



Professional cranes & hoists for lifting



Electric Chain Hoist / NHD series



CHENG DAY MACHINERY WORKS CO., LTD.

No. 173, Wen Chiu Road, Dajia District, Taichung City, 437 Taiwan.
Tel: +886-4-2688-1581 Fax: +886-4-2688-1509
Website: www.chengday.com E-mail: info@chengday.com.tw

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- Due to the printing factors, the color of the products is
subject to minor deviation from the physical objects.



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① Motor and Brake

- 1).IP55 TEFC motor, class F insulation, good thermal performance.
- 2).DC motor brake : with two-side single disk brake, electromagnetic brake actuates synchronously in the event of power failure to ensure the operation safety while loading.
- 3).Total enclosed construction, withstands harsh conditions like those found in chemical, and electroplating environments.
- 4).Asbestos-free brake to meet international request.

Over-Heat Protection

With built-in heat detector, when motor's inside working temperature reaches $140(\pm 5)^{\circ}\text{C}$, the protection mechanism will trigger, and not allow lifting the load. Instead, it permits coming down to release the load.

② Load Sheave

5 pockets on the load sheave ensures positive chain link seating resulting in smoother lifting.

③ Mechanical Brake and Overload Limit Clutch System

- 1).2 in 1 design, have the dual function of mechanical brake and overload protection system is good and it prevents the burn-out problem with some high frequency operations of much inching to precise and gentle load positioning which involves many pendant control/contactor/electric brake coil activations.
- 2).Mechanical brake collocate motor brake which provides fast braking function.
- 3).Friction Clutch prevents damage from overloading.
- 4).Easily adjusted by the gear box outside overload setting.
- 5).Ensure operation safety and product life time.

④ Limit Switch

Upper and lower gear limit switches are fitted to switch off the power simultaneously in the case of over lifting or lowering position.

⑤ Control Panel

Phase Error Relay

Phase protection, in case of any phase missing or incorrect, the hoist will not be in active, ensuring the safety and durability to all Components.

⑥ Load Chain

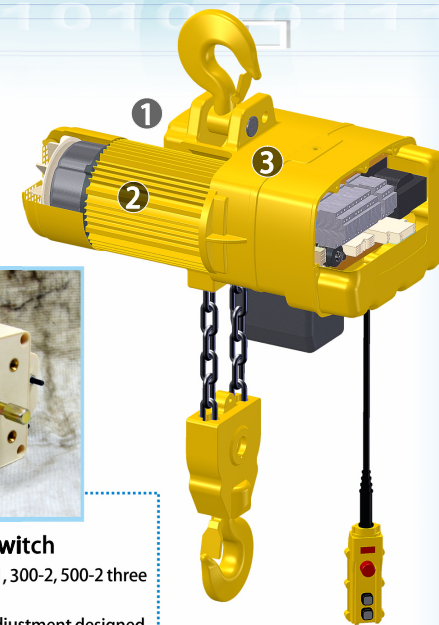
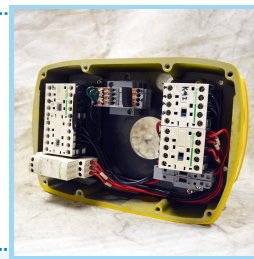
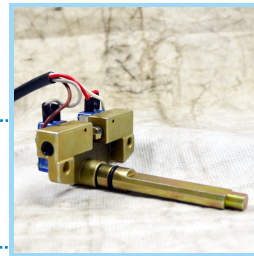
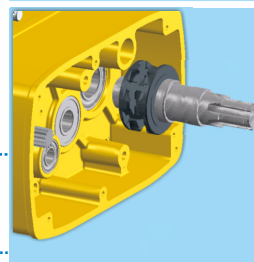
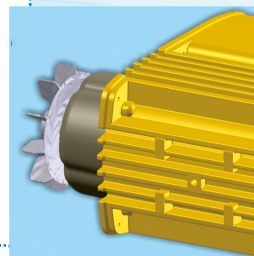
Grade 80 hardened and galvanized alloy steel chain, endures harsh conditions such as rain, saltwater and chemicals with minimal wear.

⑦ Hook

- 1).Hot forged from high tensile steel.
- 2).360° rotated.

⑧ Pendant Control

High protection grade IP65, fully water-proof, insulated, and impact resistant.



① Gear Limit Switch

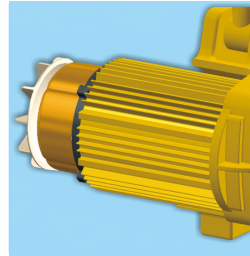
- 1). Use for NHD-200-1, 300-2, 500-2 three items.
- 2). Multiple 4 steps adjustment designed.
It has practically limitless applications in regulating hoist operation to prevent potential incidents. It can precisely control stopping point at any positions in lifting range.
- 3). Patents :
Taiwan patent no. M466909 German patent no. Nr. 20 2014 006 109.2
Japan patent no. 3193570 China patent no. ZL 2014 2 0395985.8
United States patent no.US 9263201

② Motor Assembly

High precision and rugged motor housing is made of aluminum extruded alloy. Motor coil can be disassembled easily when need to repair.

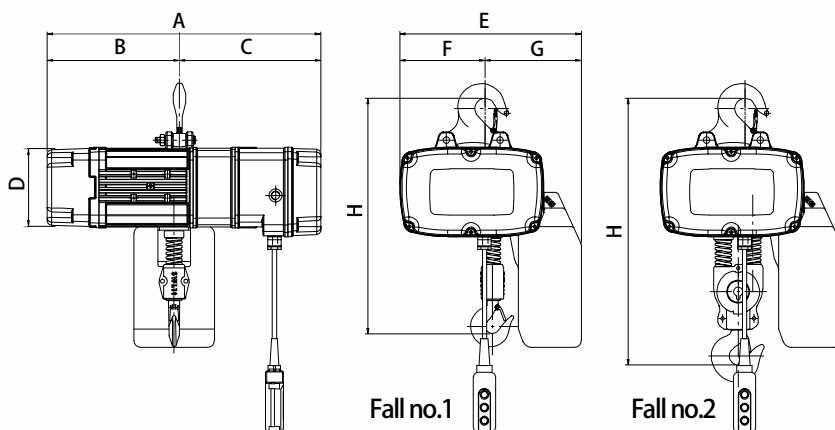
③ Load Sheave & Chain Regulator

Easy to disassemble and re-assemble, convenient for maintenance.





NHD series

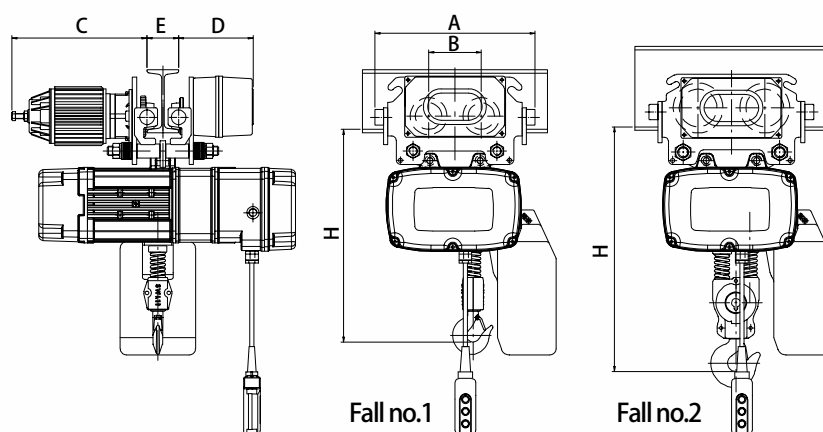


Model	Capacity (kg)	Lift (m)	%ED	Hoisting			Traversing		
				Speed(m/min)		Motor kw x pole	Speed(m/min)		Motor kw x pole
				60Hz	50Hz		60Hz	50Hz	
NHD-025-1	250	3	40/20	12/3	12/3	0.6/0.15 x 2/8P	24/6	20/5	0.12/0.03 x 2/8P
NHD-050-2	500			6/1.5	6/1.5		24/6	20/5	0.12/0.03 x 2/8P
NHD-050-1	500	3	40/20	10/2.5	10/2.5	1.1/0.28 x 2/8P	24/6	20/5	0.12/0.03 x 2/8P
NHD-100-2	1000			5/1.3	5/1.3		24/6	20/5	0.18/0.04x 2/8P
NHD-100-1	1000	3	40/20	8/2	8/2	1.5/0.38 x 2/8P	24/6	20/5	0.18/0.04 x 2/8P
NHD-200-2	2000			4/1	4/1		24/6	20/5	0.37/0.09x 2/8P
NHD-200-1	2000	3	40/20	9.6/2.4	9.6/2.4	3.7/0.93 x 2/8P	24/6	20/5	0.37/0.09x 2/8P
NHD-250-1	2500	3	40/20	8/2	8/2		24/6	20/5	0.6/0.15x 2/8P
NHD-300-2	3000	3	40/20	6.4/1.6	6.4/1.6		24/6	20/5	0.6/0.15x 2/8P
NHD-500-2	5000	3	40/20	4/1	4/1		24/6	20/5	0.6/0.15x 2/8P

Model	Dimension (mm)								Load Chain		N.W. (kg)
									Ømm	Fall No.	
	H	A	B	C	D	E	F	G			
NHD-025-1	376	380	175	205	135	299	143	156	Ø 4.0x12.0	1	30
NHD-050-2	453	380	175	205	135	299	143	156		2	32
NHD-050-1	500	570	266	304	165	375	190	185	Ø 6.3x19.1	1	47
NHD-100-2	550	570	266	304	165	375	190	185		2	50
NHD-100-1	550	620	300	320	180	415	195	220	Ø 7.1x20.2	1	62
NHD-200-2	620	620	300	320	180	415	195	220		2	67
NHD-200-1	1020	715	340	375	220	560	262	298	Ø 10x30.2	1	102
NHD-250-1	1020	715	340	375	220	560	262	298	Ø 11.2x34	1	110
NHD-300-2	1050	715	340	375	220	560	210	350	Ø 10x30.2	2	120
NHD-500-2	1100	715	340	375	220	560	210	350	Ø 11.2x34	2	145

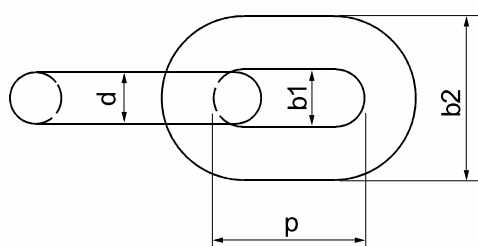


Hoist with Motorized NTD Trolley



Model	Dimension (mm)						Fall No.
	H	A	B	C	D	E	
NHD-025-1+NTD-050-2	385	385	126	325	180	75~125	1
NHD-050-2+NTD-050-2	462	385	126	325	180	75~125	2
NHD-050-1+NTD-050-1	500	385	126	325	180	75~125	1
NHD-100-2+NTD-100-2	565	385	126	325	180	75~125	2
NHD-100-1+NTD-100-1	550	385	126	325	180	75~125	1
NHD-200-2+NTD-200-2	625	395	159	360	185	100~150	2
NHD-200-1+NTD-200-1	990	395	159	360	185	100~150	1
NHD-250-1+NTD-250-1	953	445	183	400	195	125~175	1
NHD-300-2+NTD-300-2	1000	445	183	400	195	125~175	2
NHD-500-2+NTD-500-2	1050	445	183	400	195	125~175	2

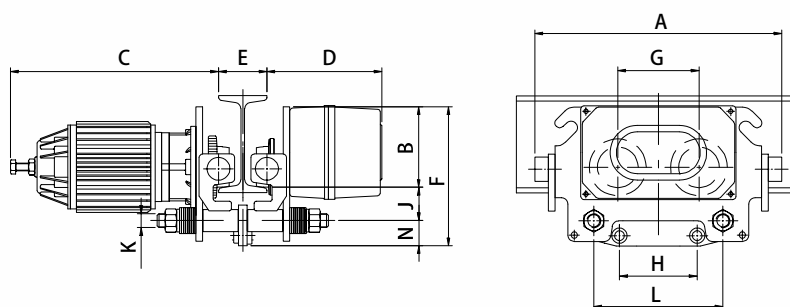
Load Chain



Diameter d(mm)	Model Reference Being Used	Inner Length p (mm)	Inner Width b1 (mm)	Outer Width b2 (mm)	Breaking Load (kN)
Ø4.0	NHD-025-1 NHD-050-2	12	5	13.6	20.1
Ø6.3	NHD-050-1 NHD-100-2	19.1	7.9	21.4	50
Ø7.1	NHD-100-1 NHD-200-2	20.2	8.1	23.2	63.3
Ø10.0	NHD-200-1 NHD-300-2	30.2	12.5	33.2	128
Ø11.2	NHD-250-1 NHD-500-2	34	14	37.5	160



Motorized NT(D) Trolley



Model	Speed (m/min)		Motor kw x pole	Dimension (mm)												N.W. (kg)	Min radius of curve (m)
	60Hz	50Hz		A	B	C	D	E	F	G	H	L	J	N	K		
NT-050-1	24	20	0.12 x 2P	385	125	325	180	75~ 125	216	126	95.5	200	52	39	7/8"~9UNC (Ø22.2)	45	1.3
NTD-050-1	24/6	20/5	0.12/0.03 x 2/8P														
NT-050-2	24	20	0.12 x 2P	385	125	325	180	75~ 125	218	126	120	200	52	41	7/8"~9UNC (Ø22.2)	45	1.3
NTD-050-2	24/6	20/5	0.12/0.03 x 2/8P														
NT-100-1	24	20	0.18 x 2P	385	114	325	180	75~ 125	220	126	120	210	67	39	1"~8UNC (Ø25.4)	45	1.3
NTD-100-1	24/6	20/5	0.18/0.04 x 2/8P														
NT-100-2	24	20	0.18 x 2P	385	114	325	180	75~ 125	220	126	95.5	210	67	39	1"~8UNC (Ø25.4)	45	1.3
NTD-100-2	24/6	20/5	0.18/0.04 x 2/8P														
NT-200-2	24	20	0.37 x 2P	395	125	360	185	100~ 150	236	159	120	230	75	36	1 1/4"~7UNC (Ø31.8)	50	1.7
NTD-200-2	24/6	20/5	0.37/0.09 x 2/8P														
NT-200-1	24	20	0.37 x 2P	395	125	360	185	100~ 150	251	159	52.5	230	75	51	1 1/4"~7UNC (Ø31.8)	50	1.7
NTD-200-1	24/6	20/5	0.37/0.09 x 2/8P														
NT-250-1	24	20	0.6 x 2P	445	154	400	195	125~ 175	283	183	52.5	250	71	58	1 1/2"~6UNC (Ø38.1)	89	2.0
NTD-250-1	24/6	20/5	0.6/0.15 x 2/8P														
NT-300-2	24	20	0.6 x 2P	445	154	400	195	125~ 175	283	183	52.5	250	71	58	1 1/2"~6UNC (Ø38.1)	89	2.0
NTD-300-2	24/6	20/5	0.6/0.15 x 2/8P														
NT-500-2	24	20	0.6 x 2P	445	154	400	195	125~ 175	283	183	52.5	250	71	58	1 3/4"~5UNC (Ø44.5)	89	2.0
NTD-500-2	24/6	20/5	0.6/0.15 x 2/8P														

*Different flange width options available on request. Maximum:310mm.

■ Federation Europeenne De La Manutention

Cubic mean value Definitions		Average operating time per day in hours							
1 (light)	$(k \leq 0.50)$ Mechanisms or parts thereof, usually subject to very small loads and in exceptional cases only to maximum loads.	0.25-0.5	0.5-1	1-2	2-4	4-8	8-16	> 16	
2 (medium)	$(0.50 < k \leq 0.63)$ Mechanisms or parts thereof, usually subject to small loads but rather often to maximum loads.	0.12-0.25	0.25-0.5	0.5-1	1-2	2-4	4-8	8-16	> 16
3 (heavy)	$(0.63 < k \leq 0.80)$ Mechanisms or parts thereof, usually subject to medium loads but frequently to maximum loads.	≤ 0.12	0.12-0.25	0.25-0.5	0.5-1	1-2	2-4	4-8	8-16
4 (very heavy)	$(0.80 < k \leq 1)$ Mechanisms or parts thereof, usually subject to maximum or almost to maximum loads.		≤ 0.12	0.12-0.25	0.25-0.5	0.5-1	1-2	2-4	4-8
Classification of Mechanisms FEM 9.511		1 Dm	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m

■ ISO/FEM (9.511)

Classification of mechanisms into groups

1 Dm	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m
M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8

Class of operation time

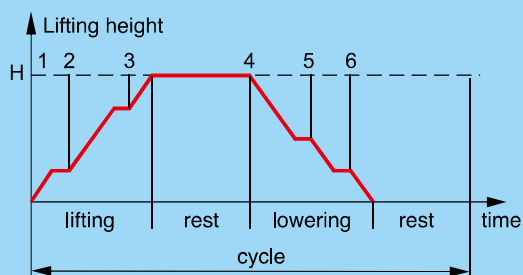
Class of operation time		Average operating time per day (in hours)	Calculated total operating time in hours
V0.06	T0	≤ 0.12	200
V0.12	T1	≤ 0.25	400
V0.25	T2	≤ 0.5	800
V0.5	T3	≤ 1	1600
V1	T4	≤ 2	3200
V2	T5	≤ 4	6300
V3	T6	≤ 8	12500
V4	T7	≤ 16	25000
V5	T8	≤ 16	50000

Classification of mechanisms

Load spectrum	Cubic mean value	Class of operation time									
		V0.06	V0.12	V0.25	V0.5	V1	V2	V3	V4	V5	
		T0	T1	T2	T3	T4	T5	T6	T7	T8	
		Average operating time per day in hours									
1 L1	$k \leq 0.50$			≤ 0.12	≤ 0.25	≤ 0.5	≤ 1	≤ 2	≤ 4	≤ 8	≤ 16
2 L2	$0.50 < k \leq 0.63$			1 Dm	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m
3 L3	$0.63 < k \leq 0.80$	1 Dm	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m		
4 L4	$0.80 < k \leq 1.00$	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m			

■ Operation Cycle

Hoist with one speed



Hoist with two speed

