

# **CM** **MAN GUARD**<sup>TM</sup>

## 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.

# 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.

## HEAVY DUTY MOTOR BRAKE

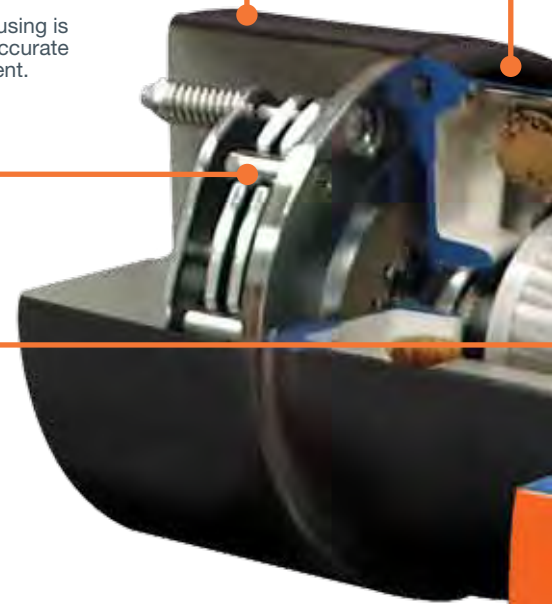
AC spring set disc brake for positive braking action and long life with minimal maintenance. Easy 1-step adjustment procedure.

## 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.

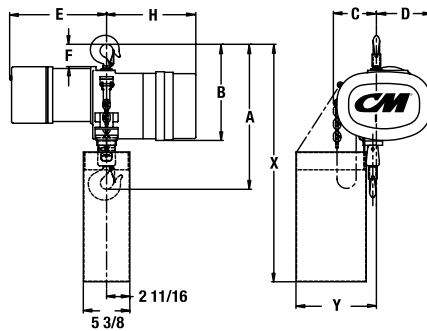


## PADDLE-TYPE LIMIT SWITCH

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

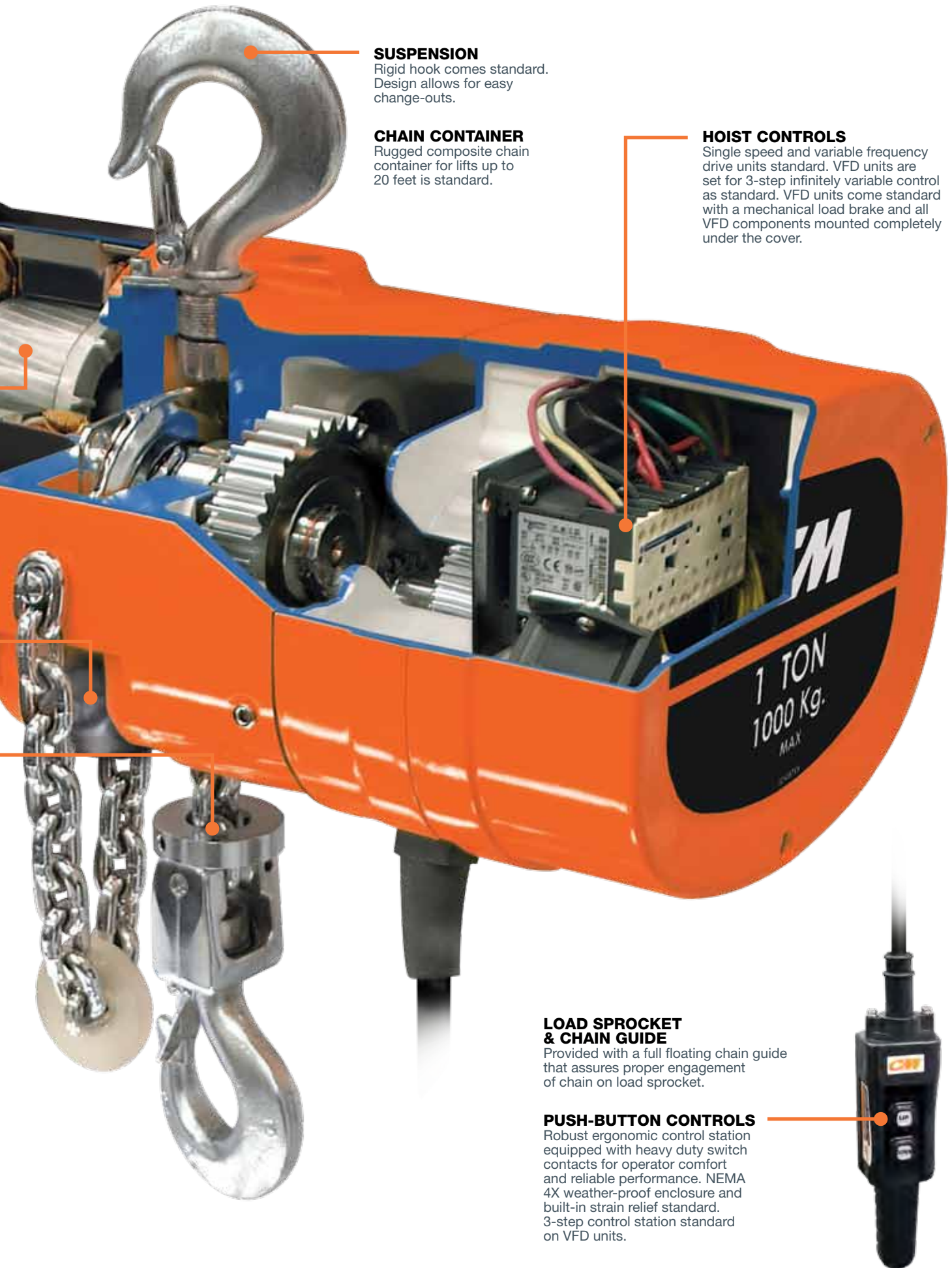
Both the Hoistaloy® Load Chain and Forged Steel Hook are manufactured in the USA by Columbus McKinnon. This ensures full compatibility and the highest quality control standards are met at all times. Load Chain is zinc plated for protection against corrosion, and is 100% proof tested.



|                                  | Capacity | Model Number | Lift Speed | Motor | Parts of Chain | Net Weight | A      | B       | C     | D      | E* Max. | F       | G      | H       | X**    | Y      |
|----------------------------------|----------|--------------|------------|-------|----------------|------------|--------|---------|-------|--------|---------|---------|--------|---------|--------|--------|
| SINGLE SPEED HOOK MOUNTED 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 | 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 |        |        |
|                                  | 1        | MG0116       | 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  | 10-5/16 | 21-5/8 | 9-1/2  |
|                                  |          | MG0132       | 32         | 2-1/2 |                | 95         |        |         |       |        |         |         |        | 11-5/16 |        |        |
|                                  |          | MG0208       | 8          | 1     |                | 111        |        |         |       |        |         |         |        | 10-5/16 |        |        |
|                                  | 2        | MG0216       | 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 | 11-5/16 | 24-3/4 | 10-3/4 |
|                                  |          | MG0305       | 5          | 1     |                | 136        |        |         |       |        |         |         |        | 11-5/16 |        |        |
|                                  | 3        | MG0310       | 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      | 10-5/16 | 30     | 12-1/4 |
|                                  |          |              |            |       |                | 11-5/16    |        |         |       |        |         |         |        |         |        |        |
| VFD HOOK MOUNTED HOISTS          | 1/4      | MG2516V      | 16         | 1/4   | 1              | 77         | 16-3/4 | 11-1/8  | 5     | 6-5/16 | 14-1/4  | 2-9/16  | 15/16  | 13-7/16 | 21-5/8 | 9-1/2  |
|                                  |          | MG2532V      | 32         | 1/2   |                | 80         |        |         |       |        |         |         |        | 13-7/16 |        |        |
|                                  | 1/2      | MG5016V      | 16         | 1/2   | 1              | 80         | 16-3/4 | 11-1/8  | 5     | 6-5/16 | 14-1/4  | 2-9/16  | 15/16  | 13-7/16 | 21-5/8 | 9-1/2  |
|                                  |          | MG5032V      | 32         | 1     |                | 81         |        |         |       |        |         |         |        | 13-7/16 |        |        |
|                                  | 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 |        |        |
|                                  |          | MG0216V      | 16         | 2-1/2 |                | 112        |        |         |       |        |         |         |        | 13-7/16 |        |        |
|                                  | 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 |
|                                  |          | MG0310V      | 10         | 2-1/2 |                | 146        |        |         |       |        |         |         |        | 13-7/16 |        |        |
|                                  | 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 |
|                                  |          |              |            |       |                |            |        |         |       |        |         |         |        |         |        |        |

\* Maximum length for 3 phase model hoists. Consult factory for exact dimensions.

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



**SUSPENSION**

Rigid hook comes standard. Design allows for easy change-outs.

**CHAIN CONTAINER**

Rugged composite chain container for lifts up to 20 feet is standard.

**HOIST CONTROLS**

Single speed and variable frequency drive units standard. VFD units are set for 3-step infinitely variable control as standard. VFD units come standard with a mechanical load brake and all VFD components mounted completely under the cover.

**LOAD SPROCKET & CHAIN GUIDE**

Provided with a full floating chain guide that assures proper engagement of chain on load sprocket.

**PUSH-BUTTON CONTROLS**

Robust ergonomic control station equipped with heavy duty switch contacts for operator comfort and reliable performance. NEMA 4X weather-proof enclosure and built-in strain relief standard. 3-step control station standard on VFD units.



## 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.

