

# MAN GUAR

H O O K MOUNTED OISTS Н





### HOOK MOUNTED HOISTS

**CAPACITIES: 1/4 TO 3 TONS** 

**10 FEET LIFT** 

Additional lifts available

5 to 32 FPM LIFTING SPEED

**HOOK SUSPENSION** 

**AC POWER SUPPLY** 

115/230 1-60 HZ; 230/460 3-60 reconnectable voltage

**BUILT-IN COMPLIANCE** 

with ASME/ANSI B30.16, ASME HST-1 and NEC electrical codes

MADE IN THE U.S.A.



## The Benefits of Superior Design

### **OVERLOAD PROTECTION**

The CM Man Guard overload clutch prevents lifting beyond load capacity, which may damage the hoist or supporting structure or cause injury to the operator.

### READY FOR HEAVY DUTY APPLICATIONS

H4 duty motor classification rated for heavy duty use.

### **LONGER SERVICE LIFE**

- Class F insulation and thermal switch in motor winding reduces motor overheating and increase life.
- Helical Gears are oil bath lubricated which provides better wear and extends gear life while reducing noise.
- Powder coat painted housing and corrosion resistance zinc plated chain provides superior protection against the elements.
- Hard-wired power and pendant cords reduces risk of corrosion and loose connections.

### **IMPROVED SERVICEABILITY**

- Open design allows quick access to AC Brake's one step adjustment.
- Easy access to Control Panel and simple wiring change to switch voltages from 115 to 230V for single phase applications.

### **SUPERIOR LOAD CONTROL**

Optional Variable Frequency Drive (VFD) with 3 Step infinitely variable pendant allows operator to adjust lifting speeds without interruption. Many competitors only offer a 2 Step pendant requiring service interruption to change lift speeds.

### **ECO-FRIENDLY ENERGY SAVER**

Efficiently designed gear train allows a smaller horsepower motor to operate at the same speeds and duty as our competition and reduces energy consumption. Shipped in boxes made of recycled material.

# VFD OPTION

- Variable speed control with single speed motor.
   VFD located completely under the cover.
- 10:1 speed ratio permits precise positioning for load spotting.
- 3-step infinitely variable push-button control offers acceleration and deceleration for full load control.
- Minimizes high-starting current on motor which helps keep it cool extending life of motor, and increases motor run-time and starts/stops over standard contactor control.
- Electronic reversing, multispeed operation (up to 3 steps) eliminates conventional magnetic contactors which are wearable components.
- Fault recorder helps troubleshoot various problems such as power related issues.
- 3 programmable outputs.
- Available Voltages: 380-460/3/60 and 208-230/3/60.



# INTRODUCING CM MAN GUARD WITH CAPACITIES UP TO 3 TONS

Columbus McKinnon Corporation, an industry leader in quality lifting and positioning equipment for hoist operators around the globe, presents CM Man Guard.

CM Man Guard electric chain hoist stays true to its name by providing operator safety through superior overload protection. The Man Guard hoist's overload clutch prevents lifting loads beyond capacity which may result in serious injury to the operator, or catastrophic damage to the hoist, load and supporting structure.

Made in the USA, Man Guard is designed for a long and dependable service life for heavy duty applications. Additionally, with its environmentally friendly design, easy access to key components, less maintenance, and enhanced safety feature, the Man Guard is the right choice for your lifting needs.

CM Man Guard is available as an individual unit or as an integral component of a complete lifting system.

# Key Components of the Man Guard

#### POWDER COAT PAINT

Provides a long lasting durable finish and added resistance to corrosive environments.

# DIE-CAST ALUMINUM ALLOY HOUSING & FRAME

Lightweight & rugged housing is precision machined for accurate gear and bearing alignment.



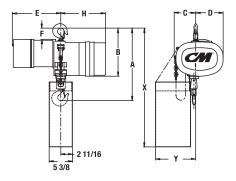
AC spring set disc brake for positive braking action and long life with minimal maintenance. Easy 1-step adjustment procedure.

# HIGH-TORQUE, HEAVY DUTY HOIST MOTOR

Motors are H4, 30 minute rated with standard Class F insulation and include a thermal actuated switch (TAS) embedded in the motor winding for protection.

### **GEARING**

Precision machined, totally enclosed, oil-bath lubricated for long life. Efficient design allows for a smaller horsepower motor, thus reducing energy consumption and the nuisance tripping of power breakers due to a high in-rush and running current.



### PADDLE-TYPE LIMIT SWITCH

Paddle-type upper & lower control limit switch standard on all hoists. Adjustable chain block limit stops standard on live and loose side of load chain.

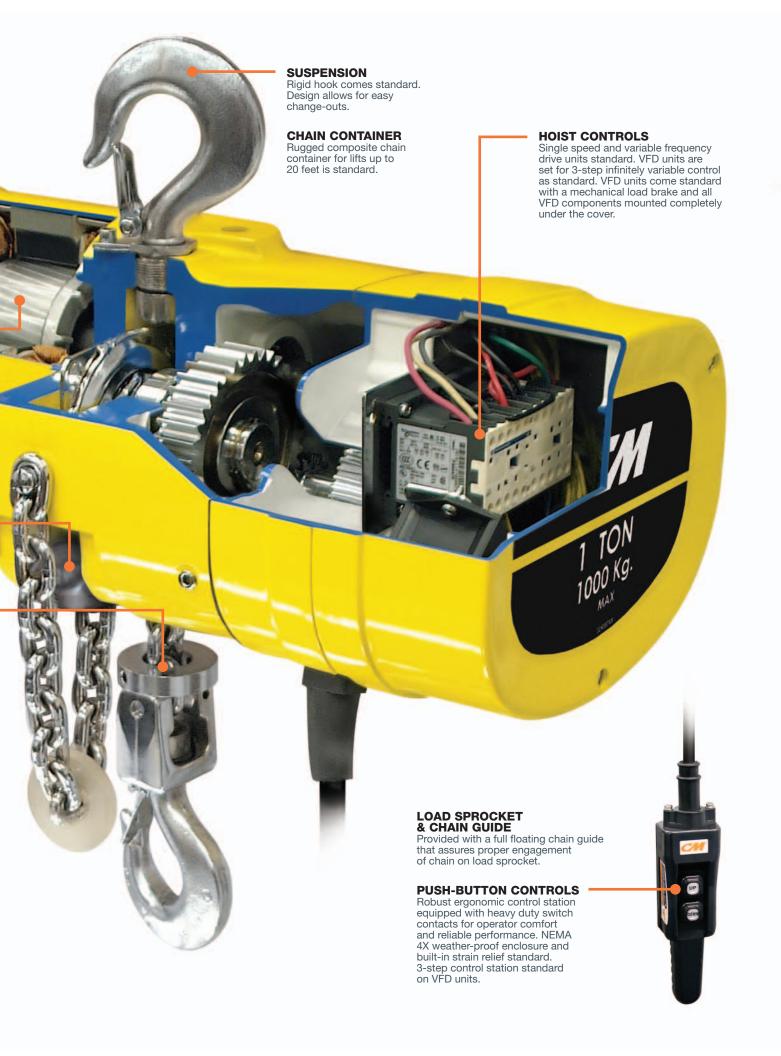
### LOAD CHAIN & HOOK

Both the Hoistaloy® Load Chain and Forged Steel Hook are manufactured in the USA by Columbus McKinnon. This ensures full compatibility and the highest quality control standards are meet at all times. Load Chain is zinc plated for protection against corrosion, and is 100% proof tested.

|  | Capacity | Model<br>Number | Lift<br>Speed | Motor | Parts of<br>Chain | Net<br>Weight | A           | В       | С     | D      | E*<br>Max. | F       | G      | Н       | Х**        | Υ      |
|--|----------|-----------------|---------------|-------|-------------------|---------------|-------------|---------|-------|--------|------------|---------|--------|---------|------------|--------|
| SINGLE<br>SPEED<br>HOOK<br>MOUNTED<br>HOISTS | 1/4      | MG2516          | 16            | 1/4   | 1                 | 77            | 16-3/4      | 11-1/8  | 5     | 6-5/16 | 14-1/4     | 2-9/16  | 15/16  | 10-5/16 | - 21-5/8 I | 9-1/2  |
|  |          | MG2532          | 32            | 1/2   |                   | 80            |             |         |       |        |            |         |        | 10-5/16 |            |        |
|  | 1/2      | MG5016          | 16            | 1/2   | 1                 | 80            | 16-3/4      | 11-1/8  | 5     | 6-5/16 | 14-1/4     | 2-9/16  | 15/16  | 10-5/16 | 21-5/8     | 9-1/2  |
|  |          | MG5032          | 32            | 1     |                   | 81            |             |         |       |        |            |         |        | 10-5/16 | 21-3/0     | 9-1/2  |
|  | 1        | MG0116          | 16            | 1     | 1                 | 89            | 17-1/2 11   | 11-7/16 | 5-1/8 | 6-5/16 | 14-1/4     | 2-15/16 | 1-1/8  | 10-5/16 | 21-5/8     | 9-1/2  |
|  |          | MG0132          | 32            | 2-1/2 |                   | 95            |             | 11-1/10 |       |        |            |         |        | 11-5/16 |            |        |
|  | 2        | MG0208          | 8             | 1     | 2                 | 111           | 23          | 13-1/8  | 6-3/8 | 5-1/16 | 14-1/4     | 4-9/16  | 1-1/16 | 10-5/16 | 24-3/4     | 10-3/4 |
|  |          | MG0216          | 16            | 2-1/2 |                   | 112           |             |         |       |        |            |         |        | 11-5/16 | 24-3/4     |        |
|  | 3        | MG0305          | 5             | 1     | 3                 | 136           | 25-7/8      | 14-3/8  | 7-7/8 | 7-1/8  | 14-1/4     | 5-7/8   | 2      | 10-5/16 | - 30       | 12-1/4 |
|  |          | MG0310          | 10            | 2-1/2 |                   | 146           |             |         |       |        |            |         |        | 11-5/16 |            |        |
| VFD<br>HOOK<br>Mounted<br>Hoists             | 1/4      | MG2516V         | 16            | 1/4   | 1                 | 77            | 16-3/4 11-1 | 44.4/0  | 5     | 6-5/16 | 14-1/4     | 2-9/16  | 15/16  | 13-7/16 | 04 5/0     | 0.4/0  |
|  |          | MG2532V         | 32            | 1/2   |                   | 80            |             | 11-1/8  |       |        |            |         |        | 13-7/16 | 21-5/8     | 9-1/2  |
|  | 1/2      | MG5016V         | 16            | 1/2   | 1                 | 80            | 16-3/4 1    | 44.4/0  | 5     | 6-5/16 | 14-1/4     | 2-9/16  | 15/16  | 13-7/16 | 04 5/0     | 0.4/0  |
|  |          | MG5032V         | 32            | 1     |                   | 81            |             | 11-1/8  |       |        |            |         |        | 13-7/16 | 21-5/8     | 9-1/2  |
|  | 1        | MG0116V         | 16            | 1     | 1                 | 89            | 17-1/2      | 11-7/16 | 5-1/8 | 6-5/16 | 14-1/4     | 2-15/16 | 1-1/8  | 13-7/16 | 21-5/8     | 9-1/2  |
|  |          | MG0132V         | 32            | 2-1/2 |                   | 95            |             |         |       |        |            |         |        | 13-7/16 | 21-5/6     | 9-1/2  |
|  | 2        | MG0216V         | 16            | 2-1/2 | 2                 | 112           | 23          | 13-1/8  | 6-3/8 | 5-1/16 | 14-1/4     | 4-9/16  | 1-1/16 | 13-7/16 | 24-3/4     | 10-3/4 |
|  | 3        | MG0310V         | 10            | 2-1/2 | 3                 | 146           | 25-7/8      | 14-3/8  | 7-7/8 | 7-1/8  | 14-1/4     | 5-7/8   | 2      | 13-7/16 | 30         | 12-1/4 |

<sup>\*</sup> Maximum length for 3 phase model hoists. Consult factory for exact dimensions.

<sup>\*\*</sup> Dimensions based on lifts through 10 ft. (all capacities) and increases proportionally with longer lifts.





KNOW HOW...KNOW WHY

Columbus McKinnon is a global leader in providing expertise and training in the proper use and inspection of rigging and overhead lifting equipment. With a range of comprehensive programs and seminars conducted at venues throughout North America, as well as on site at private companies and industries, Columbus McKinnon courses include:

- Hoist Maintenance
- Load Securement
- Crane & Hoist Inspection
- Mobile Crane Operator
- Rigging
- Safe Hoisting
- Crane Operator Training
- Rigging Gear Inspection

In addition, classes are available at the new state-of-the-art Hoist & Rigging Training Center of Excellence in the Center for Occupational Health and Automobile Manufacturing (COHAM) lab located at The Ohio State University. The COHAM lab is a hands-on learning center which allows attendees to understand how to properly use and inspect overhead lifting equipment. This leading edge training program is designed to increase workplace productivity and safety in an ergonomically-friendly training environment.

In addition to the strong knowledge base exemplified by comprehensive training programs, Columbus McKinnon is one of the only manufacturers supplying complete lifting systems to satisfy unique material handling requirements of users in a variety of environments. From jib cranes and hoists to chain slings, clamps, and related attachments; systems include products that are matched specifically to the lifting needs of the application. Products may also be modified in order to ensure that the proper system is in place for the job.

Whether your needs call for a single CM Man Guard hook mounted hoist or a completely engineered system to outfit your production facility, Columbus McKinnon provides the products and expertise to keep your workforce productive and safe.



**FAMILY OF BRANDS** 













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