



PRODUCT CATALOG



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COLUMBUS MCKINNON CORPORATION, ENTERTAINMENT PRODUCTS DIVISION

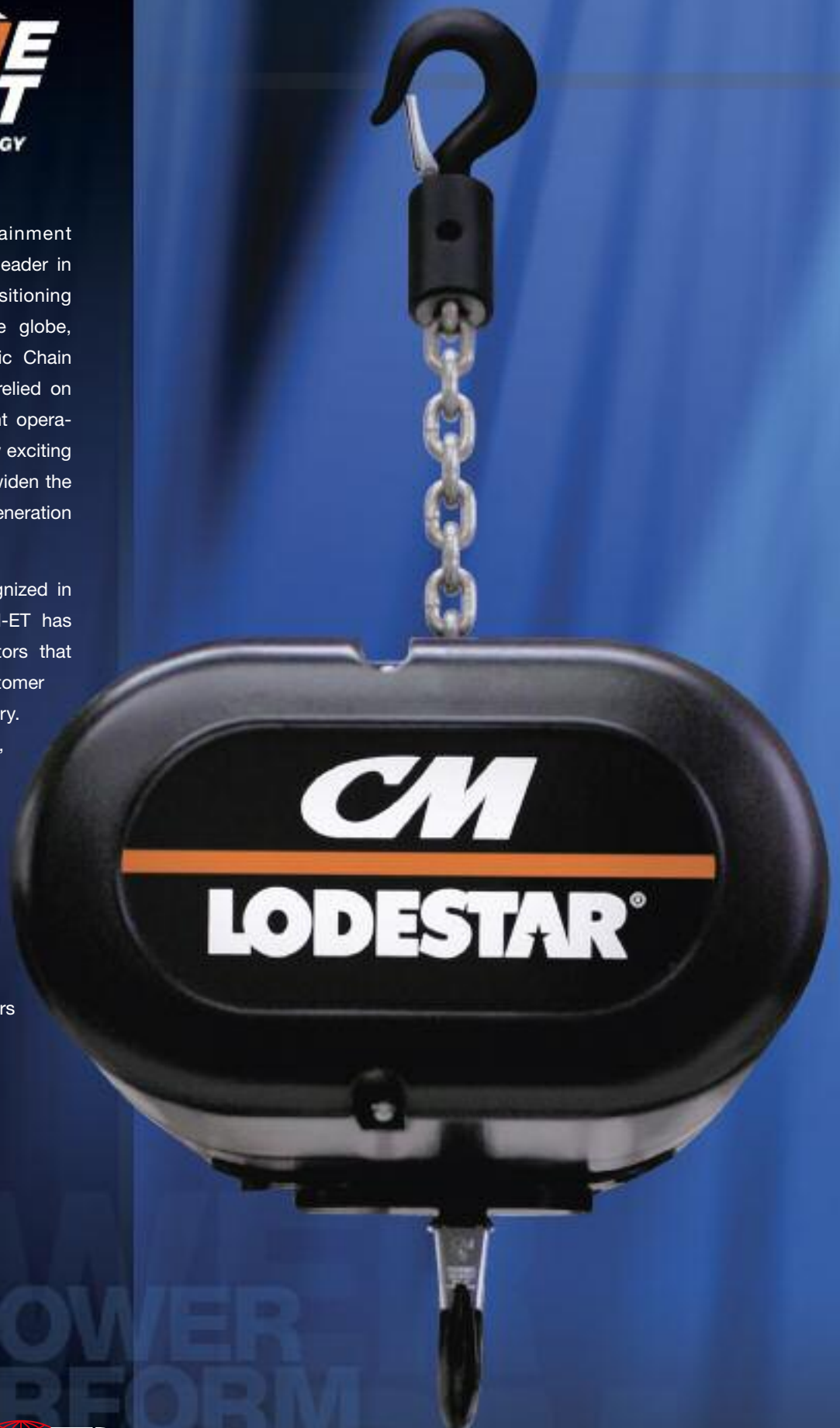
THE POWER TO PERFORM



Columbus McKinnon Entertainment Technology (CM-ET), the industry leader in providing quality lifting and positioning equipment for riggers around the globe, presents the new Lodestar Electric Chain Hoist. Generations of users have relied on the Lodestar "Motor" for consistent operation and long-life for years, and now exciting new features have been added to widen the appeal of the Lodestar to the next generation of rigging professionals.

In addition to a product line recognized in venues throughout the world, CM-ET has established a network of distributors that provide the highest level of customer service to users in the industry. Wherever the show takes place, a knowledgeable CM-ET distributor is available to offer assistance with parts, service, or accessories.

When searching for products or services to ensure that your event shines, turn to the company with more than 130 years of experience in meeting the needs of our customers – Columbus McKinnon.



THE POWER
TO PERFORM



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LODESTAR®

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!

Specs

- CAPACITIES**
1/8 to 2 TON
- LIFT**
60 feet standard
(other lifts available)
- SPEEDS**
5 to 100 feet/min
- VOLTAGES**
1-phase
& 3-phase available

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

STANDARD FEATURES

AC ELECTRO-MECHANICAL 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

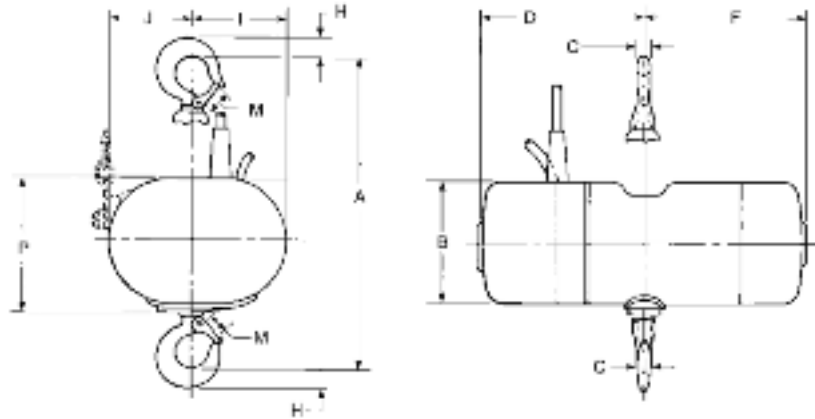
Remains locked until released by the operator, even if chain goes slack.

LODESTAR

Specifications, Dimensions & Key Components

DIMENSIONS

DRAWING LEGEND	LODESTAR MODELS		
	A, AA, B, C, E, F, H	J, JJ, L, LL	R, RR
A	16.20"	18.5625"	24.125"
B	6.08"	7.62"	7.62"
C	.67"	.875"	1.125"
D	11.80"	10.03"	10.03"
F	8.94"	13.01"	13.01"
H	1"	1.1875"	1.5"
I	4.46"	6.93"	5.57"
J	4.22"	5.69"	7.05"
M	1"	1.125"	1.3125"
P	6.62"	8.22"	8.22"



SPECIFICATIONS D8

MODEL	RATED LOAD TON*	LIFTING SPEED (FPM)	MOTOR HP	OPERATING VOLTAGE**	FULL LOAD AMPS	WORK RATING		REEVING	PROTECTION CLASS	NOISE LEVEL	LIFT (FEET)***
						HMI	FEM				
A	1/8	32	1/4	230/460-3-60	1.8/1.1	H4	2M	1	IP54	73 dB	60
AA	1/8	60	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	73 dB	60
B	1/4	16	1/4	230/460-3-60	1.8/1.1	H4	2M	1	IP54	73 dB	60
C	1/4	32	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	73 dB	60
E	1/2	8	1/4	230/460-3-60	1.8/1.1	H4	2M	2	IP54	73 dB	60
F	1/2	16	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	73 dB	60
H	1	8	1/2	230/460-3-60	2.2/1.3	H4	2M	2	IP54	73 dB	60
J	1/2	32	1	230/460-3-60	3.7/2.2	H4	2M	1	IP54	73 dB	60
JJ	1/2	64	2	230/460-3-60	7.9/5.0	H4	2M	1	IP54	73 dB	60
L	1	16	1	230/460-3-60	3.7/2.2	H4	2M	1	IP54	73 dB	60
LL	1	32	2	230/460-3-60	7.9/5.0	H4	2M	1	IP54	73 dB	60
R	2	8	1	230/460-3-60	3.7/2.2	H4	2M	2	IP54	73 dB	60
RR	2	16	2	230/460-3-60	7.9/5.0	H4	2M	2	IP54	73 dB	60

* Metric Tons
 ** Single Phase Models available
 *** Lifts other than 60ft available (Standard Units shipped less chain unless specified)



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.



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).



LIFT WHEEL

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



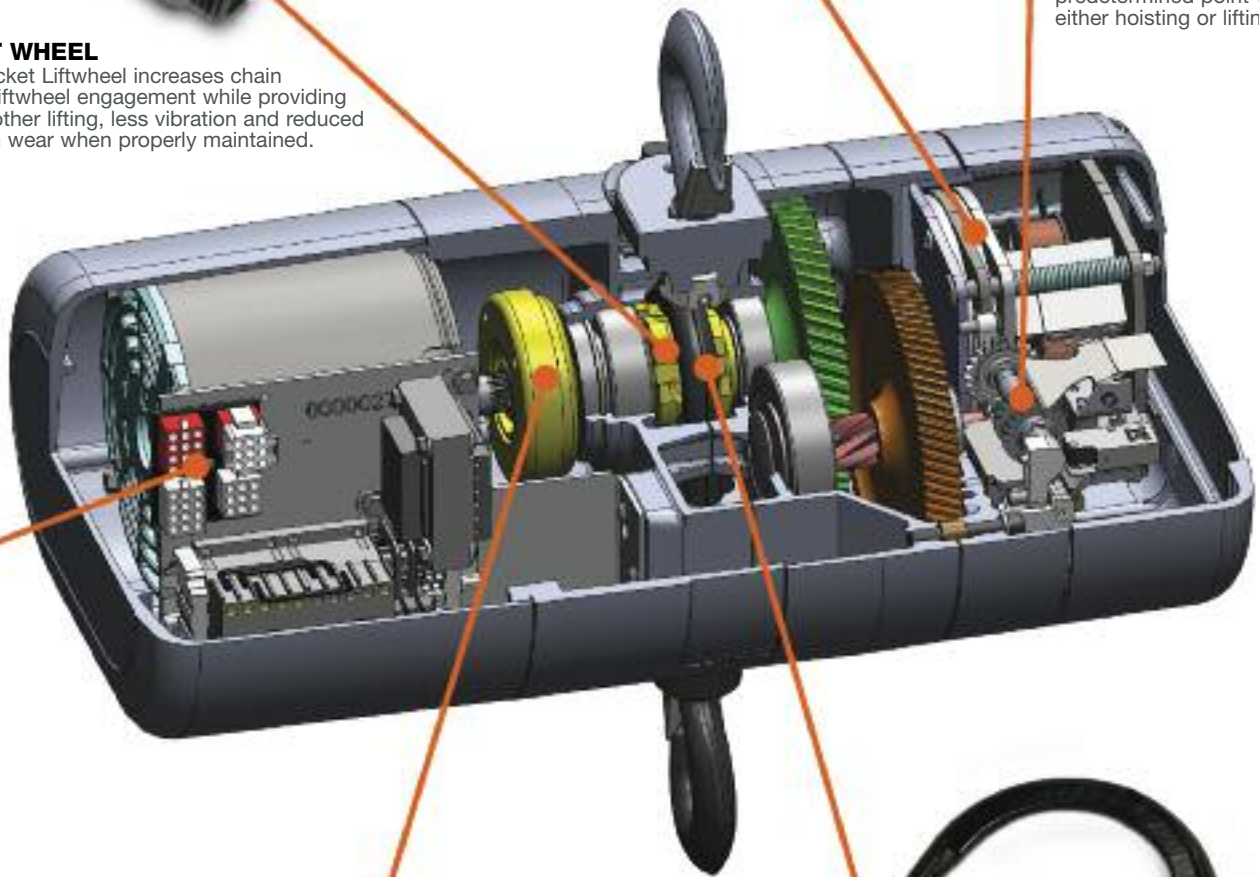
BRAKE

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



LIMIT SWITCH

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



CLUTCH

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



INTERNAL CHAIN GUIDE

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



LODESTAR D8+

CAPACITIES
70 to 1500 KG

LIFT
60 feet standard

SPEEDS
5 to 64 feet/minute

VOLTAGES
3-phase available

The Lodestar D8+ meets all Standard SR2.0 requirements. It's clutch, outside the load path, acts as a precise overload device; and design factor is 10:1 with a double brake installed. The Lodestar D8+ is in accordance with the VPLT Code of Practice.

KEY FEATURES

ELECTRO-MECHANICAL DOUBLE BRAKES

5 POCKET LIFT WHEEL
For quiet & smooth operation

68 dB OPERATIONAL NOISE
A result of the Double Brake System

GEARING
Precision machined gears heat treated for strength and durability

INTERNAL CHAIN GUIDE
PVC black coated for quieter operation

LOW VOLTAGE CONTROL
110 Volt for long cable runs without voltage drop. 24 & 48 Volt optional.

DUTY CYCLE
H-4 duty rated for heavy duty application. 2M FEM class. 50% Duty Cycle or 300 on/off per hour.

10:1 MECHANICAL DESIGN FACTOR

STANDARD FEATURES

OVERLOAD PROTECTION
Rated operational range between 125 and 150/160%. Clutch is outside the load path when disconnected from power.

DURABLE & LIGHTWEIGHT HOUSING
Cast aluminum. Black powder coated finish for low visibility.

METRIC RATED

LOAD CHAIN
Designed and manufactured by Columbus McKinnon. Zinc plated to protect against corrosion. Black phosphate finish optional.

THE INDUSTRY'S BEST LIFETIME WARRANTY

MEETS OR EXCEEDS WORLD STANDARDS
Meets German Code of Practice VPLT SR2.0

OPTIONAL FEATURES

CHAIN BAG
Easy-to-Mount Cloth Type Bags

CHAIN STOP
Mounted on load chain to prevent overtravel. Standard on Direct Control.



SPECIFICATIONS D8+

MODEL	RATED LOAD (KG)	LIFTING SPEED (FPM)	MOTOR HP	OPERATING VOLTAGE	FULL LOAD AMPS	WORK RATING HMI	RATING FEM	REEVING	PROTECTION CLASS	NOISE LEVEL	LIFT (FEET)
A	70	32	1/4	230/460-3-60	1.8/1.1	H4	2M	1	IP54	68 dB	60
AA	70	60	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	68 dB	60
B	125	16	1/4	230/460-3-60	1.8/1.1	H4	2M	1	IP54	68 dB	60
C	125	32	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	68 dB	60
E	250	8	1/4	230/460-3-60	1.8/1.1	H4	2M	2	IP54	68 dB	60
F	250	16	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	68 dB	60
H	500	8	1/2	230/460-3-60	2.2/1.3	H4	2M	2	IP54	68 dB	60
J	250	32	1	230/460-3-60	3.7/2.2	H4	2M	1	IP54	68 dB	60
JJ	500	64	2	230/460-3-60	7.9/5.0	H4	2M	1	IP54	68 dB	60
L	500	16	1	230/460-3-60	3.7/2.2	H4	2M	1	IP54	68 dB	60
LL	650	32	2	230/460-3-60	7.9/5.0	H4	2M	1	IP54	68 dB	60
R	1000	8	1	230/460-3-60	3.7/2.2	H4	2M	2	IP54	68 dB	60
RR	1300	16	2	230/460-3-60	7.9/5.0	H4	2M	2	IP54	68 dB	60
RT	1500	5	1	230/460-3-60	3.7/2.2	H4	2M	3	IP54	68 dB	60

* Lifts other than 60ft available (Standard Units shipped less chain unless specified)

See dimensions for Lodestar D8+ on Page 2

BGV-C1 SERIES

CAPACITIES
250 to 1300 KG

LIFT
60 feet standard

SPEEDS
16 to 100 feet/minute

VOLTAGES
3-phase available

The Lodestar BGV-C1 Series meets the BGV-C1 German regulation for entertainment rigging. Available with fixed or variable speed, the Lodestar BGV-C1 can be adapted to reach a System Integrity Level 3 (SIL3)*

KEY FEATURES

ELECTRO-MECHANICAL DOUBLE BRAKES

5 POCKET LIFT WHEEL
For quiet & smooth operation.

68 dB OPERATIONAL NOISE
A result of the Double Brake System

GEARING
Precision machined gears heat treated for strength and durability.

INTERNAL CHAIN GUIDE
PVC black coated for quieter operation

LOW VOLTAGE CONTROL
110 Volt for long cable runs without voltage drop. 24 & 48 Volt optional.

DUTY CYCLE
H-4 duty rated for heavy duty application. 2M FEM class. 50% Duty Cycle or 300 on/off per hour

10:1 MECHANICAL DESIGN FACTOR

UNDERLOAD PROTECTION
with load cell installed

MODULAR MULTI-PIN CONNECTOR
with multi-wire shielded cable

4 POSITION LIMIT SWITCH
with active spring micro-switch

BUILT-IN PLC
For safety function monitoring, Brake and Limit Switch integrity, Load Cell reading, Overload and Underload settings

STANDARD FEATURES

OVERLOAD PROTECTION
Rated operational range between 125 and 150/160%. Clutch is outside the load path when disconnected from power.

DURABLE & LIGHTWEIGHT HOUSING
Cast aluminum. Black powder coated finish for low visibility.

METRIC RATED LOAD CHAIN
Designed and manufactured by Columbus McKinnon. Zinc plated to protect against corrosion. Black phosphate finish optional.

THE INDUSTRY'S BEST LIFETIME WARRANTY
MEETS OR EXCEEDS WORLD STANDARDS
Meets German Regulation BGV-C1

OPTIONAL FEATURES

CHAIN BAG
Easy-to-Mount Cloth Type Bags

CHAIN STOP
Mounted on load chain to prevent overtravel.

LOAD CELL
Built in on the suspension hook

* SIL3 requires a BGV-C1 SIL3 certified controller not included.



SPECIFICATIONS BGV-C1

MODEL	RATED LOAD (KG)	LIFTING SPEED (FPM)	MOTOR HP	OPERATING VOLTAGE	FULL LOAD AMPS	REEVING	PROTECTION CLASS	NOISE LEVEL	LIFT (FEET) *
F	250	16	1/2	230/460-3-60	2.2/1.3	1	IP54	68 dB	60
J	250	32	1	230/460-3-60	3.7/2.2	1	IP54	68 dB	60
JJ	500	64	2	230/460-3-60	7.9/5.0	1	IP54	68 dB	60
L	500	16	1	230/460-3-60	3.7/2.2	1	IP54	68 dB	60
LL	650	32	2	230/460-3-60	7.9/5.0	1	IP54	68 dB	60
RR	1300	16	2	230/460-3-60	7.9/5.0	2	IP54	68 dB	60
VARISTAR	500	100	3 1/2	230/460-3-60	10.4/6.2	1	IP54	68 dB	60

* Lifts other than 60ft available (Standard Units shipped less chain unless specified)

See dimensions for BGV-C1 on Page 2



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PROSTAR

CAPACITIES
300 to 1000 LBS

LIFT
60 feet standard

SPEEDS
8 to 40 feet/minute

VOLTAGES
Single & 3-phase available

Lightweight, quiet and portable, the CM Prostar is designed and built for the unique rigging needs encountered at small venues. Featuring an overload device that protects the hoist, operator and structure from damaging overloads.

KEY FEATURES

DC ELECTRO-MECHANICAL DOUBLE BRAKES

Non-adjusting for low maintenance and quiet operation.

GEARING

Precision machined gears heat treated for strength and durability.

CHAIN GUIDE

One piece jam free for smooth operation.

HOUSING

Lightweight, cast aluminum, durable and strong black powder coated finish for low visibility.

LIFT WHEEL

CM patented 10 pocket oblique lift wheel for quiet and smooth operation.

LOW VOLTAGE CONTROL

110 Volt for long cable runs without voltage drop. 24 and 48 Volt optional.

DUTY CYCLE

H-4 duty rated, designed for heavy duty application.

STANDARD FEATURES

OVERLOAD PROTECTION

Helps prevent lifting of dangerous overloads.

CHAIN STOP

Mounted on Load Chain prevents over-travel.

METRIC RATED

LOAD CHAIN

Designed and manufactured by Columbus McKinnon. Zinc plated to protect against corrosion. Black phosphate finish optional.

THE INDUSTRY'S BEST LIFETIME WARRANTY

MEETS OR EXCEEDS WORLD STANDARDS

OPTIONAL FEATURES

CHAIN BAG

Easy-to-Mount Cloth Type Bags

DOUBLE BRAKE

ENCODER

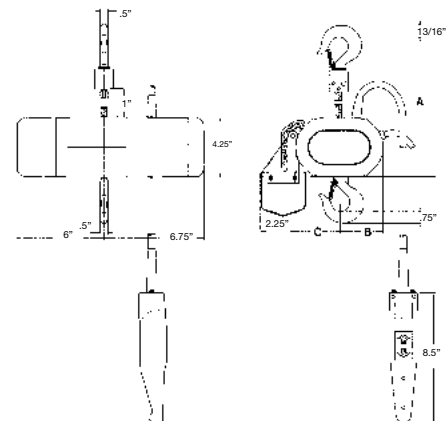


SPECIFICATIONS PROSTAR

CAPACITY	NUMBER OF CHAINS	MOTOR (HP)	LIFT SPEED (FPM)	WT. LESS LESS CHAIN (LBS)	WEIGHT 1FT OF CHAIN (LBS)	FULL LOAD AMPS	
						1-PHASE	3-PHASE
300	1	1/6	16	28	.35	3.6	.6" / 1.2"
300	1	1/6	16	28	.35		.6" / 1.1"
500	1	1/6	16	28	.35		.7" / 1.2"
500	1	1/6	12	28	.35	4	-
600	2	1/6	8	36	.7	3.6	.6" / 1.1"
600	2	1/6	8	36	.7	3.6	.6" / 1.1"
1000	2	1/6	8	36	.7		.7" / 1.2"

*415 Volt operation **220 Volt operation

MODELS (LBS)	LIFT SPEED (FPM)	OPERATING VOLTAGE			
		SINGLE PHASE		THREE PHASE	
300	16	115-1-50/60	220-1-50/60	220-3-50/60	415-3-50/60
300	24	-	-	220-3-50/60	415-3-50/60
300	40	-	-	220-3-50/60	415-3-50/60
500	12	115-1-50/60	220-1-50/60	-	-
500	16	-	-	220-3-50/60	415-3-50/60
500	20	-	-	220-3-50/60	415-3-50/60
600	8	115-1-50/60	220-1-50/60	-	-
600	12	-	-	220-3-50/60	415-3-50/60
1000	6	115-1-50/60	220-1-50/60	-	-
1000	8	-	-	220-3-50/60	415-3-50/60
1000	12	-	-	220-3-50/60	415-3-50/60



DIMENSIONS

DRAWING LEGEND	REEVING	
	SINGLE	DOUBLE
A	11"	12 1/8"
B	2 15/16"	3 1/2"
C	2 7/8"	2 3/8"



CM
PROSTAR

MANUAL HOISTS

Hand Chain & Cable Lever Hoists



HURRICANE CHAIN HOIST

- Capacities from 1/2 to 10 tons
- Standard Load Limiter for simple, automatic overload protection.
- Improved braking system is exceptionally quiet, and improves operational safety and serviceability.
- Powder coated finish for corrosion protection.
- All internal gears and pinions are heat treated steel for high strength and long life.
- Chain Guide and Stripper assures load chain alignment.
- Precision 4-Pocket Liftwheel is fully machined for better chain fit and reduced wear allowing for accurate movement of the load chain.
- Alloy steel load chain assures high strength and long wear life.
- Minimal maintenance, easily disassembled, requiring no special tools.
- Metric rated



SERIES 622 HAND CHAIN HOIST

- Capacities from 1,000 lbs. to 10 tons
- Simple, efficient, economical design.
- Compact design, low headroom and lightweight steel construction for easy installation, even in confined spaces.
- Weston-type load brake requires no lubrication.
- Hand wheel cover with guide slots minimizes jamming and slipping.
- Forged swivel hooks with latches reduce twisting of chain and unintentional unhooking of load when chain is slack.
- Standard hand chain drop is 2 feet less than lift (example: 8 ft. lift hoist has 6 ft. hand chain drop).
- One-year warranty
- Metric rated



SERIES 653 LEVER OPERATED HOIST

- Capacities from 3/4 to 6 tons.
- Hardened steel load sharing gears.
- Double pawl arrangement for assured load control.
- Two chain guide rollers for positive chain engagement.
- Weston type braking system for positive load control and positioning.
- Simple one-handed, free chaining for fast load attachment.
- Hardened steel chain for strength and long wear life.
- Forged upper and lower hooks with heavy cast steel latches.
- 5-year warranty against defects in materials and workmanship.
- Meets ASME B30.21 – Manually Lever Operated Hoist Standard and European CE Standard.
- Metric rated



SERIES 602/603 HAND CHAIN HOISTS

- Capacities: 500 lbs. & 1000 lbs.
- Plated load chain is standard.
- Weston-type load brake.
- Rubber hand grip for better comfort and security.
- Lightweight design for ease of portability. Use in confined conditions with one-hand operation.
- Forged upper and lower hooks with latches standard.
- Impact resistant, all-steel frame, gear case and cover.
- Hardened link-type alloy steel load chain for strength and long wear.
- Free wheeling feature serves to quickly attach the load.
- Metric rated



CABLE LEVER OPERATED HOIST

- Capacities: 500 lbs. to 2 tons.
- Handle design for overload protection - bends to prevent overload.
- Hooks with safety latches – 3600 swiveling hooks equipped with safety latches for positive load engagement.
- Lightweight and rugged – special cast aluminum alloy housings.
- Corrosion resistant – all stainless steel springs and shafts.
- Easy load positioning – utilize a double interlocking pawl system for precise load adjustment.
- Open construction – allows for easy cleaning and inspection.
- Self-storage cable drum – provides compact operation.



TROLLEYS & CLAMPS

Full Complement to our Hoists



PLAIN & GEARED TROLLEYS

- Capacities - Rated loads from 500 lbs to 5 tons in plain and geared models.
- Economical - Excellent low cost choice for manual and powered hoists.
- Rugged - Designed to provide superior performance and long, efficient service.
- Low Rolling Effort - Geared models have standard 6 ft. hand chain drop. Other hand chain drops available.
- Universal Hanging Clevis Accepts most hook mounted hoists.
- Adjustable - Trolley easily adjusts to fit any beam flange within range of adjustment, up to an 8.7" flange width.
- Wrap-Around Side Plates - Lugs provide additional security to increase operator safety and act as bumpers to protect wheels.
- Dual Tread Wheels - Will fit either tapered or flat beam flange within range of adjustment. Wheels include permanently lubricated, shielded ball bearings for long life and low maintenance.
- Lifetime warranty

CM SERIES 632 CLOSE RADIUS TROLLEY

- Capacities: Rated loads from 500 lbs. to 3 tons
- Negotiates radius curves as tight as 7" to 10".
- Made of highest quality rolled steel.
- Unique double row, ball bearing wheel design for greater wear capacity.
- Larger V-bars available for wider flange adjustment.
- For low headroom applications.
- Permanently lubricated bearings.
- Exclusive Dial-Fit collar quickly adapts trolley to wide range of beams and patented rails.
- Dust covers shield and protect bearings.
- Trolleys available for larger beams, rails or tracks
- Cast iron trolley guards available (except for 3 ton).
- Lifetime warranty





SERIES 633 WIDE RANGE TROLLEY

- Capacities: 1/2 to 5 tons
- Rugged steel side plates formed to include bumpers and trolley guards for added security.
- Hardened wheels and axles for added strength and durability.
- Permanently lubricated bearings.
- Fits wide range of beam applications.
- Frames connected by steel equalizer pin, secured by two nuts on each side.



SERIES 635 MOTORIZED TROLLEY

- Capacities: 250 lbs. to 3 Tons
- Speeds: 30 FPM - 75 FPM
- Hardened cast iron wheels with universal design can be used on tapered or flat flanged beams.
- Rugged steel side plates for added strength and durability.



CM BEAM CLAMP

- Working load limit up to 10 tons.
- Suitable for use with powered hoists and chain blocks.
- Load pin incorporated for load suspension with reduced headroom.
- Designed to fit flanges of most structural beams.
- All CM Screwlok girder clamps are factory proof tested and a certification is shipped with each product.

RIGGING

STAC Chain, Shackles & Accessories



CM SCREW PIN ANCHOR SHACKLES

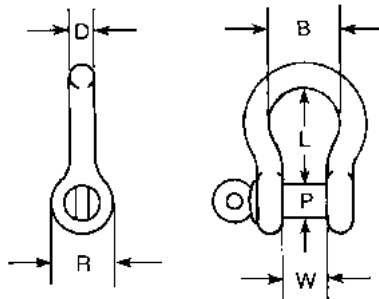
- Work Load Limits: 1/2 to 43 tons.
- Size Diameter: 3/16" to 2".
- Surface Finish - Self colored, painted or galvanized per ASTM.
- Strength and Abrasion Features - All shackle bodies and pins are forged from special steel, heat treated and tempered to give greater strength and abrasion resistance.
- Positive and Easy I.D. - All shackles are marked with size (mm and in.) and working load limit in tons.
- Strength Plus - Ultimate strength equals 5 times working load limit. Proof load equals 2.2 times working load limit.
- CE Marked

THEATRICAL SHACKLES - BLACK DIMENSIONS (INCHES)



WORKING LOAD LIMIT (TONS)	D	P	W	L	B	R
3	1/2"	5/8"	13/16"	1 15/16"	1 3/8"	1 3/8"
3 1/4	5/8"	3/4"	1 1/16"	2 3/8"	1 5/8"	1 5/8"
6 1/2	3/4"	7/8"	1 1/4"	2 7/8"	1 3/4"	2 1/8"

Screw pin standard, round pin and bolt and nut type also available.
100% Proof tested at 2.2 times the working load limit.
Ultimate strength equals 6 times the working load limit



ANCHOR SHACKLES, SCREW PIN - CARBON STEEL DIMENSIONS (INCHES)



WORKING LOAD LIMIT (TONS)	D	P	W	L	B	R
3	1/2"	5/8"	13/16"	1 15/16"	1 3/8"	1 3/8"
3 1/4	5/8"	3/4"	1 1/16"	2 3/8"	1 5/8"	1 5/8"
6 1/2	3/4"	7/8"	1 1/4"	2 7/8"	1 3/4"	2 1/8"

Available in diameters from 3/16" to 2". Available unpainted, black, or galvanized.

ANCHOR SHACKLES, SCREW PIN - ALLOY STEEL DIMENSIONS (INCHES)



WORKING LOAD LIMIT (TONS)	D	P	W	L	B	R
3 1/3	1/2"	5/8"	13/16"	1 15/16"	1 3/8"	1 3/8"
5	5/8"	3/4"	1 1/16"	2 3/8"	1 5/8"	1 5/8"
7	3/4"	7/8"	1 1/4"	2 7/8"	1 3/4"	2 1/8"

Available in diameters from 3/16" to 2". Available unpainted, black, or galvanized.

THE CM SPECIAL THEATRICAL ALLOY CHAIN (STAC)

For theatrical rigging applications where bridle adjustability is required.

SUPER STRENGTH

With working limits of 6 tons 1/2" diameter grade 80 alloy material.

HEAT TREATED

Alloy steel provides long life.

FIRE & ABRASION RESISTANT

4:1 DESIGN FACTOR

Meets or exceeds worldwide standards.

PROOF TESTED

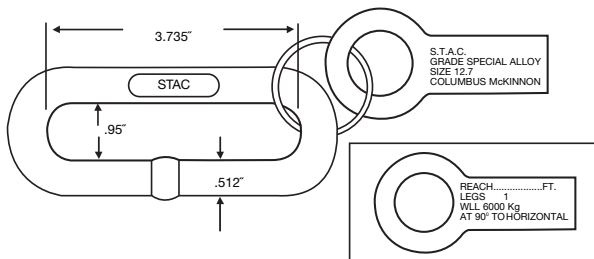
Each link proof tested to assure weld and material integrity.

POSITIVE AND EASY ID

Chain embossed with STAC and CM for easy identification as CM alloy. Also tagged with size, grade, reach and working load limit.

VERSATILITY

Link accepts up to 3/4" shackle for adjustability.



WIRE ROPE CLIPS

Wire rope clips are used to secure the end of wire rope when forming a loop, i.e., for wire rope turn back. Available in mid-grip (double saddle) and single saddle.

Mid-grip clips are available in a drop forged carbon steel material and single saddle clips are available in malleable iron or drop forged carbon steel. Available in sizes up to 1 1/2".



LAP LINKS

A quick permanent way to repair general purpose chains. Chain link and attachments are threaded onto the lap link and the link flattened. Available in a variety of sizes with stock diameters from 1/8" thru 5/8" chain. **Not to be used for overhead lifting and prohibited for all load securement applications by CVSA.**



QUICK LINKS

Afford quick and easy chain repair and/or attachment of fittings. Easy closing by threading nut onto threaded end. Reusable. Available in stock diameters ranging from 1/8" to 1/2". **Not to be used for overhead lifting, and prohibited for all load securement applications by CVSA.**



SHOULDER EYE BOLTS

- Forged steel/quenched and tempered.
- Metric sizes available.
- Recommended for straight line pull.



GRADE 100 CHAIN

- Working load limit up to 17 tons.
- Diameter sizes available from (7/32" to 3/4").
- Meets or exceeds many National and International standards.
- 25% higher working load limit when compared to Grade 80.
- Available self-colored, or grey thermal dip.
- Certification included with every drum.
- 100% proof tested.



THIMBLES-WIRE ROPE

Made specifically for wire rope turn back forming a cable loop. Used in conjunction with wire rope clips. Manufactured of hot rolled steel in accordance with FED. SPEC. FF-T-276. Available in sizes to fit a maximum of 1 1/2" diameter wire rope.



TURNBUCKLES

Turnbuckles find many uses to apply tension to wire rope or cable. They are composed of a forged body and two end fittings. End fittings can be eyes, jaws, or hooks. They must, however, be applied only up to loads within their working load limit as specified for the particular end fitting being applied.



EYE SWIVELS

- Hot dip galvanized.
- Ultimate load is 5 times working load limit.
- Meets the performance requirements of RR-C-271D, Type VII, Class 2.
- Made in USA
- Regular forged eye and eye swivels.



GRADE 30 CHAIN

- An economical utility chain for apps which do not require a high strength to weight ratio.
- Typically used as trim chain or studio chain.
 - Low carbon steel.
 - Diameter sizes available from 3/16" to 1"
 - Available as self colored, zinc plated, or hot galvanized.
 - Also available in Grades 43, 70, 80 and 100

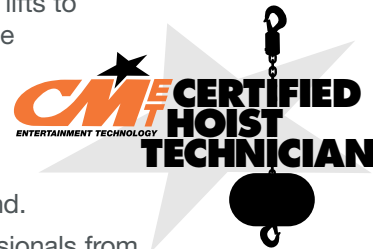


TRAINING

For decades, the Lodestar Electric Chain Hoist or "Motor" has taken on many different supporting roles in the entertainment industry. From standard lifts to sophisticated computer-automated projects, the Lodestar has been the number one choice in the market. Loyal users trust the Lodestar for unparalleled reliability and durability, show after show.

As the entertainment industry continues to evolve through technological advancements and greater production demands, the need for qualified and trained hoist technicians continues to expand.

From basic motor maintenance training to certification classes, professionals from Columbus McKinnon cover everything from hoist design and operation to maintenance tips of the trade. Participants become well versed in all aspects of hoist technology and understand practices related to safe operation and long hoist life.




In addition to the popular Lodestar, numerous rigging accessories are available as part of the CM-ET line. Theatrical shackles, lever hoists, winches, beam clamps, and wire rope clips provide riggers with numerous options, depending on the venue. Most product categories feature a wide range of capacities, allowing the user to choose the exact product for the job.



REGULATION & STANDARDS

The Lodestar meets or exceeds the most stringent standards for lifting equipment around the world, including the following: ASME B30.16; ASME HST-1; EC Machine Directive 2006/42 EC; Low Voltage Directive 73/23/EEC; EC EMC Directive 89/336/EEC; FEM 9.511 – 9.671 – 9.811 – 9.683 – 9.941 – 9.755; EN 12100-1; EN 60204-1; EN 349; EN 60204-32; EN 294; EN 55011; EN 55014; DIN 568-3; DIN 56850; BS 7905-1; BS 7906-1; CEN 15902 (ex CEN CWA 25)

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