



# *Industrial Lifting Equipment*



# Electric Chain Hoists



Ingersoll Rand Quantum QCH Series electric chain hoists bring outstanding control, reliability, long life, and safety to your load handling operations. Available in both single and dual-speed options — as well as lifting capacities ranging from 0.125 to 5 ton — Quantum QCH Series hoists meet or exceed H3 duty-cycle standards for world-class performance. They are also the only hoist family UL and C-UL listed, with third-party evaluation limiting liability.

Quantum QCH Series hoists feature geared limit switches and pendants with e-stops as standard. They offer low-headroom profiles and are easily customized to your application.



# Quantum Series

0.125 to 5 metric ton lifting capacities

## Features

**Smooth, quiet operation** — Helical / spur gear combination provides smooth movement and quiet, reliable operation. A floating chain guide precisely feeds chain onto a machine-matched, five-pocket chain wheel. This system ensures smooth, jam-resistant operation.

**Durability** — Quantum load chains are precision-formed from alloy steel, case hardened and zinc-plated. The plating is an Ingersoll Rand proprietary process that resists corrosion better than any standard plating offered for load chain.

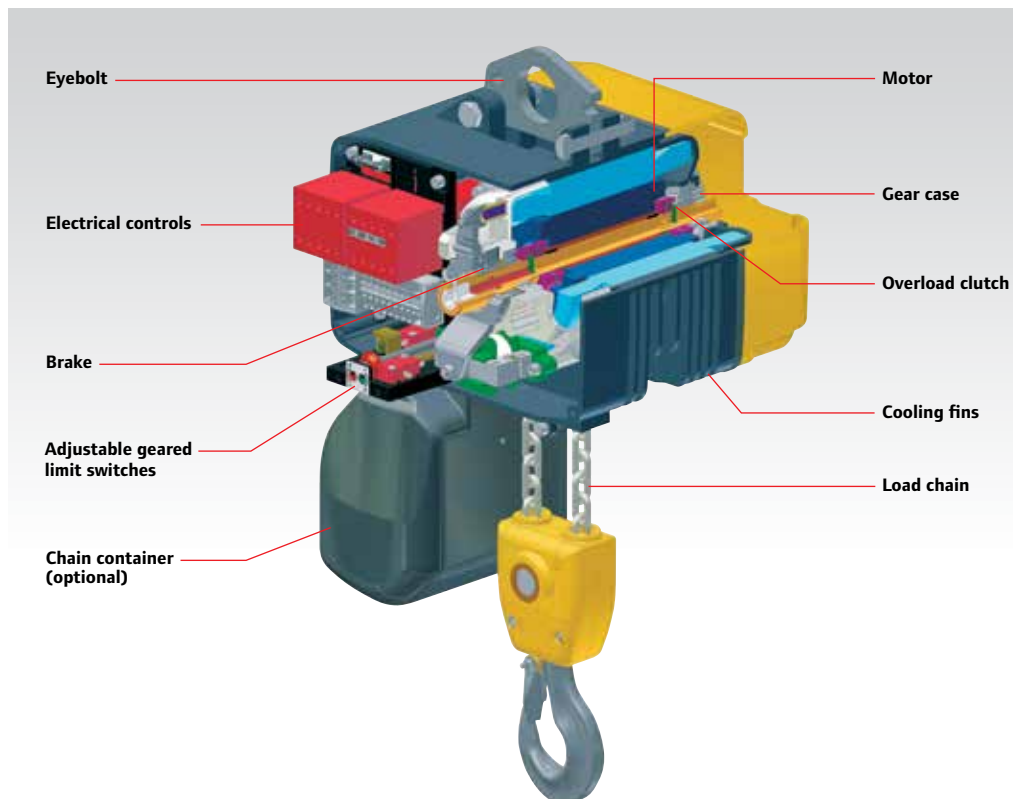
**Reliability** — With high starting torque, Quantum motors use a totally enclosed non-ventilated (TENV) squirrel cage design. Class F insulation provides a total thermal rating of 145°C at a 1.0 service factor, instead of the more common Class B insulation of 120° C.

**Safety** — State-of-the-art AC motor brakes with all-steel discs. Multiple stacking significantly increases braking surface area, reducing wear and extending life. Quantum brake discs are guaranteed for the life of the hoist. The overload clutch is factory-set to limit Quantum from lifting loads in excess of 150% of rated hoisting capacity.

**Ergonomics** — Safety-first pendent control handles are comfortable and fit securely in the operator's hand. Each low-voltage (42-volt) control handle integrates a large, red emergency stop button. Operating buttons are clearly marked with high contrast arrows, feature soft-push action, and are horizontally aligned for easier operation.



Electric Chain Hoists



# Quantum Series

0.125 to 5 metric ton lifting capacities

## Quantum Series Specifications

Model	Capacity		# Falls	Motor hp	Hook Mount Headroom		Trolley Mount Headroom		Lifting Speed Rated Load or No Load		Lowering Speed Rated Load or No Load		Chain Weight (per foot of lift)		Net Weight w/10 ft of lift	
	lb	metric tons			in	mm	in	mm	ft/min	m/min	ft/min	m/min	lb	kg	lb	kg
<b>THREE-PHASE (SINGLE SPEED)</b>																
QCH50-1NS12	275	0.125	1	1	17.1	435	17.4	441.3	32	9.8	32	9.8	0.4	0.2	45	20.4
QCH50-1NS25	550	0.25	1	1	17.1	435	17.4	441.3	32	9.8	32	9.8	0.4	0.2	45	20.4
QCH50-1NS50	1,100	0.50	1	1	17.1	435	17.4	441.3	32	9.8	32	9.8	0.4	0.2	45	20.4
QCH50-2NS100	2,200	1	2	1	18.8	476.3	18.9	481	16	4.9	16	4.9	0.7	0.3	50	22.7
QCH100-1NS100	2,200	1	1	2.1	21.8	553.2	21.5	545.3	32	9.8	32	9.8	0.7	0.3	99	44.9
QCH100-2NS200	4,400	2	2	2.1	24.7	627.1	24.4	619.9	16	4.9	16	4.9	1.4	0.6	110	49.9
QCH300-1NS200	4,400	2	1	4.2	25.4	646.1	26.4	671.5	32	8	32	9.8	1.5	0.7	143	64.9
QCH200-2NS300	6,600	3	2	3.2	28.7	727.9	29.8	756.4	16	4.9	16	4.9	3	1.4	161	73
QCH300-2NS400	8,800	4	2	4.2	28.7	727.9	29.7	753.3	16	4.9	16	4.9	3	1.4	168	76.2
QCH500-2NS500	11,000	5	2	4.2	28.7	727.9	29.7	754.9	12.5	3.8	12.5	3.8	3	1.4	168	76.2
<b>THREE-PHASE (DUAL SPEED)</b>																
QCH50-1ND12	275	0.125	1	1	17.1	435	17.4	441.3	32 / 8	9.8 / 2.4	32 / 8	9.8 / 2.4	0.4	0.2	50	22.7
QCH50-1ND25	550	0.25	1	1	17.1	435	17.4	441.3	32 / 8	9.8 / 2.4	32 / 8	9.8 / 2.4	0.4	0.2	50	22.7
QCH50-1HD25	550	0.25	1	1	17.1	435	17.4	441.3	50 / 12	15.2 / 3.7	50 / 12	15.2 / 3.7	0.4	0.2	50	22.7
QCH50-1ND50	1,100	0.50	1	1	17.1	435	17.4	441.3	32 / 8	9.8 / 2.4	32 / 8	9.8 / 2.4	0.4	0.2	50	22.7
QCH50-2ND100	2,200	1	2	1	18.8	476.3	18.9	481	16 / 4	4.9 / 1.2	16 / 4	4.9 / 1.2	0.7	0.3	55	24.9
QCH100-1ND100	2,200	1	1	2.1	21.8	553.2	21.5	545.3	32 / 8	9.8 / 2.4	32 / 8	9.8 / 2.4	0.7	0.3	101	45.8
QCH100-2ND200	4,400	2	2	2.1	24.7	627.1	24.4	619.9	16 / 4	4.9 / 1.2	16 / 4	4.9 / 1.2	1.4	0.6	112	50.8
QCH300-1ND200	4,400	2	1	4.2	25.4	646.1	26.4	671.5	32 / 8	9.8 / 2.4	32 / 8	9.8 / 2.4	1.5	0.7	147	66.7
QCH200-2ND300	6,600	3	2	3.2	28.7	727.9	29.8	756.4	16 / 4	4.9 / 1.2	16 / 4	4.9 / 1.2	3	1.4	165	74.8
QCH300-2ND400	8,800	4	2	4.2	28.7	727.9	29.7	753.3	16 / 4	4.9 / 1.2	16 / 4	4.9 / 1.2	3	1.4	172	78
QCH500-2ND500	11,000	5	2	4.2	28.7	727.9	29.7	754.9	12.5 / 3	3.8 / 0.9	12.5 / 3	3.8 / 0.9	3	1.4	172	78



Eyebolt and hook suspension



Motorized trolley suspension



PT Series plain trolley with hook suspension

# Quantum Series

## 0.125 to 5 metric ton lifting capacities

### Handy Handle control — QCH50 models only

This ergonomically designed control enables precise operation at the hook and acts as a robotic power extension of the operator's arm. The load can be positioned and controlled with one hand, freeing the other to position the load.

The Handy Handle can be ordered separately as part of a kit, to convert any 0.125-, 0.25-, and 0.50-ton single-line Quantum hoist, or as an "H" control option on a new hoist. Each Handy Handle comes standard with single- or dual-speed thumb control lever switches and red emergency stop button. A socket connection at the bottom allows the standard hook to be easily replaced by custom-end effectors or grabs.



### Quantum Series Motorized Trolley Specifications – M1, M2, and M4

Model	Traverse Speed ft/min (m/min)			Amperage			Min. in (mm)	Min. in (mm)	Flange Width in (mm)				Weight lb (kg)
	M1	M2	M4	230V	460V	575V	Beam Height	Curve Radius	A	B	C	D	
QCH50-1NS12	48 (14.6)	48/16 (14.6/4.9)	72/24 (21.9/7.3)	1.5	0.75	0.6	4 (101.6)	48 (1219.2)	2.0 - 3.9 (50.8 - 99.1)	4.0 - 5.9 (101.6 - 149.9)	6.0 - 7.8 (152.4 - 198.1)	7.9 - 9.4 (200.7 - 238.8)	60 (27.2)
QCH50-1ND12													
QCH50-1NS25													
QCH50-1ND25													
QCH50-1NS50													
QCH50-1ND50													
QCH50-2NS100													
QCH50-2ND100													
QCH100-1NS100													
QCH100-1ND100													
QCH100-2NS200													
QCH100-2ND200													
QCH300-1NS200													
QCH300-1ND200													
QCH200-2NS300													
QCH200-2ND300													
QCH300-2NS400													
QCH300-2ND400													
QCH500-2NS500	3	1.5	1.2										
QCH500-2ND500													

Electric Chain Hoists

# Quantum Series

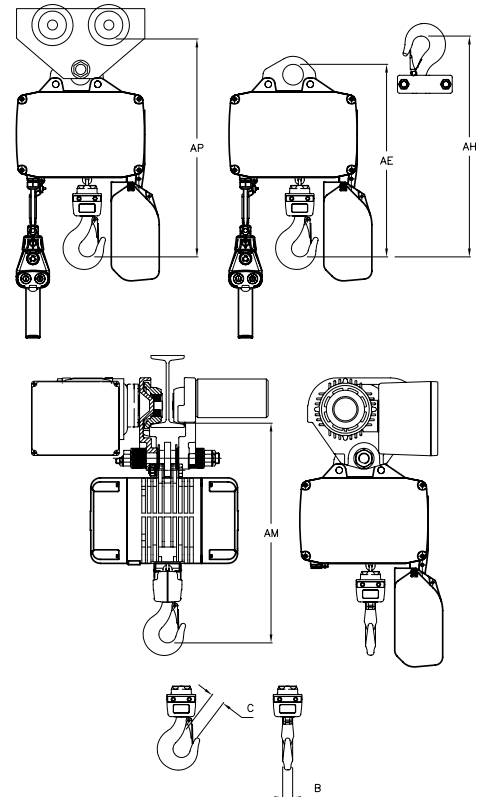
0.125 to 5 metric ton lifting capacities

## Quantum Series Dimensions

QCH Base Model	Capacity			Headroom											
	lb	Metric Tons	Falls	Eyebolt (AE)		Hook (AH)		Push Trolley (AP)		Motor Trolley (AM)		Hook (B)		Hook (C)	
				in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
<b>THREE PHASE (SINGLE SPEED)</b>															
QCH50-1NS12	275	0.125	1	14.8	375.9	17.1	434.3	17.4	442	16.8	426.7	0.9	22.9	1	25.4
QCH50-1NS25	550	0.25	1	14.8	375.9	17.1	434.3	17.4	442	16.8	426.7	0.9	22.9	1	25.4
QCH50-1NS50	1,100	0.50	1	14.8	375.9	17.1	434.3	17.4	442	16.8	426.7	0.9	22.9	1	25.4
QCH50-2NS100	2,200	1	2	16.4	416.6	18.8	477.5	18.9	480.1	18.3	464.8	0.9	22.9	1	25.4
QCH100-1NS100	2,200	1	1	19	482.6	21.8	553.7	21.5	546.1	21.3	541	1	25.4	1.3	33
QCH100-2NS200	4,400	2	2	21.9	556.3	24.7	627.4	24.4	619.8	24.3	617.2	1	25.4	1.3	33
QCH300-1NS200	4,400	2	1	23.9	607.1	25.4	645.2	26.4	670.6	26.2	665.5	1.5	38.1	1.6	40.6
QCH200-2NS300	6,600	3	2	27.2	690.9	28.7	729	29.8	756.9	29.3	744.2	1.5	38.1	1.6	40.6
QCH300-2NS400	8,800	4	2	27.2	690.9	28.7	729	29.7	754.4	29.3	744.2	1.5	38.1	1.6	40.6
QCH500-2NS500	11,000	5	2	27.2	690.9	28.7	729	29.7	754.4	29.3	744.2	1.5	38.1	1.6	40.6
<b>THREE PHASE (DUAL SPEED)</b>															
QCH50-1ND12	275	0.125	1	14.8	375.9	17.1	434.3	17.4	442	16.8	426.7	0.9	22.9	1	25.4
QCH50-1ND25	550	0.25	1	14.8	375.9	17.1	434.3	17.4	442	16.8	426.7	0.9	22.9	1	25.4
QCH50-1HD25	550	0.25	1	14.8	375.9	17.1	434.3	17.4	442	16.8	426.7	0.9	22.9	1	25.4
QCH50-1ND50	1,100	0.50	1	14.8	375.9	17.1	434.3	17.4	442	16.8	426.7	0.9	22.9	1	25.4
QCH50-2ND100	2,200	1	2	16.4	416.6	18.8	477.5	18.9	480.1	18.3	464.8	0.9	22.9	1	25.4
QCH100-1ND100	2,200	1	1	19	482.6	21.8	553.7	21.5	546.1	21.3	541	1	25.4	1.3	33
QCH100-2ND200	4,400	2	2	21.9	556.3	24.7	627.4	24.4	619.8	24.3	617.2	1	25.4	1.3	33
QCH300-1ND200	4,400	2	1	23.9	607.1	25.4	645.2	26.4	670.6	26.2	665.5	1.5	38.1	1.6	40.6
QCH200-2ND300	6,600	3	2	27.2	690.9	28.7	729	29.8	756.9	29.3	744.2	1.5	38.1	1.6	40.6
QCH300-2ND400	8,800	4	2	27.2	690.9	28.7	729	29.7	754.4	29.3	744.2	1.5	38.1	1.6	40.6
QCH500-2ND500	11,000	5	2	27.2	690.9	28.7	729	29.7	754.4	29.3	744.2	1.5	38.1	1.6	40.6

## Quantum Series Weight

QCH Base Model	Eyebolt or Hook		Push Trolley		Motor Trolley	
	lb	kg	lb	kg	lb	kg
<b>THREE PHASE (SINGLE SPEED)</b>						
QCH50-1NS12	45	20.4	65	29.5	105	47.6
QCH50-1NS25	45	20.4	65	29.5	105	47.6
QCH50-1NS50	45	20.4	65	29.5	105	47.6
QCH50-2NS100	50	22.7	80	36.3	110	49.9
QCH100-1NS100	99	44.9	129	58.5	173	78.5
QCH100-2NS200	110	49.9	165	74.8	184	83.4
QCH300-1NS200	143	64.9	198	89.8	257	116.6
QCH200-2NS300	161	73	236	107	281	127.4
QCH300-2NS400	168	76.2	274	124.3	282	127.9
QCH500-2NS500	168	76.2	274	124.3	282	127.9
<b>THREE PHASE (DUAL SPEED)</b>						
QCH50-1ND12	50	22.7	70	31.7	110	49.9
QCH50-1ND25	50	22.7	70	31.7	110	49.9
QCH50-1HD25	50	22.7	70	31.7	110	49.9
QCH50-1ND50	50	22.7	70	31.7	110	49.9
QCH50-2ND100	55	24.9	85	38.5	115	52.2
QCH100-1ND100	101	45.8	131	59.4	175	79.4
QCH100-2ND200	112	50.8	167	75.7	186	84.4
QCH300-1ND200	147	66.7	202	91.6	261	118.4
QCH200-2ND300	165	74.8	240	108.8	285	129.3
QCH300-2ND400	172	78.0	278	126.1	286	129.7
QCH500-2ND500	172	78.0	278	126.1	286	129.7



# Quantum Series

0.125 to 5 metric ton lifting capacities

## ► HOW TO ORDER

Example: QCH100-2NS200M1-21-17B4C

QCH100-2NS200

M1

21

17

B

4

C

### Base model

#### 3 phase single speed

QCH50-1NS12  
QCH50-1NS25  
QCH50-1NS50  
QCH50-2NS100  
QCH100-1NS100  
QCH100-2NS200  
QCH300-1NS200  
QCH200-2NS300  
QCH300-2NS400  
QCH500-2NS500

#### 3 phase dual-speed

QCH50-1ND12  
QCH50-1ND25  
QCH50-1HD25  
QCH50-1ND50  
QCH50-2ND100  
QCH100-1ND100  
QCH100-2ND200  
QCH300-1ND200  
QCH200-2ND300  
QCH300-2ND400  
QCH500-2ND500

### Suspension type

E = Eye bolt  
H = Hook  
P = Plain trolley ("PT" Series)  
M1 = Motorized trolley (normal speed 48 fpm)  
M2 = Motorized trolley (normal/dual speed 48/16 fpm)  
M4 = Motorized trolley (high/dual speed 96/24 fpm)

### Lift (feet)

10 = Standard  
15 = Standard  
20 = Standard  
XX = Specify length

### Pendent drop (feet)

6 = Standard  
11 = Standard  
16 = Standard  
XX = Specify length

### Flange width (See catalog for specifications)

- = Eye bolt or hook mount  
A = See flange width chart  
B = See flange width chart  
C = See flange width chart  
D = See flange width chart

### Voltage

3 = 230/3/60  
4 = 460/4/60  
5 = 575/3/60  
6 = 380/3/50\*  
(\* = these units have extended lead times and are not UL or C-UL (Canadian UL) listed)

### Options

B = Trolley brake  
C = Chain container  
E = External strain relief  
F = XX, specify power cord length (standard is 15 ft on E, H, and P, and 3 ft on M1-M4 suspensions)  
H = Handy Handle (QCH50 single fall only)  
K = 110 volt control (3 phase models only)  
P = Pendent with vertical aligned buttons  
P2 = Pendent with 2 extra vertical aligned buttons  
P4 = Pendent with 4 extra vertical aligned buttons  
Y = Bullard top hook  
Z = Bullard bottom hook

# ULE2 Ultra-Lo Series

0.25 to 24 ton lifting capacity

## Features

The complete line of low-headroom Ingersoll Rand worm-gear-driven electric and air hoists provides smooth, quiet, trouble-free operation. All models are tested in accordance with ANSI B30.16 overhead hoist standards.

- Large-diameter chain wheels for improved chain wear
- Worm gear drive for maximum control and durability
- Plain, motorized, and hand chain trolleys
- Dual up and down limits for added safety
- NEMA-12 enclosure for weather-resistant pendant controls
- Design flexibility allows custom configurations to be offered and priced on request
- Dual- and self-braking worm drive and spring-applied motor brake
- Explosion-proof units and spark- and corrosion-resistant features can be customized to fit applications and priced on request
- Quick response time to quotes and reduced lead time on delivery



## ULE2 Electric Series Specifications

Model	Capacity			Motor hp	Trolley Mount Headroom		Lifting Speed		Lowering Speed		Net Weight Plain Trolley		Net Weight Geared Trolley		Net Weight Motorized Trolley	
	lb	U.S. tons	# Falls		in	mm	Rated Load or No Load ft/min	Rated Load or No Load m/min	Rated Load or No Load ft/min	Rated Load or No Load m/min	lb	kg	lb	kg	lb	kg
ULE2_010-8-6	2,000	1	N/A	2	7	177.8	10	3.1	10	3.1	440	199.5	470	213.2	480	217.7
ULE2_015-8-6	3,000	1.5	N/A	2	7	177.8	10	3.1	10	3.1	440	199.5	470	213.2	480	217.7
ULE2_020-8-6	4,000	2	N/A	2	7	177.8	10	3.1	10	3.1	440	199.5	470	213.2	480	217.7
ULE2_030-8-6	6,000	3	N/A	2	8	203.2	5	1.5	5	1.5	540	244.9	570	258.5	580	263
ULE2_040-8-6	8,000	4	N/A	2	8.5	215.9	5	1.5	5	1.5	540	244.9	570	258.5	580	263
ULE2_050-8-6	10,000	5	N/A	4	9.5	241.3	7	2.1	7	2.1	1,280	580.5	1,340	607.7	1,310	594.1
ULE2_060-8-6	12,000	6	N/A	4	9.5	241.3	7	2.1	7	2.1	1,280	580.5	1,340	607.7	1,310	594.1
ULE2_080-8-6	16,000	8	N/A	4	12	304.8	4	1.2	4	1.2	1,350	612.2	1,480	671.2	1,400	634.9
ULE2_100-8-6	20,000	10	N/A	4	12.5	317.5	3.5	1.1	3.5	1.1	1,730	784.6	1,810	820.9	1,780	807.3
ELE2_120-8-6*	24,000	12	N/A	4	12.5	317.5	3.5	1.1	3.5	1.1	1,730	784.6	1,810	820.9	1,780	807.3
ULE2_160-8-6*	32,000	16	N/A	4	14.5	368.3	2	0.6	2	0.6	2,300	1043.1	2,380	1079.4	2,350	1065.8
ULE2_200-8-6*	40,000	20	N/A	4	18	457.2	1.7	0.5	1.7	0.5	2,650	1201.8	2,810	1274.4	2,750	1247.2
ULE2_240-8-6*	48,000	24	N/A	4	18	457.2	1.7	0.5	1.7	0.5	2,650	1201.8	2,810	1274.4	2,750	1247.2

### Notes:

Standard lift is 10 ft.

\* For over 10 U.S. ton capacity, straight track operation is recommended.

Curved radius must be specified on orders, since wheels must be modified to negotiate curves.

Curves less than minimum radius may be fitted upon application. Consult Customer Service for further information.

ULA2 air hoist specifications and dimensions are similar. Consult Customer Service if accurate data is required.



# ULE2 Ultra-Lo Series

0.25 to 24 ton lifting capacity

## ULE2 Series Dimensions†

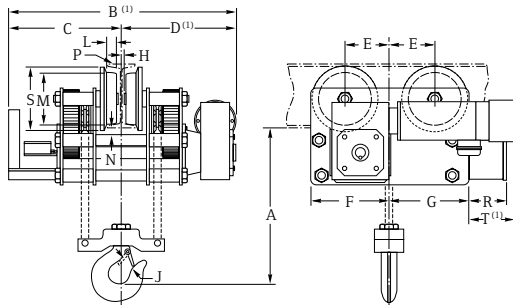
Model	A in	B in	C in	D in	E in	E1 in	F in	G in	H in	J in	L in	M in	N in	P* in	R in	S in	T** in
ULE2_010-8-6	7	33	16.5	16.5	7.8	7.8	12	10	0.6	1.1	1.1	4.5	0.9	S6X12.5	6	6	9.3
ULE2_015-8-6	7	33	16.5	16.5	7.8	7.8	12	10	0.6	1.1	1.1	4.5	0.9	S6X12.5	6	6	9.3
ULE2_020-8-6	7	33	16.5	16.5	7.8	7.8	12	10	0.6	1.1	1.1	4.5	0.9	S6X12.5	6	6	9.3
ULE2_030-8-6	8	33	16.5	16.5	9	9	14	13	0.6	1.3	1.3	6.4	1	S8X18.4	6	8	5.5
ULE2_040-8-6	8.5	33	16.5	16.5	9	9	14	13	0.6	1.7	1.3	6.4	1	S8X18.4	6	8	5.5
ULE2_050-8-6	9.5	50.5	23.5	24.9	7.4	7.4	12	15	0.9	1.7	1.4	7.2	0.9	S10X25.4	6	9	12
ULE2_060-8-6	9.5	50.5	23.5	24.9	7.4	7.4	12	15	0.9	1.7	1.4	7.2	0.9	S10X25.4	6	9	12
ULE2_080-8-6	12	50.5	23.5	24.9	8.4	8.9	14	13.5	0.6	2.1	1.7	8.3	1.1	S10X25.4	6	10	12
ULE2_100-8-6	12.5	50.5	23.5	24.9	8.5	9.8	15.6	14.4	0.6	2.3	1.8	9.8	0.9	S12X31.8	6	11.7	10
ULE2_120-8-6	12.5	50.5	23.5	24.9	8.5	9.8	15.6	14.4	0.6	2.3	1.8	9.8	0.9	S12X31.8	6	11.7	10
ULE2_160-8-6	14.5	54.5	25.5	26.9	11.9	11.9	18.6	18.6	0.6	3	2	11.8	1	S15X42.9	6	13.5	3.5
ULE2_200-8-6	18	54.5	25.5	26.9	12.1	12.4	19.3	19	0.8	3.6	2	11.8	1	S18X54.7	6	13.5	2.5
ULE2_240-8-6	18	54.5	25.5	26.9	12.1	12.4	19.3	19	0.8	3.6	2	11.8	1	S18X54.7	6	13.5	2.5

**Notes:**

†ULA2 air hoist specifications and dimensions are similar. Consult Customer Service for further information.

\*Minimum standard I-beam for proper wheel running clearance. Contact factory for smaller beams. Customer must verify beam is adequate for applied loads.

\*\*For standard motor and brake only.



**▶ HOW TO ORDER**

Example: ULE2-MT-010-10-6TW

<p><b>ULE2</b></p> <p>Base model ULA2 = Air ULE2 = Electric</p>	<p><b>MT</b></p> <p>Trolley options PT = Plain tapered PF = Plain flat MT = Motorized tapered MF = Motorized flat GT = Geared tapered GF = Geared flat</p>	<p><b>010</b></p> <p>Capacity 010 = 909 kg = 2,000 lb 015 = 1364 kg = 3,000 lb 020 = 1818 kg = 4,000 lb 030 = 2727 kg = 6,000 lb 040 = 3636 kg = 8,000 lb 050 = 4545 kg = 10,000 lb 060 = 5455 kg = 12,000 lb 080 = 7273 kg = 16,000 lb 100 = 9091 kg = 20,000 lb 120 = 10909 kg = 24,000 lb 160 = 14545 kg = 32,000 lb 200 = 18182 kg = 40,000 lb 240 = 21818 kg = 48,000 lb</p>	<p><b>10</b></p> <p>Lift (ft) 10 = 10 ft (standard) XX = Specify length</p>	<p><b>6</b></p> <p>Pendent drop 6 = 6 ft (standard) XX = Specify length</p>	<p><b>TW</b></p> <p>Options C = Chain container X = Electric mainline power interrupt and pendent buttons W = Electric (NEMA 4) watertight control box, limit switches and pendent T = Electric thermal overload relays — each single speed motor L = Electric fused control per leg of transformer secondary E = Electric motor fuses — single speed hoist F = Electric motor fuses — single speed hoist and trolley</p>
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**NOTES:**

S\*COR\*E options and marine finish are available.  
Consult factory for flange widths over - 6" up to 1 t - 6.625" up to 1.50 and 2 t 7.25" on 3 and 4 t - 8.25" on 5 to 12 t.  
Ultra-Lo hoists are not adjustable for varying beam sizes.  
Beam type, size, height, width and curve radius required for all orders.  
Customer to verify their beam is adequate for loads applied.

Electric Chain Hoists