



CM Lodestar® Standard Version

With Controls and Limit Switches



The Columbus McKinnon Lodestar® chain hoist has been designed for entertainment industry rigging operations. This allows the hoist to either climb its chain or be mounted in an upright configuration.

A range of standard operating and safety features, together with ease of maintenance, make this the market leading chain hoist for entertainment industry applications in the World.

General

- Proven over the years and designed for years of rough handling, Lodestars have supported millions of events throughout the World
- Black powder coated finish, low visibility and durability
- The Lodestar has been designed for quick disassembly using simple hand tools
- Repair parts available, regardless of when the hoist was made
- Distinctive shape prevents fouling of the hoist frame during moves
- Non-adjustable Lodestar® protector prevents over loading
- Adjustable screw limit switches give you the ability to preset stopping points
- Industrial rated for a minimum of 30 minutes duty
- Extensive range of speeds and load capacities

Electrical

- 115v control circuits allow for control runs in excess of 300 m
- Operates on 380- 460 v or 200-230 v, 3 ph, 50-60 hz
Can operate on any voltage in the world. Quick change plugs prevent improper voltage connections that can cause damage to the hoist
- Voltage tolerant- will operate with a voltage drop of up to 10%
- Finger safe wiring
- Failsafe!
- The hoist is configured so that if you lose power on L1, the transformer loses power; that in turn shuts the reversing contactor off but then sets the brake
- If you lose power to L2, the brake loses power which causes it to set
- If you lose power to L3 the transformer and brake lose power, which in turn shuts the brake down

Brake & motor

- Heavy-duty brake independent of hoist motor; eliminates heat build up and holds load securely. The brake automatically sets in the event of a power failure
- Motor torque rating of 350% of rated load; the motor can never drive through the brake which is rated for 375% torque- failsafe

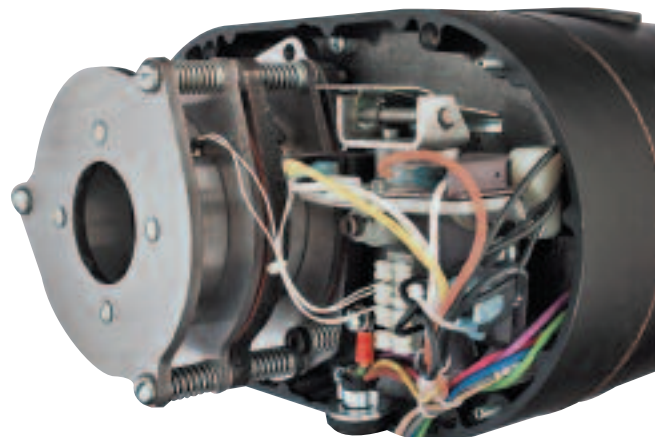
Design

- Gears have lifetime grease lubrication. Heavy duty industrial design, machined from forged steel, heat treated for extremely long life, with ball bearing supports and simple two stage reduction. Lodestar's don't drip oil
- Fully machined and heat treated alloy steel load chain wheel
- The load chain is zinc plated for chain for corrosion protection and has a 7:1 safety factor. Black chain also available
- Two piece formed heat treated alloy steel chain guides which totally encase the chain and ensure smooth entry to the load wheel
- Supplied ready for use, fully prepared and tested with lifting handles and Cee connectors fitted

Options

Double Brakes, Lodestars can be supplied with double brakes each brake can sustain the full load, this gives added safety in critical applications, either to new hoists or retro fitted to existing stock, double DC brakes have a 50-millisecond delay between first and second brake for reduced stress loading during operation and easy identification of any problems with the first brake. Designed to easily isolate brakes for individual inspection

Latchlok hooks, can be fitted to the body or chain hook, these are designed to retain slings etc under slack conditions. Hook remains locked until it is released by the operator. One handed push button release for smooth and dependable opening



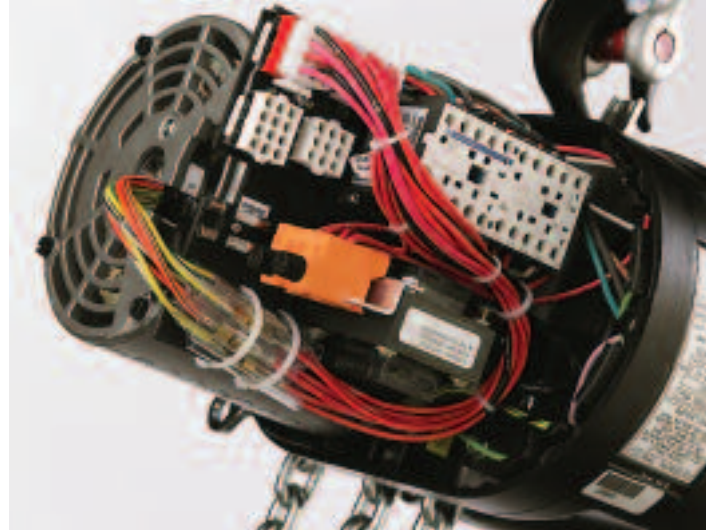
CM Double Brake



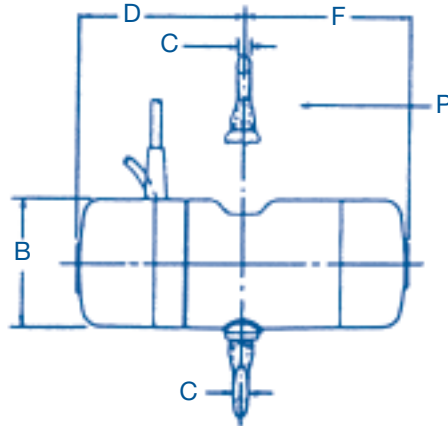
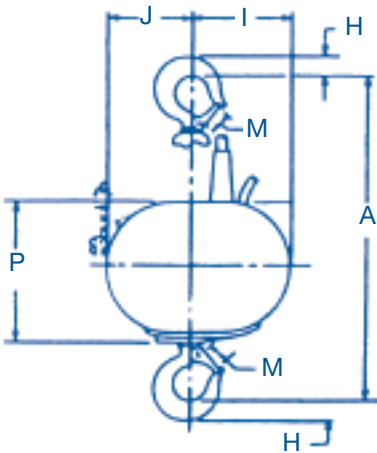
CM Lodestar® Specifications



New mechanical components and electrical wiring at brake end of lodestar



New electrical wiring at electrical end of lodestar



Dimensions

	Model A, AA, B, C, F,	Model J, L, JJ, LL	Model R	Model RR	Model RT & RRT
A	362	395	572	579	635
B	156	194	194	194	194
C	18	22	29	29	29
D	279	241	241	241	241
F	197	272	272	272	272
H	25	30	38	38	38
I	122	184	157	157	157
J	100	138	165	165	165
M	25	29	33	33	33
P	167	198	198	198	198

Specification

Lifting capacity (t)	Model	Lift speed (m/ min)	Number of chain falls	Motor power (kw)	Current (amps)	Weight of hoist (kg)	Weight per m of chain (kg)
Standard Speed Hoists							
1/4	B*	4	1	0.19	0.9	23	0.9
1/2	F*	4	1	0.37	1.1	26	0.9
1	L*	4	1	0.75	2.3	49	1.3
2	RR	4	2	1.5	4.0	54	2.6
Special Speed Hoists							
1/8	A*	8	1	0.19	0.9	24	0.9
1/8	AA*	15	1	0.37	1.1	27	0.9
1/4	C*	8	1	0.37	1.1	27	0.9
1/2	J*	8	1	0.75	2.3	49	1.3
1/2	JJ	16	1	1.5	4.0	51	1.3
1	H*	2	2	0.37	1.1	29	1.8
1	LL	8	1	1.5	4.0	51	1.3
2	R*	2	2	0.75	2.3	52	2.6
3	RT*	1.4	3	0.75	2.3	59	3.9
3	RRT	2.8	3	1.5	4.0	62	3.9

* Available in single-phase version



Hoist Options & Accessories



Double Brakes

Lodestars can be supplied with double brakes. Each brake can sustain the full load giving added safety in critical applications, either to new hoists or retro fitted to your existing stock. Double DC brake with 50-millisecond delay between first and second brake for reduced stress loading during operation and easy identification of any problems with the first brake. Designed to easily isolate brakes for individual inspection.

Silentstar

Lodestars can be equipped with a special DC braking system which dramatically reduces the noise levels by approximately 25%.

Encoders

We can supply and fit a range of Skjonberg encoders to CM Lodestar hoists; the encoder mounts inside the hoist and picks up a drive from the gearbox. A cable and XLR plug are fitted. Standard encoders normally have six pulses per revolution of the load chain wheel. Single phase and dual phase encoders available.

As part of the BGV C1 development, a range of other encoders are available.

Silencing Cover

A cover can be manufactured to fit over the hoist body to reduce noise during operation.

Weather Cover

Covers can be manufactured to fit over the hoist body to help protect against rain ingress (see photo).

Embroidery

Chain bags and weather covers can be embroidered with your company logos etc.

Further details and demonstrations on request.



Embroidered Chain Bag



Weather cover with embroidered company details available

We offer several standard chain bags for various uses, both on the Lodestar®, hand chain blocks and other chain hoists.

Prostar Chain Bags

Rectangular bags with a support mechanism which bolts into a bracket fitted to the hoist, suitable for upright or inverted hoist use.

Specification

Hoist type	Bag size	Top frame dimensions (mm)	Length (mm)	Chain capacity 50% full (m)	Chain capacity 75% full (m)
Prostar	Small	180 x 85	180	14	21
Prostar	Large	180 x 85	280	22	33



Standard Lodestar Chain Bags for inverted use (climbing)

A bucket type bag, with straps and safety hook which locates onto an eyebolt which is rated for side loading (not all are). Designed for inverted or climbing hoist use only.

Specification

Hoist frame size	Bag size	Frame diameter (mm)	Length (mm)	Chain capacity 50% full (m)
F	Small	260	360	32.0
F	Medium	300	380	46.1
L	Medium	300	380	27.7
L	Large	300	420	35.7
L	X large	300	750	71.0



Black Lodestar Strap Bags for upright use (motor up)

This bag is rectangular with a steel top frame; the bag is suspended from two straps with ratchet assemblies which wrap around the Lodestar®. It also has a bracket to fix the bag to the hoist eyebolt retaining its position. Designed for upright hoist use only.

Specification

Hoist frame size	Bag size	Frame dimensions (mm)	Length (mm)	Chain capacity 50% full (m)	Chain capacity 75% full (m)
F	Small	266 x 96	480	24.7	37.0
F	Large	266 x 96	660	41.7	62.0
L	Small	266 x 147	470	24.5	37.0
L	Large	266 x 147	680	35.7	54.0



ARS Chain Bags for Lodestar - Upright Or Inverted Use

These bags are available in various sizes dependent on hoist type and chain length. It is a rectangular bag with two suspension hooks. These attach to a bracket at the chain anchorage point. The ARS bag can be used for both upright or inverted hoist use, making this an extremely useful multi purpose bag.

Specification

Hoist type	Size	Frame dimensions (mm)	Length (mm)	Chain capacity 75% full (m)
SF 80	Small- F	200 x 140	508	24
SF 150	Small- F	200 x 140	812	45
LF 100	Large- L	254 x 140	635	30
LF 150	Large- L	254 x 140	812	45
LF 200	Large- L	254 x 140	1016	60
SR 400	Large- L	254 x 140	1524	120

