

NITCHI EC4 SERIES

THE EFFICIENT, ECONOMICAL HOISTS YOU CAN RELY ON

Wear Resisting Load Sheave

The special load sheaves engage precisely with the load chains and are specially thermo-refined to make them long wearing.

First Stage Helical Gearing

The precision helical gears in the first stage of the reduction gear system largely reduce gear tooth impact and the operating vibrations, and is one of the main factors for the quiet long dependable life of the EC4 Series.

Easy Cable Couplings - NEW!!

The new Easy Cable Coupling system makes it possible to easily and quickly attach, detach or replace the pendant and cables.

Push Button Switch

The strong light-weight push button switch responds immediately and can be operated with a light touch of the button.

Chain Bucket

Each hoist is supplied with a chain bucket as standard equipment.

Forged Steel Hooks

The top and bottom hooks on all capacities are made of drop-forged steel that is heat-treated for greater strength. Every bottom hook is equipped with a thrust bearing for smooth rotating to all directions and has a latch as standard equipment.

Heavy Duty Motor

The Class "8" (ECC4 Class "E") insulation of the high performance motors are capable of handling most materials handling applications.

Space Age Materials - NEW!!

The remarkably durable lightweight resinoid center-frame and cover provide light fits that notably improve dust and moisture protection, and assist to lower operating noises.

Steel Construction

The two rugged steel plates main frame provides maximum protection against dynamic loads.

Ultra -Tough Load Chains

The NITCHI case hardened load chains are made from special alloy steel, and are given super-tough carbonized hard surfaces that resist erosion several times longer than conventional through hardened load chains. The soft core section gives the load chain the elasticity which is essential for material lifting equipment. Every link of load chain is tested, and a record of each chain production lot is kept on record at our factory.



Moisture and Dust Protection -IMPROVED!

The IP54 protection of the hoist bodies and the IP64 protection of the push button switch are more than adequate for most applications that demand for moisture and dust protection.

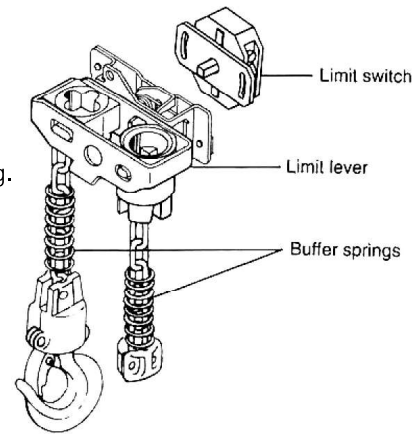
Quiet and Smooth Operation -IMPROVED!

The helical gears on the first stage of the reduction gears lower vibrations and noise levels remarkably. When compared to the former EC-3M Series, the noise levels of the EC4 Series are 3 to 10 Decibels lower!

Over Lifting and Over lowering LIMIT SWITCH-IMPORTANT!!!

The over lifting and over lowering limit switch system is one of the most important safety devices on an electric chain hoist, which can not be substituted with micro switches that rely on the over load protection device. The EC4 Series are equipped with what we believe is the most efficient and reliable limit switch system available for electric chain hoists, which functions completely independent of the overload protection.

- Buffer Springs** located on both ends of the load chain absorb the initial shock and allow the limit switch to function before the hoist is under substantial force.
- Limit Lever** is the mechanical actuator, which positively activates the limit switch system when the hoist are over lifted or over lowered.
- Limit Switch** instantly stops the hoist when over lifting or over lowering.



High ED Percent Rating (In accordance with (JIS) 88815 -1994)	
Model	ED%
EC4 (1-speed type)	40%
EC4 (2-speed type)	25%
ECC4 (single phase type)	25%

Durable Brake

The solenoid brake system responds instantly and will safely support the load during power failures. This brake system has proven to be extremely long wearing and will keep servicing costs down.

Electro-Magnetic Controlled (EC4 & ECT4)-IMPORTANT!!!

Models EC4 (1-speed type) and ECT4 (2-speed type) are electro-magnetic controlled with 24-volt, and will protect the operator from harmful electrical shocks.

Short Head Room

The ingeniously designed compact construction permits the highest possible lift where the last inch of lift must be obtained -compare the difference with equivalent models.

Remarkable Durability

The EC4 Series is designed and made to Grade M4 of Japanese Industrial Standard (JIS) B8815-1994 Electric Chain Hoist.

Easy Servicing

The robust steel design gives easy access to all of the major mechanical and electrical components, which simplifies inspection, maintenance and the replacement of components.

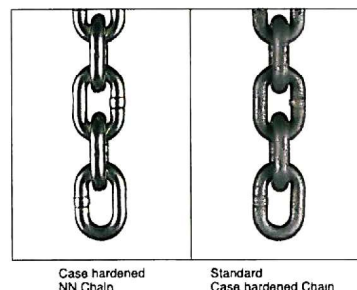
Useful Operation Manual

With each hoist is supplied a comprehensive operation manual providing sufficient instructions and information on installation, operation and maintenance with illustrated parts list.

Optional Equipment

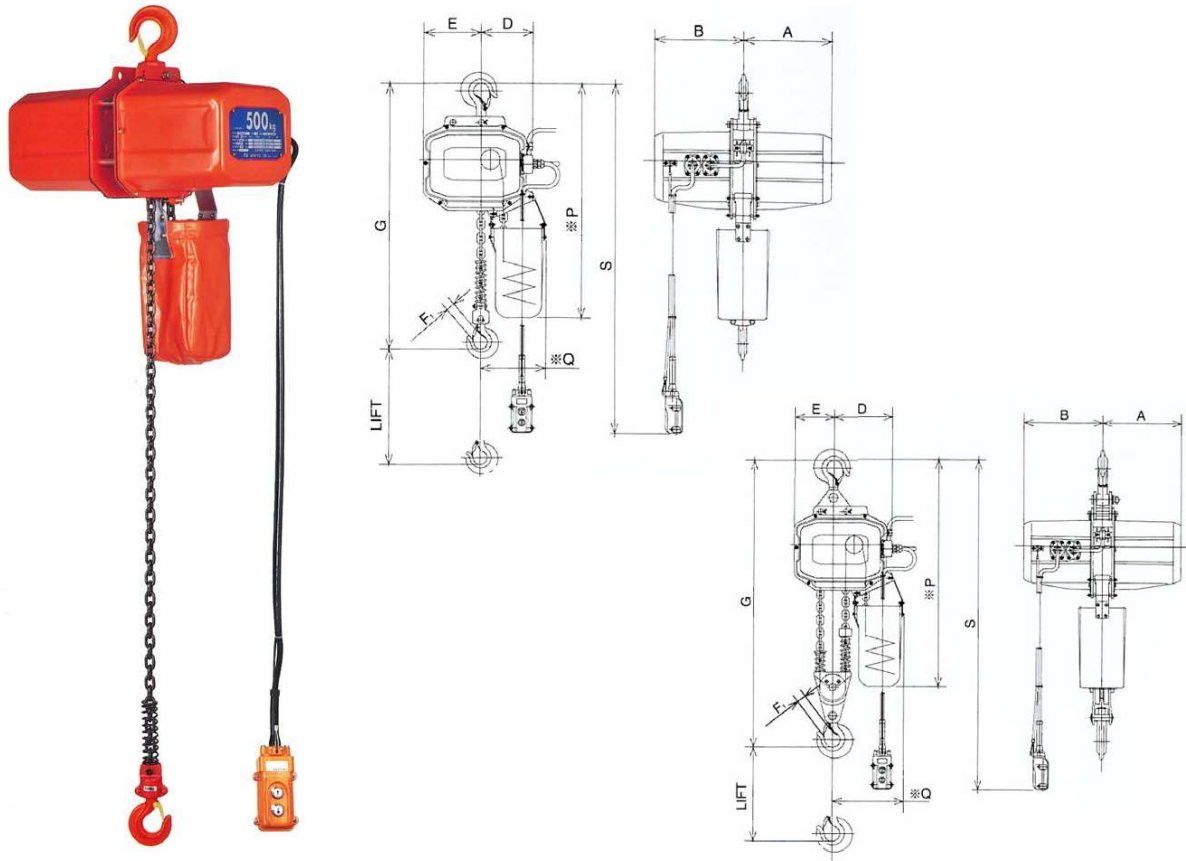
The following optional equipment are available at modest extra charges:-

- Electric type over load protection
- Friction type over load protection
- Negative Phase protection (Warning system to prevent incorrect connection of the power source)
- Push button switch with emergency stop
- NN Case hardened Chain (Non-electrolytic nickel plating fused into the surface of the chain)



THREE PHASE, SINGLE SPEED 250KG – 2000KG

One speed electric chain hoists are available in 5 different sizes ranging from light 250 kg to heavy 2t capacities.



ELECTRIC CHAIN HOISTS
NITCHI EC4

Model	Rated Load	Lift (m)	Lifting Speed (m/min)		Motor Output(kW)		Rating (min)	Load Chain		Cable length		Minimum Headroom G (mm)	Net Weight (kg)
			50Hz	60Hz	50Hz	60Hz		Dia. (mm)	No. of falls	Power Source (m)	Pendant S(m)		
EC40025	250kg	3.0	8.7	10.3	0.4	0.5	30	6.3	1	5.0	2.6	485	35
		6.0									5.6		
EC40050	500kg	3.0	8.6	10.1	0.9	1.1	30	6.3	1	5.0	2.6	520	37
		6.0									5.6		
ECJ40100	1tw	3.0	4.3	5.0	0.9	1.1	30	6.3	2	5.0	2.6	660	43
		6.0									5.6		
EC40100	1t	3.0	5.6	6.6	1.1	1.3	30	7.1	1	5.0	2.6	570	49
		6.0									5.6		
ECJ40200	2t	3.0	2.8	3.3	1.1	1.3	30	7.1	2	5.0	2.6	755	58
		6.0									5.6		

Model	Rated Load (ton)	Major Dimensions (approx.) (mm)						
		A	B	D	E	F ₁	P	Q
EC40025	250kg	245	245	137	149	20	660	195
EC40050	500kg	245	245	137	149	20	660	195
ECJ40100	1tw	245	245	167	119	25	715	225
							835	
EC40100	1t	255	255	150	168	25	710	200
							770	
ECJ40200	2t	255	255	191	127	30	770	240
							890	

THREE PHASE, DUAL SPEED

250KG – 2000KG

Two speed electric chain hoists are also available in 5 different capacities ranging from 250kg to 2000kg. The 4 to 1 speed ratio of Model ECT4 is ideal for a large variety of applications ... no more cumbersome inching, the slow speed works accurately when spotting the load to a desired position, and with the fast speed the load can be quickly and efficiently handled. The slow and fast speeds are both completely at your command with the dual-stage push button switch. For slow speed press the buttons halfway down, and the fast speed can be obtained by completely depressing the buttons.

Model	Rated Load	Lift (m)	Lifting Speed (m/min)				Motor Output(kW)				Rating (min)		Load Chain		Minimum Headroom G (mm)	Net Weight (kg)
			Fast		Slow		Fast		Slow		Fast	Slow	Dia. (mm)	No. of falls		
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz						
ECT40025	250kg	3.0	8.7	10.3	2.2	2.6	0.4	0.5	0.1	0.13	30	10	6.3	1	485	37
		6.0														40
ECT40050	500kg	3.0	8.6	10.1	2.2	2.6	0.9	1.1	0.23	0.28	30	10	6.3	1	520	41
		6.0														44
ECTJ40100	1tw	3.0	4.3	5.1	1.1	1.3	0.9	1.1	0.23	0.28	30	10	6.3	2	660	47
		6.0														52
ECT40100	1t	3.0	5.6	6.7	1.4	1.7	1.1	1.3	0.27	0.33	30	10	7.1	1	570	54
		6.0														58
ECTJ40200	2t	3.0	2.8	3.3	0.7	0.8	1.1	1.3	0.27	0.33	30	10	7.1	2	755	63
		6.0														70

Model	Rated Load	Cable length		Major Dimensions (approx.) (mm)						
		Power Source (m)	Pendant S(m)	A	B	D	E	F ₁	P	Q
ECT40025	250kg	5.0	2.6	245	245	137	149	20	660	195
			5.6							
ECT40050	500kg	5.0	2.6	245	245	137	149	20	660	195
			5.6							
ECTJ40100	1tw	5.0	2.6	245	245	167	119	25	715	225
			5.6						835	
ECT40100	1t	5.0	2.6	255	255	150	168	25	710	200
			5.6							
ECTJ40200	2t	5.0	2.6	255	255	191	127	30	770	240
			5.6						890	

SINGLE PHASE, SINGLE SPEED

250KG – 2000KG

Single phase electric chain hoists are available for 300kg, 500kg and 1 t w capacities. Model ECC4 is specially designed and manufactured for the efficient handling of loads on household power sources. N.B. Low voltage control optional extra.

Model	Rated Load	Lift (m)	Lifting Speed (m/min)		Motor Output(kW)		Rating (min)	Load Chain		Cable length		Minimum Headroom G (mm)	Net Weight (kg)
			50Hz	60Hz	50Hz	60Hz		Dia. (mm)	No. of falls	Power Source (m)	Pendant S(m)		
ECC40030	300kg	3.0	5.4	6.4	0.4	0.4	15	6.3	1	5.0	2.6	485	36
ECC40050	500kg	3.0	3.2	3.8	0.4	0.4	15	6.3	1	5.0	2.6	520	36
ECCJ40100	1tw	3.0	1.6	1.9	0.4	0.4	15	6.3	2	5.0	2.6	660	42

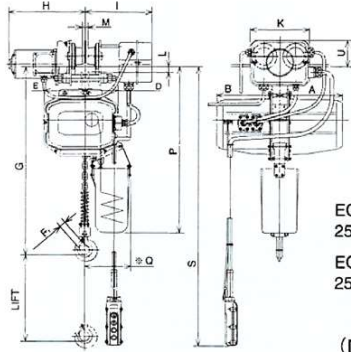
Model	Rated Load	Major Dimensions (approx.) (mm)						
		A	B	D	E	F ₁	P	Q
ECC40030	300kg	245	245	137	149	20	660	195
ECC40050	500kg	245	245	137	149	20	660	195
ECCJ40100	1tw	245	245	167	119	25	715	225

HOIST & TROLLEY (SHORT COUPLED)

250KG – 2000KG

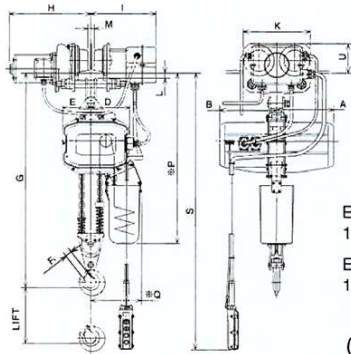
Models ECE4, ECG4 and ECP4

Model EC4 electric chain hoists are also available direct-coupled to motorized, geared or plain trolleys with mechanical joining devices. All of the trolleys are adjustable and will suit the beam widths listed in the tables. Trolleys for wide and narrow beams are also available at moderate extra charges.



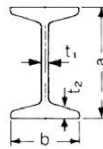
ECE4
250kg, 500kg & 1t
ECTE4
250kg, 500kg & 1t

(Diagrammatic only)



ECE4
1ton (w) & 2ton
ECTE4
1ton (w) & 2ton

(Diagrammatic only)



ELECTRIC CHAIN HOISTS
NITCHI EC4

Model	Rated Load	Lift (m)	Traversing Speed (m/min)		Motor Output (kW)	Rating (min)	Breadth of Beams b (mm)	Min. Radius for curve (m)	Cable length		Minimum Headroom G (mm)	Net Weight (kg)
			50Hz	60Hz					Power Source (m)	Pendant (m)		
ECE40025	250kg	3.0	20	24	0.2	30	75	1.0	1.0	3.0	495	62
		6.0	(10)	(12)			100			6.0		66
ECE40050	500kg	3.0	20	24	0.2	30	75	1.0	1.0	3.0	530	65
		6.0	(10)	(12)			100			6.0		69
ECJE40100	1tw	3.0	20	24	0.2	30	75	1.0	1.0	3.0	660	71
		6.0	(10)	(12)			100			6.0		77
ECE40100	1t	3.0	20	24	0.2	30	75	1.0	1.0	3.0	565	76
		6.0	(10)	(12)			100			6.0		80
ECJE40200	2t	3.0	20	24	0.4	30	100	1.0	1.0	3.0	780	107
		6.0	(10)	(12)			125			6.0		114

Model	Rated Load (ton)	Major Dimensions (approx.) (mm)												
		A	B	D	E	F ₁	H	I	K	L	M	P	Q	U
ECE40025	250kg	245	245	123	149	20	b/2+280	b/2+240	240	32-t ₂	b-49	670	195	99+t ₂
ECE40050	500kg	245	245	123	149	20	b/2+280	b/2+240	240	32-t ₂	b-49	670	195	99+t ₂
ECJE40100	1tw	245	245	153	119	25	b/2+280	b/2+240	240	32-t ₂	b-49	715 835	225	99+t ₂
ECE40100	1t	255	255	136	168	25	b/2+280	b/2+240	240	32-t ₂	b-49	705	200	99+t ₂
ECJE40200	2t	255	255	177	127	30	b/2+325	b/2+250	300	33-t ₂	b-70	790 910	240	121+t ₂

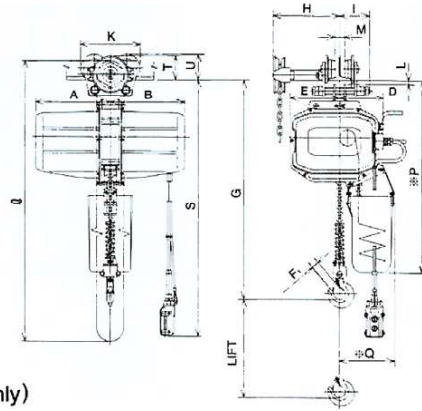
ECG4 GEARED / ECP4 PLAIN TROLLEY TYPE 250KG - 1000KG

ELECTRIC CHAIN HOISTS
NITCHI ECA



ECG4

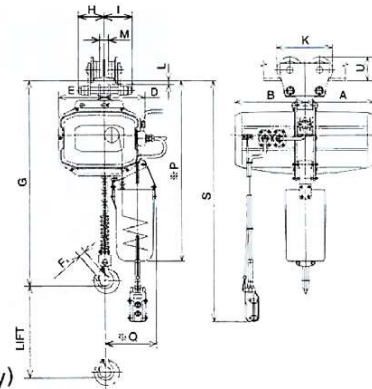
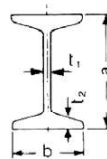
- ECG4
250kg, 500kg & 1t
- ECTG4
250kg, 500kg & 1t
- ECCG4
300kg & 500kg



(Diagrammatic only)

ECP4

- ECP4
250kg, 500kg & 1t
- ECTP4
250kg, 500kg & 1t
- ECCP4
300kg & 500kg



(Diagrammatic only)

Model	Rated Load	Lift (m)	Breadth of Beams b (mm)	Min. Radius for curve (m)	Cable length		Minimum Headroom G (mm)	ECG4			ECP4		
					Power Source (m)	Pendant S(m)		Hand Chain Length l (m)	H (mm)	T (mm)	Net Weight (kg)	H (mm)	Net Weight (kg)
ECG40025 ECP40025	250kg	3.0	75	1.0	5.0	2.6	475	3.0	b/2-190	72+t ₂	47	105	41
		6.0	100 125			5.6					53		45
ECG40050 ECP40050	500kg	3.0	75	1.0	5.0	2.6	510	3.0	b/2-190	72+t ₂	49	105	44
		6.0	100 125			5.6					55		47
ECJG40100 ECJP40100	1t w	3.0	75	1.0	5.0	2.6	640	3.0	b/2-190	72+t ₂	55	105	50
		6.0	100 125			5.6					63		55
ECG40100 ECP40100	1t	3.0	75	1.0	5.0	2.6	550	3.0	b/2-190	72+t ₂	60	105	55
		6.0	100 125			5.6					67		59
ECJG40200 ECJP40200	2t	3.0	100	1.2	5.0	2.6	765	3.0	b/2-150	115+t ₂	80	128	73
		6.0	125 150			5.6					90		80

Model	Rated Load (ton)	Major Dimensions (approx.) (mm)											
		A	B	D	E	F ₁	I	K	L	M	P	Q	U
ECG40025 ECP40025	250kg	245	245	137	149	20	105	206	24-t ₂	b-42	650	195	80+t ₂
ECG40050 ECP40050	500kg	245	245	137	149	20	105	206	24-t ₂	b-42	650	195	80+t ₂
ECJG40100 ECJP40100	1tw	245	245	167	119	25	105	206	24-t ₂	b-42	695	225	80+t ₂
											815		
ECG40100 ECP40100	1t	255	255	150	168	25	105	206	24-t ₂	b-42	685	200	80+t ₂
ECJG40200 ECJP40200	2t	255	255	191	127	30	128	262	28-t ₂	b-63	775	240	102+t ₂
											895		