-1/2	27.56	13	39.88	3.25	3.62	5	420	H-612
35	HB13F-4N	1-1/2	27.56	13	44.13	3	4.56	5.38	500	HH-612
10	HB16-4N	7/8	26.13	16	36.88	3.02	3.00	4.25	600	GG-612
15	HB16B-4N	1	26.13	16	36.88	3.02	3.00	4.25	600	GG-612
25	HB16C-4N	1-1/2	29.44	16	41.63	3.25	3.62	5	650	H-612
35	HB16D-4N	1-1/2	29.31	16	45.88	3	4.56	5.38	720	HH-612
10	HB18G-4N	7/8	26.44	18	37.5	3.02	3.00	4.25	800	G-612
15	HB18GG-4N	1	26.44	18	37.5	3.02	3.00	4.25	800	GG-612
15	HB22GG-4N	1	31.38	22	42.16	3.02	3.00	4.25	1300	GG-612
25	HB22H-4N	1-1/2	34.56	22	46.87	3.25	3.62	5	1400	H-612
35	HB22HH-4N	1-1/2	34.56	22	50.5	3	4.56	5.38	1450	HH-612

* Design factor 5:1

OVERHAUL BALLS- ASSEMBLIES Y-LINK

NON-SWIVELING EYE TO HOOK - TYPE 5



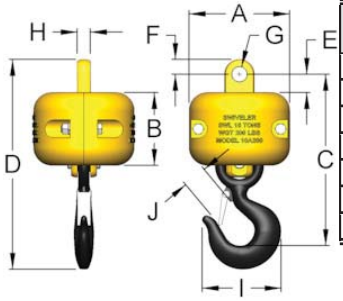
WLL* Tons	Model Number	A	B	C	E	F	G	H	I	J	Weight Lbs.
5	HB8-5N	13.5	8	19.88	1.61	1.81	2.5	1.03	2.5	0.88	95
8.5	HB10-5N	16.5	10	22.81	2.27	2.59	3.25	1.53	3	1.25	165
8.5	HB11-5N	17.13	11	26.78	2.27	2.59	3.25	1.53	3	1.25	215
5	HB12-5N	16.31	12	22.81	1.61	1.81	2.5	1.44	3	1.25	250
8.5	HB12B-5N	18.19	12	26.88	2.27	2.59	3.25	1.44	3	1.25	250
8.5	HB13-5N	17.38	13	26.03	2.27	2.59	3.25	1.53	3	1.25	328
15	HB13B-5N	21.75	13	32.5	3.02	3	4.25	1.81	3	1.5	364
10	HB16-5N	24.25	16	35	3.02	3	4.25	1.81	4	1.5	550
15	HB16B-5N	24.41	16	35.16	3.02	3	4.25	1.63	4	2	550
25	HB16C-5N	24.25	16	35	3.25	3.62	5	2.31	5	2.25	600
35	HB16D-5N	26.94	16	44	3	4.56	5.38	2.31	5	2.25	720
10	HB18G-5N	24.88	18	35.63	3.02	3	4.25	1.63	4	1.72	800
15	HB22GG-5N	28.25	22	39.03	3.02	3	4.25	2.03	4	1.94	1285
25	HB22H-5N	30.19	22	42.5	3.25	3.62	5	2.31	5	2.25	1375
35	HB22HH-5N	30.19	22	46.13	3	4.56	5.38	2.31	5	2.25	1425

* Design factor 5:1

OVERHAUL BALLS- ECONO-LINK SWIVELER

- **Compact headache ball assemblies using Miller Econo-Link thrust bearing swivels are ideal for low head-room applications.**
- Top swiveling- ball remains stationary if wire rope twists.
- Overhaul weights from 35 to 575 lbs.
- Working Loads from 3 to 15 tons, for ½" to 1" wire rope.
- Easy replacement of swivel with standard Miller Econo-Link Type 181 or 281 models.
- Drop forged carbon steel hook with safety latch.
- Design factor 4:1

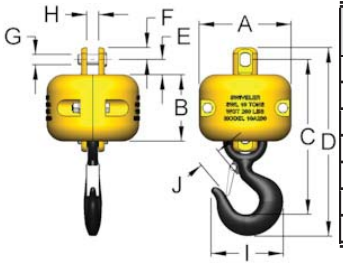
TYPE A



WLL* Tons	Model Number	ROPE	A	B	C	D	E	F	G	H	I	J	Weight Lbs.
3	3A35	1/2	6	5	10.38	12.88	1.25	1.13	1.06	1	4.88	1.34	35
6	6A100	5/8-3/4	9	6.5	14.06	17.38	1.31	1.5	1.41	1.19	6.5	1.34	100
6	6A250	5/8-3/4	12.5	8	14.06	17.38	1.31	1.5	1.41	1.19	6.5	1.34	250
10	10A200	3/4-7/8	11	8	18.63	22.88	2	1.63	1.66	1.44	8.69	2.25	200
10	10A325	3/4-7/8	13	10	18.63	22.88	2	1.63	1.66	1.44	8.69	2.25	325
15	15A320	1	13	9	22.5	27.31	2.5	1.87	2.06	1.88	11	3	320
15	15A575	1	15	12	22.5	27.31	2.5	1.87	2.06	1.88	11	3	575

* Design factor 4:1

TYPE O



WLL* Tons	Model Number	ROPE	A	B	C	D	E	F	G	H	I	J	Weight Lbs.
3	3O35	1/2	6	5	10.5	13.13	1.38	1.19	0.75	1	4.94	1.34	35
6	6O100	5/8-3/4	9	6.5	14.75	18	1.75	1.5	1	1.13	6.5	1.69	100
6	6O250	5/8-3/4	12.5	8	14.75	18	1.75	1.5	1	1.13	6.5	1.69	250
10	10O200	3/4-7/8	11	8	18.75	23	2.13	1.63	1.25	1.38	8.69	2.25	200
10	10O325	3/4-7/8	13	10	18.75	23	2.13	1.63	1.25	1.38	8.69	2.25	325
15	15O320	1	13	9	22.5	27.31	2.5	1.88	1.38	1.75	11	3	320
15	15O575	1	15	12	22.5	27.31	2.5	1.88	1.38	1.75	11	3	575

* Design factor 4:1

BLOCKS- HI-LIFT BLOCKS

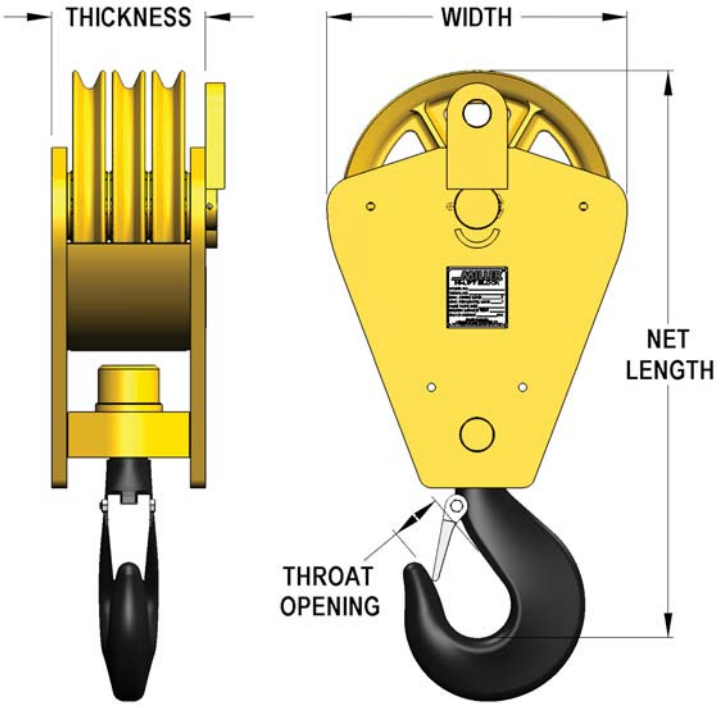
Wide capacity range available
- Standard capacities to 300T
- Design factor 4:1
- Larger capacities available
- Sheaves from 8” to 36”
- Wire rope sizes to 1 ¾”

Hooks- high quality forged alloy steel
- Per DIN 15401 or DIN 15402
- Other hook standards available
- Heavy duty thrust bearing
- Dual motion- swing plus 360° rotation
- Safety latch on all hooks
- Double and other hooks available

Heavy welded steel plate construction
- provides rigidity and strength for longer life
- Designed for shortest possible overall length
- Enclosed sheave guard for easier threading- eliminates possibility of rope jumping sheave
- “H” models provide additional overhaul weight with detachable steel cheek plates
- “T” and “TF”, extended or standard side plates- on 24” sheave models

Bearings and sheaves
- For sheave sizes 20” and below, hardened and ground sheave pin with roller bearings
- For sheaves 24” and higher, tapered roller bearings with lip seals on alloy steel sheave pin
- Bronze bushings optional
- Individual sheave lubrication for assured grease penetration.
- Heavy duty cast steel sheaves standard, roll formed/welded sheaves available
- Bronze spacers between sheaves eliminate galling

Options available
- Double hooks
- Higher load capacities
- Fittings other than hook
- Hook rotation locking device
- Third party certifications
- Cast hooks (quad)
- Custom



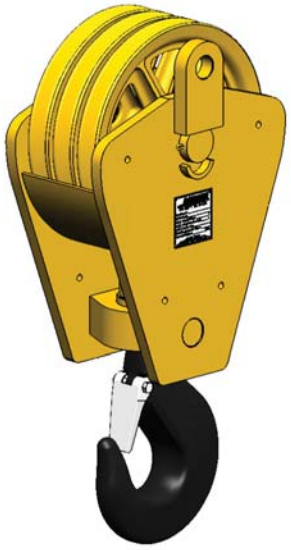
BLOCKS- HI-LIFT BLOCKS

MILLER Block Model Number Key

#	##	XX	-	###	-	XX
(Number of Sheaves)	(Sheave Outside Diameter (in))*	(Configuration)**		(Working load limit)***		(Special Designation)****

*Standard Outside Diameter Sheave Range from 8 to 36"
**Block Configuration Options:
F - Roller Bearing Mounted Sheaves, Low Profile Side Plates
H - Roller Bearing Mounted Sheaves, Low Profile Side Plates, Cheek weights
TF - Tapered Roller Bearing Mounted Sheaves, Low Profile Side Plates
T - Tapered Roller Bearing Mounted Sheaves, Extended Side Plates
***Working Load Limit Range from 5 to 300T
****Special Designations:
RT - Round Top Side Plates
LD - Locking Device, 4 Positions

****Specify Wire Rope Size When Ordering****



MODEL NO: 318F40
-3 SHEAVES, 18" DIAMETER
-LOW PROFILE SIDE PLATES
-40 TON WLL

MODEL NO: 520H80
-5 SHEAVES, 20" DIAMETER
-CHEEK WEIGHTS
-80 TON WLL

MODEL NO: 224T50
-2 SHEAVES, 24" DIAMETER
-EXTENDED SIDE PLATES
-50 TON WLL

BLOCKS- HI-LIFT BLOCKS

5 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
5	108F5	8	1	5.75	9.5	17.5	1.88	1.63	7/16	70
5	108H5	8	1	8.75	9.5	17.5	1.88	1.63	7/16	120
5	110F5	10	1	9.5	11.5	19	1.88	1.63	9/16	90
5	110H5	10	1	13	11.5	19	1.88	1.63	9/16	160
5	112F5	12	1	7.5	13.5	22.5	1.88	2.5	5/8	140
5	112H5	12	1	10.5	13.5	22.5	1.88	2.5	5/8	240
5	114F5	14	1	7.5	15.5	27.06	1.88	2.5	3/4	160
5	114H5	14	1	11	15.5	27.06	1.88	2.5	3/4	320
5	208F5	8	2	5.75	9.5	19.75	1.88	1.63	7/16	80
5	208H5	8	2	8.75	9.5	19.75	1.88	1.63	7/16	130

10 TON

WLL* Tons	Model Number	SHEAVE DIA (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
10	108F10	8	1	5.75	9.5	19.75	2.5	1.63	7/16	80
10	108H10	8	1	8.75	9.5	19.75	2.5	1.63	7/16	130
10	110F10	10	1	6	11.5	22	2.5	1.63	9/16	100
10	110H10	10	1	9.5	11.5	22	2.5	1.63	9/16	170
10	112F10	12	1	7.5	13.5	24.75	2.5	2.5	5/8	150
10	112H10	12	1	10.5	13.5	24.75	2.5	2.5	5/8	250
10	114F10	14	1	7.5	15.5	27.75	2.5	2.5	3/4	170
10	114H10	14	1	11	15.5	27.75	2.5	2.5	3/4	330
10	116F10	16	1	8.75	17.5	30.56	2.5	3	7/8	250
10	116H10	16	1	13.75	17.5	30.56	2.5	3	7/8	490
10	118F10	18	1	8.75	19.5	32.75	2.5	3	7/8	285
10	118H10	18	1	12.75	19.5	32.75	2.5	3	7/8	585
10	208F10	8	2	5.75	9.5	19.75	2.5	1.63	7/16	85
10	208H10	8	2	8.75	9.5	19.75	2.5	1.63	7/16	135
10	210F10	10	2	6	11.5	22	2.5	1.63	9/16	110
10	210H10	10	2	9.5	11.5	22	2.5	1.63	9/16	180
10	212F10	12	2	7.5	13.5	24.75	2.5	2.5	5/8	165
10	212H10	12	2	10.5	13.5	24.75	2.5	2.5	5/8	265
10	214F10	14	2	7.5	15.5	28	2.5	2.5	3/4	215
10	214H10	14	2	11	15.5	28	2.5	2.5	3/4	365
10	308F10	8	3	7.25	9.5	19.75	2.5	1.63	7/16	95
10	308H10	8	3	10.25	9.5	19.75	2.5	1.63	7/16	145
10	310F10	10	3	7.5	11.5	22	2.5	1.63	9/16	125
10	310H10	10	3	11	11.5	22	2.5	1.63	9/16	195
10	312F10	12	3	9.75	13.5	24.75	2.5	2.5	5/8	210
10	312H10	12	3	12.75	13.5	24.75	2.5	2.5	5/8	310

BLOCKS- HI-LIFT BLOCKS

15 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
15	114F15	14	1	7.5	15.5	29.63	3.38	2.5	3/4	215
15	114H15	14	1	11	15.5	29.63	3.38	2.5	3/4	365
15	116F15	16	1	8.75	17.5	32.5	3.38	3	7/8	265
15	116H15	16	1	13.75	17.5	32.5	3.38	3	7/8	585
15	118F15	18	1	8.75	19.5	34.5	3.38	3	7/8	305
15	118H15	18	1	12.75	19.5	34.5	3.38	3	7/8	605
15	210F15	10	2	7.5	11.5	25	3.38	1.63	9/16	120
15	212F15	12	2	7.5	11.5	26.88	3.38	2.5	5/8	185
15	212H15	12	2	10.5	13.5	26.88	3.38	2.5	5/8	285
15	214F15	14	2	7.5	15.5	27.06	3.38	2.5	3/4	220
15	214H15	14	2	11	15.5	27.06	3.38	2.5	3/4	380
15	216F15	16	2	8.75	17.5	32.5	3.38	3	7/8	315
15	216H15	16	2	13.75	17.5	32.5	3.38	3	7/8	555
15	310F15	10	3	7.5	11.5	22	3.38	1.63	9/16	125
15	310H15	10	3	11	11.5	22	3.38	1.63	9/16	195
15	312F15	12	3	9.75	13.5	27.06	3.38	2.5	5/8	220
15	312H15	12	3	12.75	13.5	27.06	3.38	2.5	5/8	320
15	314F15	14	3	9.75	15.5	29.5	3.38	2.5	3/4	255
15	314H15	14	3	13	15.5	29.5	3.38	2.5	3/4	415

20 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (IN.)	Weight Lbs.
20	114F20	14	1	7.5	15.5	29.5	3.38	2.5	3/4	215
20	114H20	14	1	11	15.5	29.5	3.38	2.5	3/4	365
20	116F20	16	1	8.75	17.5	32.69	3	3	7/8	265
20	116H20	16	1	13.75	17.5	32.69	3	3	7/8	505
20	118F20	18	1	8.75	19.5	34.25	3	3	7/8	305
20	118H20	18	1	12.75	19.5	34.25	3	3	7/8	605
20	214F20	14	2	7.5	15.5	29.5	3	2.5	3/4	220
20	214H20	14	2	11	15.5	29.5	3	2.5	3/4	380
20	216F20	16	2	8.75	17.5	32.69	3	3	7/8	315
20	216H20	16	2	13.75	17.5	32.69	3	3	7/8	555
20	218F20	18	2	8.75	19.5	34.25	3	3	7/8	340
20	218H20	18	2	12.75	19.5	34.25	3	3	7/8	640
20	312F20	12	3	9.75	13.5	27.06	3	2.5	5/8	220
20	312H20	12	3	12.75	13.5	27.06	3	2.5	5/8	320
20	314F20	14	3	9.75	15.5	29.5	3	2.5	3/4	255
20	314H20	14	3	13.25	15.5	29.5	3	2.5	3/4	415

BLOCKS- HI-LIFT BLOCKS

25 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
25	116F25	16	1	8.75	17.5	33.5	3.63	3	7/8	310
25	116H25	16	1	13.75	17.5	33.5	3.63	3	7/8	460
25	118F25	18	1	8.75	19.5	34.5	3	3	7/8	330
25	118H25	18	1	12.75	19.5	34.5	3	3	7/8	630
25	120F25	20	1	9	21.5	38.5	4	3	1	400
25	120H25	20	1	13	21.5	38.5	4	3	1	765
25	214F25	14	2	7.5	15.5	29.5	3	2.5	3/4	250
25	214H25	14	2	11	15.5	29.5	3	2.5	3/4	415
25	216F25	16	2	8.75	17.5	33.75	3.63	3	7/8	340
25	216H25	16	2	13.75	17.5	33.75	3.63	3	7/8	580
25	218F25	18	2	8.75	19.5	35.75	3.63	3	7/8	365
25	218H25	18	2	12.75	19.5	35.75	3.63	3	7/8	665
25	220F25	20	2	9	21.5	38.5	3	3.25	1	445
25	220H25	20	2	13	21.5	38.5	3	3.25	1	810
25	314F25	14	3	9.75	15.5	29.88	3.63	2.5	3/4	285
25	314H25	14	3	13.25	15.5	29.88	3.63	2.5	3/4	445
25	316F25	16	3	8.75	17.5	33.75	3.63	3	7/8	415
25	316H25	16	3	13.75	17.5	33.75	3.63	3	7/8	655
25	318F25	18	3	11.38	19.5	35.75	3	3	7/8	425
25	318H25	18	3	15.38	19.5	35.75	3	3	7/8	725
25	414F25	14	4	12.88	15.5	31.19	3.5	2.5	3/4	425
25	414H25	14	4	16.38	15.5	31.19	3.5	2.5	3/4	645

30 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
30	120F30	20	1	9	21.5	38.5	3	3.25	1	400
30	120H30	20	1	13	21.5	38.5	3	3.25	1	765
30	130T30	30	1	14.88	33	62.25	3.63	5	1 1/4	1750
30	214F30	14	2	7.5	15.5	31	3.63	2.5	3/4	250
30	214H30	14	2	11	15.5	31	3.63	2.5	3/4	410
30	216F30	16	2	8.75	17.5	33.75	3.63	3	7/8	340
30	216H30	16	2	13.75	17.5	33.75	3.63	3	7/8	580
30	314F30	14	3	9.75	15.5	29.88	3.63	3	3/4	285
30	314H30	14	3	13.25	15.5	29.88	3.63	3	3/4	445
30	316F30	16	3	11.38	17.5	33.75	3.63	3	7/8	415
30	316H30	16	3	16.38	17.5	33.75	3.63	3	7/8	655
30	318F30	18	3	11.38	19.5	35.34	3	3	7/8	425
30	318H30	18	3	15.38	19.5	35.34	3	3	7/8	725
30	320F30	20	3	11.75	21.5	38.5	3	3.25	1	515
30	320H30	20	3	15.75	21.5	38.5	3	3.25	1	880
30	414F30	14	4	12.88	15.5	31.19	3.5	2.5	3/4	425
30	414H30	14	4	16.38	15.5	31.19	3.5	2.5	3/4	645
30	516F30	16	5	17.63	17.5	33.81	3.5	3	7/8	520
30	516H30	16	5	22.63	17.5	33.81	3.5	3	7/8	760

BLOCKS- HI-LIFT BLOCKS

35 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
35	124T35	24	1	11.5	26.63	56.81	3.75	3.5	1 1/8	1255
35	124TF35	24	1	12	26.63	50.81	3.75	3.5	1 1/8	830
35	216F35	16	2	8.75	17.5	36.38	3.75	3	7/8	385
35	216H35	16	2	13.75	17.5	36.38	3.75	3	7/8	625
35	218F35	18	2	8.75	19.5	38.5	3.75	3	7/8	410
35	218H35	18	2	12.75	19.5	38.5	3.75	3	7/8	710
35	220F35	20	2	9	21.5	41.13	3.75	3.25	1	495
35	220H35	20	2	13	21.5	41.13	3.75	3.25	1	860
35	224T35	24	2	11.5	26	56.81	3.75	3.5	1 1/8	1360
35	224TF35	24	2	12	26.63	50.81	3.75	3.5	1 1/8	945
35	314F35	14	3	975	15.5	33.5	3.63	2.5	3/4	365
35	314H35	14	3	13.25	15.5	33.5	3.63	2.5	3/4	585
35	316F35	16	3	11.38	17.5	36.38	3.75	3	7/8	455
35	316H35	16	3	16.38	17.5	36.38	3.75	3	7/8	695
35	318F35	18	3	11.38	19.5	38.38	3.75	3	7/8	465
35	318H35	18	3	15.38	19.5	38.38	3.75	3	7/8	765
35	320F35	20	3	11.75	21.5	41.38	3.75	3.25	1	565
35	320H35	20	3	15.75	21.5	41.38	3.75	3.25	1	930
35	414F35	14	4	12.88	15.5	34.06	3.75	2.5	3/4	465
35	414H35	14	4	16.38	15.5	34.06	3.75	2.5	3/4	685
35	416F35	16	4	14.75	17.5	36.38	3.75	3	7/8	585
35	416H35	16	4	19.75	17.5	36.38	3.75	3	7/8	825
35	514F35	14	5	15.75	15.5	33.94	3.75	2.5	3/4	600
35	514H35	14	5	19.25	15.5	33.94	3.75	2.5	3/4	820
35	516F35	16	5	17.63	17.5	37.94	3.75	3	7/8	780
35	516H35	16	5	22.63	17.5	37.94	3.75	3	7/8	1020

40 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
40	124T40	24	1	11.5	26.63	56.68	3.75	3.5	1 1/8	1255
40	124TF40	24	1	12	26.63	56.68	3.75	3.5	1 1/8	830
40	130T40	30	1	14.88	33	65.81	3.75	5	1 1/4	1750
40	220F40	20	2	9	21.5	41.88	3.75	3.25	1	495
40	220H40	20	2	13	21.5	41.88	3.75	3.25	1	860
40	224T40	24	2	11.5	26	56.81	3.75	3.5	1 1/8	1360
40	224TF40	24	2	12	26.63	50.81	3.75	3.5	1 1/8	945
40	230T40	30	2	14.88	33	65.81	3.75	5	1 1/4	1900
40	316F40	16	3	11.38	17.5	35.38	3.75	3	7/8	455
40	316H40	16	3	16.38	17.5	35.38	3.75	3	7/8	695
40	318F40	18	3	11.38	19.5	38.88	3.75	3	7/8	465
40	318H40	18	3	15.38	19.5	38.88	3.75	3	7/8	765
40	320F40	20	3	11.75	21.5	42.06	3.75	3.25	1	565
40	320H40	20	3	15.75	21.5	42.06	3.75	3.25	1	930
40	414F40	14	4	13	15.5	35.25	3.75	2.5	3/4	465
40	414H40	14	4	16.5	15.5	35.25	3.75	2.5	3/4	685
40	416F40	16	4	14.75	17.5	37.88	3.75	3	7/8	585
40	416H40	16	4	19.75	17.5	37.88	3.75	3	7/8	825
40	418F40	18	4	14.75	19.5	39.63	3.75	3	7/8	640
40	418H40	18	4	18.75	19.5	39.63	3.75	3	7/8	940
40	514F40	14	5	15.75	15.5	34.06	3.75	2.5	3/4	600
40	514H40	14	5	19.25	15.5	34.06	3.75	2.5	3/4	820
40	516F40	16	5	17.63	17.5	37.88	3.75	3	7/8	770
40	516H40	16	5	22.63	17.5	37.88	3.75	3	7/8	1040
40	616F40	16	6	20	17.5	37.88	3.75	3	7/8	830
40	616H40	16	6	25	17.5	37.88	3.75	3	7/8	1100

BLOCKS- HI-LIFT BLOCKS

45 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
45	220F45	20	2	9	21.5	41.88	4.25	3.25	1	640
45	220H45	20	2	13	21.5	41.88	4.25	3.25	1	900
45	224T45	24	2	11.5	26.63	58.69	4.25	3.5	1 1/8	1000
45	224TF45	24	2	12	26.63	52.69	4.25	3.5	1 1/8	1375
45	318F45	18	3	11.38	19.5	39.38	4.25	3	7/8	525
45	318H45	18	3	15.38	19.5	39.38	4.25	3	7/8	825
45	320F45	20	3	11.75	21.5	42.13	4.25	3.25	1	535
45	320H45	20	3	15.75	21.5	42.13	4.25	3.25	1	900
45	416F45	16	4	14.75	17.5	37.5	4.25	3	7/8	705
45	416H45	16	4	19.75	17.5	38.5	4.25	3	7/8	975
45	418F45	18	4	15.25	19.5	41.63	4.25	3	7/8	760
45	418H45	18	4	19.25	19.5	41.63	4.25	3	7/8	1050
45	514F45	14	5	15.75	15.5	35.5	4.25	2.5	3/4	605
45	514H45	14	5	19.25	15.5	35.5	4.25	2.5	3/4	970
45	516F45	16	5	17.63	17.5	37.5	4.25	3	7/8	820
45	516H45	16	5	22.63	17.5	37.5	4.25	3	7/8	1090

50 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
50	130T50	30	1	14.88	33	67.69	4.25	5	1 1/4	2000
50	136T50	36	1	14.88	39	74.25	4.25	5		2500
50	220F50	20	2	9	21.5	41.88	4.25	3.25	1	535
50	220H50	20	2	13	21.5	41.88	4.25	3.25	1	900
50	224T50	24	2	11.5	26.63	58.69	4.25	3.5	1 1/8	1375
50	224TF50	24	2	12	26.63	52.69	4.25	3.5	1 1/8	1000
50	230T50	30	2	14.88	33	67.69	4.25	5	1 1/4	2160
50	318F50	18	3	11.38	19.5	39.38	4.25	3	7/8	525
50	318H50	18	3	15.38	19.5	39.38	4.25	3	7/8	825
50	320F50	20	3	11.75	21.5	42.13	4.25	3.25	1	605
50	320H50	20	3	15.75	21.5	42.13	4.25	3.25	1	970
50	324T50	24	3	16.38	26.63	62.31	4.25	3.5	1 1/8	1740
50	324TF50	24	3	12	26.63	52.69	4.25	3.5	1 1/8	1000
50	416F50	16	4	14.75	17.5	37.5	4.25	3	7/8	705
50	416H50	16	4	19.75	17.5	37.5	4.25	3	7/8	975
50	418F50	18	4	15.25	19.5	41.63	4.25	3	7/8	760
50	418H50	18	4	19.25	19.5	41.63	4.25	3	7/8	1050
50	420F50	20	4	15.5	22	42.13	4.25	3.25	1	800
50	420H50	20	4	19.5	22	42.13	4.25	3.25	1	1200
50	516F50	16	5	17.63	17.5	37.5	4.25	3	7/8	820
50	516H50	16	5	22.63	17.5	37.5	4.25	3	7/8	1090
50	518F50	18	5	16.63	20	41.63	4.25	3	7/8	1010
50	518H50	18	5	20.63	20	41.63	4.25	3	7/8	1300
50	616F50	16	6	20	17.5	37.5	4.25	3	7/8	930
50	616H50	16	6	25	17.5	37.5	4.25	3	7/8	1200

BLOCKS- HI-LIFT BLOCKS

60 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
60	130T60	30	1	14.88	33	71.75	5.13	5	1 1/4	2100
60	224T60	24	2	11.5	26.63	65.75	5.13	3.5	1 1/8	1650
60	224TF60	24	2	12	26.63	59.75	5.13	3.5	1 1/8	1100
60	230T60	30	2	14.88	33	71.75	5.13	5	1 1/4	2250
60	320F60	20	3	11.75	21.5	45.88	5.13	3.5	1	945
60	320H60	20	3	15.75	21.5	45.88	5.13	3.5	1	1345
60	324T60	24	3	16.38	26.63	65.75	5.13	3.5	1 1/8	1950
60	324TF60	24	3	15.38	26.63	59.75	5.13	3.5	1 1/8	1450
60	330T60	30	3	19.94	33	71.75	5.13	5	1 1/4	2735
60	418F60	18	4	16.25	19.75	45.88	5.13	3	7/8	1010
60	418H60	18	4	20.25	19.75	45.88	5.13	3	7/8	1300
60	420F60	20	4	17.25	22	48.38	5.13	3.5	1	1110
60	420H60	20	4	21.25	22	48.38	5.13	3.5	1	1510
60	516F60	16	5	18.63	17.5	43.5	5.13	3	7/8	1060
60	516H60	16	5	23.63	17.5	43.5	5.13	3	7/8	1330
60	518F60	18	5	18.63	20	56.5	5.13	3	7/8	1110
60	518H60	18	5	18.63	20	56.5	5.13	3	7/8	1400
60	520F60	20	5	19.75	22	48.38	5.13	3.5	1	1315
60	520H60	20	5	23.75	22	48.38	5.13	4	1	1715

65 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
65	420F65	20	4	17.25	22	48.38	5.13	3.5	1	1110
65	420H65	20	4	21.25	22	48.38	5.13	3.5	1	1510
65	516F65	16	5	18.63	17.5	43.5	5.13	3	7/8	830
65	516H65	16	5	23.63	17.5	43.5	5.13	3	7/8	1100
65	518F65	18	5	18.63	20	56.5	5.13	3	7/8	1100
65	518H65	18	5	22.63	20	56.5	5.13	3	7/8	1400
65	520F65	20	5	19.75	22	48.38	5.13	3.5	1	1315
65	520H65	20	5	23.75	22	48.38	5.13	3.5	1	1715
65	620F65	20	6	22.25	22	48.13	5.38	3.5	1	1450
65	620H65	20	6	26.25	22	48.13	5.38	3.5	1	1850

75 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
75	136T75	36	1	14.88	42.5	80.81	5.88	5		2800
75	230T75	30	2	14.88	33	74.31	5.88	5	1 1/4	2500
75	236T75	36	2	14.88	42.5	80.81	5.88	5		3000
75	320F75	20	3	11.75	21.5	50.25	5.88	3.5	1	1045
75	320H75	20	3	15.75	21.5	50.25	5.88	3.5	1	1445
75	324T75	24	3	16.38	26.56	68.31	5.88	3.5	1 1/8	2220
75	324TF75	24	3	15.38	26.63	62.44	5.88	3.5	1 1/8	1550
75	330T75	30	3	19.94	33	74.31	5.88	5	1 1/4	2835
75	420F75	20	4	16.75	22	50.63	5.88	3.5	1	1275
75	420H75	20	4	20.75	22	50.63	5.88	3.5	1	1675
75	424T75	24	4	19.75	26.5	68.31	5.88	3.5	1 1/8	2200
75	424TF75	24	4	20.25	26.63	62.44	5.88	3.5	1 1/8	1770
75	430T75	30	4	23.31	33	74.31	5.88	5	1 1/4	3625
75	520F75	20	5	19.75	22	51	5.88	3.5	1	1435
75	520H75	20	5	23.75	22	51	5.88	3.5	1	1835
75	620F75	20	6	22.25	22	49.5	5.88	3.5	1	1550
75	620H75	20	6	26.25	22	49.5	5.88	3.5	1	1950

BLOCKS- HI-LIFT BLOCKS

80 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
80	324T80	24	3	16.38	26.63	68.31	5.88	3.5	1 1/8	2220
80	324TF80	24	3	15.38	26.63	62.44	5.88	3.5	1 1/8	1550
80	420F80	20	4	16.75	21.5	50.5	5.88	3.5	1	1275
80	420H80	20	4	20.75	21.5	50.5	5.88	3.5	1	1675
80	424T80	24	4	19.75	26.5	68.44	5.88	3.5	1 1/8	2200
80	424TF80	24	4	20.25	26.63	62.44	5.88	3.5	1 1/8	1770
80	520F80	20	5	19.75	22	51	5.88	3.5	1	1435
80	520H80	20	5	23.75	22	51	5.88	3.5	1	1835
80	524T80	24	5	24.38	26.63	68.81	5.88	3.5	1 1/8	2450
80	524TF80	24	5	24.88	26.63	62.81	5.88	3.5	1 1/8	2140

90 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
90	324T90	24	3	16.38	26.63	70.31	5.38	3.5	1 1/8	2385
90	324TF90	24	3	15.38	26.63	30.75	5.38	3.5	1 1/8	1715
90	424T90	24	4	19.75	26.5	70.18	5.38	3.5	1 1/8	2365
90	424TF90	24	4	20.25	26.63	60.75	5.38	3.5	1 1/8	1935
90	520F90	20	5	19.75	22	53.5	5.38	3.5	1	1600
90	520H90	20	5	23.75	22	53.5	5.38	3.5	1	2000
90	524TF90	24	5	24.88	26.63	64.88	5.38	3.5	1 1/8	2615
90	620F90	20	6	22.25	22	53.5	5.38	3.5	1	1750
90	620H90	20	6	26.25	22	53.5	5.38	3.5	1	2150
90	624T90	24	6	28	26	70.25	5.38	3.5	1 1/8	3170
90	624TF90	24	6	27	26.63	64.75	5.38	3.5	1 1/8	2800

100 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
100	136T100	36	1	14.88	42.5	86.38	5.38	5		3250
100	236T100	36	2	14.88	42.5	86.38	5.38	5		3450
100	324T100	24	3	16.38	26.63	73.88	5.38	3.5	1 1/8	2535
100	324TF100	24	3	15.38	26.63	67.75	5.38	3.5	1 1/8	1800
100	330T100	30	3	19.94	33	79.88	5.38	5	1 1/4	3175
100	336T100	36	3	19.94	42.5	86.38	5.38	5		3900
100	424T100	24	4	19.75	26.5	73.75	5.38	3.5	1 1/8	2515
100	424TF100	24	4	20.25	26.63	67.75	5.38	3.5	1 1/8	2015
100	430T100	30	4	23.31	36	79.88	5.38	5	1 1/4	3725
100	436T100	36	4	23.31	42.5	86.38	5.38	5		4490
100	520F100	20	5	19.75	22	54.13	5.38	3.5	1	2110
100	520H100	20	5	23.75	22	54.13	5.38	3.5	1	2575
100	524T100	24	5	24.38	26.63	74.25	5.38	3.5	1 1/8	2970
100	524TF100	24	5	24.88	26.63	67.75	5.38	3.5	1 1/8	2500
100	530T100	30	5	28	36	79.88	5.38	5	1 1/4	4530
100	536T100	36	5	28	42.5	86.38	5.38	5		5340
100	620F100	20	6	22.25	22	54.13	5.38	3.5	1	2000
100	620H100	20	6	26.25	22	54.13	5.38	3.5	1	2400
100	624T100	24	6	28	26	74.25	5.38	3.5	1 1/8	3320
100	624TF100	24	6	27	26.63	64.75	5.38	3.5	1 1/8	2875

BLOCKS- HI-LIFT BLOCKS

115 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weigth Lbs.
115	424T115	24	4	19.75	26.5	73.75	5.38	3.5	1 1/8	2515
115	424TF115	24	4	20.25	26.63	67.75	5.38	3.5	1 1/8	2015
115	524TF115	24	5	24.88	26.63	67.75	5.38	3.5	1 1/8	2500
115	620F115	20	6	22.25	22	54.13	5.38	3.5	1	2000
115	620H115	20	6	26.25	22	54.13	5.38	3.5	1	2400
115	624T115	24	6	28	26	74.25	5.38	3.5	1 1/8	3320
115	624TF115	24	6	27	26.63	64.75	5.38	3.5	1 1/8	2875

125 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
125	236T125	36	2	14.88	42.5	87.38	5.5	5		3600
125	330T125	30	3	19.94	33	80.88	5.5	5	1 1/4	3200
125	336T125	36	3	19.94	42.5	87.38	5.5	5		3930
125	424T125	24	4	19.75	26.5	74.88	5.5	3.5	1 1/8	2670
125	424TF125	24	4	20.25	26.63	68.88	5.5	3.5	1 1/8	2150
125	430T125	30	4	23.31	36	80.88	5.5	5	1 1/4	3825
125	436T125	36	4	23.31	42.5	87.38	5.5	5		4590
125	524T125	24	5	24.38	26.63	75.38	5.5	3.5	1 1/8	3000
125	524TF125	24	5	27	26.63	69.38	5.5	3.5	1 1/8	2530
125	624T125	24	6	28	26	75.38	5.5	3.5	1 1/8	3350
125	624TF125	24	6	27	26.63	69.38	5.5	3.5	1 1/8	2975

135 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
135	424T135	24	4	19.75	26.5	74.88	5.5	3.5	1 1/8	2670
135	424TF135	24	4	20.25	26.63	68.88	5.5	3.5	1 1/8	2150

150 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
150	330T150	30	3	19.94	33	80.88	5.5	5	1 1/4	3200
150	336T150	36	3	19.94	42.5	87.88	5.5	5		3930
150	424T150	24	4	19.75	26.5	74.88	5.5	3.5	1 1/8	2670
150	424TF150	24	4	20.25	26.63	68.88	5.5	3.5	1 1/8	2150
150	430T150	30	4	23.31	36	80.88	5.5	5	1 1/4	3825
150	436T150	36	4	23.31	42.5	87.88	5.5	5		4590
150	524T150	24	5	24.38	26.63	75.38	5.5	3.5	1 1/8	3000
150	524TF150	24	5	24.88	26.63	69.38	5.5	3.5	1 1/8	2530
150	530T150	30	5	28	36	86.75	5.5	5	1 1/4	4560
150	536T150	36	5	28	42.5	87.88	5.5	5		5370
150	624T150	24	6	28	26	75.38	5.5	3.5	1 1/8	3350
150	624TF150	24	6	27	26.63	69.38	5.5	3.5	1 1/8	2975
150	630T150	30	6	31.75	36	86.75	5.5	5	1 1/4	4650
150	636T150	36	6	31.75	42.5	87.88	5.5	5		5600

BLOCKS- HI-LIFT BLOCKS

200 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
200	430T200	30	4	23.31	36	89	6	5	1 1/4	4200
200	436T200	36	4	23.31	42.5	95.5	6	5		4965
200	530T200	30	5	28	36	89	6	5	1 1/4	4700
200	536T200	36	5	28	42.5	95.5	6	5		5600
200	630T200	30	6	31.75	36	89	6	5	1 1/4	4900
200	636T200	36	6	31.75	42.5	95.5	6	5		5900

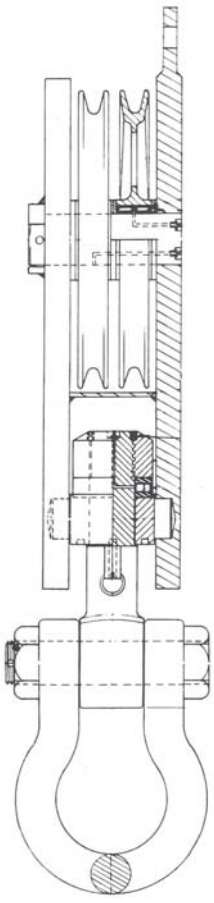
250 TON

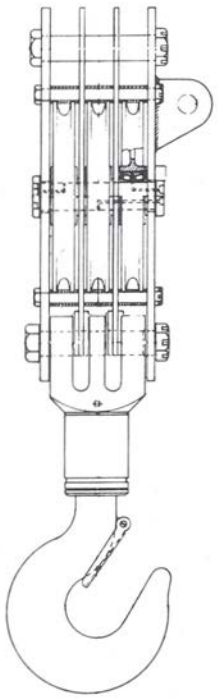
WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
250	630T250	30	6	31.75	36	93.5	7.5	5	1 1/4	5120
250	636T250	36	6	31.75	42.5	99.75	7.5	5		6125

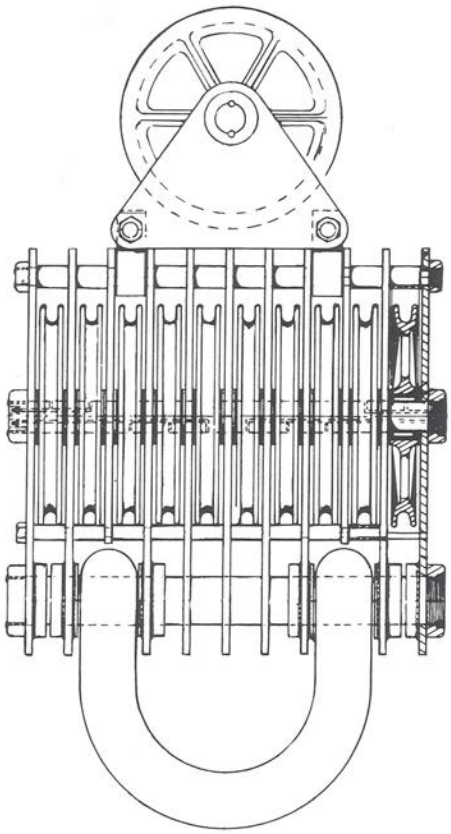
300 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	THROAT OPENING (in.)	SHEAVE PIN DIA. (in.)	STD WIRE ROPE DIA. (in.)	Weight Lbs.
300	530T300	30	5	30	36	94.25	8	5	1 1/4	6400
300	536T300	36	5	28	42.5	100.75	7.5	5		7025
300	630T300	30	6	33.75	36	94.25	7.5	5	1 1/4	6700
300	636T300	36	6	31.75	42.5	100.75	7.5	5		7370

Custom Miller Blocks are available to suit your special requirements.
Contact us for more information.



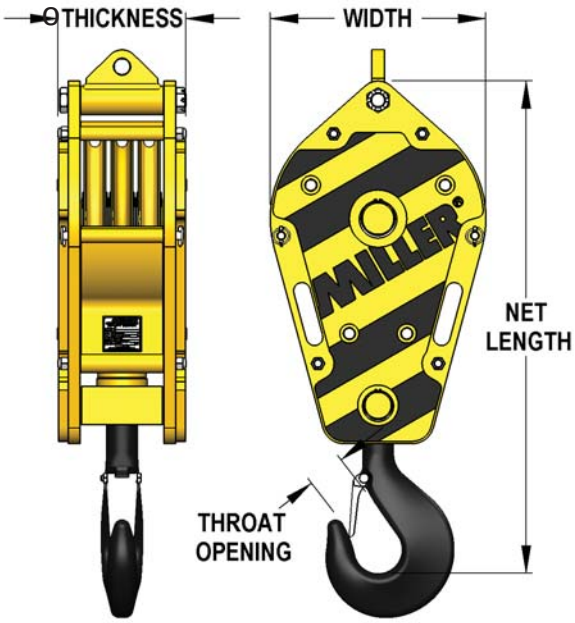




BLOCKS- MOBILE CRANE BLOCKS

- **Product Range**
  - **Capacity** 15 to 80 tons standard with higher capacities available
  - **Sheave** sizes, to 24" for up to 1 ¼" wire rope, 1 to 7 sheaves
- **Technical Features**
  - **Quick-reeving** configuration with optional drop-away sheave guards allows easy passage of rope with end fitting in place. Dead end centered above the sheaves on 1-4 sheave blocks, 5 and up dead end to side plate.
  - **Hooks** are forged alloy steel, single or duplex, in accordance with DIN15401 or DIN15402. Single hook blocks include heavy-duty locking latches. Locking latches optional for duplex hooks. All hooks are individually certified for mechanical and physical properties including Charpy impact test, and include ultrasonic and magnetic particle evaluation.
  - **Design Factor** 4 to 1 minimum.
  - **Bearings** for sheaves are low-friction, double-row, full complement cylindrical roller type for tight sheave alignment and high resistance to axial forces caused by variation in fleet angles and require no friction spacers between sheaves. Hook bearings are tapered roller thrust type as used in all Miller Hi-Lift blocks.

  - **Lubrication** for sheave bearings via channels in the sheave pin. Hook bearing grease fitting is located in the hook upper end.
  - **Hook-locking** device is available for all models over 40 tons. Allows user to lock hook every 90°.
  - **Side plates** and cheek weights are full-length and provided for a range of overhaul weights.



Model Number Key

#	##	MC	###	-	#	XX
Number of Sheaves	*Sheave O.D.*	*Mobile Crane Block*	*Working Load Limit*		*Cheek Weights*	*Option Code**

**Option Codes*

D *- Duplex Hook*

DL *- Duplex Hook, Locking Latches*

LD *- Hook Locking Device, 4 Position*

DLD *- Duplex Hook, 4 Position Locking Device*

DLLD *- Duplex Hook, Locking Latches, 4 Position Locking Device*

BLOCKS- MOBILE CRANE BLOCKS

15 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
15	110MC15	10	1	7.50	14.25	33.43	2.48	1/2 to 5/8"	240
15	110MC15-1	10	1	9.00	14.25	33.43	2.48	1/2 to 5/8"	310
15	112MC15	12	1	8.44	16.00	36.31	2.48	1/2 to 3/4"	315
15	112MC15-1	12	1	9.94	16.00	36.31	2.48	1/2 to 3/4"	400
15	114MC15	14	1	8.44	18.00	39.00	2.48	1/2 to 3/4"	360
15	114MC15-1	14	1	9.94	18.00	39.00	2.48	1/2 to 3/4"	470
15	116MC15	16	1	9.16	20.25	41.78	2.48	9/16 to 7/8"	460
15	116MC15-1	16	1	10.66	20.25	41.78	2.48	9/16 to 7/8"	590
15	118MC15	18	1	9.98	22.5	39.38	2.48	5/8 to 1"	365
15	118MC15-1	18	1	11.98	22.5	39.38	2.48	5/8 to 1"	535
15	210MC15	10	2	7.47	14.25	33.43	2.48	1/2 to 5/8"	255
15	210MC15-1	10	2	8.97	14.25	33.43	2.48	1/2 to 5/8"	325
15	212MC15	12	2	8.44	16.00	36.31	2.48	1/2 to 3/4"	335
15	212MC15-1	12	2	9.94	16.00	36.31	2.48	1/2 to 3/4"	420
15	214MC15	14	2	8.44	18.00	39.00	2.48	1/2 to 3/4"	380
15	214MC15-1	14	2	10.44	18.00	39.00	2.48	1/2 to 3/4"	490
15	216MC15	16	2	9.16	20.25	41.78	2.48	9/16 to 7/8"	490
15	216MC15-1	16	2	10.66	20.25	41.78	2.48	9/16 to 7/8"	625
15	218MC15	18	2	9.98	22.5	39.38	2.48	5/8 to 1"	405
15	218MC15-1	18	2	11.98	22.5	39.38	2.48	5/8 to 1"	575
15	310MC15	10	3	7.47	14.25	33.43	2.48	1/2 to 5/8"	295
15	310MC15-1	10	3	8.97	14.25	33.43	2.48	1/2 to 5/8"	345
15	312MC15	12	3	8.44	16.00	36.31	2.48	1/2 to 3/4"	365
15	312MC15-1	12	3	9.94	16.00	36.31	2.48	1/2 to 3/4"	450
15	314MC15	14	3	8.44	18.00	39.00	2.48	1/2 to 3/4"	425
15	314MC15-1	14	3	9.94	18.00	39.00	2.48	1/2 to 3/4"	530
15	316MC15	16	3	9.16	20.25	37.38	2.48	9/16 to 7/8"	540
15	316MC15-1	16	3	10.66	20.25	37.38	2.48	9/16 to 7/8"	675
15	318MC15	18	3	9.98	22.5	39.38	2.48	5/8 to 1"	445
15	318MC15-1	18	3	11.98	22.5	39.38	2.48	5/8 to 1"	615
15	412MC15	12	4	10.56	16.00	42.18	2.48	1/2 to 3/4"	430
15	412MC15-1	12	4	12.06	16.00	42.18	2.48	1/2 to 3/4"	515
15	414MC15	14	4	10.56	18.00	39.00	2.48	1/2 to 3/4"	485
15	414MC15-1	14	4	12.06	18.00	39.00	2.48	1/2 to 3/4"	595

BLOCKS- MOBILE CRANE BLOCKS

20 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
20	110MC20-1	10	1	9.00	14.25	33.43	2.48	1/2 to 5/8"	310
20	112MC20	12	1	8.44	16.00	36.31	2.48	1/2 to 3/4"	315
20	112MC20-1	12	1	9.94	16.00	36.31	2.48	1/2 to 3/4"	400
20	114MC20	14	1	8.44	18.00	39.00	2.48	1/2 to 3/4"	360
20	114MC20-1	14	1	9.94	18.00	39.00	2.48	1/2 to 3/4"	470
20	116MC20	16	1	9.16	20.25	41.78	2.48	9/16 to 7/8"	460
20	116MC20-1	16	1	10.66	20.25	41.78	2.48	9/16 to 7/8"	590
20	118MC20	18	1	9.98	22.5	40.38	2.8	5/8 to 1"	375
20	118MC20-1	18	1	11.98	22.5	40.38	2.8	5/8 to 1"	525
20	210MC20	10	2	7.47	14.25	33.43	2.48	1/2 to 5/8"	255
20	210MC20-1	10	2	8.97	14.25	33.43	2.48	1/2 to 5/8"	325
20	212MC20	12	2	8.44	16.00	36.31	2.48	1/2 to 3/4"	335
20	212MC20-1	12	2	9.94	16.00	36.31	2.48	1/2 to 3/4"	420
20	214MC20	14	2	8.44	18.00	39.00	2.48	1/2 to 3/4"	380
20	214MC20-1	14	2	10.44	18.00	39.00	2.48	1/2 to 3/4"	490
20	216MC20	16	2	9.16	20.25	41.78	2.48	9/16 to 7/8"	490
20	216MC20-1	16	2	10.66	20.25	41.78	2.48	9/16 to 7/8"	625
20	218MC20	18	2	9.98	22.5	40.38	2.8	5/8 to 1"	415
20	218MC20-1	18	2	11.98	22.5	40.38	2.8	5/8 to 1"	565
20	310MC20	10	3	7.47	14.25	33.43	2.48	1/2 to 5/8"	295
20	310MC20-1	10	3	8.97	14.25	33.43	2.48	1/2 to 5/8"	345
20	312MC20	12	3	8.44	16.00	36.31	2.48	1/2 to 3/4"	365
20	312MC20-1	12	3	9.94	16.00	36.31	2.48	1/2 to 3/4"	450
20	314MC20	14	3	8.44	18.00	39.00	2.48	1/2 to 3/4"	425
20	314MC20-1	14	3	9.94	18.00	39.00	2.48	1/2 to 3/4"	530
20	316MC20	16	3	9.16	20.25	37.38	2.48	9/16 to 7/8"	540
20	316MC20-1	16	3	10.66	20.25	37.38	2.48	9/16 to 7/8"	675
20	318MC20	18	3	9.98	22.5	40.38	2.8	5/8 to 1"	455
20	318MC20-1	18	3	11.98	22.5	40.38	2.8	5/8 to 1"	605
20	412MC20	12	4	10.56	16.00	42.18	2.48	1/2 to 3/4"	430
20	412MC20-1	12	4	12.06	16.00	42.18	2.48	1/2 to 3/4"	515
20	414MC20	14	4	10.56	18.00	39.00	2.48	1/2 to 3/4"	485
20	414MC20-1	14	4	12.06	18.00	39.00	2.48	1/2 to 3/4"	595

25 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
25	116MC25-1	16	1	10.94	20.50	45.88	3.15	9/16 to 7/8"	670
25	118MC25	18	1	9.98	22.50	48.25	3.15	5/8 to 1"	595
25	118MC25-1	18	1	11.98	22.50	48.25	3.15	5/8 to 1"	800
25	120MC25	20	1	9.98	24.50	52.00	3.15	3/4 to 1-1/8"	690
25	120MC25-1	20	1	11.98	24.50	52.00	3.15	3/4 to 1-1/8"	935
25	214MC25	14	2	8.44	18.50	43.25	3.15	1/2 to 3/4"	440
25	214MC25-1	14	2	10.44	18.50	43.25	3.15	1/2 to 3/4"	580
25	216MC25	16	2	9.16	20.50	45.88	3.15	9/16 to 7/8"	540
25	216MC25-1	16	2	10.94	20.50	45.88	3.15	9/16 to 7/8"	705
25	218MC25	18	2	9.98	22.50	44.56	3.15	5/8 to 1"	655
25	218MC25-1	18	2	11.98	22.50	44.56	3.15	5/8 to 1"	860
25	220MC25	20	2	9.98	24.50	52.00	3.15	3/4 to 1-1/8"	765
25	220MC25-1	20	2	11.98	24.50	52.00	3.15	3/4 to 1-1/8"	1000
25	314MC25	14	3	8.44	18.50	43.25	3.15	1/2 to 3/4"	475
25	314MC25-1	14	3	10.44	18.50	43.25	3.15	1/2 to 3/4"	615
25	316MC25	16	3	9.16	20.50	43.88	3.15	9/16 to 7/8"	590
25	316MC25-1	16	3	10.94	20.50	43.88	3.15	9/16 to 7/8"	750
25	318MC25	18	3	9.98	22.50	48.25	3.15	5/8 to 1"	745
25	318MC25-1	18	3	11.98	22.50	48.25	3.15	5/8 to 1"	945
25	320MC25	20	3	9.98	24.50	52.00	3.15	3/4 to 1-1/8"	855
25	320MC25-1	20	3	11.98	24.50	52.00	3.15	3/4 to 1-1/8"	1100
25	414MC25	14	4	10.56	18.25	36.88	3.15	1/2 to 3/4"	480
25	414MC25-1	14	4	12.56	18.25	36.88	3.15	1/2 to 3/4"	580

BLOCKS- MOBILE CRANE BLOCKS

30 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
30	116MC30-1	16	1	10.94	20.50	45.88	3.15	9/16 to 7/8"	670
30	118MC30	18	1	9.98	22.50	48.25	3.15	5/8 to 1"	595
30	118MC30-1	18	1	11.98	22.50	48.25	3.15	5/8 to 1"	800
30	120MC30	20	1	9.98	24.50	52.00	3.15	3/4 to 1-1/8"	690
30	120MC30-1	20	1	11.98	24.50	52.00	3.15	3/4 to 1-1/8"	935
30	214MC30	14	2	8.44	18.50	43.25	3.15	1/2 to 3/4"	440
30	214MC30-1	14	2	10.44	18.50	43.25	3.15	1/2 to 3/4"	580
30	216MC30	16	2	9.16	20.50	45.88	3.15	9/16 to 7/8"	540
30	216MC30-1	16	2	10.94	20.50	45.88	3.15	9/16 to 7/8"	705
30	218MC30	18	2	9.98	22.50	44.56	3.15	5/8 to 1"	655
30	218MC30-1	18	2	11.98	22.50	44.56	3.15	5/8 to 1"	860
30	220MC30	20	2	9.98	24.50	52.00	3.15	3/4 to 1-1/8"	765
30	220MC30-1	20	2	11.98	24.50	52.00	3.15	3/4 to 1-1/8"	1000
30	314MC30	14	3	8.44	18.50	43.25	3.15	1/2 to 3/4"	475
30	314MC30-1	14	3	10.44	18.50	43.25	3.15	1/2 to 3/4"	615
30	316MC30	16	3	9.16	20.50	43.88	3.15	9/16 to 7/8"	590
30	316MC30-1	16	3	10.94	20.50	43.88	3.15	9/16 to 7/8"	750
30	318MC30	18	3	9.98	22.50	48.25	3.15	5/8 to 1"	745
30	318MC30-1	18	3	11.98	22.50	48.25	3.15	5/8 to 1"	945
30	320MC30	20	3	9.98	24.50	52.00	3.15	3/4 to 1-1/8"	855
30	320MC30-1	20	3	11.98	24.50	52.00	3.15	3/4 to 1-1/8"	1100
30	414MC30	14	4	10.56	18.25	37.88	3.15	1/2 to 3/4"	480
30	414MC30-1	14	4	12.56	18.25	37.88	3.15	1/2 to 3/4"	580

35 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
35	124MC35-1	24	1	14.02	28.50	58.25	3.54	7/8 to 1-1/4"	1475
35	220MC35	20	2	10.48	24.50	52.00	3.54	3/4 to 1-1/8"	910
35	220MC35-1	20	2	12.48	24.50	52.00	3.54	3/4 to 1-1/8"	1160
35	224MC35	24	2	12.02	28.50	58.25	3.54	7/8 to 1-1/4"	1260
35	224MC35-1	24	2	14.02	28.50	58.25	3.54	7/8 to 1-1/4"	1610
35	314MC35	14	3	8.94	18.50	42.88	3.54	1/2 to 3/4"	525
35	314MC35-1	14	3	10.94	18.50	42.88	3.54	1/2 to 3/4"	635
35	316MC35	16	3	9.66	20.50	46.75	3.54	9/16 to 7/8"	720
35	316MC35-1	16	3	11.66	20.50	46.75	3.54	9/16 to 7/8"	900
35	318MC35	18	3	10.48	22.50	49.38	3.54	5/8 to 1"	860
35	318MC35-1	18	3	12.48	22.50	49.38	3.54	5/8 to 1"	1065
35	320MC35	20	3	10.48	24.50	52.00	3.54	3/4 to 1-1/8"	1000
35	320MC35-1	20	3	12.48	24.50	52.00	3.54	3/4 to 1-1/8"	1250
35	414MC35	14	4	11.06	18.25	43.63	3.54	1/2 to 3/4"	580
35	414MC35-1	14	4	13.06	18.25	43.63	3.54	1/2 to 3/4"	690
35	416MC35	16	4	12.02	20.50	46.75	3.54	9/16 to 7/8"	825
35	416MC35-1	16	4	14.02	20.50	46.75	3.54	9/16 to 7/8"	1000
35	418MC35	18	4	13.13	22.50	49.38	3.54	5/8 to 1"	980
35	418MC35-1	18	4	15.13	22.50	49.38	3.54	5/8 to 1"	1190
35	514MC35	14	5	13.19	18.25	43.63	3.54	1/2 to 3/4"	645
35	514MC35-1	14	5	15.19	18.25	43.63	3.54	1/2 to 3/4"	755
35	516MC35	16	5	14.38	20.31	47.19	3.54	9/16 to 7/8"	715
35	516MC35-1	16	5	16.38	20.31	47.19	3.54	9/16 to 7/8"	875
35	616MC35	16	6	16.75	20.31	48.19	3.54	9/16 to 7/8"	790
35	616MC35-1	16	6	18.75	20.31	48.19	3.54	9/16 to 7/8"	950

BLOCKS- MOBILE CRANE BLOCKS

40 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
40	124MC40-1	24	1	14.02	28.50	58.25	3.54	7/8 to 1-1/4"	1475
40	220MC40	20	2	10.48	24.50	52.00	3.54	3/4 to 1-1/8"	910
40	220MC40-1	20	2	12.48	24.50	52.00	3.54	3/4 to 1-1/8"	1160
40	224MC40	24	2	12.02	28.50	58.25	3.54	7/8 to 1-1/4"	1260
40	224MC40-1	24	2	14.02	28.50	58.25	3.54	7/8 to 1-1/4"	1610
40	314MC40	14	3	8.94	18.50	42.88	3.54	1/2 to 3/4"	525
40	314MC40-1	14	3	10.94	18.50	42.88	3.54	1/2 to 3/4"	635
40	316MC40	16	3	9.66	20.50	46.75	3.54	9/16 to 7/8"	720
40	316MC40-1	16	3	11.66	20.50	46.75	3.54	9/16 to 7/8"	900
40	318MC40	18	3	10.48	22.50	49.38	3.54	5/8 to 1"	860
40	318MC40-1	18	3	12.48	22.50	49.38	3.54	5/8 to 1"	1065
40	320MC40	20	3	10.48	24.50	52.00	3.54	3/4 to 1-1/8"	1000
40	320MC40-1	20	3	12.48	24.50	52.00	3.54	3/4 to 1-1/8"	1250
40	414MC40	14	4	11.06	18.25	43.63	3.54	1/2 to 3/4"	580
40	414MC40-1	14	4	13.06	18.25	43.63	3.54	1/2 to 3/4"	690
40	416MC40	16	4	12.02	20.50	46.75	3.54	9/16 to 7/8"	825
40	416MC40-1	16	4	14.02	20.50	46.75	3.54	9/16 to 7/8"	1000
40	418MC40	18	4	13.13	22.50	49.38	3.54	5/8 to 1"	980
40	418MC40-1	18	4	15.13	22.50	49.38	3.54	5/8 to 1"	1190
40	514MC40	14	5	13.19	18.25	43.63	3.54	1/2 to 3/4"	645
40	514MC40-1	14	5	15.19	18.25	43.63	3.54	1/2 to 3/4"	755
40	516MC40	16	5	14.38	20.31	47.19	3.54	9/16 to 7/8"	715
40	516MC40-1	16	5	16.38	20.31	47.19	3.54	9/16 to 7/8"	875
40	616MC40	16	6	16.75	20.31	48.19	3.54	9/16 to 7/8"	790
40	616MC40-1	16	6	18.75	20.31	48.19	3.54	9/16 to 7/8"	950

45 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
45	220MC45-1	20	2	12.48	24.50	55.21	3.94	3/4 to 1-1/8"	1245
45	224MC45	24	2	12.02	28.50	59.50	3.94	7/8 to 1-1/4"	1320
45	224MC45-1	24	2	14.02	28.50	59.50	3.94	7/8 to 1-1/4"	1675
45	314MC45	14	3	8.94	18.25	43.59	3.94	1/2 to 3/4"	525
45	314MC45-1	14	3	10.94	18.25	43.59	3.94	1/2 to 3/4"	655
45	316MC45	16	3	9.66	20.50	49.50	3.94	9/16 to 7/8"	780
45	316MC45-1	16	3	11.66	20.50	49.50	3.94	9/16 to 7/8"	970
45	318MC45	18	3	10.48	22.50	51.65	3.94	5/8 to 1"	935
45	318MC45-1	18	3	12.48	22.50	51.65	3.94	5/8 to 1"	1155
45	320MC45	20	3	10.48	24.50	55.21	3.94	3/4 to 1-1/8"	1070
45	320MC45-1	20	3	12.48	24.50	55.21	3.94	3/4 to 1-1/8"	1335
45	324MC45	24	3	12.02	28.50	59.50	3.94	7/8 to 1-1/4"	1480
45	324MC45-1	24	3	14.02	28.50	59.50	3.94	7/8 to 1-1/4"	1840
45	414MC45	14	4	11.06	18.25	43.59	3.94	1/2 to 3/4"	570
45	414MC45-1	14	4	13.06	18.25	43.59	3.94	1/2 to 3/4"	700
45	416MC45	16	4	12.02	20.50	49.25	3.94	9/16 to 7/8"	890
45	416MC45-1	16	4	14.02	20.50	49.25	3.94	9/16 to 7/8"	1080
45	418MC45	18	4	13.13	22.50	51.65	3.94	5/8 to 1"	1060
45	418MC45-1	18	4	15.13	22.50	51.65	3.94	5/8 to 1"	1380
45	420MC45	20	4	13.13	24.50	55.21	3.94	3/4 to 1-1/8"	1225
45	420MC45-1	20	4	15.13	24.50	55.21	3.94	3/4 to 1-1/8"	1490
45	514MC45	14	5	13.19	18.25	43.59	3.94	1/2 to 3/4"	630
45	514MC45-1	14	5	15.19	18.25	43.59	3.94	1/2 to 3/4"	760
45	516MC45	16	5	14.38	20.31	47.38	3.94	9/16 to 7/8"	720
45	516MC45-1	16	5	16.38	20.31	47.38	3.94	9/16 to 7/8"	895
45	518MC45	18	5	15.75	22.5	49.38	3.94	5/8 to 1"	820
45	518MC45-1	18	5	17.75	22.5	49.38	3.94	5/8 to 1"	1045
45	616MC45	16	6	16.75	20.31	47.38	3.94	9/16 to 7/8"	780
45	616MC45-1	16	6	18.75	20.31	47.38	3.94	9/16 to 7/8"	955

BLOCKS- MOBILE CRANE BLOCKS

50 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
50	220MC50-1	20	2	12.48	24.50	55.21	3.94	3/4 to 1-1/8"	1245
50	224MC50	24	2	12.02	28.50	59.50	3.94	7/8 to 1-1/4"	1320
50	224MC50-1	24	2	14.02	28.50	59.50	3.94	7/8 to 1-1/4"	1675
50	314MC50	14	3	8.94	18.25	43.59	3.94	1/2 to 3/4"	525
50	314MC50-1	14	3	10.94	18.25	43.59	3.94	1/2 to 3/4"	655
50	316MC50	16	3	9.66	20.50	49.50	3.94	9/16 to 7/8"	780
50	316MC50-1	16	3	11.66	20.50	49.50	3.94	9/16 to 7/8"	970
50	318MC50	18	3	10.48	22.50	51.65	3.94	5/8 to 1"	935
50	318MC50-1	18	3	12.48	22.50	51.65	3.94	5/8 to 1"	1155
50	320MC50	20	3	10.48	24.50	55.21	3.94	3/4 to 1-1/8"	1070
50	320MC50-1	20	3	12.48	24.50	55.21	3.94	3/4 to 1-1/8"	1335
50	324MC50	24	3	12.02	28.50	59.50	3.94	7/8 to 1-1/4"	1480
50	324MC50-1	24	3	14.02	28.50	59.50	3.94	7/8 to 1-1/4"	1840
50	414MC50	14	4	11.06	18.25	43.59	3.94	1/2 to 3/4"	570
50	414MC50-1	14	4	13.06	18.25	43.59	3.94	1/2 to 3/4"	700
50	416MC50	16	4	12.02	20.50	49.25	3.94	9/16 to 7/8"	890
50	416MC50-1	16	4	14.02	20.50	49.25	3.94	9/16 to 7/8"	1080
50	418MC50	18	4	13.13	22.50	51.65	3.94	5/8 to 1"	1060
50	418MC50-1	18	4	15.13	22.50	51.65	3.94	5/8 to 1"	1380
50	420MC50	20	4	13.13	24.50	55.21	3.94	3/4 to 1-1/8"	1225
50	420MC50-1	20	4	15.13	24.50	55.21	3.94	3/4 to 1-1/8"	1490
50	514MC50	14	5	13.19	18.25	43.59	3.94	1/2 to 3/4"	630
50	514MC50-1	14	5	15.19	18.25	43.59	3.94	1/2 to 3/4"	760
50	516MC50	16	5	14.38	20.31	47.38	3.94	9/16 to 7/8"	720
50	516MC50-1	16	5	16.38	20.31	47.38	3.94	9/16 to 7/8"	895
50	518MC50	18	5	15.75	22.5	49.38	3.94	5/8 to 1"	820
50	518MC50-1	18	5	17.75	22.5	49.38	3.94	5/8 to 1"	1045
50	616MC50	16	6	16.75	20.31	47.38	3.94	9/16 to 7/8"	780
50	616MC50-1	16	6	18.75	20.31	47.38	3.94	9/16 to 7/8"	955

55 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
55	224MC55-1	24	2	14.52	28.88	60.06	4.41	7/8 to 1-1/4"	1475
55	318MC55	18	3	10.98	22.50	53.66	4.41	5/8 to 1"	1080
55	318MC55-1	18	3	12.98	22.50	53.66	4.41	5/8 to 1"	1300
55	320MC55	20	3	10.98	24.50	56.79	4.41	3/4 to 1-1/8"	1235
55	320MC55-1	20	3	12.98	24.50	56.79	4.41	3/4 to 1-1/8"	1500
55	324MC55	24	3	12.52	28.50	61.41	4.41	7/8 to 1-1/4"	1700
55	324MC55-1	24	3	14.52	28.50	61.41	4.41	7/8 to 1-1/4"	2055
55	416MC55	16	4	12.52	20.31	50.13	4.41	9/16 to 7/8"	1000
55	416MC55-1	16	4	14.52	20.31	50.13	4.41	9/16 to 7/8"	1185
55	418MC55	18	4	13.63	22.5	52.88	4.41	5/8 to 1"	1080
55	418MC55-1	18	4	15.63	22.5	52.88	4.41	5/8 to 1"	1310
55	420MC55	20	4	13.63	24.50	56.79	4.41	3/4 to 1-1/8"	1400
55	420MC55-1	20	4	15.63	24.50	56.79	4.41	3/4 to 1-1/8"	1670
55	516MC55	16	5	14.88	20.31	50.13	4.41	9/16 to 7/8"	1100
55	516MC55-1	16	5	16.88	20.31	50.13	4.41	9/16 to 7/8"	1285
55	518MC55	18	5	16.25	22.5	52.88	4.41	5/8 to 1"	1160
55	518MC55-1	18	5	18.25	22.5	52.88	4.41	5/8 to 1"	1490
55	520MC55	20	5	16.25	24.50	56.79	4.41	3/4 to 1-1/8"	1565
55	520MC55-1	20	5	18.25	24.50	56.79	4.41	3/4 to 1-1/8"	1830
55	620MC55	20	6	18.89	24.63	56.06	4.41	3/4 to 1-1/8"	1420
55	620MC55-1	20	6	20.89	24.63	56.06	4.41	3/4 to 1-1/8"	1700

BLOCKS- MOBILE CRANE BLOCKS

65 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
65	224MC65-1	24	2	14.52	28.88	60.06	4.41	7/8 to 1-1/4"	1475
65	318MC65	18	3	10.98	22.50	53.66	4.41	5/8 to 1"	1080
65	318MC65-1	18	3	12.98	22.50	53.66	4.41	5/8 to 1"	1300
65	320MC65	20	3	10.98	24.50	56.79	4.41	3/4 to 1-1/8"	1235
65	320MC65-1	20	3	12.98	24.50	56.79	4.41	3/4 to 1-1/8"	1500
65	324MC65	24	3	12.52	28.50	61.41	4.41	7/8 to 1-1/4"	1700
65	324MC65-1	24	3	14.52	28.50	61.41	4.41	7/8 to 1-1/4"	2055
65	416MC65	16	4	12.52	20.31	50.13	4.41	9/16 to 7/8"	1000
65	416MC65-1	16	4	14.52	20.31	50.13	4.41	9/16 to 7/8"	1185
65	418MC65	18	4	13.63	22.5	52.88	4.41	5/8 to 1"	1080
65	418MC65-1	18	4	15.63	22.5	52.88	4.41	5/8 to 1"	1310
65	420MC65	20	4	13.63	24.50	56.79	4.41	3/4 to 1-1/8"	1400
65	420MC65-1	20	4	15.63	24.50	56.79	4.41	3/4 to 1-1/8"	1670
65	516MC65	16	5	14.88	20.31	50.13	4.41	9/16 to 7/8"	1100
65	516MC65-1	16	5	16.88	20.31	50.13	4.41	9/16 to 7/8"	1285
65	518MC65	18	5	16.25	22.5	52.88	4.41	5/8 to 1"	1160
65	518MC65-1	18	5	18.25	22.5	52.88	4.41	5/8 to 1"	1490
65	520MC65	20	5	16.25	24.50	56.79	4.41	3/4 to 1-1/8"	1565
65	520MC65-1	20	5	18.25	24.50	56.79	4.41	3/4 to 1-1/8"	1830
65	620MC65	20	6	18.89	24.63	56.06	4.41	3/4 to 1-1/8"	1420
65	620MC65-1	20	6	20.89	24.63	56.06	4.41	3/4 to 1-1/8"	1700

70 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
70	320MC70-1	20	3	13.48	24.50	61.00	4.92	3/4 to 1-1/8"	1810
70	324MC70	24	3	13.02	28.50	65.18	4.92	7/8 to 1-1/4"	2000
70	324MC70-1	24	3	15.02	28.50	65.18	4.92	7/8 to 1-1/4"	2380
70	418MC70	18	4	14.13	22.5	58.75	4.92	5/8 to 1"	1430
70	418MC70-1	18	4	16.13	22.5	58.75	4.92	5/8 to 1"	1680
70	420MC70	20	4	14.13	24.50	61.00	4.92	3/4 to 1-1/8"	1685
70	420MC70-1	20	4	16.13	24.50	61.00	4.92	3/4 to 1-1/8"	1980
70	424MC70	24	4	16.16	28.50	65.18	4.92	7/8 to 1-1/4"	2270
70	424MC70-1	24	4	18.16	28.50	65.18	4.92	7/8 to 1-1/4"	2660
70	518MC70	18	5	16.75	22.5	58.75	4.92	5/8 to 1"	1540
70	518MC70-1	18	5	18.75	22.5	58.75	4.92	5/8 to 1"	1790
70	520MC70	20	5	16.75	24.63	62.31	4.92	3/4 to 1-1/8"	1615
70	520MC70-1	20	5	18.75	24.63	62.31	4.92	3/4 to 1-1/8"	1915
70	524MC70	24	5	19.31	28.50	65.18	4.92	7/8 to 1-1/4"	2535
70	524MC70-1	24	5	21.31	28.50	65.18	4.92	7/8 to 1-1/4"	2925
70	620MC70	20	6	19.39	22.5	62.31	4.92	3/4 to 1-1/8"	1785
70	620MC70-1	20	6	21.39	22.5	62.31	4.92	3/4 to 1-1/8"	2085

BLOCKS- MOBILE CRANE BLOCKS

80 TON

WLL * Tons	Model Number	Sheave Diameter (in)	Number of Sheaves	Thickness (in)	Width (in)	Net Length (in)	Throat Opening (in)	Wire Rope Range (in)	Weight (lbs)
80	320MC80-1	20	3	13.48	24.50	61.00	4.92	3/4 to 1-1/8"	1810
80	324MC80	24	3	13.02	28.50	65.18	4.92	7/8 to 1-1/4"	2000
80	324MC80-1	24	3	15.02	28.50	65.18	4.92	7/8 to 1-1/4"	2380
80	418MC80	18	4	14.13	22.5	58.75	4.92	5/8 to 1"	1430
80	418MC80-1	18	4	16.13	22.5	58.75	4.92	5/8 to 1"	1680
80	420MC80	20	4	14.13	24.50	61.00	4.92	3/4 to 1-1/8"	1685
80	420MC80-1	20	4	16.13	24.50	61.00	4.92	3/4 to 1-1/8"	1980
80	424MC80	24	4	16.16	28.50	65.18	4.92	7/8 to 1-1/4"	2270
80	424MC80-1	24	4	18.16	28.50	65.18	4.92	7/8 to 1-1/4"	2660
80	518MC80	18	5	16.75	22.5	58.75	4.92	5/8 to 1"	1540
80	518MC80-1	18	5	18.75	22.5	58.75	4.92	5/8 to 1"	1790
80	520MC80	20	5	16.75	24.63	62.31	4.92	3/4 to 1-1/8"	1615
80	520MC80-1	20	5	18.75	24.63	62.31	4.92	3/4 to 1-1/8"	1915
80	524MC80	24	5	19.31	28.50	65.18	4.92	7/8 to 1-1/4"	2535
80	524MC80-1	24	5	21.31	28.50	65.18	4.92	7/8 to 1-1/4"	2925
80	620MC80	20	6	19.39	22.5	64.31	4.92	3/4 to 1-1/8"	1785
80	620MC80-1	20	6	21.39	22.5	64.31	4.92	3/4 to 1-1/8"	2085

OVERHEAD BRIDGE CRANE BLOCKS

Wide capacity range, made to application, new or replacement

- Working loads from 15 tons to 300 tons
- Design factor 4:1 and up per specification
- All CMAA service classes (also FEM, DIN, ISO)
- Hooks are forged alloy in accord with DIN 15041 or 15402, single or duplex on thrust bearing and crosshead
- Hook lock or motorized hook available
- Fabricated, roll-formed or cast sheaves with roller bearings or bronze bushings
- Optional lubrication through sheave shaft
- Heavy duty sheave guards
- Optional slotted covers over sheaves
- Special configurations, sheave spacings
- Optional insulated hook

See next page for Quote Request form...

OVERHEAD CRANE BLOCKS QUOTE REQUEST

Requestor
Name:_____**Date:**_____**Quantity**_____
Company:_____ **Address:**_____
City:_____ **State:**_____ **Zip:**_____
Phone:_____ **E-mail:**_____

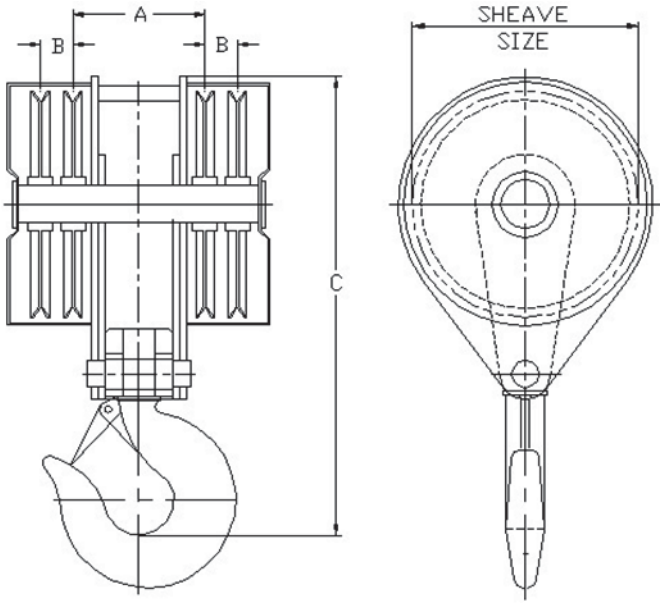
SHEAVES
NUMBER OF SHEAVES:_____ OUTSIDE DIAMETER:_____ WIRE ROPE SIZE:_____

SHEAVE BUSHINGS
BRONZE BUSHING_____ ROLLER BEARING_____

BLOCK CAPACITY & DIMENSIONS, WEIGHT
DIMENSIONS: A_____ B_____ C_____

WORKING CAPACITY (LOAD LIMIT)_____
(INDICATE US / METRIC TONS)

DESIGN FACTOR_____
OVERHAUL WEIGHT_____



HOOK / FITTING TYPE
HOOK_____ SINGLE_____ DOUBLE_____
LOCKING HOOK_____
MOTORIZED HOOK_____
OTHER FITTINGS_____

OTHER REQUIREMENTS

CMAA SERVICE CLASS:_____

SPECIAL TESTING, THIRD PARTY INSPECTION,
ETC:_____
_____
_____

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FORGED HOOKS

Miller's forged hooks are produced to the following comprehensive, international standards:

- DIN 15400- Materials, properties, capacities, stresses
- DIN 15401- Single hooks, forged
- DIN 15402- Double hooks, forged
- DIN 7540 - Eye hooks class 8 (grade 80), forged

DIN is the German Institute for Standardization (Deutsches Institut für Normung) and has been based in Berlin since 1917. DIN has historically developed the detailed and exacting standards used in German engineering and is the body that represents Germany in international standards organizations.

Forged Shank Hooks

Hooks are identified by hook number and material. Each hook number maintains identical dimensions across a range of different materials with its load capacity dependent on the material used. Shank hooks are forged and heat-treated for optimal strength and toughness and are available in single and double configurations in standard working loads to 1,100 tons. Standard design factor is 5:1.

Hook forgings are available in three increasingly stronger carbon and alloy steel materials:

DIN class P: Fine-grained carbon steel, St-E355/St-E420, similar to ASTMA573 Gr. 65
DIN class T: Structural low alloy steel, 34CrMo4 or 34CrNiMo6, similar to SAE 4135/4340
DIN class V: Super alloy steel, 34CrNiMo6 or 30CrNiMo8, similar to SAE 4340/4337

Forged hooks are also available to order, in bronze alloy or stainless steel for non-sparking or other special applications. Stainless steel hooks are forged from ANSI 304 or 316L stainless steel and bronze hooks are forged from a non-sparking aluminum-nickel bronze alloy (CuAl10Ni/C95500).

In the succeeding selection tables, working load limits (WLL) are indicated for each hook number depending on the material selected.

Standard safety latches are included with all hook forgings. Heavy duty positive locking latches are available upon request. See the special section of this catalog for instructions on how to order replacement latches.

Extended length shanks are available upon request.

All hooks are supplied with certifications by serial number for mechanical and chemical properties including Charpy testing, and include 100% ultrasonic and magnetic particle non-destructive examination. Hooks include markings of fixed distances ("y" dimension in tables) which allow confirmation that no deformation has occurred in use or during proof testing. Class V hooks are API-2C compliant.

Machined Hooks with Nut, Suspensions and Blocks

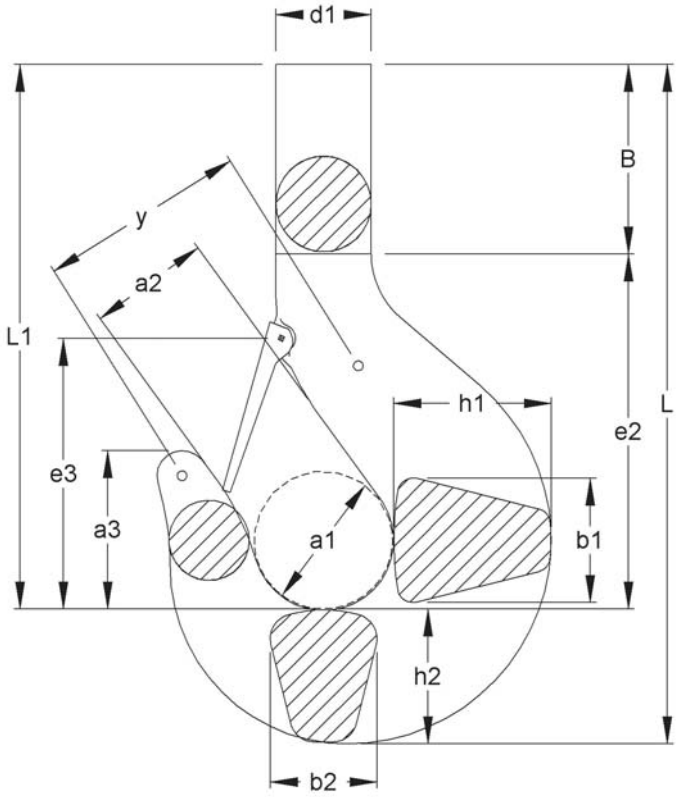
Miller can provide forged hooks fully machined and threaded to customer requirements, matching nut included and ready for assembly into the customer's structure. We can also provide the complete hook suspension with trunnion and thrust bearing, and since Miller is a block manufacturer, we can provide a complete hook block assembly for any crane type. Miller has a full range of standard blocks for mobile cranes and produces custom blocks to order for overhead cranes.

Forged Heavy-Duty Eye Hooks

Miller's DIN 7540 Grade 80 Eye Hook features the traditional eye-ring of circular cross section allowing the maximum degree of motion in the connection and is available standard in working loads up to 400 metric tons (440 short tons). These heavy duty eye hooks are forged from 34CrNiMo6V alloy steel, include a safety latch, and can be adapted for ROV use. The standard design factor is 4:1. See detailed eye hook tables following the shank hook tables.

FORGED HOOKS- SINGLE HOOKS DIN 15401

Imperial Dimensions

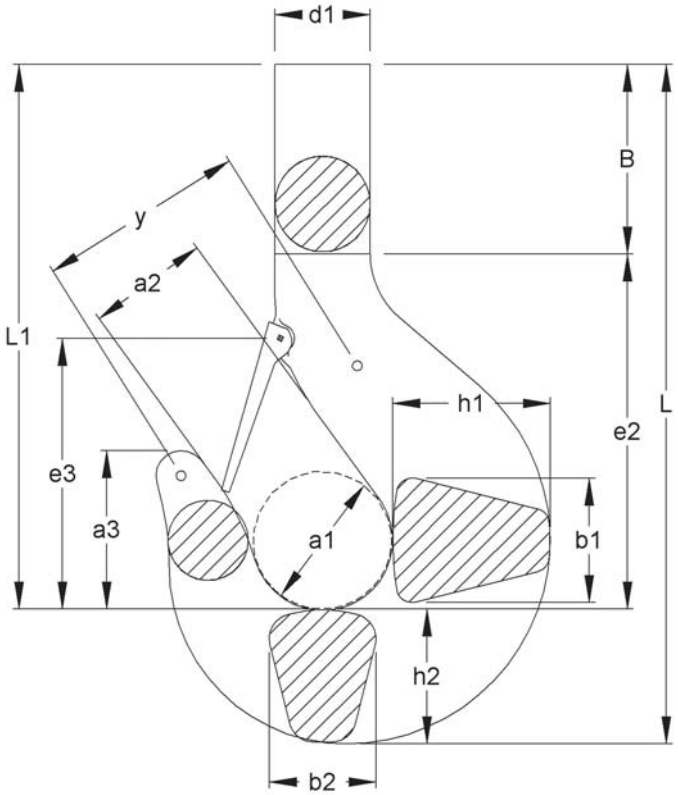


Model Number	Capacity Short Tons Carbon Class P	Capacity Short Tons Alloy Class T	Capacity Short Tons Super Alloy Class V	Capacity Short Tons STAIN-LESS STEEL	a1	a2	a3	B	b1	b2	d1	e2	e3	h1	h2	L	L1	y	Weight Lbs.
GS 1,6	3	6	7	3	2.21	1.77	2.52	3.07	1.77	1.50	1.42	5.75	4.65	2.21	1.89	10.72	8.83		10
GS 2,5	6	9	11	3	2.48	1.97	2.84	3.39	2.09	1.77	1.65	6.58	5.20	2.64	2.29	12.25	9.97		14
GS 4	9	13	18	6	2.80	2.21	3.15	3.74	2.48	2.09	1.89	7.49	5.83	3.15	2.64	13.87	11.23		19
GS 5	11	18	22	9	3.15	2.48	3.55	4.06	2.80	2.36	2.09	8.47	6.50	3.55	2.96	15.48	12.53		27
GS 6	14	22	28	11	3.55	2.80	3.98	5.52	3.15	2.64	2.36	9.46	7.29	3.94	3.35	18.32	14.97	5.12	38
GS 8	18	28	35	14	3.94	3.15	4.45	5.91	3.55	2.96	2.64	10.56	8.27	4.41	3.74	20.21	16.47	5.71	53
GS 10	22	35	44	18	4.41	3.55	5.00	6.54	3.94	3.35	2.96	11.27	8.71	4.93	4.18	21.99	17.81	6.30	75
GS 12	28	44	55	22	4.93	3.94	5.63	8.23	4.41	3.74	3.35	12.45	9.93	5.52	4.65	25.33	20.69	7.09	121
GS 16	35	55	69	28	5.52	4.41	6.30	9.38	4.93	4.18	3.74	14.07	11.03	6.30	5.20	28.64	23.44	7.88	170
GS 20	44	69	88	35	6.30	4.93	7.09	10.24	5.52	4.65	4.18	15.96	13.00	7.09	5.91	32.11	26.20	8.87	247
GS 25	55	88	110	44	7.09	5.52	7.96	11.03	6.30	5.20	4.65	17.93	14.18	7.88	6.70	35.66	28.96	10.05	353
GS 32	69	110	138	55	7.88	6.30	8.87	11.82	7.09	5.91	5.20	20.09	15.76	8.83	7.49	39.40	31.91	11.43	485
GS 40	88	138	176	69	8.83	7.09	9.93	13.32	7.88	6.70	5.91	22.34	17.61	9.85	8.35	44.01	35.66	12.61	683
GS 50	110	176	220	88	9.85	7.88	11.23	13.99	8.83	7.49	6.70	25.02	19.11	11.03	9.30	48.30	39.01	13.99	948
GS 63	138	220	276	110	11.03	8.83	12.61	16.15	9.85	8.35	7.49	27.97	21.67	12.41	10.44	54.57	44.13	15.76	1323
GS 80	176	276	353	138	12.41	9.85	14.11	18.44	11.03	9.30	8.35	31.6	23.56	13.99	11.82	61.86	50.04	17.73	1896
GS 100	220	353	441	176	13.99	11.03	15.84	20.21	12.41	10.44	9.26	35.54	27.11	15.76	13.20	68.95	55.75	19.90	2690
GS 125	276	441	551	n/a	15.76	12.41	17.73	22.46	13.99	11.82	10.44	40.19	29.55	17.73	14.78	77.42	62.65	22.46	3836
GS 160	353	551	705	n/a	17.73	13.99	19.90	25.41	15.76	13.20	11.82	45.11	32.51	19.70	16.75	87.27	70.53	25.22	5467
GS 200	441	705	882	n/a	19.70	15.76	22.26	30.38	17.73	14.78	13.20	50.24	35.46	22.06	18.72	99.41	80.69	28.37	7540
GS 250	705	882	1102	n/a	22.83	17.71	25.00	34.44	19.68	16.73	14.76	56.29	38.58	24.80	20.86	111.6	90.75	39.96	10582

•Design factor is 5:1 •For dimensional tolerances and extended shank options see page 70 •Capacities listed are per DIN 15400 drive group 1Am, which generally reflect loading conditions for mobile crane applications. The 1Am drive group can generally be approximated to CMAA Specification No. 70, Service Class B. For application-specific information consult the relevant standard or contact Miller for assistance.

FORGED HOOKS- SINGLE HOOKS DIN 15401

Metric Dimensions

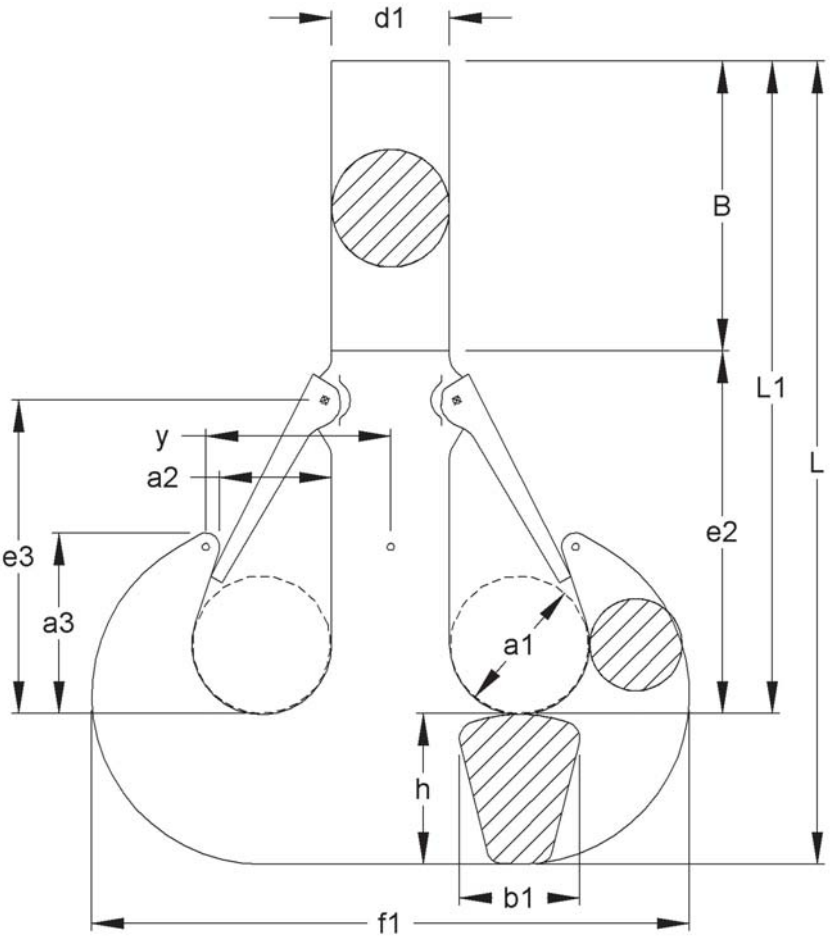


Model Number	Capacity Metric Tons Carbon Class P	Capacity Metric Tons Alloy Class T	Capacity Metric Tons Super Alloy Class V	Capacity Metric Tons STAIN-LESS STEEL	a1	a2	a3	B	b1	b2	d1	e2	e3	h1	h2	L	L1	y	Weight Kg
GS 1,6	3	5	6.5	2.5	56	45	64	78	45	38	36	146	118	56	48	272	224		4.5
GS 2,5	5	8	10	3	63	50	72	86	53	45	42	167	132	67	58	311	253		6.3
GS 4	8	12	16	5	71	56	80	95	63	53	48	190	148	80	67	352	285		8.8
GS 5	10	16	20	8	80	63	90	103	71	60	53	215	165	90	75	393	318		12.3
GS 6	12.5	20	25	10	90	71	101	140	80	67	60	240	185	100	85	465	380	130	17.1
GS 8	16	25	32	12.5	100	80	113	150	90	75	67	268	210	112	95	513	418	145	24
GS 10	20	32	40	16	112	90	127	166	100	85	75	286	221	125	106	558	452	160	34
GS 12	25	40	50	20	125	100	143	209	112	95	85	316	252	140	118	643	525	180	55
GS 16	32	50	63	25	140	112	160	238	125	106	95	357	280	160	132	727	595	200	77
GS 20	40	63	80	32	160	125	180	260	140	118	106	405	330	180	150	815	665	225	112
GS 25	50	80	100	40	180	140	202	280	160	132	118	455	360	200	170	905	735	255	160
GS 32	63	100	125	50	200	160	225	300	180	150	132	510	400	224	190	1000	810	290	220
GS 40	80	125	160	63	224	180	252	338	200	170	150	567	447	250	212	1117	905	320	310
GS 50	100	160	200	80	250	200	285	355	224	190	170	635	485	280	236	1226	990	355	430
GS 63	125	200	250	100	280	224	320	410	250	212	190	710	550	315	265	1385	1120	400	600
GS 80	160	250	320	125	315	250	358	468	280	236	212	802	598	355	300	1570	1270	450	860
GS 100	200	320	400	160	355	280	402	513	315	265	235	902	688	400	335	1750	1415	505	1220
GS 125	250	400	500	n/a	400	315	450	570	355	300	265	1020	750	450	375	1965	1590	570	1740
GS 160	320	500	640	n/a	450	350	505	645	400	335	300	1145	825	500	425	2215	1790	640	2480
GS 200	400	640	800	n/a	500	400	565	771	450	375	335	1275	900	560	475	2523	2048	720	3420
GS 250	640	800	1000	n/a	580	450	635	875	500	425	375	1430	980	630	530	2835	2305	1015	4800

•Design factor is 5:1 •For dimensional tolerances and extended shank options see page 70 •Capacities listed are per DIN 15400 drive group 1Am, which generally reflect loading conditions for mobile crane applications. The 1Am drive group can generally be approximated to CMAA Specification No. 70, Service Class B. For application-specific information consult the relevant standard or contact Miller for assistance.

FORGED HOOKS- DUPLEX HOOK DIN 15402

Imperial Dimensions

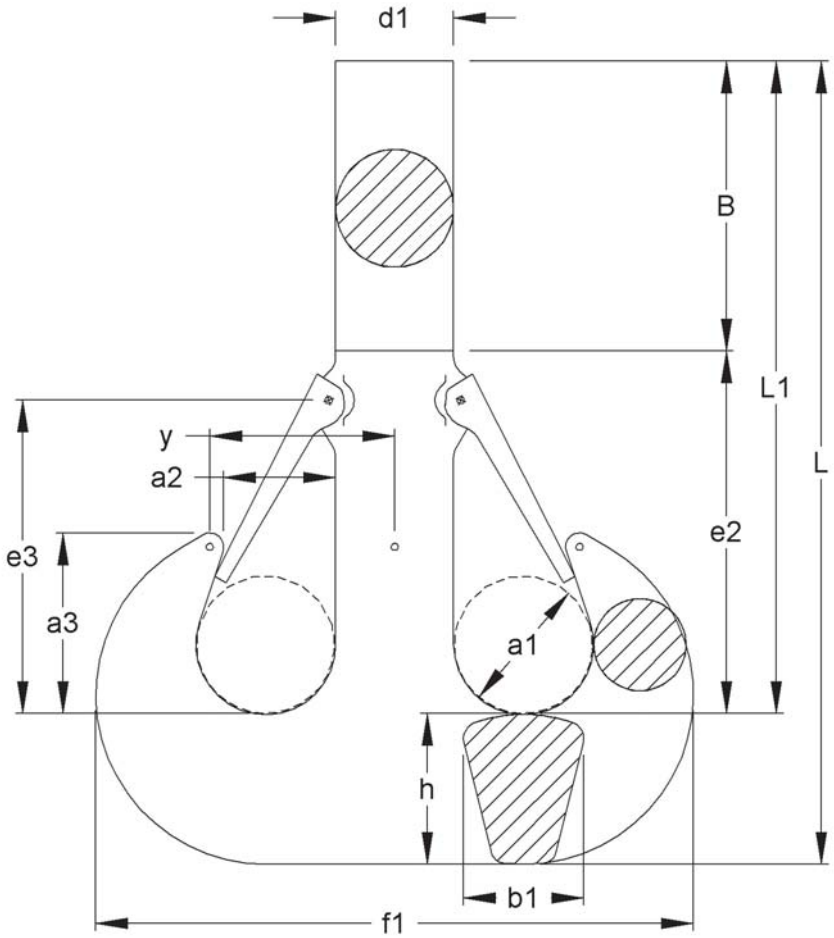


Model Number	Capacity Short Tons Carbon Class P	Capacity Short Tons Alloy Class T	Capacity Short Tons Super Alloy Class V	a1	a2	a3	B	f1	b1	e2	d1	e3	h	L	L1	y	Weight Lbs.
GD 6	14	22	28	2.80	2.21	3.62	7.21	11.86	2.36	7.56	2.36	6.30	2.96	17.73	14.78	3.66	37
GD 8	18	28	35	3.15	2.48	4.06	7.76	13.28	2.64	8.59	2.64	7.17	3.35	19.70	16.35	4.12	56
GD 10	22	35	44	3.55	2.80	4.57	8.67	14.85	2.96	9.06	2.96	7.56	3.74	21.47	17.73	4.63	80
GD 12	28	44	55	3.94	3.15	5.12	10.17	16.59	3.35	9.93	3.35	8.27	4.18	24.27	20.09	5.22	111
GD 16	35	55	69	4.41	3.55	5.75	11.66	18.56	3.74	11.19	3.74	9.34	4.65	27.50	22.85	5.85	157
GD 20	44	69	88	4.93	3.94	6.42	13.08	20.92	4.18	12.53	4.18	10.44	5.20	30.81	25.61	6.52	219
GD 25	55	88	110	5.52	4.41	7.17	13.67	23.56	4.65	14.89	4.65	12.41	5.91	34.08	28.17	7.29	304
GD 32	69	110	138	6.30	4.93	8.08	15.29	26.48	5.20	15.84	5.20	13.20	6.70	37.82	31.13	8.16	434
GD 40	88	138	176	7.09	5.52	9.06	17.14	29.71	5.91	17.73	5.91	14.78	7.49	42.36	34.87	9.18	631
GD 50	110	176	220	7.88	6.30	10.24	18.16	33.17	6.70	19.86	6.70	16.55	8.35	46.37	38.02	10.44	869
GD 63	138	220	276	8.83	7.09	11.50	21.20	37.19	7.49	21.75	7.49	18.12	9.30	52.24	42.95	11.70	1206
GD 80	176	276	353	9.85	7.88	12.81	24.31	41.84	8.35	24.35	8.35	20.29	10.44	59.10	48.66	13.04	1673
GD 100	220	353	441	11.03	8.83	14.34	26.99	46.73	9.26	27.19	9.26	22.66	11.82	66.00	54.18	14.58	2337
GD 125	276	441	551	12.41	9.85	16.08	30.57	52.40	10.44	30.50	10.44	25.41	13.20	74.27	61.07	16.33	3287
GD 160	353	551	705	13.99	11.03	18.05	34.45	59.30	11.82	34.25	11.82	28.57	14.78	83.53	68.75	18.36	4663
GD 200	441	705	882	15.76	12.41	20.29	40.82	66.39	13.20	37.83	13.20	31.52	16.75	95.47	78.72	20.59	6647
GD 250	551	882	1102	17.73	13.99	22.85	47.05	74.27	14.78	41.53	14.78	34.48	18.72	107.3	88.65	23.15	9409

•Design factor is 5:1 •For dimensional tolerances and extended shank options see page 70 •Capacities listed are per DIN 15400 drive group 1Am, which generally reflect loading conditions for mobile crane applications. The 1Am drive group can generally be approximated to CMAA Specification No. 70, Service Class B. For application-specific information consult the relevant standard or contact Miller for assistance.

FORGED HOOKS- DUPLEX HOOK DIN 15402

Metric Dimensions

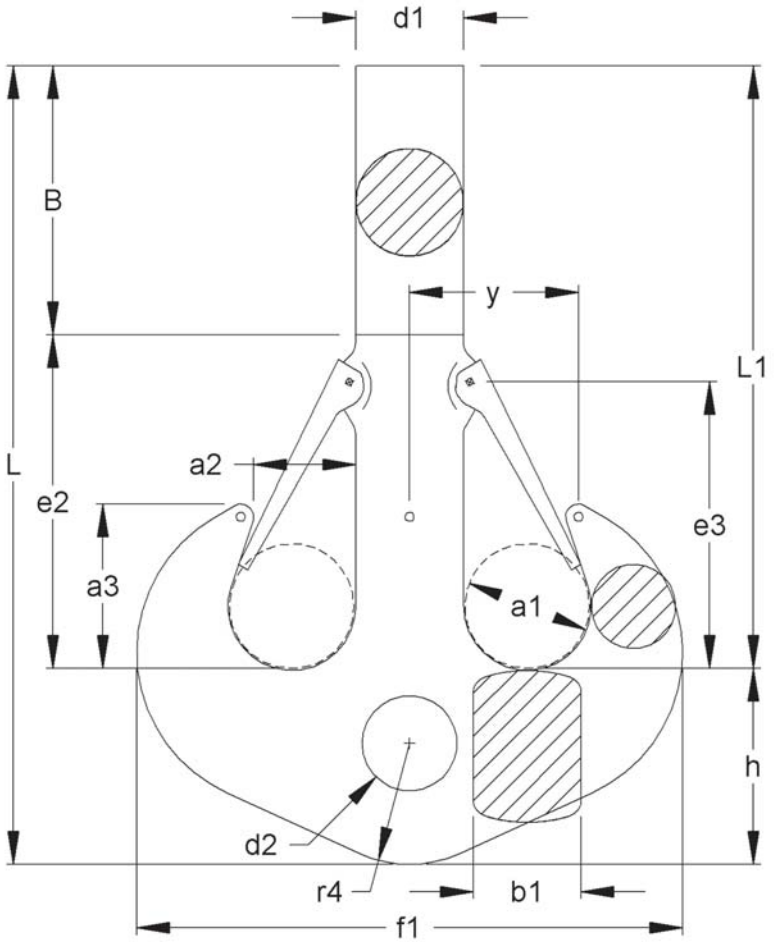


Model Number	Capacity Metric Tons Carbon Class P	Capacity Metric Tons Alloy Class T	Capacity Metric Tons Super Alloy Class V	a1	a2	a3	B	f1	b1	e2	d1	e3	h	L	L1	y	Weight Kg
GD 6	12.5	20	25	71	56	92	183	301	60	192	60	160	75	450	375	93	16.8
GD 8	16	25	32	80	63	103	197	337	67	218	67	182	85	500	415	104.5	25.3
GD 10	20	32	40	90	71	116	220	377	75	230	75	192	95	545	450	117.5	35.3
GD 12	25	40	50	100	80	130	258	421	85	252	85	210	106	616	510	132.5	50
GD 16	32	50	63	112	90	146	296	471	95	284	95	237	118	698	580	148.5	71
GD 20	40	63	80	125	100	163	332	531	106	318	106	265	132	782	650	165.5	100
GD 25	50	80	100	140	112	182	347	598	118	378	118	315	150	865	715	185	138
GD 32	63	100	125	160	125	205	388	672	132	402	132	335	170	960	790	207	197
GD 40	80	125	160	180	140	230	435	754	150	450	150	375	190	1075	885	233	286
GD 50	100	160	200	200	160	260	461	842	170	504	170	420	212	1177	965	265	394
GD 63	125	200	250	224	180	292	538	944	190	552	190	460	236	1326	1090	297	547
GD 80	160	250	320	250	200	325	617	1062	212	618	212	515	265	1500	1235	331	760
GD 100	200	320	400	280	224	364	685	1186	235	690	235	575	300	1675	1375	370	1060
GD 125	250	400	500	315	250	408	776	1330	265	774	265	645	335	1885	1550	414.5	1491
GD 160	320	500	500	355	280	458	875	1505	300	870	300	725	375	2120	1745	466	2115
GD 200	400	640	800	400	315	515	1037	1685	335	961	335	800	425	2423	1998	522.5	3015
GD 250	500	800	1000	450	355	580	1195	1885	375	1055	375	875	475	2725	2250	587.5	4268

•Design factor is 5:1 •For dimensional tolerances and extended shank options see page 70 •Capacities listed are per DIN 15400 drive group 1Am, which generally reflect loading conditions for mobile crane applications. The 1Am drive group can generally be approximated to CMAA Specification No. 70, Service Class B. For application-specific information consult the relevant standard or contact Miller for assistance.

FORGED HOOKS- DUPLEX HOOK DIN 15402-B

Imperial Dimensions

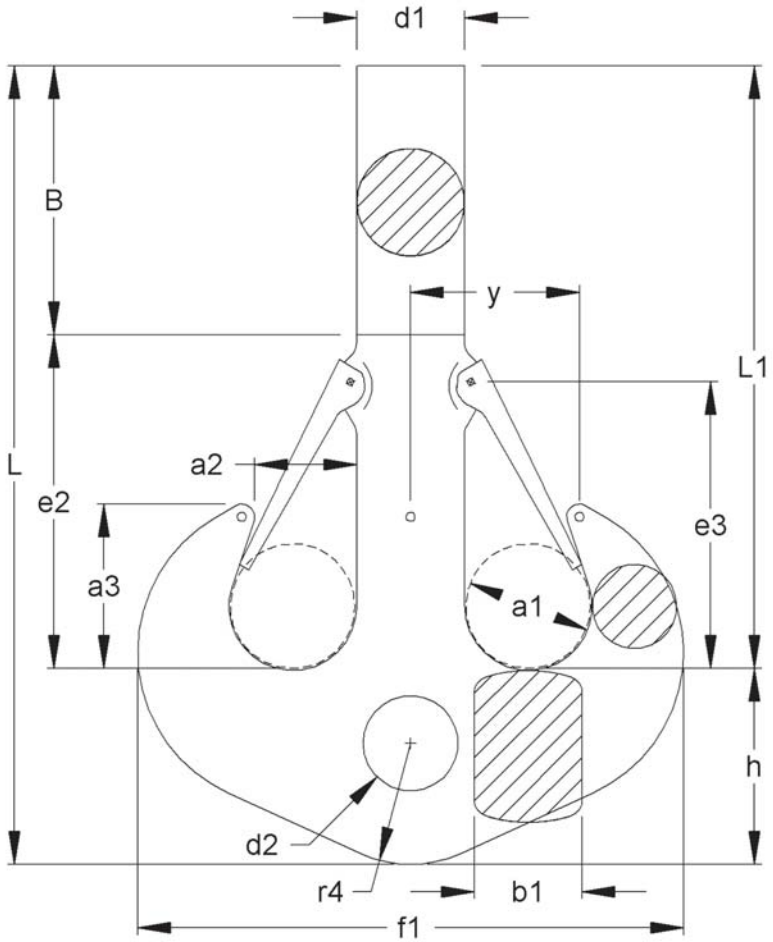


Model Number	Capacity Short Tons Carbon Class P	Capacity Short Tons Alloy Class T	Capacity Short Tons Super Alloy Class V	a1	a2	a3	B	f1	b1	d2	e2	d1	e3	h	L	L1	r4	y	Weight Lbs.
GDB 10	22	35	44	3.55	2.80	4.57	8.67	14.85	2.96	2.92	9.06	2.96	7.56	5.12	22.85	17.73	3.35	4.63	90
GDB 12	28	44	55	3.94	3.15	5.12	10.17	16.59	3.35	3.07	9.93	3.35	8.27	5.91	26.00	20.09	3.74	5.22	126
GDB 16	35	55	69	4.41	3.55	5.75	11.66	18.56	3.74	3.39	11.19	3.74	9.34	6.70	29.55	22.85	4.17	5.85	181
GDB 20	44	69	88	4.93	3.94	6.42	13.08	20.92	4.18	3.78	12.53	4.18	10.44	7.49	33.10	25.61	4.65	6.52	254
GDB 25	55	88	110	5.52	4.41	7.17	13.67	23.56	4.65	4.18	14.89	4.65	12.41	8.35	36.52	28.17	5.2	7.29	353
GDB 32	69	110	138	6.30	4.93	8.08	15.29	26.48	5.20	4.57	15.84	5.20	13.20	9.30	40.42	31.13	5.9	8.16	505
GDB 40	88	138	176	7.09	5.52	9.06	17.14	29.71	5.91	5.16	17.73	5.91	14.78	10.44	45.31	34.87	6.7	9.18	728
GDB 50	110	176	220	7.88	6.30	10.24	18.16	33.17	6.70	5.75	19.86	6.70	16.55	11.82	49.84	38.02	7.48	10.44	1010
GDB 63	138	220	276	8.83	7.09	11.50	21.20	37.19	7.49	6.62	21.75	7.49	18.12	13.20	56.15	42.95	8.35	11.70	1407
GDB 80	176	276	353	9.85	7.88	12.81	24.31	41.84	8.35	7.41	24.35	8.35	20.29	14.78	63.43	48.66	9.29	13.04	1967
GDB 100	220	353	441	11.03	8.83	14.34	26.99	46.73	9.26	8.20	27.19	9.26	22.66	16.75	70.92	54.18	10.4	14.58	2751
GDB 125	276	441	551	12.41	9.85	16.08	30.57	52.40	10.44	9.26	30.50	10.44	25.41	18.72	79.79	61.07	11.8	16.33	3873
GDB 160	353	551	705	13.99	11.03	18.05	34.45	59.30	11.82	10.24	34.25	11.82	28.57	20.88	89.64	68.75	13.2	18.36	5512
GDB 200	441	705	882	15.76	12.41	20.29	40.82	66.39	13.20	11.11	37.83	13.20	31.52	23.64	100.8	77.22	14.8	20.59	7848
GDB 250	551	882	1102	17.73	13.99	22.85	47.05	74.27	14.78	12.29	41.54	14.78	34.48	26.40	113.4	87.07	16.7	23.15	11096

•Design factor is 5:1 •For dimensional tolerances and extended shank length options see page 70. •Hole tolerance +2%/-0
•Capacities listed are per DIN 15400 drive group 1Am, which generally reflect loading conditions for mobile crane applications. The 1Am drive group can generally be approximated to CMAA Specification No. 70, Service Class B. For application-specific information consult the relevant standard or contact Miller for assistance.

FORGED HOOKS- DUPLEX HOOK DIN 15402-B

Metric Dimensions



Model Number	Capacity Metric Tons Carbon Class P	Capacity Metric Tons Alloy Class T	Capacity Metric Tons Super Alloy Class V	a1	a2	a3	B	f1	b1	d2	e2	d1	e3	h	L	L1	r4	y	Weight Kg
GDB 10	20	32	40	90	71	116	220	377	75	74	230	75	192	130	580	450	85	117.5	41
GDB 12	25	40	50	100	80	130	258	421	85	78	252	85	210	150	660	510	95	132.5	57
GDB 16	32	50	63	112	90	146	296	471	95	86	284	95	237	170	750	580	106	148.5	82
GDB 20	40	63	80	125	100	163	332	531	106	96	318	106	265	190	840	650	118	165.5	115
GDB 25	50	80	100	140	112	182	347	598	118	106	378	118	315	212	927	715	132	185	160
GDB 32	63	100	125	160	125	205	388	672	132	116	402	132	335	236	1026	790	150	207	229
GDB 40	80	125	160	180	140	230	435	754	150	131	450	150	375	265	1150	885	170	233	330
GDB 50	100	160	200	200	160	260	461	842	170	146	504	170	420	300	1265	965	190	265	458
GDB 63	125	200	250	224	180	292	538	944	190	168	552	190	460	335	1425	1090	212	297	638
GDB 80	160	250	320	250	200	325	617	1062	212	188	618	212	515	375	1610	1235	236	331	892
GDB 100	200	320	400	280	224	364	685	1186	235	208	690	235	575	425	1800	1375	265	370	1248
GDB 125	250	400	500	315	250	408	776	1330	265	235	774	265	645	475	2025	1550	300	414.5	1757
GDB 160	320	500	640	355	280	458	875	1505	300	260	875	300	725	530	2275	1745	335	466	2500
GDB 200	400	640	800	400	315	515	1037	1685	335	282	1037	335	800	600	2560	1960	375	522.5	3560
GDB 250	500	800	1000	450	355	580	1195	1885	375	312	1195	375	875	670	2880	2210	425	587.5	5030

•Design factor is 5:1 •For dimensional tolerances and extended shank length options see page 70.
•Hole tolerance is +2%/-0 •Capacities listed are per DIN 15400 drive group 1Am, which generally reflect loading conditions for mobile crane applications. The 1Am drive group can generally be approximated to CMAA Specification No. 70, Service Class B. For application-specific information consult the relevant standard or contact Miller for assistance.

DIN SHANK HOOKS- TOLERANCES & OPTIONAL LONG SHANKS

DIN SHANK HOOKS- TOLERANCES AND OPTIONAL EXTENDED LENGTH SHANKS

METRIC DIMENSIONS

Single hooks per DIN 15401

Single Hook Number	Long Shank Add Value to L1 (mm)
2.5	62
4	100
5	92
6	50
8	102
10 to 20	150
25 to 125	200
160 and 200	Per Order

Single Hook Number	Dimensional Tolerances (mm)									
	a1	a2	a3	b1	b2	d1	e3	h1	h2	L1
1.6 and 2.5	+3 / -0									
4 and 5	+4 / -0									
6 and 8	+5 / -0									
10 to 16	+6 / -0									
20	+8 / -0									
25 and 32	+12 / -0		+/- 10	+16 / -0		+12 / -0	+/- 10	+20 / -0		
40 to 63	+16 / -0		+/- 12	+20 / -0		+16 / -0	+/- 12	+24 / -0		
80 to 125	+20 / -0		+/- 16	+25 / -0		+20 / -0	+/- 16	+32 / -0		
160 to 200	+25 / -0		+/- 20	+32 / -0		+25 / -0	+/- 20	+40 / -0		

Duplex hooks per DIN 15402

Duplex Hook Number	Long Shank Add Value to L1 (mm)
6	115
8	120
10 and 12	110
16 and 20	N/A
25	150
32 to 160	200
200 and 250	Per Order

Duplex Hook Number	Dimensional Tolerances (mm)							
	a1	a2	a3	b1	d1	e	h	L1
6 and 8	+5 / -0							
10 to 16	+6 / -0							
20 and 25	+8 / -0							
32	+12 / -0		+/- 10	+16 / -0	+12 / -0	+5 / -0	+20 / -0	
40 to 63	+16 / -0		+/- 12	+20 / -0	+16 / -0	+6 / -0	+24 / -0	
80 to 125	+20 / -0		+/- 16	+25 / -0	+20 / -0	+8 / -0	+32 / -0	
160 to 250	+25 / -0		+/- 20	+32 / -0	+25 / -0	+10 / -0	+40 / -0	

IMPERIAL DIMENSIONS

Single hooks per DIN 15401

Single Hook Number	Long Shank Add Value to L1 (in)
2.5	2.44
4	3.94
5	3.62
6	1.97
8	4.02
10 to 20	5.91
25 to 125	7.88
160 and 200	Per Order

Single Hook Number	Dimensional Tolerances (inches)									
	a1	a2	a3	b1	b2	d1	e3	h1	h2	L1
1.6 and 2.5	+.12 / -0									
4 and 5	+.16 / -0									
6 and 8	+.2 / -0									
10 to 16	+.24 / -0									
20	+.32 / -0									
25 and 32	+.47 / -0		+/- .39	+.63 / -0		+.47 / -0	+/- .39	+.79 / -0		
40 to 63	+.63 / -0		+/- .47	+.79 / -0		+.63 / -0	+/- .47	+.95 / -0		
80 to 125	+.79 / -0		+/- .63	+.99 / -0		+.79 / -0	+/- .63	+1.26 / -0		
160 to 200	+.99 / -0		+/- .79	+1.26 / -0		+.99 / -0	+/- .79	+1.58 / -0		

Duplex hooks per DIN 15402

Duplex Hook Number	Long Shank Add Value to L1 (in)
6	4.53
8	4.73
10 and 12	4.33
16 and 20	N/A
25	5.91
32 to 160	7.88
200 and 250	Per Order

Duplex Hook Number	Dimensional Tolerances (inches)							
	a1	a2	a3	b1	d1	e	h	L1
6 and 8	+.2 / -0							
10 to 16	+.24 / -0							
20 and 25	+.32 / -0							
32	+.47 / -0		+/- .39	+.63 / -0	+.47 / -0	+.2 / -0	+.79 / -0	
40 to 63	+.63 / -0		+/- .47	+.79 / -0	+.63 / -0	+.24 / -0	+.95 / -0	
80 to 125	+.79 / -0		+/- .63	+.99 / -0	+.79 / -0	+.32 / -0	+1.26 / -0	
160 to 250	+.99 / -0		+/- .79	+1.26 / -0	+.99 / -0	+.39 / -0	+1.58 / -0	

LATCH KITS FOR HOOKS

Miller Lifting Products
100A Sturbridge Rd.
Charlton MA 01507 USA
800.733.7071
sales@millerproducts.net

LATCH KITS FOR STANDARDIZED EUROPEAN SHANK HOOKS

DIN 15401 SINGLE HOOKS ▪ DIN15402 DOUBLE HOOKS
STANDARD OR HEAVY-DUTY LOCKING TYPE

*Attachment hardware included

Hook Frame Number		Standard	Heavy-Duty
Single	Duplex	Flapper	Positive-Locking
1.6	2.5	M291805106	M291807106
2.5	4	M291805106	M291807205
4	5	M291805004	M291807005
5	6	M291805005	M291807007
6	8	M291805006	M291807006
8	10	M291805008	M291807008
10	12	M291805010	M291807010
12	16	M291805012	M291807012
16	20	M291805016	M291807016
20	25	M291805020	M291807020
25	32	M291805025	M291807025
32	40	M291805032	M291807032
40	50	M291805040	M291807040
50	63	M291805050	M291807050
63	80	M291805063	M291807063
80	100	M291805080	M291807080
100	125	M291805100	M291807100
125	160	M291805125	M291807125
160	200	M291805160	M291807160
200	250	M291805200	M291807200

Standard **HD Pos Lock**

*Lock Pin Not Shown

How to locate hook frame number:

See hook markings located as indicated below. Hook frame number is followed by a single letter P, T,V, S, or M

LATCH KITS FOR EUROPEAN EYE HOOKS

DIN 7540 Standard Flapper Latch Kits

*Attachment hardware included

Hook Frame Number	Part Number
34	M291991034
35	M291991035
36	M291991036
37 and 38	M291991037
39, 40 and 41	M291991039
42	M291991042

* Positive locking latches by special order

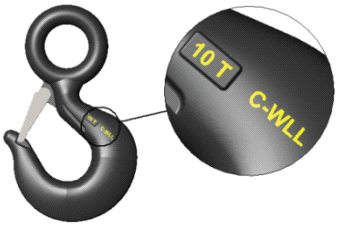
How to locate hook frame number:

See hook markings located as indicated below. Hook frame number is a two-digit number 34 through 42

LATCH KITS FOR ELD EYE HOOKS

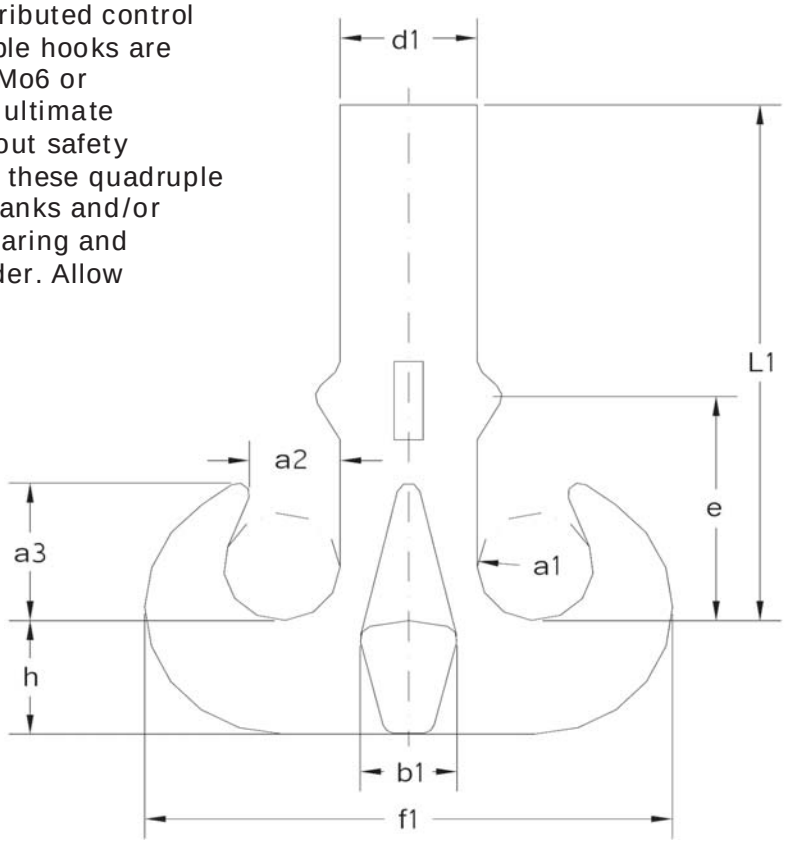
*Attachment hardware included

Working Load & Material	Part Number
3 TON CARBON	M291803000
5 TON CARBON / 7.5 TON ALLOY	M291804005
7.5 TON CARBON / 11.5 TON ALLOY	M291804007
10 TON CARBON / 16 TON ALLOY	M291804004
22 TON ALLOY	M291804009



FORGED HOOKS- QUADRUPLE HOOK - BASED ON DIN 15402

For heavy lift activity where more distributed control of the load is necessary, these quadruple hooks are forged from class V superalloy, 34CrNiMo6 or 30CrNiMo8. The static design factor to ultimate strength is 5:1. Available with or without safety latches. Shown here as a raw forging, these quadruple hooks are also available with longer shanks and/or machined with matching nut, thrust bearing and trunnion. Quad hooks are forged to order. Allow adequate time for delivery.



Metric Dimensions

Model Number	Capacity (SWL) Metric Tons*	a1	a2	a3	b1	d1	e	f1	h	L1**	Weight Kg
GQ16V	160	112	90	146	95	132	237	508	118	580	146
GQ20V	200	125	100	163	106	150	265	575	132	650	208
GQ25V	250	140	112	182	118	170	315	650	150	715	300
GQ32V	320	160	125	205	132	190	335	730	170	790	418
GQ40V	400	180	140	230	150	212	375	816	190	885	604
GQ50V	500	200	160	260	170	236	420	908	212	965	785

Imperial Dimensions

Model Number	Capacity (SWL) Short Tons*	a1	a2	a3	b1	d1	e	f1	h	L1**	Weight Lbs.
GQ16V	176	4.41	3.54	5.75	3.74	5.20	9.33	20.00	4.65	22.83	322
GQ20V	220	4.92	3.94	6.42	4.17	5.91	10.43	22.64	5.20	25.59	459
GQ25V	275	5.51	4.41	7.17	4.65	6.69	12.40	25.59	5.91	28.15	661
GQ32V	352	6.30	4.92	8.07	5.20	7.48	13.19	28.74	6.69	31.10	922
GQ40V	440	7.09	5.51	9.06	5.91	8.35	14.76	32.13	7.48	34.84	1332
GQ50V	551	7.87	6.30	10.24	6.69	9.29	16.54	35.75	8.35	37.99	1731

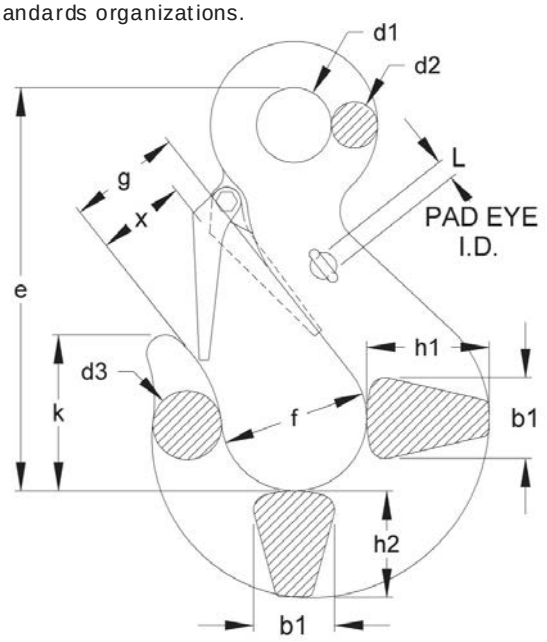
▪ Tolerance per DIN15402

* Capacities based on FEM 1Bm/ISO M3 service class ** Additional length, L1 is available

FORGED EYE HOOKS- DIN 7540 GRADE 80

DIN is the German Institute for Standardization (Deutsches Institut für Normung) and has been based in Berlin since 1917. DIN has historically developed the detailed and exacting standards used in German engineering and is the body that represents Germany in international standards organizations.

- Forged from high-strength alloy steel 34CrNiMo6V
- Safe Working Loads from 40 to 400 metric tons
- Design factor 4:1 to ultimate strength
- Proof load is 2.5 times Safe Working Load
- Includes safety latch
- ROV modification (addition of pad eyes) available upon request
- Higher load capacities available upon request



Metric Dimensions

Model Number	Capacity (SWL) Metric Tons	MBL Metric ton	b1	d1	d1 Tolerance	d2	d3	e	f	g	h1	h2	K	L	X	Weight Kg
EH34	40	160	78	72	+1.9 / -3.7	44	66	388	140	109	118	103	80	19	90	31.5
EH35	50	200	89	84	+1.9 / -3.7	50	74	442	158	124	135	116	90	19	103	46
EH36	63	250	99	90	+2.3 / -4.7	56	83	494	176	138	151	130	101	19	114	63
EH37	80	320	110	102	+2.3 / -4.7	63	93	610	198	155	168	145	113	19	131	80
EH38	100	400	125	116	+/- 5.0	74	120	650	225	175	195	172	133	19	147	125
EH39	150	600	140	130	+/- 6.5	86	140	765	250	200	225	199	160	19	166	250
EH40	200	800	160	150	+/- 7.5	102	161	850	275	225	260	237	195	25	*	365
EH41	250	1000	180	170	+/- 8.5	120	195	928	310	255	290	269	210	25	*	515
EH42	300	1200	200	190	+/- 9.5	140	223	1052	350	290	330	310	240	32	*	730
EH43	400	1600	240	210	+/- 10.5	170	240	1195	400	320	380	345	270	32	*	1055

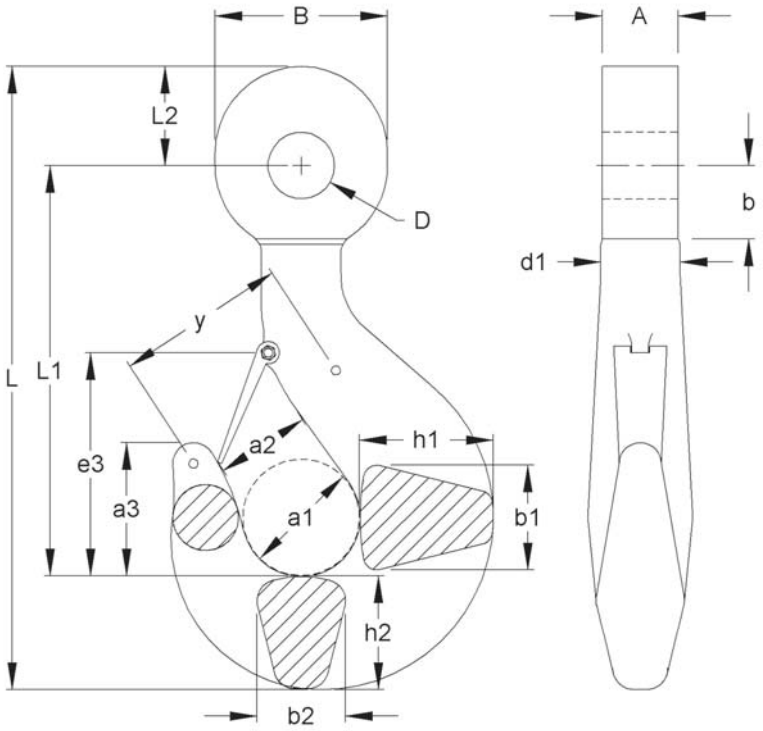
Imperial Dimensions

Model Number	Capacity (SWL) Short Tons	MBL Short ton	b1	d1	d1 Tolerance	d2	d3	e	f	g	h1	h2	k	L	X	Weight Lbs.
EH34	44	176	3.07	2.83	+.07 / -.14	1.73	2.60	15.28	5.51	4.29	4.65	4.06	3.15	.75	3.54	69
EH35	55	220	3.50	3.31	+.07 / -.14	1.97	2.91	17.40	6.22	4.88	5.31	4.57	3.54	.75	4.06	102
EH36	69	275	3.90	3.54	+.09 / -.18	2.20	3.27	19.45	6.93	5.43	5.94	5.12	3.98	.75	4.49	139
EH37	88	353	4.33	4.02	+.09 / -.18	2.48	3.66	24.02	7.88	6.10	6.61	5.71	4.45	.75	5.16	176
EH38	110	441	4.92	4.57	+/- .19	2.91	4.72	25.59	8.86	6.89	7.68	6.77	5.24	.75	5.79	276
EH39	165	661	5.51	5.12	+/- .25	3.39	5.51	30.12	9.84	7.87	8.86	7.83	6.30	.75	6.54	551
EH40	220	882	6.30	5.91	+/- .29	4.02	6.34	33.46	10.83	8.86	10.24	9.33	7.68	.98	*	805
EH41	276	1102	7.09	6.69	+/- .33	4.72	7.68	36.54	12.20	10.04	11.42	10.59	8.27	.98	*	1135
EH42	331	1322	7.87	7.48	+/- .37	5.51	8.78	41.42	13.78	11.42	12.99	12.20	9.45	1.26	*	1609
EH43	441	1764	8.27	8.27	+/- .41	6.69	9.45	47.05	15.75	12.60	14.96	13.58	10.63	1.26	*	2326

- Except where otherwise noted, dimensional tolerances for hooks through model EH37 are approximately ±5%, and increase somewhat for hooks larger than model EH37. Contact Miller for detailed tolerance data.
- Load capacities indicated are for operating temperatures between -40°C and 200°C (-40°F and 392°F). Outside this range check with Miller for reduced capacity limits.

***** x dimension please inquire.

FORGED HOOKS- HEAVY DUTY SHACKLE EYE HOOK



Heavy Duty Eye Hooks for Shackles

Miller Heavy Duty Eye Hooks are specifically intended for use with shackles or other pin-type connections. The cylindrical cross-section of the eye assures uniform pin loading while limiting relative hook motion.

Based also the DIN norms, they are typically forged from the strongest DIN "V" material class (see above) and carry a 5:1 design safety factor and a positive locking latch. Adaptable for ROV (Remotely Operated Vehicles) use, these eye hooks fit standard shackles and also are available in customized versions. Deformation indicators are also included on these heavy duty models.

Metric Dimensions

Model Number	Capacity Metric Tons	A	a1	a2	a3	B	b1	b2	D	d1	e3	h1	h2	b	L1	L2	L	y	Weight Kg
GSOJ8T	30	52	100	80	113	115	90	75	43	67	210	112	95	51	419	65	569	145	17
GSOJ8V	40	65	100	80	113	140	90	75	52.5	67	210	112	95	59	427	80	602	145	24
GSOJ12V	55	74.5	125	100	143	155	112	95	60.5	85	252	140	118	68	484	90	692	180	55
GSOJ20V	85	96.5	160	125	180	195	140	118	73	106	330	180	150	80	585	112	847	225	112
GSOJ25V	120	119	180	140	202	235	160	132	86	118	360	200	170	91	646	135	951	255	160
GSOJ32V	150	125	200	160	225	250	180	150	98.5	132	400	224	190	112	722	145	1057	290	220
GSOJ40T	175	131.5	224	180	252	285	200	170	109.5	150	447	250	212	126	793	165	1170	320	310
GSOJ40V	200	144.5	224	180	252	320	200	170	122.5	150	447	250	212	147	814	185	1211	320	310
GSOJ50V	250	179	250	200	285	340	224	190	135	170	485	280	236	168	903	195	1334	355	430
GSOJ63V	300	179	280	224	320	405	250	212	154	190	550	315	265	168	978	235	1478	400	600
GSOJ80V	400	201.5	315	250	358	460	280	236	179.5	212	598	355	300	196	1098	265	1663	450	860

•Dimensional Tolerance are, A=+0/-1%, D=+2/-0% and all others are +7/-2%

Imperial Dimensions

Model Number	Capacity Short Tons	A	a1	a2	a3	B	b1	b2	D	d1	e3	h1	h2	b	L1	L2	L	y	Weight Lbs.
GSOJ8T	33	2.05	3.94	3.15	4.45	4.53	3.55	2.96	1.69	2.64	8.27	4.41	3.74	2.01	16.51	2.56	22.42	5.71	37
GSOJ8V	44	2.56	3.94	3.15	4.45	5.52	3.55	2.96	2.07	2.64	8.27	4.41	3.74	2.32	16.82	3.15	23.72	5.71	53
GSOJ12V	61	2.94	4.93	3.94	5.63	6.11	4.41	3.74	2.38	3.35	9.93	5.52	4.65	2.68	19.07	3.55	27.26	7.09	121
GSOJ20V	94	3.80	6.30	4.93	7.09	7.68	5.52	4.65	2.88	4.18	13.00	7.09	5.91	3.15	23.05	4.41	33.37	8.87	247
GSOJ25V	132	4.69	7.09	5.52	7.96	9.26	6.30	5.20	3.39	4.65	14.18	7.88	6.70	3.59	25.45	5.32	37.47	10.05	353
GSOJ32V	165	4.93	7.88	6.30	8.87	9.85	7.09	5.91	3.88	5.20	15.76	8.83	7.49	4.41	28.45	5.71	41.65	11.43	485
GSOJ40T	193	5.18	8.83	7.09	9.93	11.23	7.88	6.70	4.31	5.91	17.61	9.85	8.35	4.96	31.24	6.50	46.10	12.61	683
GSOJ40V	220	5.69	8.83	7.09	9.93	12.61	7.88	6.70	4.83	5.91	17.61	9.85	8.35	5.79	32.07	7.29	47.71	12.61	683
GSOJ50V	276	7.05	9.85	7.88	11.23	13.40	8.83	7.49	5.32	6.70	19.11	11.03	9.30	6.62	35.58	7.68	52.56	13.99	948
GSOJ63V	331	7.05	11.03	8.83	12.61	15.96	9.85	8.35	6.07	7.49	21.67	12.41	10.44	6.62	38.53	9.26	58.23	15.76	1323
GSOJ80V	441	7.94	12.41	9.85	14.11	18.12	11.03	9.30	7.07	8.35	23.56	13.99	11.82	7.72	43.26	10.44	65.52	17.73	1896

•Dimensional Tolerance are, A=+0/-1%, D=+2/-0% and all others are +7/-2%

HEAVY DUTY SHEAVES - CAST - REPLACEMENT PARTS

STANDARD SHEAVES

Miller Heavy Duty Sheaves are now available in newly-designed, wear-resistant, cast alloy steel for both **Miller Hi-Lift Standard Crane Blocks** and for **Miller Mobile Crane Blocks.**

Features of the new designs include a selection of D/d ratios by sheave diameter and wire rope size, a new shape for increased structural strength, more weight for today's higher and heavier overhaul requirements, and the ability to alter wire groove details to allow compliance with certain industry standards including API2C.

Miller Hi-Lift Blocks are furnished standard with new-design, cast alloy steel sheaves and with cylindrical roller bearings up to 20" diameter and with tapered roller bearings for 24" and larger diameters.

Miller Mobile Crane Blocks are furnished standard with new–design, cast alloy steel sheaves with full-complement cylindrical double roller bearings.

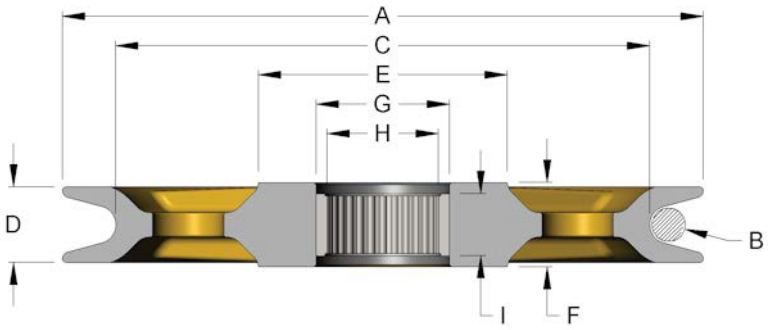
Cast alloy steel sheaves are available in standard sizes from 8" to 36" in diameter and are listed in the succeeding tables. Sheaves are available with bare bore, or with bearings or SAE 660 bronze bushings. Stainless steel versions of the sheaves in the following tables are also available. Available with grease fitting by request, lubrication through the sheave pin is recommended. Standard groove angle is 30° minimum and groove radii meet API requirements.

CUSTOM SHEAVES

Custom cast sheaves weighing up to 4 tons and to 120" diameter are available to your requirements. Roll-formed sheaves are produced to your requirements up to a diameter of 130". See the sheave request for quotation form in this section and specify cast or formed, or include your drawing. All sheaves can be manufactured to accommodate special requirements (e.g., API, ABS).

HEAVY DUTY SHEAVES - CAST - REPLACEMENT PARTS

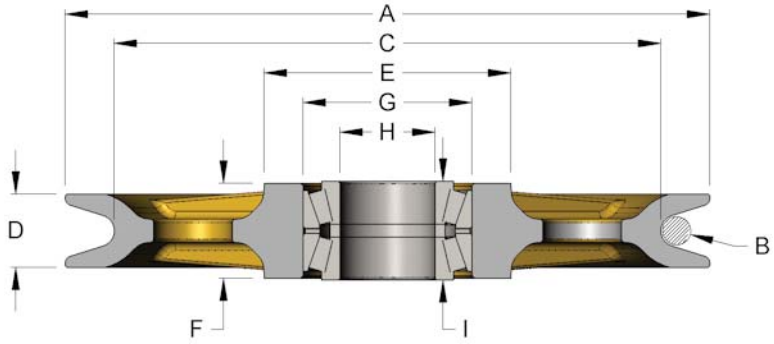
HI-LIFT BEARING TYPE ROLLER



A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	I (in.)	D/d RATIO	WEIGHT Lbs.
8	5/16	6.91	1.16	3.38	1.25	2.19	1.63	1.25	23	11
8	3/8	6.78	1.16	3.38	1.25	2.19	1.63	1.25	19	11
8	7/16	6.58	1.16	3.38	1.25	2.19	1.63	1.25	16	10
8	1/2	6.5	1.16	3.38	1.25	2.19	1.63	1.25	14	10
10	7/16	8.47	1.19	3.54	1.25	2.19	1.63	1.25	20	17
10	1/2	8.37	1.19	3.54	1.25	2.19	1.63	1.25	18	17
10	9/16	8.31	1.19	3.54	1.25	2.19	1.63	1.25	16	16
10	5/8	8.28	1.19	3.54	1.25	2.19	1.63	1.25	14	16
12	1/2	10.25	1.75	5.64	2	3.25	2.5	1.75	22	39
12	9/16	10.03	1.75	5.64	2	3.25	2.5	1.75	19	38
12	5/8	9.81	1.75	5.64	2	3.25	2.5	1.75	17	36
12	3/4	9.75	1.75	5.64	2	3.25	2.5	1.75	14	35
14	1/2	12.25	1.75	5.66	2	3.25	2.5	1.75	26	44
14	9/16	12.03	1.75	5.66	2	3.25	2.5	1.75	22	42
14	5/8	11.81	1.75	5.66	2	3.25	2.5	1.75	20	41
14	3/4	11.75	1.75	5.66	2	3.25	2.5	1.75	17	40
16	9/16	14.03	2	6.6	2.38	3.75	3	1.75	26	67
16	5/8	13.81	2	6.6	2.38	3.75	3	1.75	23	65
16	3/4	13.56	2	6.6	2.38	3.75	3	1.75	19	62
16	7/8	13.37	2	6.6	2.38	3.75	3	1.75	16	60
18	5/8	15.81	2.13	6.99	2.38	3.75	3	1.75	26	90
18	3/4	15.37	2.13	6.99	2.38	3.75	3	1.75	21	85
18	7/8	15.16	2.13	6.99	2.38	3.75	3	1.75	18	81
18	1	15	2.13	6.99	2.38	3.75	3	1.75	16	78
20	3/4	17.37	2.31	7.61	2.5	4.25	3.25	2	24	112
20	7/8	16.94	2.31	7.61	2.5	4.25	3.25	2	20	106
20	1	16.75	2.31	7.61	2.5	4.25	3.25	2	18	101
20	1-1/8	16.62	2.31	7.61	2.5	4.25	3.25	2	16	98
20	3/4	17.37	2.31	7.61	2.5	4.5	3.5	2	24	112
20	7/8	16.94	2.31	7.61	2.5	4.5	3.5	2	20	106
20	1	16.75	2.31	7.61	2.5	4.5	3.5	2	18	101
20	1-1/8	16.62	2.31	7.61	2.5	4.5	3.5	2	16	98

HEAVY DUTY SHEAVES - CAST - REPLACEMENT PARTS

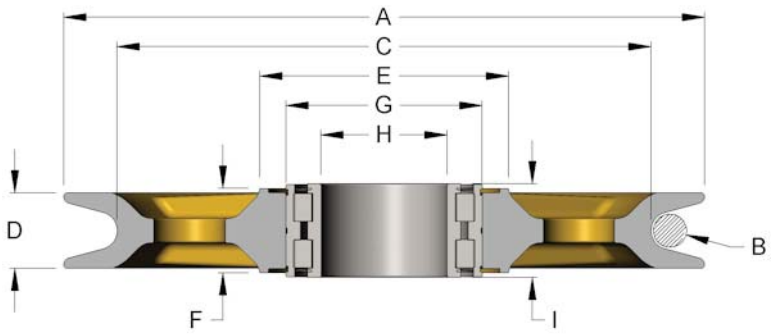
HI-LIFT BEARING TYPE TAPERED ROLLER



A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	I (in.)	D/d RATIO	WEIGHT Lbs.
24	7/8	20.94	2.75	9.18	3.56	6	3.5	3.625	25	200
24	1	20.5	2.75	9.18	3.56	6	3.5	3.625	22	189
24	1-1/8	20.34	2.75	9.18	3.56	6	3.5	3.625	19	185
24	1-1/4	20.25	2.75	9.18	3.56	6	3.5	3.625	17	182
30	1-1/8	25.63	3	8.03	3.63	7.19	5	3.688	22	176
30	1-1/4	25.63	3	8.03	3.63	7.19	5	3.688	21	171
30	1-3/8	25.63	3	8.03	3.63	7.19	5	3.688	20	166

HEAVY DUTY SHEAVES - CAST - REPLACEMENT PARTS

MCB BEARING TYPE FULL COMPLEMENT ROLLER



A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	I (in.)	D/d RATIO	WEIGHT Lbs.
10	7/16	8.47	1.5	4.7	1.75	3.54	2.17	1.81	20	23
10	1/2	8.37	1.5	4.7	1.75	3.54	2.17	1.81	18	23
10	9/16	8.17	1.5	4.7	1.75	3.54	2.17	1.81	16	22
10	5/8	8.12	1.5	4.7	1.75	3.54	2.17	1.81	14	21
12	1/2	10.25	1.75	5.64	2	4.33	2.76	2.13	22	38
12	9/16	10.03	1.75	5.64	2	4.33	2.76	2.13	19	37
12	5/8	9.81	1.75	5.64	2	4.33	2.76	2.13	17	35
12	3/4	9.75	1.75	5.64	2	4.33	2.76	2.13	14	34
14	1/2	12.25	1.75	5.66	2	4.33	2.76	2.13	26	43
14	9/16	12.03	1.75	5.66	2	4.33	2.76	2.13	22	41
14	5/8	11.81	1.75	5.66	2	4.33	2.76	2.13	20	40
14	3/4	11.75	1.75	5.66	2	4.33	2.76	2.13	17	38
16	9/16	14.03	2	6.61	2.25	5.12	3.35	2.36	26	65
16	5/8	13.81	2	6.61	2.25	5.12	3.35	2.36	23	63
16	3/4	13.56	2	6.61	2.25	5.12	3.35	2.36	19	60
16	7/8	13.37	2	6.61	2.25	5.12	3.35	2.36	16	57
18	5/8	15.81	2.13	6.99	2.38	5.51	3.54	2.64	26	88
18	3/4	15.37	2.13	6.99	2.38	5.51	3.54	2.64	21	83
18	7/8	15.16	2.13	6.99	2.38	5.51	3.54	2.64	18	79
18	1	15	2.13	6.99	2.38	5.51	3.54	2.64	16	76
20	3/4	17.37	2.31	7.61	2.5	5.91	3.94	2.64	24	109
20	7/8	16.94	2.31	7.61	2.5	5.91	3.94	2.64	20	103
20	1	16.75	2.31	7.61	2.5	5.91	3.94	2.64	18	98
20	1-1/8	16.62	2.31	7.61	2.5	5.91	3.94	2.64	16	95
24	7/8	20.94	2.75	9.2	3.11	7.09	4.72	3.15	25	185
24	1	20.5	2.75	9.2	3.11	7.09	4.72	3.15	22	174
24	1-1/8	20.34	2.75	9.2	3.11	7.09	4.72	3.15	19	170
24	1-1/4	20.25	2.75	9.2	3.11	7.09	4.72	3.15	17	167

HEAVY DUTY SHEAVES - CAST - CUSTOM SHEAVES

REQUEST FOR QUOTATION

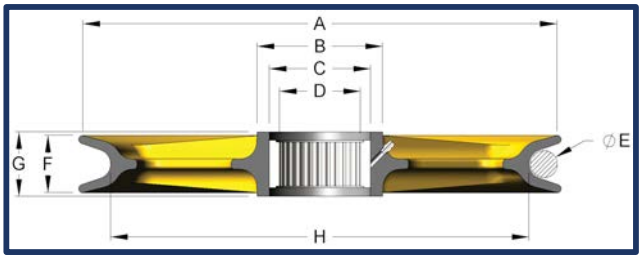
Name _____ Company _____ Date _____

Address _____

Telephone _____ Fax _____ E-mail _____

1. Specify type & quantity: Cast _____ Roll-formed _____ Quantity _____

2. Specify dimensions:



Outside diameter (A)	
Tread diameter (H)	
Shaft diameter (D)	
Rim width max (F)	
Hub O.D. (B)	
Hub Width (G)	
Hub bore dia. (C)	
Rope or chain size (E)	

3. Specific bearing type:

None, plain bore _____ Roller _____ Tapered roller _____ Composite _____ Bronze _____

4. Specify where applicable:

Base material _____ Finish _____

To industry standard _____

Special testing _____

Groove hardness _____ Third party inspection _____

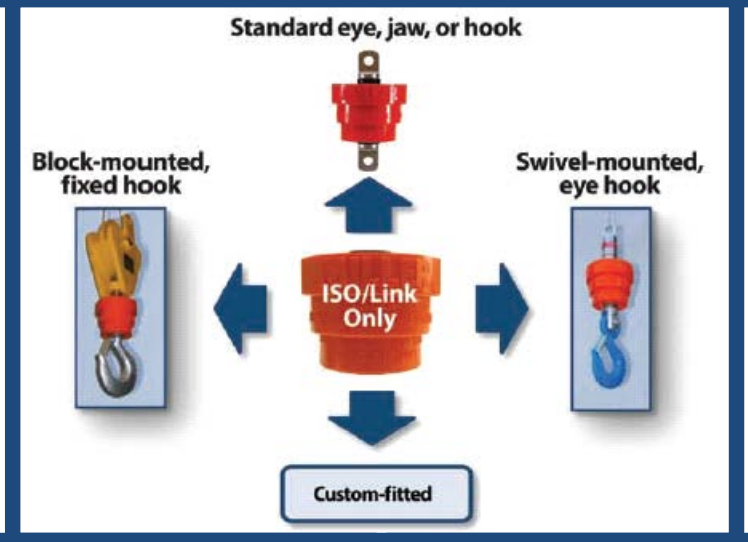
Other _____

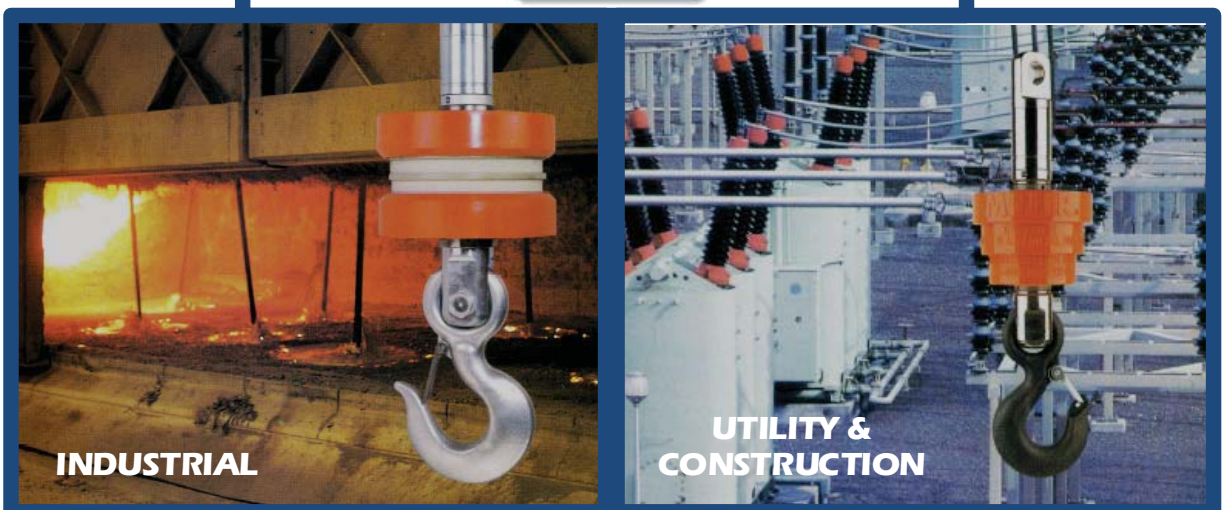
5. Fax, call or e-mail to:

Miller Lifting Products
100A Sturbridge Rd.
Charlton, MA 01507 USA

Tel 1.508.248.3941 / 800.733.7071
Fax 1.508.248.0639
E-mail sales@millerproducts.net

INSULATING LINKS, ISO/LINK AC & DC





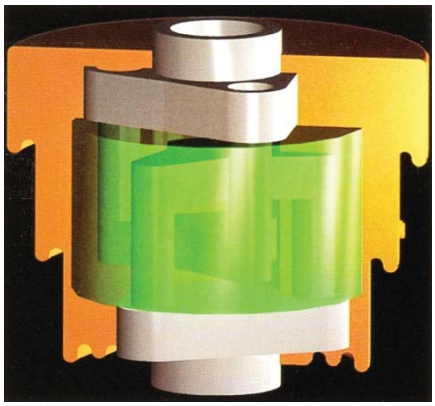
INSULATING LINKS, ISO/LINK AC & DC

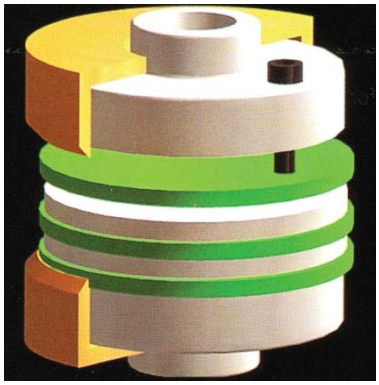
Proven Performance in Hi-Voltage & Hi-Current Environments

Miller ISO/Link® insulating links are the product of five decades of experience in protection from unwanted electrical discharges in AC or DC environments, while at the same time offering the rugged and secure lifting capability Miller has always been known for.

ISO/Link-AC® = POWER LINE SAFETY

ISO/Link-AC® insulating links protect workers from the leading cause of electrical injury in the workplace, accidental contact between crane booms and overhead power lines. Made of durable high-performance materials, ISO/Link-AC insulating links are rated for 25,000 AC volts. Permanently sealed construction prevents the absorption of moisture and other contaminants. A low-profile alloy steel interlocking matrix insures reliable performance under the most demanding conditions without requiring excessive length. Designed for use in construction, refineries, utility work, and various manufacturing applications, Miller AC insulating links employ a tough, polyurethane dielectric that surpasses natural rubber in durability and electrical resistance. Available to working loads of 60 tons with a design safety factor of 5:1.



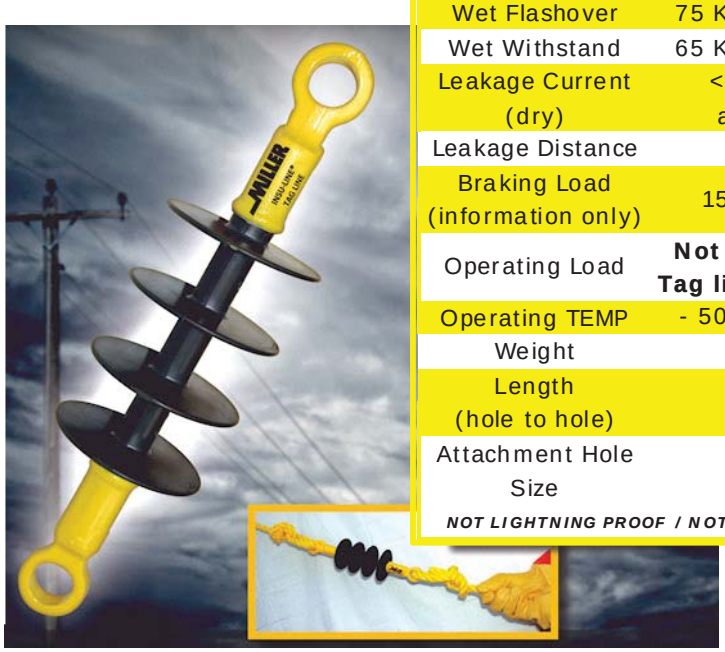


ISO/Link-DC®

ISO/Link-DC® insulating links are specially designed for use in the smelting industry or wherever high DC current is a threat, e.g., industrial welding. The high temperatures, high duty cycle and strong magnetic fields found in smelting environments were all taken into consideration during the development of this addition to the ISO/Link Series. By incorporating a G-10 glass fiber dielectric, the ISO/Link-DC can withstand continuous temperatures as high as 130°C. Each link is tested to 10,000 Volts DC and rated to 1,000 Volts DC. Factory rebuild is possible. Because of its maintenance-oriented design, the ISO/Link-DC is not sealed and is intended for interior use only. Available to working loads of 60 tons with a design safety factor of 5:1.

INSU-LINE® TAG LINE INSULATOR

For tag line use in load handling, where high voltage is a safety concern. Adapted by Miller from proven power distribution insulator technology. Fiberglass core for high strength to-weight ratio and shatter resistance. Hydrophobic polymer sheath and sheds promote dirt and dust resistance. Every unit is factory proof tested with electrical test certificate available. *Miller INSU-LINE® tag line insulators are not to be used for lifting. Only use tag line insulators with non-conductive tag lines for protection of your ground crew. For lifting applications use Miller's ISO/Link insulating link.* ***ORDER PART NUMBER M135502001.***

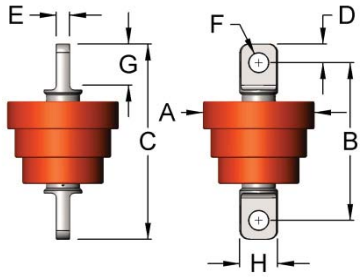


SPECIFICATIONS	
Rated Voltage	**50 KV rms**
Dry Flashover	110 KV @ 60 Hz.
Dry Withstand	100 KV @ 60 Hz.
Wet Flashover	75 KV @ 60 Hz.
Wet Withstand	65 KV @ 60 Hz.
Leakage Current (dry)	<0.05 mA at 50 KV
Leakage Distance	16 in.
Braking Load (information only)	15,000 lbs.
Operating Load	**Not for lifting- Tag line use only**
Operating TEMP	- 50 F to 150 F
Weight	2 lbs.
Length (hole to hole)	12 in.
Attachment Hole Size	1 in.

NOT LIGHTNING PROOF / NOT FOR LIFTING

INSULATING LINKS, NON SWIVELING, ISO/LINK-AC

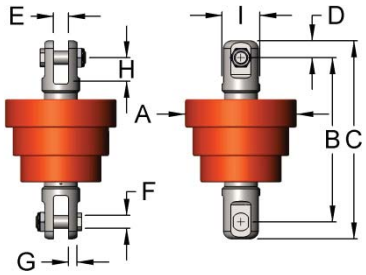
EYE TO EYE



WLL* Tons	Model	A**	B	C	D	E	F	G	H	Weight Lbs.
5	2VD2	7.38	10.50	13.00	1.25	0.88	1.28	2.75	2.50	19
10	2VE2	8.63	14.50	17.75	1.63	1.63	1.66	3.75	3.75	60
25	2VG2	11.88	19.50	24.25	2.38	2.22	2.53	5.50	5.00	150
60	2VJJ2	12.38	22.75	29.25	3.25	3.00	2.91	7.00	6.50	250

Dimensions in Inches(in), *5:1 Design Factor ,**Link profile varies depending on WLL

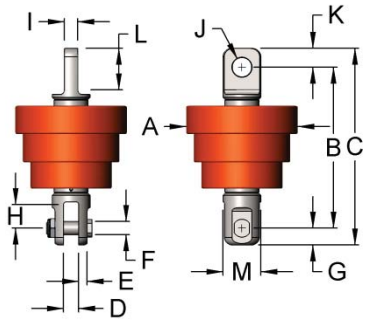
CLEVIS TO CLEVIS



WLL* Tons	Model	A**	B	C	D	E	F	G	H	I	Weight Lbs.
5	1VD1	7.38	10.88	13.13	1.13	1.00	0.88	0.56	1.56	2.50	21
10	1VE1	8.63	16.88	20.38	1.75	1.75	1.50	0.81	3.00	4.00	70
25	1VG1	11.88	21.13	25.88	2.38	2.00	2.00	1.13	3.69	5.00	160
60	1VJJ1	12.38	26.25	32.75	3.25	3.00	2.50	1.50	4.00	7.00	290

Dimensions in Inches(in), *5:1 Design Factor ,**Link profile varies depending on WLL

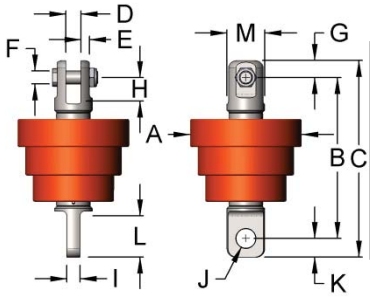
EYE TO CLEVIS



WLL* Tons	Model	A**	B	C	D	E	F	G	H	I	J	K	L	M	Weight Lbs.
5	2VD1	7.38	10.69	13.06	1.00	0.56	0.88	1.13	1.56	0.88	1.28	1.25	2.75	2.50	20
10	2VE1	8.63	15.69	19.06	1.75	0.81	1.50	1.75	3.00	1.63	1.66	1.63	3.75	4.00	65
25	2VG1	11.88	20.31	25.06	2.00	1.13	2.00	2.38	3.69	2.22	2.53	2.38	5.50	5.00	155
60	2VJJ1	12.38	24.50	31.00	3.00	1.50	2.50	3.25	4.00	3.00	2.91	3.25	7.00	7.00	270

Dimensions in Inches(in), *5:1 Design Factor ,**Link profile varies depending on WLL

CLEVIS TO EYE

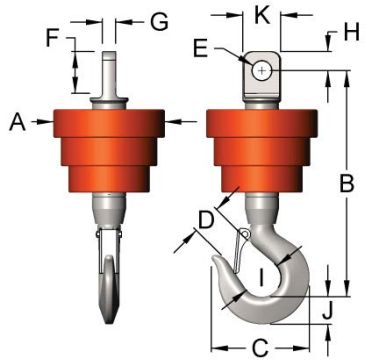


WLL* Tons	Model	A**	B	C	D	E	F	G	H	I	J	K	L	M	Weight Lbs.
5	1VD2	7.38	10.69	13.06	1.00	0.56	0.88	1.13	1.56	0.88	1.28	1.25	2.75	2.50	20
10	1VE2	8.63	15.69	19.06	1.75	0.81	1.50	1.75	3.00	1.63	1.66	1.63	3.75	4.00	65
25	1VG2	11.88	20.31	25.06	2.00	1.13	2.00	2.38	3.69	2.22	2.53	2.38	5.50	5.00	155
60	1VJJ2	12.38	24.50	31.00	3.00	1.50	2.50	3.25	4.00	3.00	2.91	3.25	7.00	7.00	270

Dimensions in Inches(in), *5:1 Design Factor ,**Link profile varies depending on WLL

INSULATING LINKS, NON SWIVELING, ISO/LINK-AC

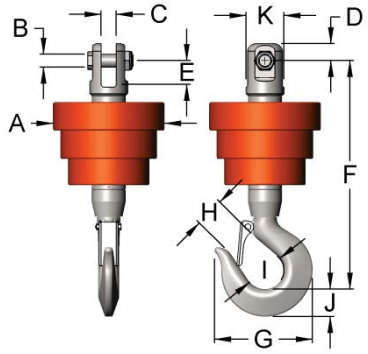
EYE TO HOOK



WLL* Tons	Model	A**	B	C	D	E	F	G	H	I	J	K	Weight Lbs.
5	2VD5	7.38	14.94	6.28	1.78	1.28	2.75	0.88	1.25	2.50	1.82	2.50	25
10	2VE5	8.63	18.39	8.34	2.63	1.66	3.75	1.63	1.63	3.25	2.60	3.75	70
25	2VG5	11.88	26.05	11.56	3.15	2.53	5.50	2.22	2.38	3.94	3.74	5.00	185
60	2VJJ5	12.38	33.44	17.00	4.92	2.91	7.00	3.00	3.25	6.30	5.91	6.50	420

Dimensions in Inches(in), *5:1 Design Factor ,**Link profile varies depending on WLL

CLEVIS TO HOOK

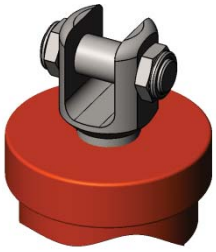


WLL* Tons	Model	A**	B	C	D	E	F	G	H	I	J	K	Weight Lbs.
5	1VD5	7.38	0.88	1.00	1.13	1.56	15.06	6.28	1.78	2.50	1.82	2.50	26
10	1VE5	8.63	1.50	1.75	1.75	3.00	19.57	8.34	2.63	3.25	2.60	4.00	75
25	1VG5	11.88	2.00	2.00	2.38	3.69	26.87	11.56	3.15	3.94	3.74	5.00	190
60	1VJJ5	12.38	2.50	3.00	3.25	4.00	35.20	17.00	4.92	6.30	5.91	7.00	440

Dimensions in Inches(in), *5:1 Design Factor ,**Link profile varies depending on WLL

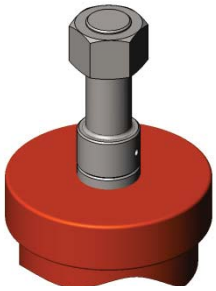
CUSTOM APPLICATIONS

Wire Rope Thimble



Oversized Clevis and Pin for use with Synthetic Slings

Swivel Hoist Ring



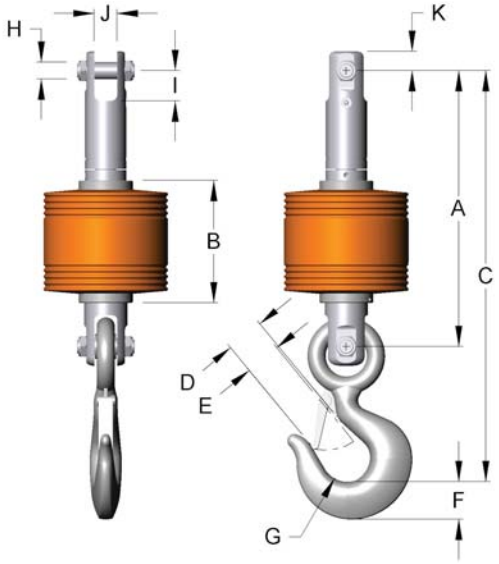
Threaded Stud Adaptor with Nut

Forged Eye Nut

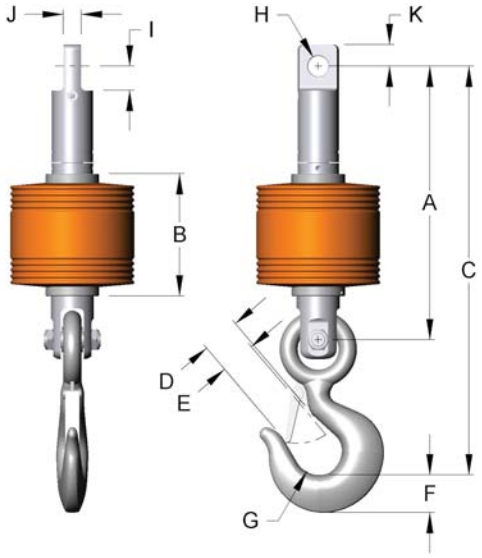
Other configurations available by request. Also available ISO-Blocks and ISO/LINK-AC assemblies using Miller Y-Link Angular Contact Swivel.

INSULATING LINKS, SWIVELING, ISO/LINK-AC

CLEVIS TO HOOK – TYPE 1



EYE TO HOOK – TYPE 2



CLEVIS TO HOOK, SWIVELING - TYPE 1

WLL	Model Number	ROPE	A	B	C	D	E	F	G	H	I	J	K	WEIGHT	LINK DIA	SWIVEL
3	ML6C-1	1/2	13.03	6.13	18.44	1.47	1.36	1.44	2	0.75	1.19	0.75	0.94	25	7.38	C-113
5	ML6D-1	5/8	15	6.13	21.75	1.75	1.61	1.81	2.5	0.88	1.56	1	1.13	33	7.38	D-113
5	ML8D-1	5/8	17.38	8.5	24.75	1.75	1.61	1.81	2.5	0.88	1.56	1	1.13	77	8.63	D-113
8.5	ML8E-1	3/4	18.94	8.5	28.25	2.5	2.27	2.59	3.25	1.19	2.13	1.56	1.25	96	8.63	EE-113
10	ML8G-1	7/8	24	8.5	35.13	3.3	3.02	3.00	4.25	1.5	3.5	1.75	1.75	144	8.63	G-113
15	ML12GG-1	1	26	10.5	37.13	3.3	3.02	3.00	4.25	1.5	3.5	1.75	1.75	247	11.88	GG-113
25	ML12H-1	1-1/8	28.25	10.5	45.19	4	3.25	3.62	5	2	3.69	2	2.38	342	11.88	H-113
35	ML12.5HH-1	1-1/4	28.25	12.25	45.19	4.25	3	4.56	5.38	2	3.69	2	2.38	370	12.5	HH-113
45	ML12.5I-1		32	12.25	50.94	4.75	3.38	5.06	6	2.25	4	2.5	3.00	475	12.5	I-113
60	ML12.5JJ-1		32.25	12.25	55	5.75	4.12	6.00	7	2.5	4.5	3	3.50	620	12.5	JJ-113

* Design factor = 5:1 except for units 45T and higher where Design factor = 4:1 minimum

EYE TO HOOK, SWIVELING - TYPE 2

WLL	Model Number	ROPE	A	B	C	D	E	F	G	H	I	J	K	WEIGHT	LINK DIA	SWIVEL
3	ML6C-2	1/2	13	6.13	18.5	1.47	1.36	1.44	2	0.91	4	0.75	1.00	25	7.38	C-213
5	ML6D-2	5/8	14.94	6.13	21.69	1.75	1.61	1.81	2.5	1.28	1.31	1.00	1.19	33	7.38	D-213
5	ML8D-2	5/8	17.31	8.5	24.69	1.75	1.61	1.81	2.5	1.28	1.31	1	1.19	77	8.63	D-213
8.5	ML8E-2	3/4	18.75	8.5	28.06	2.5	2.27	2.59	3.25	1.41	1.63	1.25	1.50	96	8.63	EE-213
10	ML8G-2	7/8	23.94	8.5	36.06	3.3	3.02	3.00	4.25	1.66	2.84	1.75	1.81	144	8.63	G-213
15	ML12GG-2	1	25.94	10.5	37.06	3.3	3.02	3.00	4.25	2.03	2.84	2	2.13	247	11.88	GG-213
25	ML12H-2	1-1/8	28.25	10.5	45.19	4	3.25	3.62	5	2.31	2.88	2.25	2.38	342	12.5	H-213
35	ML12.5HH-2	1-1/4	28.25	12.25	45.19	4.25	3	4.56	5.38	2.31	2.88	2.25	2.38	370	12.5	HH-213
45	ML12.5I-2		32	12.25	50.94	4.75	3.38	5.06	6	2.53	3.5	2.5	3.00	475	12.5	I-213
60	ML12.5JJ-2		32.25	12.25	55	5.75	4.12	6.00	7	2.88	4	2.5	3.5	620	12.5	JJ-213

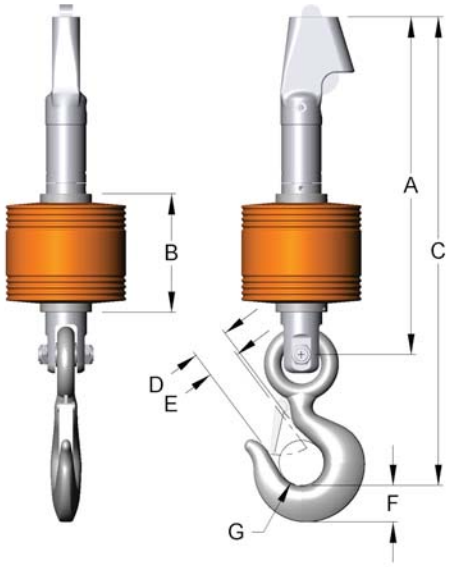
* Design factor = 5:1 except for units 45T and higher where Design factor = 4:1 minimum

Rated maximum voltage 25KVAC (dry); operating temperature -50° to 150°F.

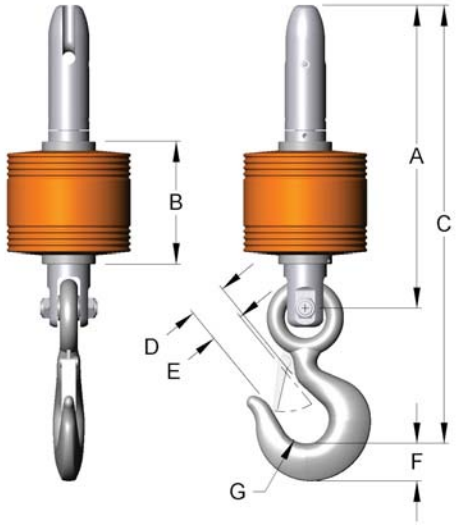
Link cleanliness is very important. Electrical performance degrades when surface is dirty. See maintenance instructions. Use of an insulating link is one of a number of measures required for comprehensive power line safety. Use of an insulating link. Alone, in absence of other required measures is not acceptable. See 29 CFR Part 1926 for the latest OSHA requirements.

INSULATING LINKS, SWIVELING, ISO/LINK-AC

WEDGE TO HOOK – TYPE 3



THIMBLE TO HOOK – TYPE 4



WEDGE TO HOOK, SWIVELING - TYPE 3

WLL	Model Number	ROPE	A	B	C	D	E	F	G	WEIGHT	LINK DIA	SWIVEL
3	ML6C-3	1/2	17.19	6.13	22.56	1.47	1.36	1.44	2	27	7.38	C-713
5	ML6D-3	1/2, 5/8	19.63	6.13	27.94	1.75	1.61	1.81	2.5	36	7.38	D-713
5	ML8D-3	1/2, 5/8	22	8.5	29.38	1.75	1.61	1.81	2.5	80	8.63	D-713
8.5	ML8E-3	1/2, 5/8, 3/4	23.94	8.5	33	2.5	2.27	2.59	3.25	102	8.63	E-713
10	ML8G-3	3/4, 7/8, 1	27.75	8.5	38.88	3.3	3.02	3.00	4.25	151	8.63	G-713
10	ML12GG-3	3/4, 7/8, 1	29.75	10.5	40.88	3.3	3.02	3.00	4.25	254	11.88	GG-713

* Design factor = 5:1 except for units 45T and higher where Design factor = 4:1 minimum

THIMBLE TO HOOK, SWIVELING - TYPE 4

WLL	Model Number	ROPE	A	B	C	D	E	F	G	WEIGHT	LINK DIA	SWIVEL
3	ML6C-4	1/2	14.84	6.13	20.25	1.47	1.36	1.44	2	26	7.38	C-413
5	ML6D-4	5/8	16.38	6.13	24.81	1.75	1.61	1.81	2.5	34	7.38	D-613
5	ML8D-4	5/8	16	8.5	23.38	1.75	1.61	1.81	2.5	78	8.63	D-613
8.5	ML8E-4	3/4	20.69	8.5	30	2.5	2.27	2.59	3.25	98	8.63	E-813
10	ML8G-4	7/8	25.5	8.5	36.63	3.3	3.02	3.00	4.25	148	8.63	G-613
15	ML12GG-4	1	27.5	10.5	38.63	3.3	3.02	3.00	4.25	251	11.88	GG-613

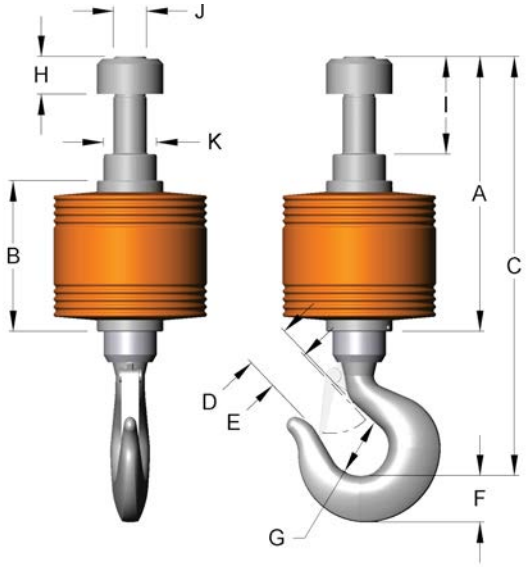
* Design factor = 5:1 except for units 45T and higher where Design factor = 4:1 minimum

Rated maximum voltage 25KVAC (dry); operating temperature -50° to 150°F.

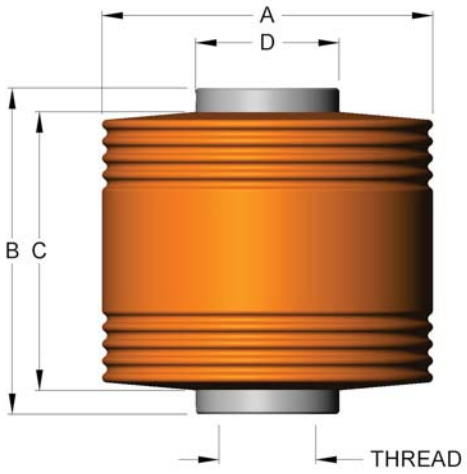
Link cleanliness is very important. Electrical performance degrades when surface is dirty. See maintenance instructions. Use of an insulating link is one of a number of measures required for comprehensive power line safety. Use of an insulating link. Alone, in absence of other required measures is not acceptable. See 29 CFR Part 1926 for the latest OSHA requirements.

INSULATING LINKS, SWIVELING, ISO/LINK-AC

NON-SWIVELING STUD TO HOOK – TYPE 14



LINK ONLY



NON-SWIVELING, STUD TO HOOK - TYPE 14

WLL	Model Number	A	B	C	D	E	F	G	H	I	J	K
5	ML6-14-5-11	12.13	6.25	18.38	2.5	2.25	2.6	3.25	1.38	3.38	1.62-12	2.25
5	ML8-14-5-1	14.63	8.5	23.06	2.62	2.41	2.6	3.25	1.56	4.63	1.25-7	3
10	ML8-14-10	13.5	8.5	21.94	2.62	2.41	2.6	3.25	1.31	3.5	1.62-12	3
15	ML12-14-15	16.94	10.5	27.81	3.41	3.19	3.01	4.25	1.56	4.38	1.77-12	4
25	ML12-14-25	18.31	10.5	30.06	4.75	3.38	5.06	6	2.56	5.31	2.25-12	4
35	ML12.5-14-35	23	12.25	35.5	4.25	3	4.56	5.38	3	7.75	2.5-12	4.75
60	ML12.5-14-60	25.5	12.25	38.5	6.5	5.38	6.69	7.75	5.13	10.38	4.0-12	4.5

* Design factor = 5:1

AC LINK ONLY

WLL	Model Number	A	B	C	D	THREAD	WEIGHT
5	VD	7.38	6.25	5.5	2.25	1.68-12UN	13.7
10	VE	8.62	8.5	7.26	3.75	2.50-8UN	41
25	VG	11.88	10.5	8.75	4.5	3.25-8UN	95
60	VJJ	12.38	12.25	9.75	5.75	4.00-8UN	150

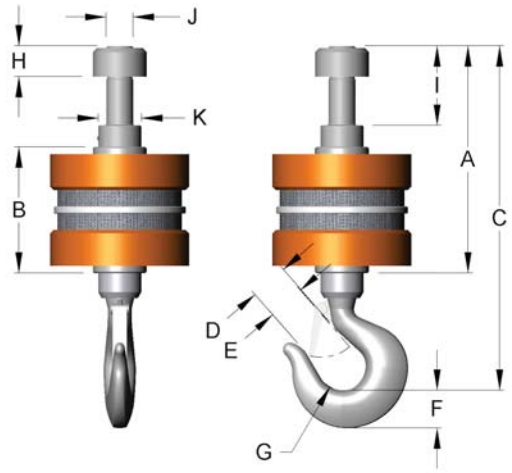
* Design factor = 5:1

Rated maximum voltage 25KVAC (dry); operating temperature -50° to 150°F.

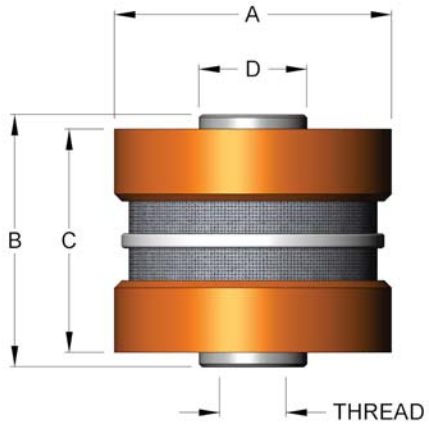
Link cleanliness is very important. Electrical performance degrades when surface is dirty. See maintenance instructions. Use of an insulating link is one of a number of measures required for comprehensive power line safety. Use of an insulating link. Alone, in absence of other required measures is not acceptable. See 29 CFR Part 1926 for the latest OSHA requirements.

INSULATING LINKS, DC, ISO/LINK-DC

NON-SWIVELING STUD TO HOOK – TYPE 14



LINK ONLY



DC - NON SWIVELING, STUD TO HOOK - TYPE 14

WLL	Model Number	A	B	C	D	E	F	G	H	I	J	K
5	MLV8-14-5	14.875	8.75	23.31	2.62	2.41	2.6	3.25	1.43	4.62	1.25-7	3
10	MLV8-14-10	13.625	8.75	22.06	2.62	2.41	2.6	3.25	1.31	3.37	1.62-12	3
15	MLV12-14-15	17.18	10.5	27.06	3.41	3.19	3.01	4.25	1.56	4.18	1.77-12	4
25	MLV12-14-25	18.31	10.5	30.06	4.75	3.38	5.06	6	2.56	5.31	2.25-12	4
35	MLV12.5-14-35	21.43	12.25	33.12	4.25	3	4.56	5.38	2.68	6.18	2.5-12	4.75
60	MLV12.5-14-60	26.75	12.25	42.25	6.5	5.38	6.69	7.75	3.5	14.5	4.0-12	4.5

* Design factor = 5:1

DC LINK ONLY

WLL	Model Number	A	B	C	D	THREAD	WEIGHT
10	V1000E	10	8.75	7.75	3.75	2.50-8UN	90
25	V1000G	13.3	10.5	8.75	4.5	3.25-8UN	170
60	V1000JJ	12.38	12.25	10.2	5.75	4.00-8UN	225

* Design factor 5:1 (Link only)

SPARE BUMPERS FOR ISO\LINK-DC INSULATING LINKS		
Each kit includes upper and lower bumper halves plus hardware		
ISO\Link-DC Model	**Bumper Kit Part No.**	**Weight (lbs)**
V1000E	M237000007	4
V1000G	M237000016	6
V1000JJ	M237000037	7

Rated maximum voltage 1000 VDC (dry); operating temperature -0° to 130°C.

Link cleanliness is very important. Electrical performance degrades when surface is dirty. See maintenance instructions.

Miller® ISO/Block™

With the Miller ISO/Block™, exceptional performance also protects workers from high-voltage hazards. **The ISO/Block integrates our Miller HI-LIFT block and Miller ISO/Link-AC into one assembly** designed to protect workers in case of accidental boom or wire line contact with overhead power lines, which is the single leading cause of electrical injury in the workplace and an increasing area of focus of US workplace safety regulators. Also very useful for isolation in in-plant operations or other hazardous locations.

Electrical Protection

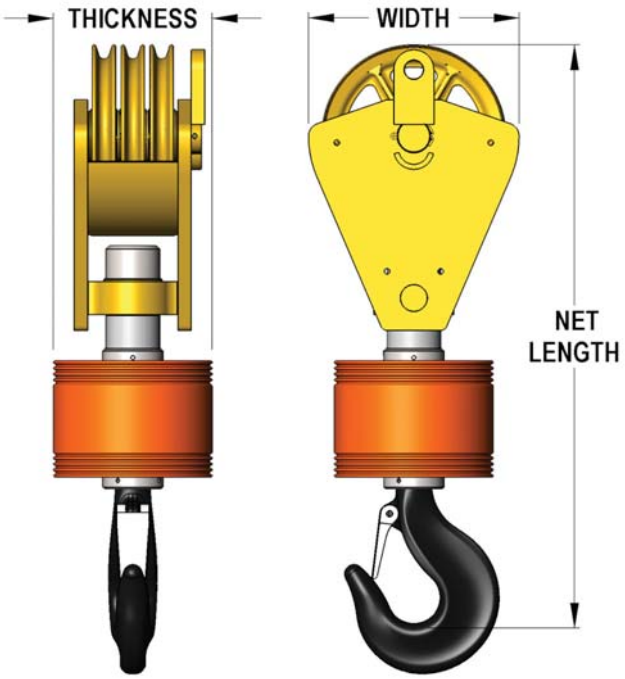
- Molded polymer insulation
- Weatherproof / durable
- Rated to 25,000 volts AC
- Tested at 50,000 volts AC
- Individually certified

Mechanical Integrity

- Load ratings to 120 tons
- Design safety factors
  - ISO/Link, 5:1
  - Block, 4:1
  - ISO/Block, 4:1
- Unique interlocking plate construction

Flexibility

- Available in a number of configurations and capacities
- Simple annual electrical certification test by Miller or by customer



BLOCKS- ISO-BLOCKS

5 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	Weight Lbs.
5	108F5VD1	8	1	7.38	9.5	26.56	110
5	108H5VD1	8	1	7.38	9.5	26.56	160
5	208F5VD1	8	2	7.38	9.5	26.56	120
5	208H5VD1	8	2	7.38	9.5	26.56	170
5	110F5VD1	10	1	7.38	11.5	29.25	130
5	110H5VD1	10	1	7.38	11.5	29.25	200
5	112F5VD1	12	1	7.38	13.5	32.25	180
5	112H5VD1	12	1	7.38	13.5	32.25	280
5	114F5VD1	14	1	7.38	15.5	34.75	200
5	114H5VD1	14	1	7.38	15.5	34.75	360

10 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	Weight Lbs.
10	108F10VE1	8	1	8.63	9.5	31.63	170
10	108H10VE1	8	1	8.63	9.5	31.63	220
10	208F10VE1	8	2	8.63	9.5	31.63	175
10	208H10VE1	8	2	8.63	9.5	31.63	225
10	308F10VE1	8	3	8.63	9.5	32	185
10	308H10VE1	8	3	8.63	9.5	32	235
10	110F10VE1	10	1	8.63	11.5	34.25	190
10	110H10VE1	10	1	8.63	11.5	34.25	260
10	210F10VE1	10	2	8.63	11.5	34.25	200
10	210H10VE1	10	2	8.63	11.5	34.25	270
10	310F10VE1	10	3	8.63	11.5	35	215
10	310H10VE1	10	3	8.63	11.5	35	285
10	112F10VE1	12	1	8.63	13.5	36.44	240
10	112H10VE1	12	1	8.63	13.5	36.44	340
10	212F10VE1	12	2	8.63	13.5	36.44	255
10	212H10VE1	12	2	8.63	13.5	36.44	355
10	312F10VE1	12	3	5.25	13.5	31.75	300
10	312H10VE1	12	3	5.25	13.5	31.75	400
10	114F10VE1	14	1	8.63	15.5	37.75	260
10	114H10VE1	14	1	8.63	15.5	37.75	420
10	214F10VE1	14	2	8.63	15.5	37.75	305
10	214F10VE1	16	1	8.63	17.88	42.13	340
10	116F10VE1	16	1	8.63	17.88	42.13	340
10	116H10VE1	16	1	8.63	17.88	42.13	580
10	118F10VE1	18	1	8.63	19.5	44.38	375
10	118H10VE1	18	1	8.63	19.5	44.38	675

15 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	Weight Lbs.
15	210F15VG1	10	2	11.88	11.5	43	320
15	310F15VG1	10	3	11.38	11.5	43	325
15	310H15VG1	10	3	11.88	11.5	44.13	395
15	212F15VG1	12	2	11.88	13.5	45.25	385
15	212H15VG1	12	2	11.88	13.5	45.25	485
15	312F15VG1	12	3	11.88	13.5	45.25	420
15	312H15VG1	12	3	11.88	13.5	45.25	520
15	114F15VG1	14	1	11.88	15.5	42.63	415
15	114H15VG1	14	1	11.88	15.5	42.63	565
15	214F15VG1	14	2	11.88	15.5	42.63	420
15	214H15VG1	14	2	11.88	15.5	42.63	580
15	314F15VG1	14	3	11.88	15.5	42.63	455
15	314H15VG1	14	3	12.25	15.5	42.63	615
15	116F15VG1	16	1	11.88	17.5	46.5	465
15	116H15VG1	16	1	11.88	17.5	46.5	705
15	216F15VG1	16	2	11.88	17.5	46.5	515
15	216H15VG1	16	2	11.88	17.5	46.5	755
15	118F15VG1	18	1	11.88	19.5	48.5	505
15	118H15VG1	18	1	11.88	19.5	48.5	805

BLOCKS- ISO-BLOCKS

25 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	NET LENGTH (in.)	Weight Lbs.
25	214F25VG1	14	2	11.88	15.5	45	450
25	214H25VG1	14	2	11.88	15.5	45	610
25	314F25VG1	14	3	11.88	15.5	45	485
25	314H25VG1	14	3	12.25	15.5	45	645
25	414F25VG1	14	4	11.88	15.5	45	625
25	414H25VG1	14	4	11.88	15.5	45	845
25	116F25VG1	16	1	11.88	17.5	47.88	510
25	116H25VG1	16	1	11.88	17.5	47.88	750
25	216F25VG1	16	2	11.88	17.5	47.88	540
25	216H25VG1	16	2	11.88	17.5	47.88	780
25	316F25VG1	16	3	11.88	17.5	47.88	615
25	316H25VG1	16	3	11.88	17.5	47.88	855
25	118F25VG1	18	1	11.88	19.5	48.5	530
25	118H25VG1	18	1	11.88	19.5	48.5	830
25	218F25VG1	18	2	11.88	19.5	48.5	565
25	218H25VG1	18	2	11.88	19.5	48.5	865
25	318F25VG1	18	3	11.88	19.5	49.75	625
25	318H25VG1	18	3	15.88	19.5	49.75	925
25	120F25VG1	20	1	11.88	21.5	52.13	600
25	120H25VG1	20	1	11.88	21.5	52.13	965
25	220F25VG1	20	2	11.88	21.5	52.13	645
25	220H25VG1	20	2	11.88	21.5	52.13	1010

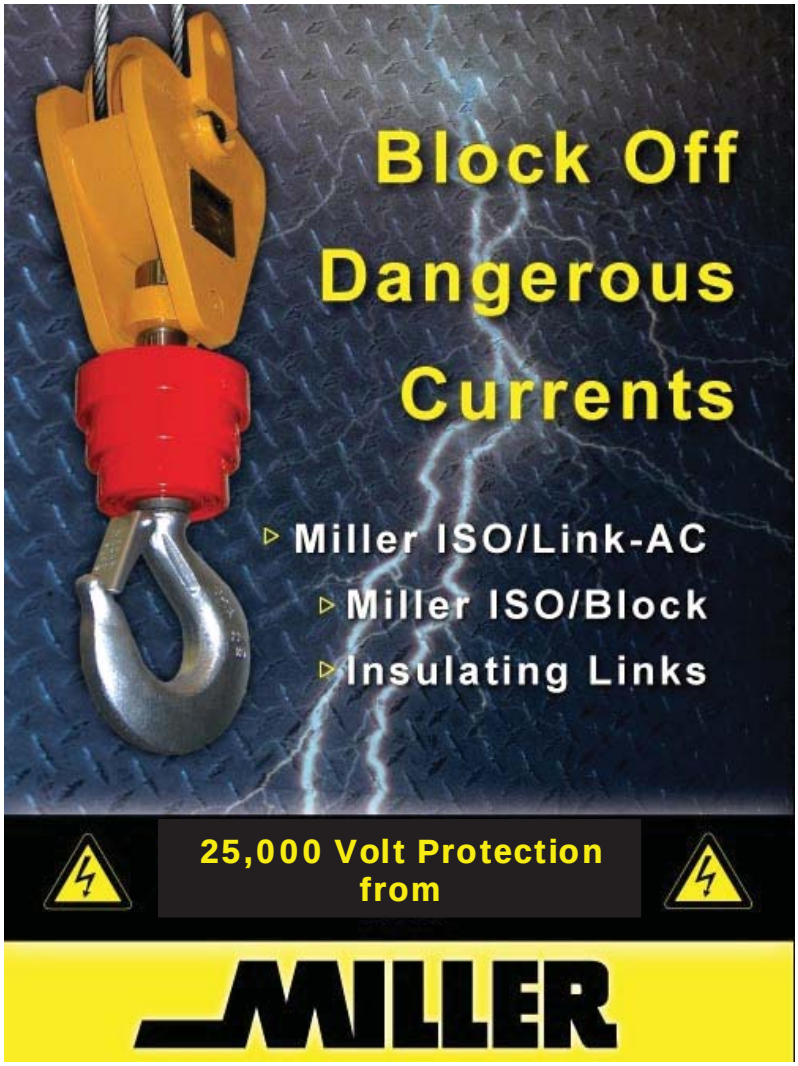
35 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	Weight Lbs.
35	314F35VJJ1	14	3	12.38	15.5	590
35	314H35VJJ1	14	3	12.38	15.5	810
35	414F35VJJ1	14	4	12.38	15.5	690
35	414H35VJJ1	14	4	12.38	15.5	910
35	514F35VJJ1	14	5	12.38	15.5	825
35	514H35VJJ1	14	5	12.38	15.5	1045
35	216F35VJJ1	16	2	12.38	17.5	610
35	216H35VJJ1	16	2	12.38	17.5	850
35	316F35VJJ1	16	3	12.38	17.5	680
35	316H35VJJ1	16	3	12.38	17.5	920
35	416F35VJJ1	16	4	12.38	17.5	810
35	416H35VJJ1	14	4	12.38	17.5	1050
35	516F35VJJ1	16	5	12.38	17.5	1005
35	516H35VJJ1	14	5	12.38	17.5	1245
35	218F35VJJ1	18	2	12.38	19.5	635
35	218H35VJJ1	18	2	12.38	19.5	935
35	318F35VJJ1	18	3	12.38	19.5	690
35	318H35VJJ1	18	3	12.38	19.5	990
35	220F35VJJ1	20	2	12.38	21.5	720
35	220H35VJJ1	20	2	12.38	21.5	1085
35	320F35VJJ1	20	3	12.38	21.5	790
35	320H35VJJ1	20	3	12.38	21.5	1155
35	124T35VJJ1	24	1	12.38	26.63	1480
35	124TF35VJJ1	24	1	12.38	26.63	1055
35	224T35VJJ1	24	2	12.38	26.63	1585
35	224TF35VJJ1	24	2	12.38	26.63	1170

BLOCKS- ISO-BLOCKS

60 TON

WLL* Tons	Model Number	SHEAVE DIA. (in.)	# OF SHEAVES	THICKNESS (in.)	WIDTH (in.)	Weight Lbs.
60	516F60VJJ1	16	5	12.38	17.5	1285
60	516H60VJJ1	16	5	12.38	17.5	1555
60	418F60VJJ1	18	4	12.38	19.5	1235
60	418H60VJJ1	18	4	12.38	19.5	1525
60	518F60VJJ1	18	5	12.38	19.5	1335
60	518H60VJJ1	18	5	12.38	19.5	1625
60	320F60VJJ1	20	3	12.38	21.5	1170
60	320H60VJJ1	20	3	12.38	21.5	1570
60	420F60VJJ1	20	4	12.38	21.5	1335
60	420H60VJJ1	20	4	12.38	21.5	1735
60	520F60VJJ1	20	5	12.38	21.5	1540
60	520H60VJJ1	20	5	12.38	21.5	1940
60	224T60VJJ1	24	2	12.38	26.63	1875
60	224TF60VJJ1	24	2	12.38	26.63	1325
60	324T60VJJ1	24	3	12.38	26.63	2175
60	324TF60VJJ1	24	3	12.38	26.63	1675



Notes

FRACTION TO DECIMAL

Inches and Millimeters

in.	in.	mm.	in.	in.	mm.
1/64	0.0156	0.40	33/64	0.5156	13.10
1/32	0.0312	0.79	17/32	0.5312	13.49
3/64	0.0468	1.19	35/64	0.5468	13.89
1/16	0.0625	1.59	9/16	0.5625	14.29
5/64	0.0781	1.98	37/64	0.5781	14.68
3/32	0.0937	2.38	19/32	0.5937	15.08
7/64	0.1093	2.78	39/64	0.6093	15.48
1/8	0.125	3.18	5/8	0.625	15.88
9/64	0.1406	3.57	41/64	0.6406	16.27
5/32	0.1562	3.97	21/32	0.6562	16.67
11/64	0.1718	4.36	43/64	0.6718	17.06
3/16	0.1875	4.76	11/16	0.6875	17.46
13/64	0.2031	5.16	45/64	0.7031	17.86
7/32	0.2187	5.55	23/32	0.7187	18.25
15/64	0.2343	5.95	47/64	0.7343	18.65
1/4	0.25	6.35	3/4	0.75	19.05
17/64	0.2656	6.75	49/64	0.7656	19.45
9/32	0.2812	7.14	25/32	0.7812	19.84
19/64	0.2968	7.54	51/64	0.7968	20.24
5/16	0.3125	7.94	13/16	0.8125	20.64
21/64	0.3281	8.33	53/64	0.8281	21.03
11/32	0.3437	8.73	27/32	0.8437	21.43
23/64	0.3593	9.13	55/64	0.8593	21.83
3/8	0.375	9.53	7/8	0.875	22.23
25/64	0.3906	9.92	57/64	0.8906	22.62
13/32	0.4062	10.32	29/32	0.9062	23.02
27/64	0.4218	10.71	59/64	0.9218	23.41
7/16	0.4375	11.11	15/16	0.9375	23.81
29/64	0.4531	11.51	61/64	0.9531	24.21
15/32	0.4687	11.90	31/32	0.9687	24.60
31/64	0.4843	12.30	63/64	0.9843	25.00
1/2	0.5	12.70	64/64	1	25.40

WIRE ROPE NOMINAL STRENGTHS AND WEIGHTS

Standard 6 x 19 & 6 x 37 Class Ropes

Size	Fiber Core			IWRC			
Dia. (in.)	Approx. wt./ft. (lbs.)	Nominal Strength (tons of 2000 lbs)		Approx. wt./ft. (lbs.)	Nominal Strength (tons of 2000 lbs.)		
		IPS	XIP		IPS	XIP	XXIP
3/16	0.059	1.55	1.71	--	--	--	--
1/4	0.105	2.74	3.02	0.116	2.94	3.4	--
5/16	0.164	4.26	4.69	0.18	4.58	5.27	--
3/8	0.236	6.1	6.72	0.26	6.56	7.55	8.3
7/16	0.32	8.27	9.1	0.35	8.89	10.2	11.2
1/2	0.42	10.7	11.8	0.46	11.5	13.3	14.6
9/16	0.53	13.5	14.9	0.59	14.5	16.8	18.5
5/8	0.66	16.7	18.3	0.72	17.9	20.6	22.7
3/4	0.95	23.8	26.2	1.04	25.6	29.4	32.4
7/8	1.29	32.2	35.4	1.42	34.6	39.8	43.8
1	1.68	41.8	46	1.85	44.9	51.7	56.9
1 1/8	2.13	52.6	57.8	2.34	56.5	65	71.5
1 1/4	2.63	Back	71.1	2.89	69.4	79.9	87.9
1 3/8	3.18	77.7	85.5	3.5	83.5	96	106
1 1/2	3.78	92	101	4.16	98.9	114	125
1 5/8	4.44	107	118	4.88	115	132	146
1 3/4	5.15	124	137	5.67	133	153	169
1 7/8	5.91	141	156	6.5	152	174	192
2	6.72	160	176	7.39	172	198	217
2 1/8	7.59	179	197	8.35	192	221	244
2 1/4	8.51	200	220	9.36	215	247	272

METRIC-IMPERIAL EQUIVALENTS			1 inch = 2.54 cm; 1 m = 39.37 in.		
Force	1 short ton =	2000 lbs	8896.4 N	907.2 kg	
Force	1 metric ton =	2204.6 lbs	9806.6 N	1000 kg	
Force	1 lb. =	0.4536 kg	4.448 N		
Force	1 kg. =	2.2046 lb	9.807 N		
Stress	1 lb. per square inch =	6894.8 Pa	703.07 kg/m^2		0.0703 kg/cm^2
Density	1 lb. per cubic foot =	27 lb/y^3	0.1337 lb/gal		16.018 kg/m^3

WEIGHTS OF VARIOUS MATERIALS BY VOLUME

APPROXIMATE IN LBS. PER CUBIC FOOT

Metal Alloys, Ores		***Timber, U.S. Seasoned***		***Earth, etc., Excavated***		***Building materials***	
Aluminum, cast-hammered	165	***(moisture, 15-20%)***		Clay, dry	63	Cement, Portland, loose	94
Aluminum bronze	481	Ash, white-red	40	Clay, damp, plastic	110	Cement, Portland, set	183
Brass, cast-rolled	534	Birch	32	Clay, and gravel, dry	100	Crushed rock	90-110
Bronze, 7.9 to 14% Sn	509	Cedar, white-red	22	Earth, dry, loose	76	Lime, gypsum, loose	53-64
Bronze, Phosphor	554	Cypress	30	Earth, dry, packed	95	Morter, set	103
Copper, cast-rolled	556	Fir, Douglas spruce	32	Earth, mud, packed	115	***Stone, Quarried, Piled***	
Copper ore, pyrites	262	Fir, eastern	25	Riprap, limestone	80-85	Basalt, granite, gneiss	96
Iron, gray cast	442	Elm, white	45	Riprap, sandstone	90	Limestone, marble, quartz	95
Iron, cast, pig	450	Hemlock	29	Riprap, shale	105	Sandstone	82
Iron, wrought	485	Hickory	48	Sand, gravel, dry, loose	90-105	Shale	92
Iron ore, hematite	325	Mahogany	44	Sand, gravel, dry, packed	100-120	***Coal and Coke, Piled***	
Iron ore, limonite	237	Maple, hard	43	Sand, gravel, wet	118-120	Coal, anthracite	47-58
Iron ore, magnetite	315	Maple, white	33	***Excavations in Water***		Coal, bituminous, ignite	40-54
Iron slag	172	Oak, chestnut	54	Sand or gravel	60	Coal, peat, turf	20-26
Lead	710	Oak, live	59	Sand or gravel and clay	65	***Masonry***	
Lead ore, galena	465	Oak, red, black	41	Clay	80	Ashlar masonry	140-160
Manganese	475	Oak, white	46	River mud	90	Brick, masonry, common	125
Manganese ore, pyrolusite	259	Pine, Oregon	32	Soil	70	Brick, pressed	140
Nickel	537	Pine, red	30	Stone riprap	65	Clay tile	60
Steel, cold-drawn	489	Pine, white	26	***Liquids***		Concrete, cinder, haydite	100-110
Tin, cast-hammered	459	Pine, yellow, long-leaf	44	Alcohol, pure	49	Concrete, slag	130
Tin ore, cassiterite	418	Walnut, black	42	Gasoline	42	Concrete, stone	144
Tungsten	1200	Walnut, white	28	Oils	58	Concrete, stone, reinforced	150
Zinc, cast-rolled	440			Water, 4°C, max density	62.428	***Miscellaneous***	
Zinc ore, blende	253			Water, 100°C	59.83	Asphalt	80
				Water, ice	56	Glass	160
				Water, snow, fresh fallen	8	Paper	60
				Water, sea water	64	Tar	75

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