



ELECTRIC CHAIN HOIST

500kg~20T



SERIES

Construction & Features

Capacity Range: 500Kg to 20 T

Power Supply: 220/380V-50/60Hz-3Ø

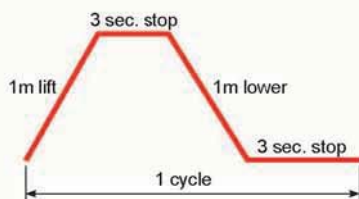
(Other voltages available as an option)

Classification: ASME H4, ISO-M5, FEM 2M

Duty Rating:

■ Short time rating

This rating indicates how long the hoist can be operated continuously on the below cycle, assuming continued operation for a short time span.



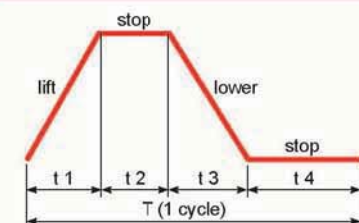
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- Single speed: 60 min
- Dual speed: 30/10 min

■ Intermittent Rating (Percent ED)

Max. Number of Starts Per Hour

This rating indicates the allowable ratio of motor ON time to OFF time, and starts per hour for a hoist operates continuously at 63%* of rated capacity on the cycle below, assuming continued operation or repeated starting over a long time span.



©Specified for 63% of W.L.L.

In case of single speed :

$$\%ED = \frac{\text{Motor ON time } (t_1 + t_3)}{T \text{ (1 cycle)}} \times 100$$

T = 1 cycle (t1+t2-t3+t4)
(Within 10 minutes)

%ED and Max. number of starts per hour

- Single speed: 60%ED, 360 starts/hr
- Dual speed: 40/20%ED, 120/240 starts/hr

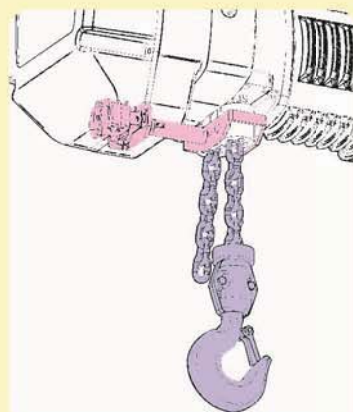
*Note: Intermittent rating reduced to: 240 SH 40% ED at 125% rated capacity.



Mechanical Brake with friction clutch

THAC's mechanical brake combined with a friction clutch. The dual safety device can protect human being & property.

Standard for USK



Upper/Lower Limit Switch

The limit switch prevents overwinding which stops the hoist in case of overlifting or overlowering.

Standard for USS & USK

Motor Brakes

- The advanced magnetic cone brake (US Series only) provides accurate and reliable stopping, even in the event of a total power loss. It's as simple as motor off, brake on; motor on, brake off.
- Holding brake can be manually released to lower the load in the event of a power failure or malfunction without special tools.
- Brake lining (asbestos-free) with a life of more than 1 million actuations.

Chain Guide

- High quality design provides quiet and smooth guiding of the load chain.

Heavy Duty Motor

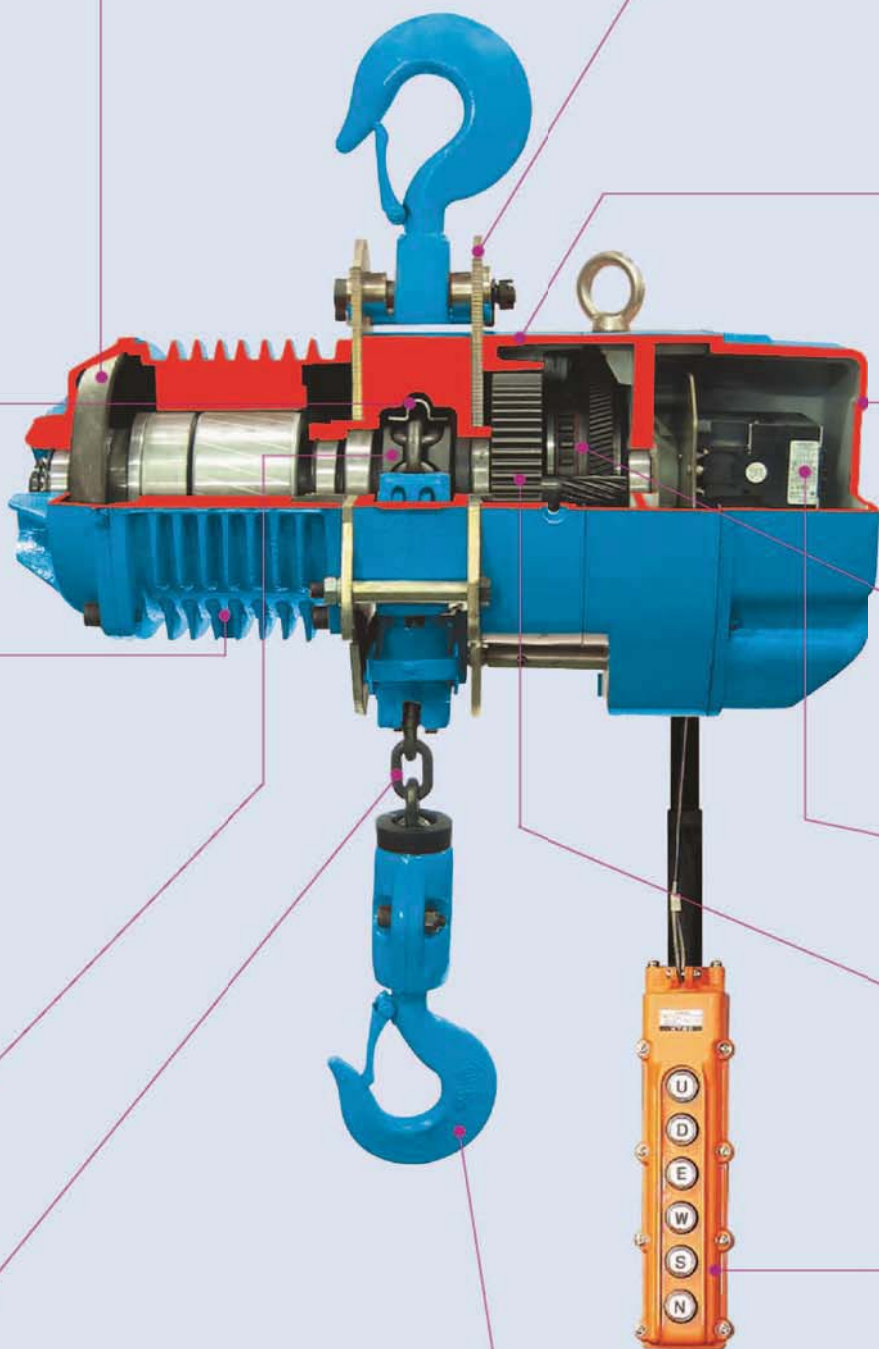
- Squirrel cage parallel rotor motor designed specifically for hoist duty.
- Cooling fins increase surface area for maximum heat radiation.
- The IP55 totally enclosed construction can withstand demanding environment, the motor have class B insulation and aluminum frame.
- Thermal protection via 145 °C rated N.C. thermostatic switch embedded in motor windings is option.

Sprocket

- High performance, high precision, sprocket collocated with chain guide let load chain motion quiet and smooth.

Load Chain

- Grade 80 super alloy load chain is precisely calibrated and heat-treated for long life.
- Safety factor is more than 6-1. Non-Acid processing galvanized plating load chain for resistance against corrosion is option.



Load-supporting frame

- The lug frame use S50C medium carbon steel plate (2t 1 fall type and over capacity) or FCD45 nodular cast-iron (3 Ton 3 Falls Type and lower capacity)

Gear Box

- The gearbox is cast in one piece from aluminum alloy by gravity die-casting.

Weather protected

- Frame and control enclosure are IP55 weather protected from ingress of dust and water.

Overwinding Prevention

- Newly designed device features a friction clutch immersed in an oil bath to protect the hoist from overwinding. (USK series only)

Electromagnetic Contactor has Mechanically Interlocked for added safety.

Quiet Gear Components

- For quiet operation and long service life, hardened precision, durable alloy steel helical gears are submersed in an oil bath.

Push Button Station

- Molded reinforced high insulation plastic housing is impact, weather, corrosion and fire resistant. Push button switches are mechanically interlocked. Strain relief cable is molded into the pendant cord.
- 48 Volt, low voltage control, 24 volt option.
- 6 or 8 point IP65 pendant option.
- EMS button option.

High Durability Chain Containers

- THAC provides processed canvas chain containers, which have outstanding durability. (Steel containers option for outstanding lift.)

Hook

- Drop forged from alloy steel and heat-treated for strength and toughness, will not fracture but open slowly when overloaded.
- Equipped with safety latch and 360° swivel hook.

WHAT DO YOU WANT ?

THAC IS YOUR BEST CHOICE !

For Heavy-Duty industrial applications and workplace requirements, THAC Electric Chain Hoist packed with the latest technology, quality components, and superior design characteristics, these hoists will satisfy the most demanding customers.

The THAC hoist offers a number of features as standard that are in compliance with codes and regulations for specific applications. Let THAC improve your operation's efficiency while reducing labor costs with a high performance electric chain hoists.

See the chart below a detailed feature comparison and lifting speed guide.

Feature Comparisons

Feature	USS	USK	USE
Mechanical Brake	S	S	S
Overload Slip Clutch	N/A	S	N/A
Upper/Lower Limit Switch	S	S	S
Magnetic Cone Brake	S	S	S
Thermal Protector	O	O	O
Emergency Stop Pendant	O	O	O
Chain Container	S	S	S
Grade 80 Chain	S	S	S
Zinc Diffused Chain	O	O	O
Single Phase	N/A	N/A	S

"O" : Option. "S" : Standard. "N/A" : Not Available.

Lifting Speed

Type	Lifting Speed		Capacity (Ton)									
			500 kg	1	2	2.5	3	5	7.5	10	15	20
USS	Single Speed	Low	●	●	●		●					
		High	●	●	●		●					
		Standard			●	●	●	●	●	●	●	●
	Dual Speed	Low	●	●	●		●					
		High	●	●	●		●					
		Standard			●	●	●	●	●	●	●	●
USK	Single Speed	Low	●	●	●		●					
		High	●	●	●		●					
		Standard			●	●	●	●	●	●	●	●
	Dual Speed	Low	●	●	●		●					
		High	●	●	●		●					
		Standard			●	●	●	●	●	●	●	●
USE	Single Speed	Low	●	●	●							



MORE EFFICIENCY

LESS LABOR COSTS

Order Example:

(A) For Hoist Only :

USS

■ Type
USS : Standard type
USK : Advanced type
USE : Single Phase type

0100

■ Capacity Code
0050 : 500kg
0100 : 1 t
0200 : 2 t
1000 : 10 t

L

■ Lifting Speed
L : Low (Single Speed)
H : High (Single Speed)
S : Standard (Single Speed)
LD : Low (Dual Speed)
HD : High (Dual Speed)
SD : Standard (Dual Speed)

※ With 2-Point Push Button

(B) For Trolley Only :

MT

■ Type
MT : Mono Rail
DT : Double Rail

0100

■ Capacity Code
0100 : 1t
0200 : 2t
0300 : 3t
0500 : 5t
0750 : 7.5t
1000 : 10t
1500 : 15t
2000 : 20t

L

■ Lifting Speed
L : Low Speed
H : High Speed
D : Dual Speed

※ Without Any Push Button

(C) For Hoist With Trolley :

USS

0100

L

- MT

0100

L

■ Type
USS : Standard Type
USK : Advanced Type

■ Capacity Code
0100 : 1t
0200 : 2t
0300 : 3t
0500 : 5t
0750 : 7.5t
1000 : 10t
1500 : 15t
2000 : 20t

■ Lifting Speed
L : Low Speed
H : High Speed
D : Dual Speed
LD : Low(Dual Speed)
HD : High(Dual Speed)
SD : Standard(Dual Speed)

■ Type
MT : Mono Rail
DT : Double Rail
LT : Low-Headroom

■ Capacity Code
0100 : 1t
0200 : 2t
0300 : 3t
0500 : 5t
0750 : 7.5t
1000 : 10t
1500 : 15t
2000 : 20t

■ Trolley Speed
L : Low Speed
H : High Speed
D : Dual Speed
LD : Low(Dual Speed)
MD : Medium(Dual Speed)
HD : High(Dual Speed)

※ Low-Headroom only up to 5 Ton

※ With 4-Point Push Button

Load Chain Link Standard Dimensions (mm)

Capacity Code	d	a	b	p
0050(L/H)	7.1	8.9	23.6	21.0
0100(L/H)				
0200(L/H)				
0300(L/H)				
0200S	10.0	12.5	33.2	30.0
0300S				
0280S				
0500S				
0750S	11.2	14.0	37.2	34.0
1000S				
1500S				
2000S				
3000S				

Hook Standard Dimensions (mm)

Capacity code / ton	T/B	a	b	c	d	e	g
500kg	T/B	33	23	29	23	40	29
1	T/B	33	23	29	23	40	29
2	T/B	45	31	41	31	46	37
2.5	T/B	55	34	48	34	52	40
3	T/B	55	34	48	34	52	40
5	T/B	67	45	60	45	62	46
7.5	T/B	85	60	78	60	80	55
10	T/B	100	70	95	65	100	64
15	T/B	120	87	110	85	120	82
20	T/B	140	100	130	95	140	105

T-Top Hook ; B-Bottom Hook

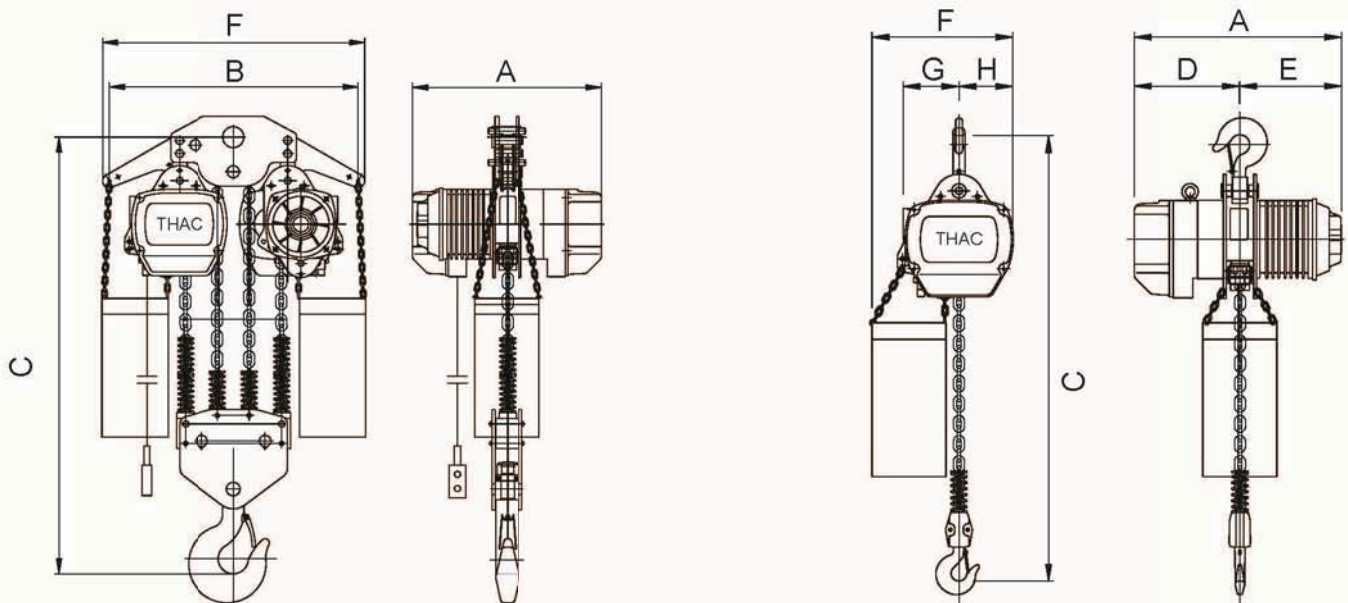
USS / USK

Standard Type / Advanced Type

Hook / Lug Suspension Type Electric Chain Hoist



- The lug frame use S50C medium carbon steel plate (2t 1 fall type and over capacity) or FCD45 nodular cast-iron (3 Ton 3 Falls Type and lower capacity)
- Magnetic Cone Brake provides accurate and reliable stopping, even in the event of a total power loss.
- Long-service, trouble-free Mechanical brake. Together with motor brake, provides dual braking system to assure operating safety.
- Newly designed device features a friction clutch immersed in an oil bath to protect the hoist from overwinding. **(USK ONLY)**
- Upper /Lower limit switch is standard to prevent overwinding.
- Processed canvas chain containers, which have outstanding durability. (Steel containers are required if lifting height exceeds limit of canvas chain container.
- Standard lift of load chain, push-button cord or power supply cables are 3 meters. Special lengths are available upon request.
- 0750S, 1000S, 1500S and 2000S are available as lug mount only.
- 48 Volt, low voltage control, 24 volt option.
- All series with CE approval.



USS / USK

Standard Type / Advanced Type

Hook / Lug Suspension Type Electric Chain Hoist

Specifications

W.L.L. Capacity (Ton)	Capacity Code		Lifting Speed (m/min)				Lifting Motor (kw)		Load Chain Dia.(mm) x Chain Falls	Net Weight (kg)		Weight for additional One Meter of Lift (kg)	
	Single Speed	Dual Speed	50Hz		60Hz		Single Speed	Dual Speed		Single Speed	Dual Speed		
			Single Speed	Dual Speed	Single Speed	Dual Speed							
500kg	0050L	0050LD	6.7	6.7/2.2	8.0	8.0/2.6	1.0	1.5/0.5	Ø7.1 x 1	58	63	1.1	
500kg	0050H	0050HD	11.3	11.3/3.8	13.5	13.5/4.5			Ø7.1 x 1	60	63	1.1	
1	0100L	0100LD	4.7	4.7/1.6	5.6	5.6/1.8			Ø7.1 x 1	58	63	1.1	
1	0100H	0100HD	6.7	6.7/2.2	8.0	8.0/2.6			1.5	Ø7.1 x 1	60	63	1.1
2	0200L	0200LD	2.3	2.3/0.8	2.8	2.8/0.9			1.0	Ø7.1 x 2	70	75	1.1
2	0200H	0200HD	3.3	3.3/1.1	4.0	4.0/1.3			1.5	Ø7.1 x 2	70	75	1.1
2	0200S	0200SD	6.6	6.6/2.2	7.9	7.9/2.6	3.7	3.7/1.2	Ø10.0 x 1	116	121	2.18	
2.5	0250S	0250SD	5.3	5.3/1.8	6.4	6.4/2.1			Ø11.2 x 1	116	121	2.73	
3	0300L	0300LD	1.5	1.5/0.5	1.8	1.8/0.6	1.0	1.5/0.5	Ø7.1 x 3	84	89	1.1	
3	0300H	0300HD	2.2	2.2/0.7	2.6	2.6/0.9	1.5		Ø7.1 x 3	84	89	1.1	
3	0300S	0300SD	4.3	4.3/1.4	5.2	5.2/1.7	3.7	3.7/1.2	Ø10.0 x 2	134	139	2.18	
5	0500S	0500SD	2.6	2.6/0.9	3.2	3.2/1.0			Ø11.2 x 2	145	150	2.73	
7.5	0750S	0750SD	1.8	1.8/0.6	2.1	2.1/0.7			Ø11.2 x 3	195	205	2.73	
10	1000S	1000SD	2.6	2.6/0.9	3.2	3.2/1.0	3.7 x 2	3.7/1.2 x 2	Ø11.2 x 4	334	344	2.73	
15	1500S	1500SD	1.8	1.8/0.6	2.1	2.1/0.7			Ø11.2 x 6	400	410	2.73	
20	2000S	2000SD	1.3	1.3/0.4	1.6	1.6/0.5			Ø11.2 x 8	510	520	2.73	

Dimensions (mm)

W.L.L. Capacity (Ton)	Capacity Code		A		B	Minimum Headroom C	D		E		F	G	H
	Single Speed	Dual Speed	Single Speed	Dual Speed			Single Speed	Dual Speed	Single Speed	Dual Speed			
500 kg	0050L	0050LD	530	530	N/A	630	260	260	270	270	350	137	123
500 kg	0050H	0050HD	530	530	N/A	630	260	260	270	270	350	137	123
1	0100L	0100LD	530	530	N/A	630	260	260	270	270	350	137	123
1	0100H	0100HD	530	550	N/A	630	260	260	270	290	350	137	123
2	0200L	0200LD	530	530	N/A	795	260	260	270	270	350	198	62
2	0200H	0200HD	530	550	N/A	795	260	260	270	290	350	198	62
2	0200S	0200SD	630	665	N/A	765	320	320	310	345	470	169	161
2.5	0250S	0250SD	630	665	N/A	925	320	320	310	345	470	169	161
3	0300L	0300LD	530	550	N/A	925	260	260	270	290	370	210	145
3	0300H	0300HD	530	550	N/A	925	260	260	270	290	370	210	145
3	0300S	0300SD	630	665	N/A	925	320	320	310	345	470	224	106
5	0500S	0500SD	630	665	N/A	960	320	320	310	345	470	229	101
7.5	0750S	0750SD	630	665	N/A	1170	320	320	310	345	587	N/A	N/A
10	1000S	1000SD	630	665	885	1190	320	320	310	345	1030	N/A	N/A
15	1500S	1500SD	630	665	1055	1360	320	320	310	345	1200	N/A	N/A
20	2000S	2000SD	630	665	1245	1450	320	320	310	345	1390	N/A	N/A

USE

Single Phase Type

Hook Suspension Type Electric Chain Hoist



- Runs on 220/230V, 50/60Hz AC power supplies, **single phase**.
- Magnetic Cone Brake provides accurate and reliable stopping, even in the event of a total power loss.
- Processed canvas chain containers, which have outstanding durability. (Steel containers are required if lifting height exceeds limit of canvas chain container).
- Standard lifts of load chain, push-button cord or power supply cables are 3 meters. Special lengths are available upon request.
- 220/230V control.

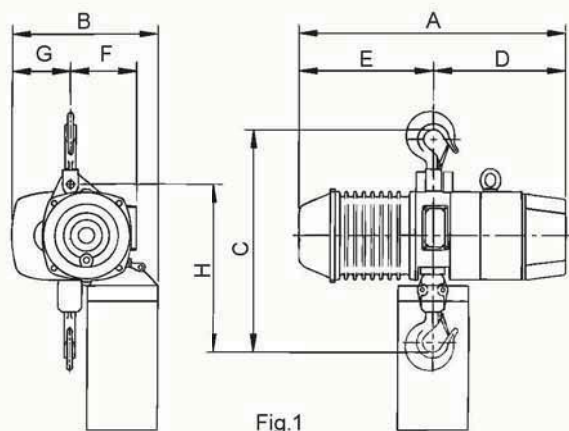


Fig.1

Specifications

W.L.L. Capacity (Ton)	Capacity Code	Lifting Speed (m/min)		Lifting Motor (kw)	Load Chain Dia.(mm) x Chain Falls	Net Weight (kg)	Weight for additional One Meter of Lift (kg)
		50Hz	60Hz				
500kg	0050	5.3	6.4	1.1	Ø7.1 x 1	61	1.2
1	0100	5.3	6.4	1.5	Ø7.1 x 1	63	1.2
2	0200	2.6	3.2	1.5	Ø7.1 x 2	74	1.2

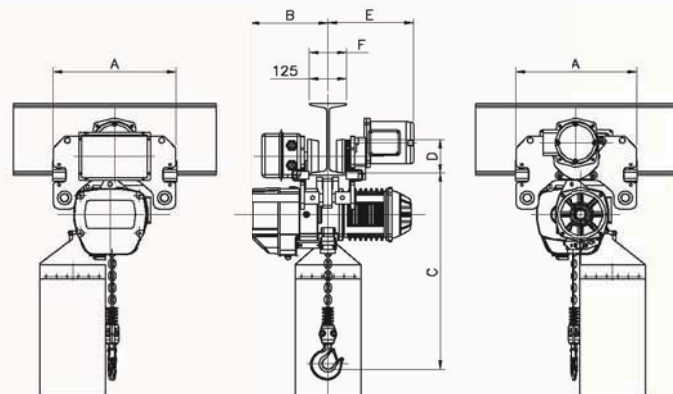
Dimensions (mm)

W.L.L. Capacity (Ton)	Capacity Code	A	B	Minimum Headroom C	D	E	F	G	H
500kg	0050	530	350	463	260	270	137	123	360
1	0100	530	350	463	260	270	137	123	360
2	0200	530	350	653	260	270	198	62	360

Electric Chain Hoist With Low-Headroom Motorized Trolley 1, 2, 3 and 5 Ton capacity only



- THAC Electric Low Headroom Trolleys are designed for those applications where headroom is limited.
- LT performance with the space savings of an integral trolley, it is ideal for applications requiring a low headroom hoist and trolley combination.
- These products minimize the 'dead space' between the underside of the monorail track and the load point of the carrying hook.
- This can be as low as 360 mm for the 1 ton unit and 700 mm for the 5 ton hoist.
- Magnetic Cone Brake provides accurate and reliable stopping, even in the event of a total power loss.
- Specially designed side roller system.
- Simple gear box construction.
- Minimum curve radius.
- Trolley wheels can be used on "I" beams and "H" beams and trolley can adjustable for varying beam size.
- Push button switches come in a standard 4-button type (Up/Down/East/West) for monorail.
- Both push and geared trolley versions are available to best suit your application. Consult factory.



Specifications & Dimensions

W.L.L. Capacity (Ton)	MODEL	Trolley Speed(m/min)				Trolley Motor(kw)		Dimensions (mm)					Minimum Headroom (mm) C	Minimun Allow. Radius For curve (mm)	Net Weight (kg)	
		Single Speed		Dual Speed		Single Speed	Dual Speed	A	B	D Wheel Dia.	E	F* Flange Width			Single Speed	Dual Speed
		50HZ	60HZ	50HZ	60HZ	4P	2P/6P									
1	LT0100L	12.5	15	-	-	0.4	-	420	262	106	288	75~175	477	1500	40	-
	LT0100H	18.8	22.5	-	-	0.4	-								40	-
	LT0100D	-	-	20/6.6	24/8	-	0.4/0.13								-	42
2	LT0200L	12.5	15	-	-	0.4	-	440	262	106	288	75~175	551	1500	48	-
	LT0200H	18.8	22.5	-	-	0.4	-								48	-
	LT0200D	-	-	20/6.6	24/8	-	0.4/0.13								-	52
3	LT0300L	12.5	15	-	-	0.4	-	525	262	106	288	125~200	594	1800	74	-
	LT0300H	18.8	22.5	-	-	0.4	-								74	-
	LT0300D	-	-	20/6.6	24/8	-	0.4/0.13								-	76
5	LT0500L	12.5	15	-	-	0.75	-	520	325	139	338	125~200	799	1800	120	-
	LT0500H	18.8	22.5	-	-	0.75	-								120	-
	LT0500D	-	-	20/6.6	24/8	-	0.75/0.25								-	123

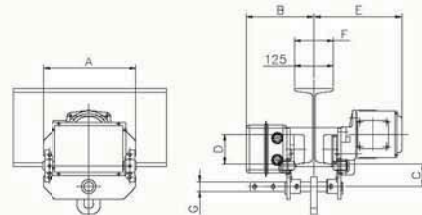
* LT should be combined with #USS or USK series hoist, please see P.6 for the specification of hoist.

MT

Monorail Type Motorized trolley



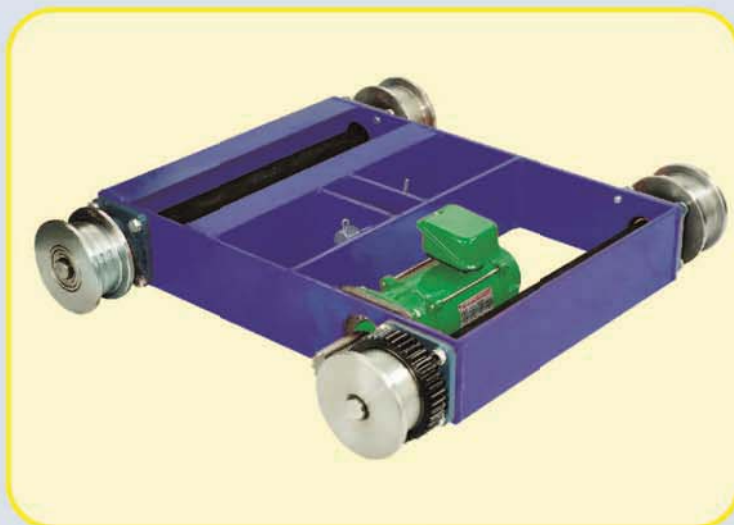
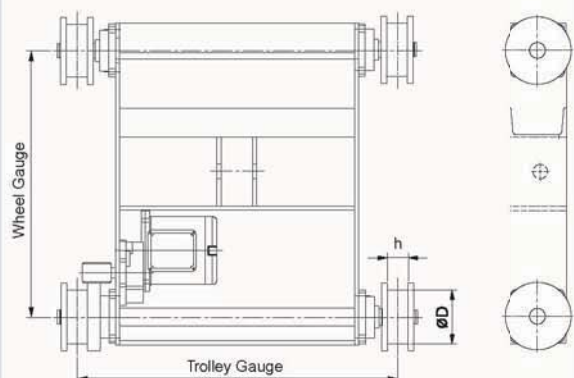
- Magnetic Cone Brake provides accurate and reliable stopping, even in the event of a total power loss.
- Specially designed side roller system.
- Simple gear box construction.
- Minimum curve radius.
- Trolley wheels can be used on “I” beams and “H” beams and trolley can adjustable for varying beam size.
- Push button switches come in a standard 4-button type (Up/Down/East/west) for combines hoist.



Specifications & Dimensions (mm)

W.L.L. Capacity (Ton)	Model	Trolley Speed (m/min)		Trolley Motor (kw)		Dimensions (mm)							Minimun Allow. Radius For curve (mm)	Net Weight (kg)	
		Single Speed	Dual Speed	Single Speed	Dual Speed	A	B	C	E	G	D Wheel Dia.	F* Flange Width		Single Speed	Dual Speed
		50Hz	50Hz	4P	2P/6P										
1	MT0100L	12.5	-	0.4	-	300	218	73	290	30	118	75~175	800	30	-
	MT0100H	18.8	-	0.4	-						94			36	-
	MT0100D	-	20/6.6	-	0.4/0.13						118			-	38
2	MT0200L	12.5	-	0.4	-	302	221	64	294	38	118	75~175	1000	44	-
	MT0200H	18.8	-	0.4	-						106			44	-
	MT0200D	-	20/6.6	-	0.4/0.13						118			-	46
3	MT0300L	12.5	-	0.4	-	325	221	76	294	45	118	125~200	1000	70	-
	MT0300H	18.8	-	0.4	-						125			70	-
	MT0300D	-	20/6.6	-	0.4/0.13						118			-	72
5	MT0500L	12.5	-	0.75	-	400	228	94	301	55	139	150~200	1500	115	-
	MT0500H	18.8	-	0.75	-									115	-
	MT0500D	-	20/6.6	-	0.75/0.25									-	118
7.5	MT0750L	12.5	-	0.75	-	445	231	105	304	70	169	150~300	2000	150	-
	MT0750H	18.8	-	0.75	-									150	-
	MT0750D	-	20/6.6	-	0.75/0.25									-	155
10	MT1000L	12.5	-	0.75	-	510	237	104	311	70	200	150~300	2000	230	-
	MT1000H	18.8	-	0.75	-									230	-
	MT1000D	-	20/6.6	-	0.75/0.25									-	235

Double Girder Top Running Type Motorized Trolley



- Magnetic Cone Brake provides accurate and reliable stopping, even in the event of a total power loss.
- Simple gear box construction.
- Eccentrically mounted trolley wheels always seek level.
- Push button switches come in a standard 4-button type (Up/Down/East/west) for combines hoist.

Specifications & Dimensions (mm)

W.L.L. Capacity (Ton)	Model	Trolley Speed (m/min)		Trolley Motor (kw)		Dimensions (mm)				Net Weight (kg)	
		Single Speed	Dual Speed	Single Speed	Dual Speed	Trolley Gauge	Wheel Gauge	D Wheel Dia.	h Wheel Tread	Single Speed	Dual Speed
		50Hz	50Hz	4P	4P/12P						
1	DT0100H	15	-	0.4	-	700	580	117	45	70	-
	DT0100D	-	15/5	-	0.4/0.13					-	73
2	DT0200H	15	-	0.4	-					80	-
	DT0200D	-	15/5	-	0.4/0.13					-	83
3	DT0300H	15	-	0.4	-	900	665	154	45	115	-
	DT0300D	-	15/5	-	0.4/0.13					-	120
5	DT0500H	15	-	0.75	-					175	-
	DT0500D	-	15/5	-	0.75/0.25					-	180
7.5	DT0750H	15	-	0.75	-	1000	810	162	48	220	-
	DT0750D	-	15/5	-	0.75/0.25					-	225
10	DT1000H	15	-	0.75	-	1200	930	162	60	300	-
	DT1000D	-	15/5	-	0.75/0.25					-	305
15	DT1500H	15	-	0.75	-	1300	1360	210	70	320	-
	DT1500D	-	15/5	-	0.75/0.25					-	325
20	DT2000H	15	-	0.75	-					330	-
	DT2000D	-	15/5	-	0.75/0.25					-	335



WARNING:

The equipment shown in this catalogue is intended for industrial use only and should not be used to lift, support, or otherwise transport people, or to suspend loads over people.



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