

chain hoists

Introduction to chain hoists

The Power to Perform

Total Structures is an Entertainment Master Distributor for America's favorite chain hoist. With on the shelf inventory, in house technicians, competitive pricing, regular motor schools and a sales team with over 30 years of product experience, we are your best choice when it comes to filling your lifting needs. In addition to hoists, Total Structures carries several lines of motor control, cabling, and rigging hardware, providing you with a complete system solution. From production houses, resellers, and end users to architects and specifiers, Total Structures can help you accomplish your jobs with the best equipment for your application.

A vast range of CM products are available including a multitude of spares and accessories. Featured opposite are the specifications for the most popular hoists used globally in the temporary structures market, the "riggers choice" Lodestar and the increasingly popular and renowned baby brother, the Prostar.



Lodestar

Prostar

Overview

The CM Lodestar is the most durable chain hoist on the market today. Its reliability is unsurpassed in the entertainment industry.

Overview

The CM Prostar models are designed and built for the unique rigging applications encountered at small venues. Lightweight, quiet and portable, the CM Prostar features an overload device that protects the operator and structure from damaging overloads.

Features

- Capacities – ¼ to 2 tons – Higher capacities available if required.
- Speeds – 8 – 64 ft per minute.
- Lift – 60ft standard. Any other on request.
- Voltages – Three Phase 415V/220V 50/60 Hz as standard with other three phase and single phase units available.
- Low voltage control – 110V for long cable runs without voltage drop. 24V and 48V optional.
- Direct control units also available.
- Voltage Board – Quick change plugs prevent improper voltage connections that can cause damage to the hoist. If misconnected, hoist will not operate. No other component changes required.
- Electrical – Finger safe wiring meets all electrical codes.
- Adjustable limit switch – Prevents loads from over travel.
- New 5 pocket lift wheel for improved chain wear and smooth lifting.
- Double brake – Optional double brake available.
- Load chain – Zinc plated load chain protects against corrosion. Optional black finish available.
- Optional CM Alloy Latchlok Hooks – Locking Hooks released only by operator.
- Black Powdercoat finish – For low visibility and durability.
- Overload protection – Helps prevent lifting of dangerous overloads.
- Lodestar is the "riggers choice".

Features

- Capacities – 300 to 1000lbs.
- Speeds – 8 – 40 ft per minute
- Lift – 60ft standard. Any other on request
- Voltages – Three Phase 220V 60 Hz as standard with other three phase and single phase voltages available.
- Low voltage control – 110V for long cable runs without voltage drop. 24V and 48V optional.
- Direct control units also available.
- Compact design.
- Light weight. 500 Lb body weighs less than 29 lbs.
- Quiet and smooth.
- Chain stop – Mounted on chain prevents over-travel.
- Overload protection – Helps prevent lifting of dangerous overloads.

Technical data

| Capacity (Tons) | Model | No of Chains | Lift Speed ft/min | H.P. | Headroom | Housing Dim. (Inches) | | | Weight (Less Chain) lbs | Chain Weight (lbs per ft) | Operating Voltage | Full Load Amps |
|-----------------|-------|--------------|-------------------|------|----------|-----------------------|--------|--------|-------------------------|---------------------------|-------------------|----------------|
| | | | | | | H | W | L | | | | |
| 1/4 | B | 1 | 16 | 1/4 | 16 1/4 | 6 1/8 | 8 3/4 | 20 3/4 | 63 | 0.85 | 230/460-3-60 | 1.8/1.1 |
| 1/4 | C | 1 | 32 | 1/2 | 16 1/4 | 6 1/8 | 8 3/4 | 20 3/4 | 68 | 0.85 | 230/460-3-60 | 1.7/1.2 |
| 1/2 | F | 1 | 16 | 1/2 | 16 1/4 | 6 1/8 | 8 3/4 | 20 3/4 | 68 | 0.85 | 230/460-3-60 | 1.7/1.2 |
| 1/2 | J | 1 | 32 | 1 | 18 5/8 | 7 5/8 | 12 5/8 | 23 | 110 | 1.1 | 230/460-3-60 | 3.8/2.3 |
| 1/2 | JJ | 1 | 64 | 2 | 18 5/8 | 7 5/8 | 12 5/8 | 23 | 114 | 1.1 | 230/460-3-60 | 11.3/6 |
| 1 | L | 1 | 16 | 1 | 18 5/8 | 7 5/8 | 12 5/8 | 23 | 110 | 1.1 | 230/460-3-60 | 3.8/2.3 |
| 1 | LL | 1 | 32 | 2 | 18 5/8 | 7 5/8 | 12 5/8 | 23 | 114 | 1.1 | 230/460-3-60 | 11.3/6 |
| 2 | R | 2 | 8 | 1 | 24 1/8 | 7 5/8 | 12 5/8 | 23 | 119 | 1.1** | 230/460-3-60 | 3.8/2.3 |
| 2 | RR | 2 | 16 | 2 | 24 1/8 | 7 5/8 | 12 5/8 | 23 | 123 | 1.1** | 230/460-3-60 | 11.3/6 |
| 1/4 | B | 1 | 16 | 1/4 | 16 1/4 | 6 1/8 | 8 3/4 | 20 3/4 | 63 | 0.85 | 115-1-60 | 5.2 |
| 1/4 | C | 1 | 32 | 1/2 | 16 1/4 | 6 1/8 | 8 3/4 | 20 3/4 | 68 | 0.85 | 115-1-60 | 8 |
| 1/2 | F | 1 | 16 | 1/2 | 16 1/4 | 6 1/8 | 8 3/4 | 20 3/4 | 68 | 0.85 | 115-1-60 | 8 |
| 1/2 | J | 1 | 32 | 1 | 18 5/8 | 7 5/8 | 12 5/8 | 23 | 110 | 1.1 | 115-1-60 | 13 |
| 1 | L | 1 | 16 | 1 | 18 5/8 | 7 5/8 | 12 5/8 | 23 | 110 | 1.1 | 115-1-60 | 13 |
| 2 | R | 2 | 8 | 1 | 24 1/8 | 7 5/8 | 12 5/8 | 23 | 114 | 1.1** | 115-1-60 | 13 |

** Requires double chain, therefore multiply by 2 per ft of lift
 Other capacities up to 3 Tons and other speeds available upon request.
 Other voltages including 220V single phase and 575V three phase available upon request.

Technical data

| Capacity (lbs) | Product Code | No of Chains | Lift Speed ft/min | H.P. | Headroom | Housing Dim. (Inches) | | | Weight (Less Chain) lbs | Chain Weight (lbs per ft) | Operating Voltage | Full Load Amps |
|----------------|--------------|--------------|-------------------|------|----------|-----------------------|---|--------|-------------------------|---------------------------|-------------------|----------------|
| | | | | | | H | W | L | | | | |
| 300 | 2042S | 1 | 16 | 1/6 | 11 5/8 | 4 | 6 | 12 1/2 | 28.6 | 0.24 | 230-3-60 | 1.2 |
| 300 | 2074E | 1 | 40 | 1/6 | 11 5/8 | 4 | 6 | 12 1/2 | 28.6 | 0.24 | 230-3-60 | 1.2 |
| 500 | 2127S | 1 | 16 | 1/4 | 11 5/8 | 4 | 6 | 12 1/2 | 28.6 | 0.24 | 230-3-60 | 1.6 |
| 600 | 2045S | 2 | 8 | 1/6 | 11 5/8 | 4 | 6 | 12 1/2 | 33 | 0.24** | 230-3-60 | 1.2 |
| 1000 | 2129S | 2 | 8 | 1/6 | 11 5/8 | 4 | 6 | 12 1/2 | 33 | 0.24** | 230-3-60 | 1.2 |
| 300 | 2049S | 1 | 16 | 1/6 | 11 5/8 | 4 | 6 | 12 1/2 | 28.6 | 0.24 | 115-1-60 | 3.6 |
| 500 | 2018S | 1 | 12 | 1/6 | 11 5/8 | 4 | 6 | 12 1/2 | 28.6 | 0.24 | 115-1-60 | 3.6 |
| 600 | 2048 | 2 | 8 | 1/6 | 11 5/8 | 4 | 6 | 12 1/2 | 33 | 0.24** | 115-1-60 | 3.6 |

** Requires double chain, therefore multiply by 2 per ft of lift
 Other capacities and speeds available upon request.
 Other voltages including 415V three phase and 220V single phase units available upon request.

The Rigger's Choice

We've received the best reviews, heard "Bravo" countless times and, like all the greats, we're recognized in every venue around the world. So how do we make the legendary Lodestar electric chain hoist even better? By incorporating new features that provide steady operation for any application in the entertainment industry. From today's top-selling musical performers to international sporting competitions, organizers rely on the Lodestar for consistent performance event after event. Professional riggers have trusted the Lodestar for unsurpassed reliability for decades, and now you can experience the quietest, smoothest-running Lodestar ever. What an Encore!

New features on this next generation of Lodestar

- 5 pocket liftwheel
Improved chain wear & smooth lifting.
- Clutch outside gear train meets international standards.
- Precision helical gearing for quieter operation.
- Redesigned control panel for easier access & fuse installation.



LOAD CHAIN
Sizes available from 1/4 in. to 5/16 in. Meets or exceeds many national and international standards. Zinc plated supplied as standard. Black phosphate finish available. 100% proof tested.

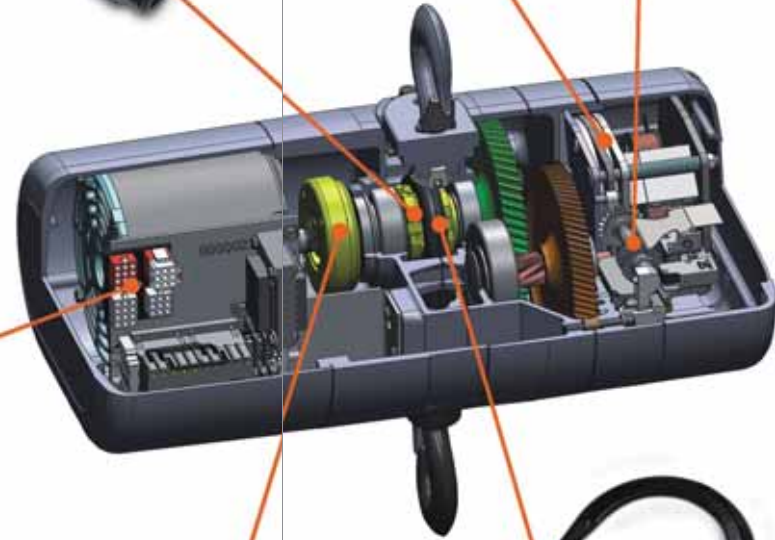
BRAKE - Heavy Duty AC Brake proven design in more than 1 million Lodestars. (Double DC Brake available)



LIFT WHEEL
5 Pocket Liftwheel increases chain and liftwheel engagement while providing smoother lifting, less vibration and reduced chain wear when properly maintained.



LIMIT SWITCH
Adjustable screw limit switch that will automatically stop the hook at any predetermined point when either hoisting or lifting.



INTERNAL CHAIN GUIDE
Stamped Steel guide coated for corrosion resistance and quiet operation, while keeping the load chain and liftwheel aligned.

CONTROL PANEL
Provides easy access to controls, plug & play connectors allow for quick voltage change for dual voltage motors. Fuses located on terminal strip (optional).



CLUTCH
Designed to prevent lifting of excessive overloads. Located outside the gear box. Adjustable and easy to access.



Standard features

- AC ELECTROMECHANICAL BRAKE**
Field tested and proven in over 1 million lodestars worldwide.
- LOW VOLTAGE CONTROL**
110 volt for long cable runs without Voltage drop 24 & 48 volt optional. (low voltage unit only).
- DURABLE & LIGHTWEIGHT HOUSING**
Cast aluminum. Black powder coated finish for low visibility.
- GEARING**
Helical design for long wear life and smooth operation.
- LOAD CHAIN**
Designed and manufactured by Columbus McKinnon. Zinc plated to protect against corrosion. Optional black finish available.
- DUTY CYCLE**
H-4 duty rated for heavy duty application. 2m fem class. 50% duty cycle or 300 on/off per hour. Direct control units available.
- ELECTRICAL**
Finger safe wiring meets all electrical codes. Quick change plugs allow for voltages 208 thru 460. Prevents improper voltage connections which can cause hoist damage. (Low Voltage Unit Only).
- ADJUSTABLE LIMIT SWITCH**
Adjustable screw limit switch that will automatically stop the hook at any predetermined point when either lifting or lowering, preventing overtravel. (Low Voltage Unit Only).

- OVERLOAD PROTECTOR**
Designed to prevent lifting of excessive overloads. Helps prevent lifting of dangerous overloads.
- METRIC RATED MEETS REQUIREMENTS**
Meets or exceeds world standards.
- ROAD READY**
Easy to stow and travel.
- LIFETIME WARRANTY**
The industry's best.

Optional features

- DOUBLE BRAKE**
Two independent acting DC brakes for redundant braking. Field installation kit available.
- ENCODERS AVAILABLE**
Incremental & Absolute.
- CHAIN BAGS**
Cloth type bags easy-to-mount.
- VARIABLE SPEED UNITS AVAILABLE**
- ALLOY LATCHLOK HOOKS**
Remains locked until released by the operator, even if chain goes slack.