

► LODESTAR





# LODESTAR®

## **ELECTRIC CHAIN MOTOR**

**CAPACITIES** 

125 kg to 500 kg

18 metre standard\*\*\*

**SPEEDS** 

4 to 8 metre/minute

**VOLTAGES** 

1-phase & 3-phase available

From World touring rock concerts and Broadway musicals to Las Vegas shows and sporting events, the CM Lodestar is the trusted industry workhorse.

The New Generation Lodestar complies with BGV-D8, BGV-D8+ and igvw SQ P2 codes of practice.

#### **STANDARD FEATURES**

#### **IP 65 RATING**

An Ingress Protection (IP) Rating of 65 indicates that the Lodestar offers protection from dust and highpressure water - making this unit ideal for use in outdoor environments.

#### **ADJUSTABLE CLUTCH**

Clutch outside of gear train meets International standards and is fully adjustable. Designed to prevent damage to the hoist by preventing excessive overloads.

#### **5 POCKET LIFTWHEEL**

Improved chain life & smooth lifting.

#### PRECISION HELICAL GEARING

Designed for long life, and smoother operation.

#### REDESIGNED CONTROL PANEL

For easier access.

#### **HEAVY DUTY DC BRAKE** Designed for a long service life,

access & easy inspection. **LOW VOLTAGE CONTROL** 110 Volt for long cable runs without

the brake location allows for quick

voltage drop. 24 & 48 Volt optional. (Low Voltage Unit Only)

#### **DURABLE &** LIGHTWEIGHT HOUSING

Cast aluminum. Black powder coated finish for low visibility.

#### **LOAD CHAIN**

Designed and manufactured by Columbus McKinnon to provide a factor of safety of 8:1. Zinc plated to protect against corrosion. Optional black finish available.

#### **DUTY CYCLE**

2M FEM class. 40% Duty Cycle 300 operations for H-4. 240 for FEM per

#### **ELECTRICAL**

Finger safe wiring meets all electrical codes. Quick change plugs allow for voltages 230 through 460. Prevents improper voltage connections which can cause hoist damage. (Low Voltage Unit Only).

#### **ADJUSTABLE LIMIT SWITCH**

Adjustable limit switch that will automatically stop the hook at any predetermined point when either lifting or lowering, preventing overtravel. (Low Voltage Unit Only).

# METRIC RATED MEETS REQUIREMENTS

Meets or exceeds world standards.

#### **ROAD READY**

Easy to stow and travel.



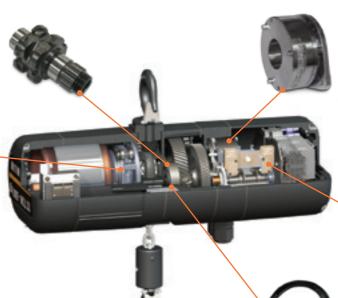
#### **LIFT WHEEL**

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



#### **ADJUSTABLE CLUTCH**

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



Heavy duty DC brake is standard. AC brake and double DC brake are also available.

#### **LIMIT SWITCH**

Adjustable limit switch that will automatically stop the hook at any predetermined point when either lifting or lowering.

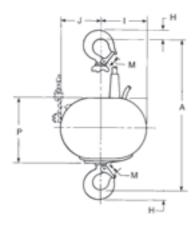


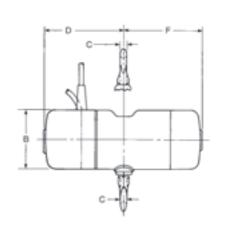
#### **INTERNAL CHAIN GUIDE**

Stamped steel guide coated for corrosion resistance and quiet operation, while keeping the load chain and liftwheel aligned.

#### **DIMENSIONS**

Drawing Legend	Dimensions (mm) D8 Series A, AA, B, C, E, F, H
Α	413mm
В	154mm
C	17mm
D	297mm
F	225mm
Н	25mm
I	107mm
J	113mm
M	25mm
P	168mm





#### **SPECIFICATIONS**

Туре	Rate Capacity	Standard Lifting Speed at 50Hz	Operating Voltage	Single Phase Voltage	FEM Class	FEM Duty Factor	Chain Weight Per Metre Lift- EWL	EN 010 7	Power Consumption - Full Load	Reeves Fall of Chain	Motor HP	Protection Class	Noise Level
Model B	250kg	4m/min	400-3-50	optional	2M	40%	1.2kg	6.3 x 18.9	1.1A	1	1/4 HP	IP 65	68 db (A)
Model C	250kg	8m/min	400-3-50	optional	2M	40%	1.2kg	6.3 x 18.9	1.2A	1	1/2 HP	IP 65	68 db (A)
Model F	500kg	4m/min	400-3-50	optional	2M	40%	1.2kg	6.3 x 18.9	1.2A	1	1/2 HP	IP 65	68 db (A)

<sup>\*\*\*</sup> Lifts other than 18 metres available (Standard Units shipped less chain unless specified). Consult factory for additional speeds and capacities

#### **OPTIONAL FEATURES**

#### **DOUBLE DC BRAKE**

Two independent acting DC brakes for redundant braking. Field installation kit available.

#### DOUBLE LIMIT SWITCH

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

#### **CHAIN BAGS**

Cloth type bags are durable and easy to mount.

#### **DIRECT CONTROL UNITS**

The CM Lodestar is available as a Direct Control Unit featuring a single cable. Direct Control Units can be used as part of a system with multiple units with a single control. The Lodestar is compatible with most Direct Control Motor Controllers.

2-TONNE, SINGLE REEVED MODELS (see page 8)

ENTERTAINMENT PRODUCT CATALOGUE WWW.CM-ET.COM WWW.CM-FT.COM 5 ENTERTAINMENT PRODUCT CATALOGUE

► LODESTAR





# LODESTAR®

## **ELECTRIC CHAIN MOTOR**

**CAPACITIES** 500 kg to 2000 kg

18 metre standard\*\*\*

**SPEEDS** 

4 to 16 metre/minute

**VOLTAGES** 

1-phase & 3-phase available

From World touring rock concerts and Broadway musicals to Las Vegas shows and sporting events, the CM Lodestar is the trusted industry workhorse.

The New Generation Lodestar complies with BGV-D8, BGV-D8+ and igvw SQ P2 codes of practice.

#### **STANDARD FEATURES**

#### **IP 65 RATING**

An Ingress Protection (IP) Rating of 65 indicates that the Lodestar offers protection from dust and highpressure water - making this unit ideal for use in outdoor environments.

#### **ADJUSTABLE CLUTCH**

Clutch outside of gear train meets International standards and is fully adjustable. Designed to prevent damage to the hoist by preventing excessive overloads.

#### **5 POCKET LIFTWHEEL**

Improved chain life & smooth lifting.

#### PRECISION HELICAL GEARING

Designed for long life, and smoother operation.

#### REDESIGNED CONTROL PANEL

For easier access.

#### **HEAVY DUTY DC BRAKE** Designed for a long service life,

access & easy inspection. **LOW VOLTAGE CONTROL** 110 Volt for long cable runs without

the brake location allows for quick

voltage drop. 24 & 48 Volt optional. (Low Voltage Unit Only)

#### **DURABLE &** LIGHTWEIGHT HOUSING

Cast aluminum. Black powder coated finish for low visibility.

#### **LOAD CHAIN**

Designed and manufactured by Columbus McKinnon to provide a factor of safety of 8:1. Zinc plated to protect against corrosion. Optional black finish available.

#### **DUTY CYCLE**

2M FEM class. 40% Duty Cycle 300 operations for H-4. 240 for FEM per

#### **ELECTRICAL**

Finger safe wiring meets all electrical codes. Quick change plugs allow for voltages 230 through 460. Prevents improper voltage connections which can cause hoist damage. (Low Voltage Unit Only).

#### **ADJUSTABLE LIMIT SWITCH**

Adjustable limit switch that will automatically stop the hook at any predetermined point when either lifting or lowering, preventing overtravel. (Low Voltage Unit Only).

# METRIC RATED MEETS REQUIREMENTS

Meets or exceeds world standards.

#### **ROAD READY**

Easy to stow and travel.



#### **LIFT WHEEL**

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



#### **ADJUSTABLE CLUTCH**

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

#### **CONTROL PANEL**

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

Heavy duty DC brake is standard. AC brake and double DC brake are also available.

#### **LIMIT SWITCH**

Adjustable limit switch that will automatically stop the hook at any predetermined point when either lifting or lowering.

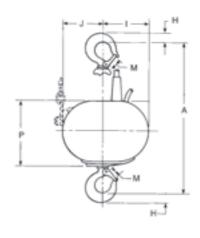


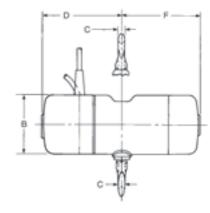
#### **INTERNAL CHAIN GUIDE**

Stamped steel guide coated for corrosion resistance and quiet operation, while keeping the load chain and liftwheel aligned.

#### **DIMENSIONS**

Drawing	Dimensions (mm)						
Legend	D8 Series J, L, LL	D8 Series R, RR					
Α	472mm	613mm					
В	194mm	194mm					
C	22mm	29mm					
D	253mm	253mm					
F	329mm	329mm					
Н	30mm	38mm					
1	145mm	179mm					
J	176mm	142mm					
M	28mm	33mm					
P	208mm	208mm					





#### **SPECIFICATIONS**

Туре	Rate Capacity	Standard Lifting Speed at 50Hz	Operating Voltage	Single Phase Voltage	FEM Class	FEM Duty Factor	Chain Weight Per Metre Lift- EWL	Load Chain EN 818-7 (mm)	Power Con- sumption - Full Load	Reeves Fall of Chain	Motor HP	Protection Class	Noise Level
Model J	500kg	8m/min	400-3-50	-	2M	40%	1.65kg	7.9 x 21.7	2.3A	1	1 HP	IP 65	68 db (A)
Model JJ	500kg	16m/min	400-3-50	-	2M	40%	1.65kg	7.9 x 21.7	3.6A	1	2 HP	IP 65	68 db (A)
Model L	1000kg	4m/min	400-3-50	optional	2M	40%	1.65kg	7.9 x 21.7	2.3A	1	1 HP	IP 65	68 db (A)
Model LL	1000kg	8m/min	400-3-50	-	2M	40%	1.65kg	7.9 x 21.7	3.6A	1	2 HP	IP 65	68 db (A)
Model R	2000kg	2m/min	400-3-50	optional	2M	40%	3.3kg	7.9 x 21.7	2.3A	2	1 HP	IP 65	68 db (A)
Model RR	2000kg	4m/min	400-3-50	-	2M	40%	3.3kg	7.9 x 21.7	3.6A	2	2 HP	IP 65	68 db (A)

<sup>\*\*\*</sup> Lifts other than 18 metres available (Standard Units shipped less chain unless specified). Consult factory for additional speeds and capacities

#### **OPTIONAL FEATURES**

#### **DOUBLE DC BRAKE**

Two independent acting DC brakes for redundant braking. Field installation kit available.

#### DOUBLE LIMIT SWITCH

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

#### **VARIABLE SPEED UNITS AVAILABLE (VFD)**

Varistar or variable speed versions available, please contact your CM-ET sales representative for details.

#### **CHAIN BAGS**

Cloth type bags are durable and easy to mount.

#### **DIRECT CONTROL UNITS**

The CM Lodestar is available as a Direct Control Unit featuring a single cable. Direct Control Units can be used as part of a system with multiple units with a single control. The Lodestar is compatible with most Direct Control Motor Controllers.

2-TONNE, SINGLE REEVED MODELS (see page 8)

ENTERTAINMENT PRODUCT CATALOGUE WWW.CM-ET.COM WWW.CM-FT.COM ENTERTAINMENT PRODUCT CATALOGUE ► LODESTAR (2-TONNE SINGLE-REEVED)



# LODESTAR®

**ELECTRIC CHAIN MOTOR** 

## 2-TONNE SINGLE-REEVED

The CM® entertainment Lodestar® is now available as an economical 2-tonne, single-reeved unit that's ideal for a variety of lifting applications. And, because it's a single-reeved unit, overall weight is decreased and safety increased making it easier to transport and rig compared to a traditional double-reeved unit.

#### **BENEFITS & FEATURES**

#### **IP 65 RATING**

An Ingress Protection (IP) Rating of 65 indicates that the Lodestar offers protection from dust and high-pressure water – making this unit ideal for use in outdoor environments.

# HIGH-PERFORMANCE COMPOSITE CORD GRIPS

Prevent water from entering the motor body at the pendant and power cord points of entry.

### **CONTINUOUS GASKETS**

Create a waterproof seal between the gearbox assembly and the back frame and motor covers.

#### O-RINGS ON LIFT WHEEL BEARING

Prevent water from entering the motor body through the lift wheel opening.

#### **EASY TO TRANSPORT & RIG**

With less chain than double-reeved units, the 2-tonne, single-reeved Lodestar is lighter, making it easier to transport and rig.

#### **ADJUSTABLE CLUTCH**

Clutch outside of gear train meets International standards and is fully adjustable. Designed to prevent damage to the hoist by preventing excessive overloads.

#### IMPROVED CHAIN LIFE

5-pocket lift wheel provides better chain and lift wheel engagement for smoother lifting and reduced vibration, equating to less wear and a longer chain life

## LESS MAINTENANCE & EASIER INSPECTION

- Brake location allows for quick access and easy inspection.
- Lifetime grease-lubricated gear box means no oil change is required.
- Clutch located outside the gear box allows for easy access, which eliminates the need for complete disassembly and reduces downtime

# **IMPROVED SERVICEABILITY**Easy access to the clutch,

Easy access to the clutch, motor, electrical control panel and brake assembly.

#### **METRIC RATED**

#### **EASY-ACCESS CONTROL PANEL**

Finger-safe wiring and plug-and-play connectors on the control panel allow for quick voltage change, easy access to terminal strips and simple fuse installation.

#### **LONGER SERVICE LIFE**

- Heavy-duty DC brake is designed for a long service life.
- Lifetime grease-lubricated gear box and helical gearing ensures longer life and smooth operation. Heavy-duty-rated motors.

### IMPROVED LOAD SAFETY

Clutch is located outside the load path, preventing slipping of the load in an overload condition when the brake is not powered.

## **ADJUSTABLE LIMIT SWITCH**Easy to adjust limit switch

automatically stops the hook at any predetermined point when either lifting or lowering, preventing overtravel.

#### **OVERLOAD PROTECTOR**

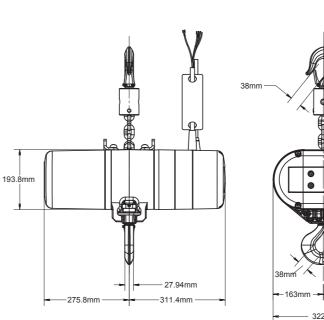
Helps prevent lifting of dangerous overloads.

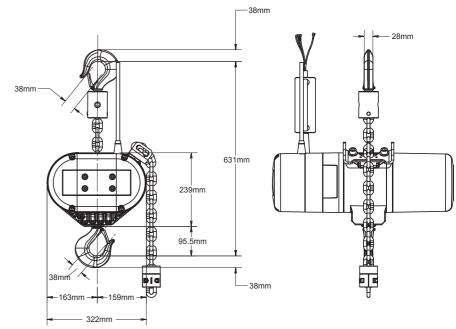
#### LIFETIME WARRANTY

The industry's best warranty against manufacturing and material defects.

## SWIVEL OR RIGID HOOK







Dimensions are RRS model CM-ET Lodestar 2 tonne Single Reeved with Swivel Latch Type Hook Suspension

#### **OPTIONAL FEATURES**

#### **DOUBLE DC BRAKE**

Two independent acting DC brakes for redundant braking. Field installation kit available.

#### DOUBLE LIMIT SWITCH

Adjustable limit switch that will automatically stop the hook at any predetermined point when either lifting or lowering.

#### **ENCODERS**

Available for positioning, incremental and absolute.

#### **VARIABLE SPEED UNITS AVAILABLE (VFD)**

Varistar or variable speed versions available, please contact your CM-ET sales representative for details.

#### **CM ALLOY LATCHLOK® HOOKS**

Latchlok® hooks combine innovative design and solid alloy steel.

I-beam construction offers more reliable performance than any
other hook on the market.

- One-hand operation and recessed push-button thumb release for smooth and dependable opening.
- Hook remains locked until released by the operator, even if chain goes slack.
- Sturdy forged heat treated I-beam construction for strong, yet lightweight hooks.
- Lifetime warranty.
- Made in U.S.A.

### DIRECT CONTROL UNITS

The CM Lodestar is available as a Direct Control Unit featuring a single cable. Direct Control Units can be used as part of a system with multiple units with a single control. The Lodestar is compatible with most Direct Control Motor Controllers.



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