⚠ caution

Please read "Product Manual" ahead of the use to use the product correctly and safely.
Though our product is manufactured under a strict quality control, Please set up the safety device before application to equipment to which the occurrence of a serious accident and the loss is forecast due to the breakdown of product etc.

MITSUBISHI ELECTRIC FA INDUSTRIAL PRODUCTS CORPORATION
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AVAILABLE FROM

MHSE 03 Mar.30 2

MITSUBISHI ELECTRIC
Changes for the Better

Hoist General Catalog

MITSUBISHI ELECTRIC
FA INDUSTRIAL PRODUCTS CORPORATION

We support your ordinary course of business and lead customer's future.

New

We offer customers consistant high valued service and support which it will hope to lead buiding a strong relation of trust.
Development,manufacturing, and after-sales service of high-quality hoist and geard motor for suppoting tomorrow's FA field.

New Inverter Hoist
U3 type

ISO certification

ISO 14001 Registered Plant

Mitsubishi Electric FA Industrial Products Corporation and its Fukuoka Plant, which is located in the vicnity of Genkai Seminational Park, have been certified to the ISO 14001 Environment Management Standard, and achieved by actively promoting both continuous antipollution and production of environmental-friendly products.

LRQA CERTIFIED ISO 14001

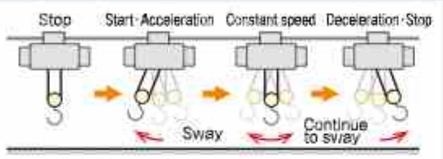
ISO 9001 Certified Plant

Mitsubishi Electric FA Industrial Products Corporation has been certified by the ISO 9001 Quality Standard to produce high quality products to satisfy customers need.

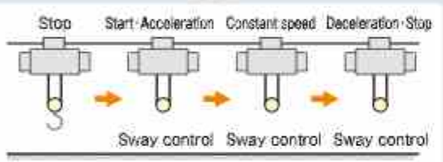
LRQA CERTIFIED ISO 9001 UKAS MANAGEMENT SYSTEMS 0001

New New Inverter Hoist U3・HU3 type series

Improvement of safety and work efficiency
Anti-sway function

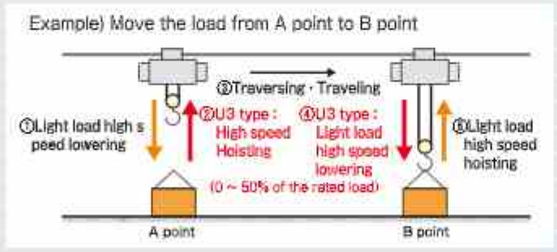


Restraint of the sway of the load



Improvement of work efficiency
Light load High Speed Function(Wide Range)

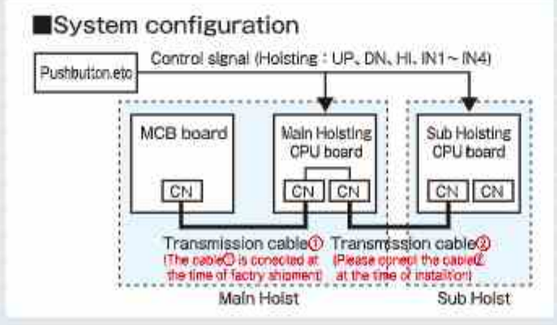
Expansion of the range of load detection



Improvement of convenience
Synchronized control(Special specifications)

The system configuration diagram is right figure

Composition is as the right illustration.



■Example of Function code

U3	–	3	–	L	R	S	3A	–	S	R

Contents U3 Type 3 ton Low lift Double rail type
With traversing inverter With Synchronized control
※Please refer to the 9 page about the Function code

Maintaining the functions that match the conventional maintaniability and application

Maintainability

- Overload prevention function
- Anomaly detection function
- Recording and viewing of the operation and error history

Functions tailored to the applications

- Electronic limit switches
- Speed coordination function

※Please refer to the 15-16 page about the detail of U3 type

■Hoist Type (Shapes)

Monorail Type

Motor Operated Traversing Hoist
This hoist travels in parallel to the traverse rail by motor driven trolley.(This type of hoist is the most widely used)

R-2-LM3

Low-head Type

Motor Operated Traversing Hoist
When this type of hoist performs hoisting to the upper limit,the distance between the bottom surface of the rail and the center of the hook becomes very short compared with Monorail Type.(Therefore, this type is very useful for use in a place with a small height of ceiling)

S-2-LD2

Double rail Type

Motor Operated Traversing Hoist
This hoist travels on the 2 rails of the hoist type overhead crane in the traverse direction.(Since its stability is extremely high, in particular, this type is often used for a large capacity.)

S-2.8-LR3A

Suspended Type

This hoist is fixed at the ceiling and used only for lifting and lowering cargo.

R-2-LK3

Frame mounted Type

This hoist is fixed on the pedestal and used only for lifting and lowering cargo. (This hoist is usually used for the same application as suspended type as well as the substitution for a winch.

S-2.8-HS3

■Introduction of Products

Hoists

U3・HU3Type
(1/2-60t)

New Inverter Hoist U3 Type offers further improvement of safety, work efficieny and convenience by Anti-sway function. Wide range light load high speed function and Synchronized control function(specialized function).

For high frequency use
Mitsubishi original inverter specially developed for hoist has realized the miniaturization and versatility.
Functions, which detect the hook position and change to higher hoisting speed when zero load is detected, offer high level of operation efficiency.

S Type
(1/2-60t)

For high frequency use
S type series is heavy-duty type hoists for applications involving high frequency operations. Its hoisting speed and duty class is the highest available.

UM Type
(5t・10t)

For medium frequency use
UM Type series has been developed based on the next generation concept.
UM Type series has Mitsubishi original inverter specially developed for hoist.
Overload prevention function, Electronic limit switches, Light load high speed operation function and Operation history function are standard.
It has been designed for optimizing price and performance.

M Type
(5t・10t)

For medium frequency use
M Type series has been developed based on the next generation concept.
It is has been designed for optimizing price and performance.

R Type
(1-2.8(3)t)

For medium frequency use
R Type series is structurally simple and economical with real capability.
It is provided with one class higher capability and both power and worthy of its real capability and economical efficiency.

U-X・S-X Type
(1/2-60t)

Inverter Explosion-Proof Type (U-X Type) ※Only 200V class is available
U-X Type series is the first Inverter Explosion-Proof Type in the industry.
Explosion-Proof Type (S-X Type)
Hoists used in places where explosive gas or steam exist must pass the Explosion-Protection Examination.
Explosive grade d2 and Ignition degree 4 grade are available.

Crane Related Equipment

Saddle for Crane(～20t×27m)

<ST-D・MT>Top-Running Crane Saddle and <SP-D・MP>Suspension Crane Saddle are available. A traveling device that adopts Channel frame makes the installation to the main beam easy. (ST-D, SP-D)

Gear Motor for Crane Saddle(SGM)

(0.4kw-3.7kw)

<SGM-A>is easy handling gear motor for crane saddle.
There are two speed types of output axis rotation.(Low speed and High speed)
It allows customers to choose the most suitable type of gear motor.

Other Crane Related Equipments

<TIB-2> Inverter control box for saddle motor
<LCV-B> Over load detection device (Electric)
<LCM> Over load detection device (Mechanical)

※A LCM is sold with a hoist. A LCM is not sold as single item.

THE MITSUBISHI ELECTRIC HOIST APPLICATIONS AND SELECTION DIAGRAM

The diagram enables you to select the most suitable hoist type for each customer's condition:

The hoist type selection diagram

Rate of loading \ Total operating hour h	Under 800	Over 800 to Under 1600	Over 1600 to Under 3200	Over 3200 to Under 6300	Over 6300 to Under 12500	Over 12500 to Under 25000	Over 25000
Load distribution 100% 0% Crane used normally in under 50% of the rated load	A	A	A	B	C	D	E
Crane used normally from 50% to less than 63% of the rated load	A	A	B	C	D	E	F
Crane used normally from 63% to less than 80% of the rated load	A	B	C	D	E	F	F
Crane used normally in more than 80% of the rated load	B	C	D	E	F	F	F
		R Type M Type UM Type	U3·HU3 S Type	U3·HU3 S Type (special)	Crab Crane		

① Signs such as A or B grade stand for the application group of the crane structure standard. (Japan Ministry of Labor)
② C grade applied the hoist of S, U3, HU3 series lift more than 12m.
③ The licence of Crab type production is necessary about the large-capacity hoist more than 30t. In addition, please specify the application group.

■Percentage of duty cycle and number of starts per Hr.

Type / Percentage of duty cycle and number of starts per Hr.		R	S	U3 HU3	M UM
Lifting	Percentage of duty cycle(%)ED	25	40	40	40
	Number of starts Per Hr(S/Hr)	250	400	400	240
Traversing	Percentage of duty cycle(%)ED	25			25
	Number of starts Per Hr(S/Hr)	250			150

- Starting frequencies represent the number of starts during one hour at the busiest rate of operation.
- Special designs are required for applications involving load/time rations in excess of 40% or starting number frequencies in excess of 400/hour. Consult your dealer.

$$ED(\%) = \frac{\text{Total time motor is under power during 1 hour of operation at busiest rate(minutes)}}{60} \times 100$$

■The kind of the crane and crane classes of the hoisting devices

Classification of the crane	Class of the hoisting device
For Power plants, Disassemble and assemble crane	A
For Machinary and assembly factory crane	A
For general factory crane	B—D
Installed on a ceiling (with bucket, magnet)	D—F
Ladle crane	E—F
Charging crane	F
Forging crane	F
General use Portal bridge crane (with hook)	B—C

※In the case of dual speed, it is assumed that the ratio between low speed and high speed of the load time is 1:2, and the ratio between low speed and high speed of the maximum number of starts per Hr is 2:1.

※Continuous operating time limit at maximum allowable frequency of use is below

Load condition	Light (50% of the rated load)	Medium (63% of the rated load)	Heavy (80% of the rated load)
Continuous operating time	Less than 8 hours	Less than 4 hours	Less than 2 hours

※Please contact us if it exceeds above continuous operating time.

Basic term of the hoist (crane)

There are many technical terms in this catalogue and the words that are generally used. The most basic words are explained below.

① Hoisting load
The maximum load that hoist (crane) can burden
※The load that includes mass of a hook (lifting tod) and rated

② Rated load
The load that deducted the mass of a hook and the lifting tool from hoisting load
※We display rating load with capacity.

③ Lift
Vertical movement distance of the hook
※The standard lift of Mitsubishi hoist

- **Low lift** { **Less than 3t→6m** / **More than 5t→8m**
- **High lift 12m**

※M,UM Type has only 12M.

④ Hoisting(Lifting)/Lowering
Vertical motion of the load

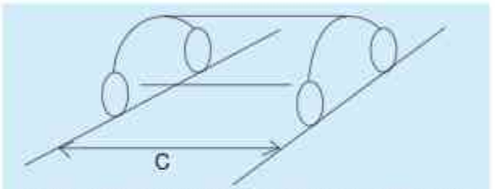
⑤ Horizontal Traversing
Motion of hoist

⑥ Horizontal Travelling
Motion of crane
※Distance hoist moves (speed) ····· Traversing distance(speed)
※Distance crane moves (speed) ····· Travelling distance(speed)

⑦ Minimum head room
From the upper end of the lift
- Monorail Type ··· to under surface of I-beam
- Double rail Type ··· to contact surface with the rail
- Suspended Type ··· to the bolt hole center for suspending
- Frame mounted Type ··· to the under surface of a mounting frame

※The minimum head room is indicaded as "N" dimensions.

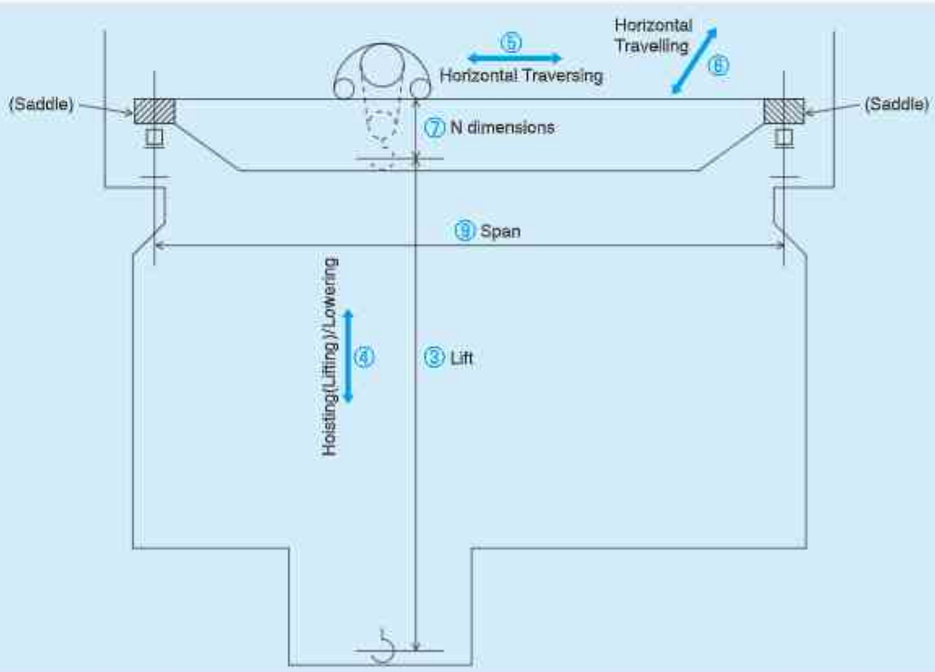
⑧ Wheel distance of the hoist
Distance between the center of the traversing rail (only as for the Double rail Type)



※The length between rails is indicated as "C" dimensions.

⑨ Span
Distance between the center of the traversing rails

⑩ Crane
Machine loaded by power, and to carry up and down, front and back and right and left
※The crane especially called Telfer works only up and down, right and left.



■The selection of the model

At first, select by purpose of use, use condition, frequency of use and decide concrete model by capacity, lift, shape(Suspended Type, Frame mounted Type, with traversing) and hoisting speed next.

①Allowable freqency of use

Select the model by the start number of times (the number of times of the up and down operation of the push button), percentage of duty cycle.(Please refer to the hoist applications and seledtion diagram of P3.)

②Capacity

S series, U3 series:1/2-60t, HU3 series:10t - 60t, R series:11-2.8(3)t, M series, UM series : 5t and 10t

③Lift

We have Low lift type and High lift type. As for the low lift, 6m (more than 5t, 8m), the high lift is 12m. Most models make both high lift and low lift.

※M, UM Type has only 12M.

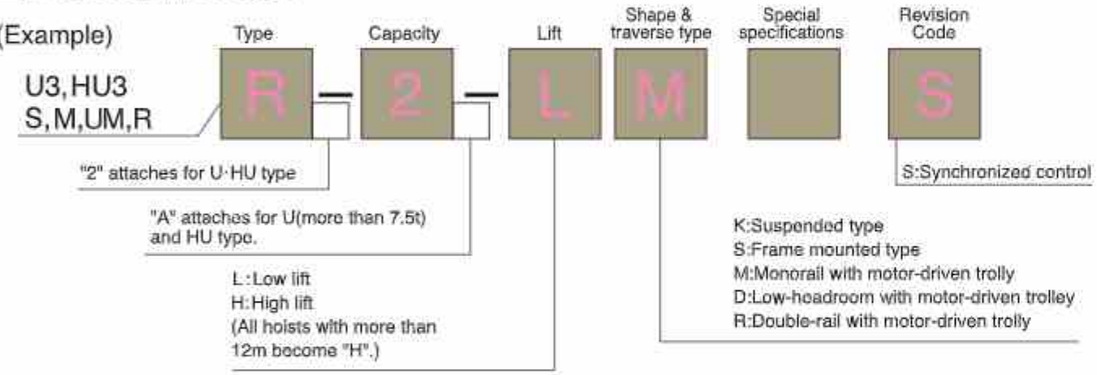
④Shape

Suspended Type, Frame mounted Type, Monorail Type, Low-head Type, Double rail Type

※There is some hoist which we don't produce by a model, capacity. (Please refer to production overview of P6.)

■Function code

(Example)



In the case of special hoists, the following code attaches to the end of function code.

Special specifications	Code
With hoisting inverter	H
With hoisting and traversing inverter	S
With traversing inverter(S type, R type)	T
With hoisting creep speed(S type)	VT
With hoisting and traversing creep speed(S type)	VS

Special specifications	Code
With gear type limit swich	G
With electric limit swich	E
With emergency brake	B
Explosion-proof type	X

■The viewpoint of the catalog

①MITSUBISHI Hoist applications and selection diagram, allowable duty cycle and the number of starts per Hr.

The allowable duty cycle and the number of starts per Hr. are described. Confirm how much frequency you use hoist at, and select the most suitable model.

②Production Overview Table

You can distinguish a production range according to the production overview table.

③Specifications

We describe basic specifications of the hoist. You can identify wire rope size, motor capacity, lifting and traversing speed, current value, in addition, basic specifications.

④Outline Drawings

We have outline drawings type-by-type. Minimum head room(N dimentions), general weight, applicable I-Beams are described in it. Please warm being the model that the minimum radius curvatures grows big with the I-Bean of small size by the facia column of the applicable I-Beam.

■Production model

	Type	Frequency of use	Type of Control system		Capacity(t)											
			Inverter	Magnetic contactor	1/2	1	2	2.8(3)	5	7.5	10	15	20	30	45	60
Variable speed type	U3	High	○		○	○	○	○	○	○	○	○	○	○	○	○
	UM	Medium	○						○		○					
	UH3		○								○	○	○	○	○	○
Fixed speed type	S	High		○	○	○	○	○	○	○	○	○	○	○	○	○
	R	Medium		○		○	○	○								
	M	Medium		○					○		○					

■Production Overview Table

〈U3〉〈S〉〈S-VT,VS〉Type

Capacity(t)	Motor Operated Traversing			Suspended Type	Frame mounted Type
	Monorail Type	Low-head Type	Double Rail Type		
	LM/HM	LD/HD	LR/HR	LK/HK	LS/HS
1/2	6m/12m	6m	–	6m/12m	–
1	6m/12m	6m/12m	–	6m/12m	6m/12m
2	6m/12m	6m/12m	–	6m/12m	6m/12m
2.8(3)	6m/12m	6m/12m	6m/12m	6m/12m	6m/12m
5	8m/12m	8m/12m	8m/12m	8m/12m	8m/12m
7.5	8m/12m	8m/12m	8m/12m	8m/12m	8m/12m
10	8m/12m	8m/12m	8m/12m	8m/12m	8m/12m
15	8m/12m	–	8m/12m	8m/12m	8m/12m
20	12m	–	12m	–	12m
30	–	–	12m	–	12m
40	–	–	6.5m/11.5m	–	6.5m/11.5m
45	–	–	12m	–	12.5m
60	–	–	–	–	9.5m/14.5m

〈HU3〉 Type

Capacity(t)	Motor Operated Traversing			Suspended Type	Frame mounted Type
	Monorail Type	Low-head Type	Double Rail Type		
	LM/HM	LD/HD	LR/HR	LK/HK	LS/HS
10	8m/12m	8m/12m	8m/12m	8m/12m	8m/12m
15	8m/12m	–	8m/12m	8m/12m	8m/12m
20	12m	–	12m	12m	12m
30	–	–	12m	–	12m
40	–	–	6.5m/11.5m	–	6.5m/11.5m
45	–	–	12.5m	–	12.5m
60	–	–	–	–	9.5m/14.5m

〈R〉 Type

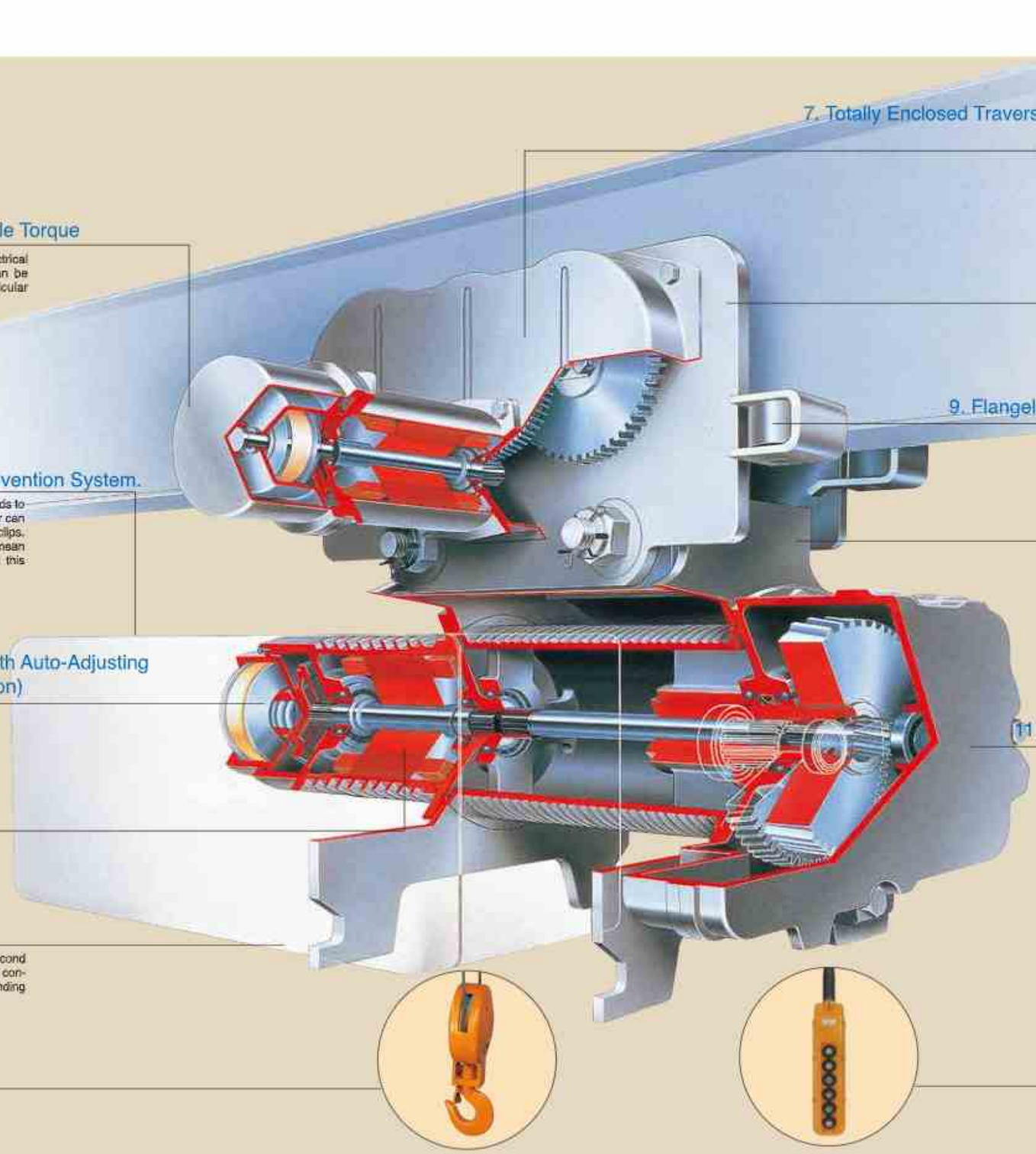
Capacity(t)	Motor Operated Traversing			Suspended Type
	Monorail Type	Low-head Type	Double Rail Type	
	LM/HM	LD/HD	LR/HR	LK/HK
1	6m/12m	6m	–	6m/12m
2	6m/12m	6m	–	6m/12m
2.8(3)	6m/12m	6m	6m	6m/12m

〈M〉〈UM〉Type

Capacity(t)	Motor Operated Traversing		Suspended Type	Frame mounted Type
	Monorail Type	Double Rail Type		
	HM	HR	HK	HS
5	12m	12m	12m	12m
10	12m	12m	12m	12m

SUPER MECHANICAL FEATURES BASED ON A TRADITION OF ADVANCED TECHNOLOGY.

Control Box, traversing motor and oil gauge are arranged on the same side for ease of maintenance.



1. Traverse Brakes with Adjustable Torque

DC voltage magnetic disc brakes provide easy electrical control of the traverse motor. The brake torque can be adjusted to provide the ideal level of inertia for the particular application.

2. Control Box with Overload Prevention System.

A microprocessor system automatically detects overloads to ensure total safety. For ease of maintenance, the cover can be opened or secured by means of one-touch catch clips.
(Note:Power conditions in certain parts of the world mean that in some causes units must be shipped without this circuit).

3. DC Electromagnetic Brakes with Auto-Adjusting Mechanism (Not exceeding 5ton)

These DC disc brakes are electromagnetically operated and will provide years of trouble-free service. The core gap is automatically adjusted according to the degree of friction on the brake surface to ensure a stable braking action.

4. Hoist Motor

This high-resistance die-cast motor combines a low starting current with a high starting torque. There is on initial buildup of heatand inching operations are easy.

5. 2-Step Hoist-Limiting Switch

The first step cuts off the hoist control circuit. The second shuts off the main power supply circuit under abnormal conditions, such as reverse-phase connection, reverse winding of fused connections.

6. Hook Block with Safety Cover

The entire assembly is enclosed for added safety.

7. Totally Enclosed Traverse Gear Assembly (More than 7.5t monorail type and 7.5t low-head type are with dustproof cover)

The grease-lubricated tooth-gear system is fully enclosed to shut out harmful dust and prevent cog and shaft wear.

8. Side Plate for Traverse

The connection between the wheelshaft and the side plate is based on newly developed technology and provides total load security.

9. Flangeless Wheels and Guide Rollers (Not exceeding 3ton)

Friction between the I-beam and wheels has been mini-mized to ensure smooth traverse. The guide rollers are locat-ed on the outside of the side plate for easy maintenance and inspection.

10. Steel Frame

Strength and reliability have been further enhanced by means if a design based on sophisticated mechanical analysis techniques.

11. Simplified Hoist Gear System (Not exceeding 3ton)

A simple 2-stage reduction system has been used for even quieter hoist operation.

12. Protective Construction for Drip-proof

13. Drip-proof Push-Button Switches

Switches are enclosed in a drip-proof plastic case for added protection against electric shock.

U3·HU3 Type Series Ultra type 1/2t~60t

Included over load prevention function as standard equipment

Low-wearing electromagnet brake

- Heat-generation and wear are small under severe inching operations accompanied by braking operations at low motor-speeds in the inverter-driven power train. Abatement heat-generation and wear contribute to long-span operation.
- Hoists rated for 7.5 ton or more are equipped with an emergency brake.

Resistance unit

- Cement resistances are unitized for downsizing.
  (For hoist rated for 10 ton or less)
- Adoption of the connector system facilitates hoist work.
  (For hoists rated for 10 ton or less)

Control panel integrating purpose-built inverter

- The control panel, made compact with an integrated inverter only for hoist, has improved environmental resistance.
- Simple parameter setting operation
  - ＊Allows operating speed to be specified freely.
  - ＊Allows selection of light-load high-speed function.
  - ＊Allows the position detection point to be specified freely.
- Troubleshooting facilitated by abnormality display.
- The time for replacement of parts can be judged easily by the operation history display function.
- Hoists with traversing inverter are equipped with the Anti-sway function as a standard function.
  - ＊The judgement levels of light load and overload vary depending on the environment(voltage, temperature, etc) in which the hoists are used.(Please be sure to adjust them on site.)
  - ＊Anti-sway function can be effective only when the traversing rail is straight.
  - ＊The factory setting of the traversing acceration time is 3 seconds.
  - ＊When using a response control function, it's sometimes different from the conventional convenience in inchingu operation. (When it's equipped with a changeover switch in a push button, it's possible to add to operator's sense.)

Adoption of S type body

- This series is based on the model S, high-performance parent body which features highest-in-class hoisting speed, power, and durability, and withstands repeated operations.

Encoder

- Full-time monitoring of hoist motor motion; detects abnormalities and stops the machine if necessary as a safety precaution.
- Detects position using rotation pulses; reduces machine speed when approaching the upper or the lower limit and stops it there.
- Detects light-load and automatically operates light-load high-speed.

Smooth operation

- Infinitesimal and light-moving inching operations
- Smooth changeover between high- and low-speed operations

Introduction of UA type 45 kW series

- 45 kW hoisting motor has further improved machine speed

Type	Capacity (t)	Hoisting speed m/min	Hooting Motor	
			Capacity(kW)	Poles(P)
UA	15	1.3/13	45	4
	20	1.1/11		
	30	0.75/7.5		
	40	0.56/5.6		
	45	0.5/5		
	50	0.45/4.5		
	60	0.37/3.7		

＊Outside dimensions of this hoist differ from those listed on this catalog; contact us for further information.
＊A general-purpose inverter will be installed.
＊Some functions of this hoist differ from those on other Soukai-TEI products.

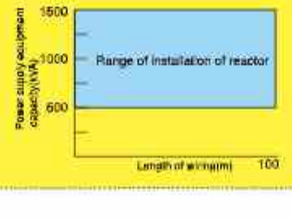
Manufacturing specifications for typical large-capacity hoists

Type	Capacity (t)	Hoisting speed m/min	Hooting Motor	
			Capacity(kW)	Poles(P)
U	100	0.36/2.2	24kW ×2台	4
UA	100	0.67/4 Light-load high-speed function 6m/min	45kW ×2台	4

※400 V series are also available; contact us for further information.

Note: AC Reactor

The inverter hoist might be damaged when it is connected directly with the large capacity power transformer(more than 500kVA transformer), there is a switch of the phase advance capacitor and the excessive peak current inflows into the power supply input circuit. In such cases, please make sure that the AC reactor is installed on the primary side of the inverter hoist.



Inverter hoist that develops new use and new field

Specifications

Type	Capacity(t)	Lift(m) Low	Lift(m) High	Wire Rope: Monorail type	Wire Rope: Lowhead type	Wire Rope: Double railtype	Rope specification	Holsting: Inverter Operation speed m/min On-load Low speed	Holsting: Inverter Operation speed m/min On-load High speed	Holsting: Inverter Operation speed m/min Light load high speed	Holsting: Motor Out put (kW)	Holsting: Motor Rated Current (A)	Holsting: Motor Poles	Traversing: Monorail・Low-head type speed m/min Magnetic contactor operation 50 Hz	Traversing: Monorail・Low-head type speed m/min Magnetic contactor operation 60 Hz	Traversing: Monorail・Low-head type speed m/min INV Operation Low speed	Traversing: Monorail・Low-head type speed m/min INV Operation High speed	Traversing: Monorail・Low-head type Motor Magnetic contactor operation Out put (kW) 50 Hz	Traversing: Monorail・Low-head type Motor Magnetic contactor operation Out put (kW) 60 Hz	Traversing: Monorail・Low-head type Motor Magnetic contactor operation Rated Current (A) 50 Hz	Traversing: Monorail・Low-head type Motor Magnetic contactor operation Rated Current (A) 60 Hz	Traversing: Monorail・Low-head type Motor Magnetic contactor operation Poles	Traversing: Double rail type speed m/min Magnetic contactor operation 50 Hz	Traversing: Double rail type speed m/min Magnetic contactor operation 60 Hz	Traversing: Double rail type speed m/min INV Operation Low speed	Traversing: Double rail type speed m/min INV Operation High speed	Traversing: Double rail type Motor Magnetic contactor operation Out put (kW) 50 Hz	Traversing: Double rail type Motor Magnetic contactor operation Out put (kW) 60 Hz	Traversing: Double rail type Motor Magnetic contactor operation Rated Current (A) 50 Hz	Traversing: Double rail type Motor Magnetic contactor operation Rated Current (A) 60 Hz	Traversing: Double rail type Motor Magnetic contactor operation Poles
U3	1/2	6	12	φ6.3 2falls	—	φ4	6×W(19) B Class JIS G3525	0.0233 (1.4)	0.217 (13)	0.325 (19.5)	1.2	8	4	0.35 (21)	0.417 (25)	0.417 (2.5)	0.417 (25)	0.22	0.26	1.6	1.5	4	—	—	—	—	—	—	—	—	—
	1			φ8 ×3	—	φ6.3					2.4	17												—	—	—	—	—	—	—	—	—
	2			φ10	—	φ8	—	0.0183 (1.1)	0.167 (10)	0.25 (15)	3.5	26						0.5	0.6	3.2	3.1		—	—	—	—	—	—	—	—	—
	2.8			φ12.5	—	φ9	φ9				4.9	32												0.35 (21)	0.417 (25)	0.417 (2.5)	0.417 (25)	0.5	0.6	3.2	3.1	
	3			φ12.5	—	φ9	φ9				5.3	34																			
	5	8		—	φ11.2	φ11.2	φ11.2	0.015 (0.9)	0.133 (8)	0.2 (12)	7.5	40						0.85	1.0	4.8	4.7									
	7.5			—	φ14	φ14	φ14	0.017 (0.7)	0.117 (7)	0.175 (10.5)	10	54																0.85	1.0	4.8	4.7	
	10			—	φ16	φ16	φ16	0.01 (0.6)	0.1 (6)	0.2 (12)	12	58		0.2 (12)	0.25 (15)	0.25 (1.5)	0.25 (15)	1.5	1.8	8.5	8.1	4									
	15			—	φ20	—	φ20				20	89						0.85 ×2	1.0 ×2	4.8 ×2	4.7 ×2						1.5	1.8	8.5	8.1	4
	20	—		—	φ22.4	—	φ22.4	0.0083 (0.5)	0.083 (5)	0.167 (10)	20	89						1.5 ×2	1.6 ×2	8.5 ×2	8.1 ×2										
	30	—		—	—	—	φ25	IWRC6×F(29) B Class JIS G3525	0.0067 (0.4)	0.055 (3.3)	0.11 (6.6)	20	89	6	—	—	—	—	—	—	—	—		0.25 (15)	0.3 (18)	0.03 (1.8)	0.3 (18)	1.5 ×2	1.8 ×2	8.5 ×2	8.1 ×2	
	40	6.5 — 11.5		—	—	—	φ22.4 (6falls) ※1	6×FI(29) B Class JIS G3525	0.005 (0.3)	0.0417 (2.5)	—	20	89		—	—	—	—	—	—	—	—						0.75 ×4	0.75 ×4	4.1 ×4	3.6 ×4	
	45	12.5 — 19		—	—	—	φ25 (6falls) ※1	IWRC6×F(29) B Class JIS G3525	0.005 (0.3)	0.0367 (2.2)	—	20	89		—	—	—	—	—	—	—	—										
HU3	10	8	12	—	φ16	φ16	φ16	6×FI(29) B Class JIS G3525	0.015 (0.9)	0.15 (9)	0.225 (13.5)	18	90	4	0.2 (12)	0.25 (15)	0.25 (1.5)	0.25 (15)	1.5	1.8	8.5	8.1	4	0.25 (15)	0.3 (18)	0.03 (1.8)	0.3 (18)	0.85	1.0	4.8	4.7	4
	15			—	φ20	—	φ20				30	130						0.85 ×2	1.0 ×2	4.8 ×2	4.7 ×2						1.5	1.8	8.5	8.1	
	20	—		—	φ22.4	—	φ22.4	0.025 (0.75)	0.125 (7.5)	0.183 (11)	30	130						1.5 ×2	1.8 ×2	8.5 ×2	8.1 ×2										
	30	—		—	—	—	φ25	IWRC6×F(29) B Class JIS G3525	0.0083 (0.5)	0.083 (5)	0.125 (7.5)	30	130		—	—	—	—	—	—	—	—						1.5 ×2	1.8 ×2	8.5 ×2	8.1 ×2	
	40	6.5 — 11.5		—	—	—	φ22.4 (6falls)	6×FI(29) B Class JIS G3525	0.0067 (0.4)	0.0617 (3.7)	—	30	130		—	—	—	—	—	—	—	—						0.75 ×4	0.75 ×4	4.5 ×4	3.8 ×4	
	45	— 12.5 — 19		—	—	—	φ25 (6falls)	IWRC 6×FI(29) B Class JIS G3525	0.0067 (0.4)	0.055 (3.3)	—	30	130		—	—	—	—	—	—	—	—										
	50 ※2	— —		—	—	—	—	—	0.005 (0.3)	0.05 (3)	—	30	130		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	
	60 ※2	— —		—	—	—	—	—	0.0046 (0.25)	0.0416 (2.5)	—	30	130		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	

※1 Please note that 40t is 8falls and 45t is 6falls. (Please contact us for 60t separately.) ※2 Please contact us for 50t and 60t separately
※3 Rope specification of 1t 2falls is 6×FI(29) ※4 It'll be motor capacity 7.2kW and electric current 40A in case of 4.8t.
※5 Please choose which growing powerful is, "business-driving" or "inverter driving".

Standard Specifications

- Power supply ··· 3-phase 200V 50/60Hz control 200V, 220V 60Hz control 220V
  (400Vclass is also available) ··· 3-phase 400V 50/60Hz control 200V, 440V 60Hz control 220V
  3-phase 380V 50Hz control 48V(100V and 24V are also available)
- Operating method ··· Push button switch operations

Suspended type Frame mounted type	10 Points 4 Points ON OFF U D
Motor operated traversing hoist	8 Points ON OFF U D E W S N

※Above push buttons are all 2 step push buttons excluding "ON" and "OFF"

- Rating ··· Hoisting (less than 6t) 40%ED(63% of load rating), 400S/Hr
  (More than 7.5t) 25%ED(63% of load rating), 150S/Hr JIS C 9620
  Traversing 30min(JIS C 9620)
- Power supply system ··· Cable feeding, trolley feeding(only double trolly)
- Ambient air temperature ··· -10℃ to 40℃(Non congelation)
- Ambient air humidity ··· 90% or less(Non condensing)
- Enclosure ··· Simplified out door type(JIS C 0920, equivalent to IP-44)
- Please prepare the shelter place or the installation of rain cover when it is used in outdoor.
- Applicable standard ··· JIS C 9620 electric hoist/crane structure standard.
- Color coating ··· Main body:Metallic gray(Equivalent to Munsell N4.0)
  Hook block:Munsell7.5YR7/14
  Pushbutton:Equivalent to Munsell7.5YR7/13

Note :There are differences between 200V class and 400V(380V) class in outline and specifications, etc. Please contact us for 400V(380V) class separately.

New Inverter Hoist U3·HU3 Type

Are you struggling with the sway of the load when you move the load by crane?

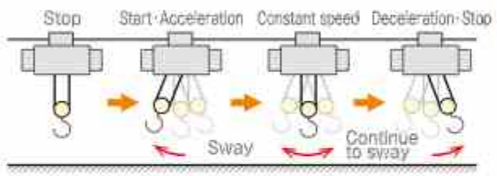
1 Anti-sway function can restrain the sway of the load

U2 Type

It can be dangerous due to sway of the load

Without Ant-sway function

There are risks of collision and collapse of the load due to sway of the load during traversing operation.

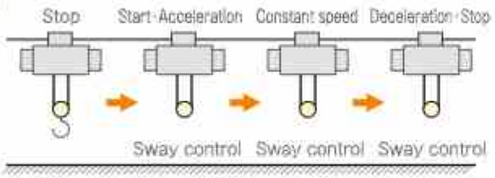


U3・HU3 Type

Even a beginner can operate the crane safely and work efficiency can be improved.

With Ant-sway function

Anti-sway function can restrain the s way of the load at traversing operation and improve the safety and work efficiency.



Points of Anti-sway control

- The effect of Anti-sway function can contribute to secure worker's safety.
- Work efficiency can be imroved by restraining the sway of the load during traversing operation.
- The risk of workers who are not used to operate the crane can be reduced.

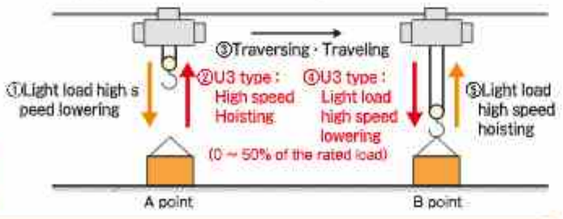
※The swing quantity of the load is 1/5 or below with comparing to that of U2 type.
(It is necessary to set the length of pendulum to use Anti-sway function)

2 Light Load High Speed Function(Wide Range)

Type	Name of function	Range of light load detection
U2 Type Hoist	Light load high speed function	0~25% of the rated load
U3·HU3Type Hoist	Light load high speed function(Wide range)	0~50% of the rated load

The detection range of Light load high speed function is expanded.

Example) Move the load from A point to B point



The points of Light load high speed function (Wide range)

- If hoists are less than 7.5 ton, hoisting speeds are changed automatically to 1.5 x faster than standard speed, and if the hoists are over 10 ton hoist, they are changed to 2x faster than standard speed. (It depends on the number of motor poles)
- The judgement value is changeable in the rage of 0% to 50%of the rated load. Frequency setting of Ligh load high speed operation can also be changed.
- Light load high speed fuction can be used even under combined hoisting operation.

※In the case of long lift models, there is a possibility that Light load high speed fuction can not be used. Please contact us for long lift models.
※There is a possibility that the Light load high speed function can not be used at 50% of the rated load due to the variation of judgement arised from the environment(voltage, temperature, etc) in which the hoists are used.

- The factory setting of the ligh load detection level is 25% of the rated load.

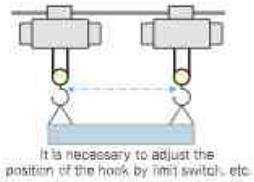
Don't you feel annoyed to adjust the position of the hook at combined hoisting operation ?

3 Synchronized control function(specialized function) offers safey and control the position of the hook automatically by transmission board.

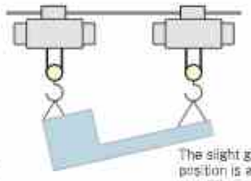
U2 Type

Strain to adjust the position of the hook.

- In general, it is necesarry to adjust the position of the hook every time.
- It is necesarry to reset the position of the hook by limit switch or swhitch to single operation mode.



It is necesarry to adjust the position of the hook by limit switch, etc.



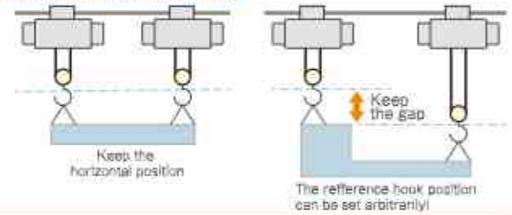
The slight gap of hook position is arised by repetitive operation.

U3・HU3 Type

Ease of combined hoisting operation due to position of the hook is automatically adjusted.

- Synchronalzed control fuction monitors the mutual hook position by transmission board and automatically adjust the hook position gap.
- The refference hook position can be set voluntarily by the offset function of combined hoisting operation.

Synchronized control image



The points of Synchronaized control function

①Autmomatically adjusting the gap of hook position

- Synchronized control function monitors the postion of the hook automatically at the time of start of hoisting and lowering, constant operation and stop. (It can be set to active or inactive)

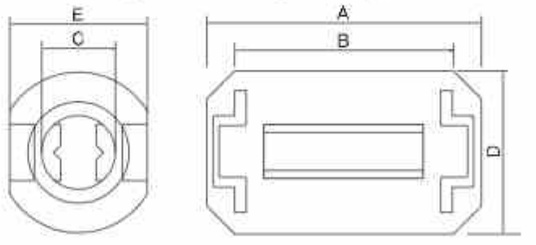
②The offset function of combined hositing operation and control

- The reference hook position and switching from combined hositing operation to single hoisting operation can be set voluntarily by the parameter setting or external input signal.

※2 hoists can be even used. When using this function, connect 2 hoists.
(If hoists cannot be connected mechanically, kindly install a traversing interlock)

Please use below products when it is necessary to comply with IEC61000. They can reduce the effect of noise.

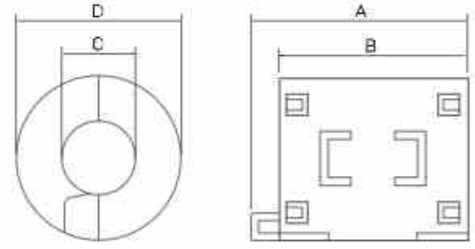
Type Code:3H817(for 2 terns)



Outer dimensions				Applicable cable (mm)
A	B	C	D	
35.0	28.0	9.0	17.4	Suitable cable (Φ4.2㎜)

Product name	Ferrite core(for 2 terns)
Type	E04SR200935AB
Weight(g)	20
Impedance(Ω)	10MHz:90 100MHz:108

Type Code:3H818(for 3 terns)



Outer dimensions				Applicable cable (mm)
A	B	C	D	
39.0	34.0	13.0	30.0	Suitable cable (Φ4.2㎜)

Product name	Ferrite core(for 3 terns)
Type	ZCAT3035-1330
Weight(g)	62
Impedance(Ω)	10MHz:80 100MHz:150

■ When is it necessary ?

In the case of transmission does not work due to the noise, distance from the power supply cable is not enough, and take masures gainst noisebefore the full-scale operation of the crane attach the noise filter(Ferrite) as a countermasure.

■Differences between 2 terns and 3 turns

Althought if the number of turns is higher, it is effective due to the attenuation characteristic,the communicatins countermesures differ depending on the amount and quality of noise and the length of transmission cable, etc. The stray capacitance and magnetic coupling increase if the number of wraps increases.
Please select and implement the effective countermasures according to the environment and the systems in which it is used.

New Inverter Hoist U3·HU3 Type (200V/400 class)

Features of U3·HU3 Type

1 Reduction of shock at starting and stopping

Mitsubushi inverter hoists can reduce the shock and shaking of the hoisting load considerably.Therefore, they are very useful for delicate load positioning and the load position can be contolled as you like.

2 Adjustable hoisting speed

Hoisting speed can be adjusted freely in a range from minimum speed to standard spee. This allows operators to select the most suitable speed for their jobs.
Switching between high and low speed is facilitated by a two stage push button operation.

3 Highly controllable inching operation

Mitsubishi inverter hoists enable highly controllable inching operation, enabling delicate load positioning with ease.
The traversing inverter allows sharp speed reduction by pushing the opposite direction button.

4 New Anti-sway function

Anti-sway function can restrain the sway of the load at traversing operation.
(The swing quantity of the load is 1/5 or below with comparing to that of U2 type)
That can restrain the sway of the load at traversing operation and improve the safety and work efficiency.
When using Anti-sway function, inching operation may feel differ from the conventional usability.
By equipping push button with a switching switch, it can be adjusted to the operator' s sense of feeling.

5 Low wearing brake and machine parts

Mitsubishi inverter hoists can improve durability of brake discs, wire rope, gears and sheaves because Mitsubishi inverter hoists drastically reduce load shock. Unlike conventional hoists(non inverter hoists), it is not necessary to replace the electromaganetic contactors.(However, frequent use of light load high speed mode may increase brake disc wear)
Simplified design has reduced the number of parts, contributing to reduced failure risk and extended life span of many parts.Brake disc wear can be checked easily through a window on the brake box.
(The pressure plate and brake disc have wear limit indications. The window allows you to check whether the adjustment ring had dropped)

6 Electronic limit switches (for upper and lower limits)

Electronic limit switches can decelerate and stop the hook automatically by detecting the hook position.
All postion settings(deceleration and stop positions) can be controlled at the same time, allowing you to replace the wire rope with ease.
Unnecessary position settings can be canceled. For example, only the setting of the lower limit stop position is required when other positions are not used.

7 New Light load high speed function

If Hoist is less than 7.5 tons, hoisting speeds are changed automatically to 1.5x faster than standard speeds. And if over 10 tons hoists, they are changed to 2x faster than standard speeds. U3 Type and HU3 Type can change the judgement value setting in the range of 0 to 50% of the rated load. The judgement value varies depending on the environment(voltage, temperature, etc) in which the hoists are used. U3 Type and HU3 Type can adjust the judgement value up to 50% of the rated load accroding to the hanging tool. Ligh load high speed function can be used even under combined hoisting operation. It can be set to output "R" phase voltagefrom the "OUT 3" terminal when the load value is judged. It can prevent the case where only one side of the hoist changes to high speed automatically if each hoist's"OUT 3" is connected to the other side of terminal "IN 4". The operation frequency of the light load high speed fuction can be changed. In the case of hoists with special long lift, there is a possibility that they can not use Light load high speed function. Please contact us.

8 Overload prevention function

The overload judgment value is adjustable within a range from 100 to 125 percent of the rated load.
The overload detection signal is output by terminal [OUT3] .
It can be set to stop the hoisting operation when an overload is detected.
(The factory setting is that the hoisting is not stopped even if an overload is detected.)
※Overload prevention function does not work by inching operation.

9 Numerous output signals

Signals are output from OUT1 at the upper limit stop point, and from OUT 2 at the lower limit.
Signals are output from OUT3 when overload evaluation is carried out, and from OUT4 during operation.
Setting can be changed to get signals from OUT3 when light loading evaluation is done.

10 Speed coordination function

Speed coordination function is to restrict the load slope attributed to combined hoisting operation.
The low hoisting speed and low lowering speed are within ±20%(within JIS stpulated range)
Speed coordonation function also enable very stable hoisting and lowering speed(within ±1%)

11 Synchronaized control function (special specifications)

2 hoists can operate by monitoring the mutual positions of the hooks by transmmsion boards, and automatically adjust the position gap arised from the combined hoisting operation.
Safety work can be possible by offset combined hoisting function according to the hanging tool and load.

12 Environmental considerations

Continueous efforts to remove environmental toxins from our profucts.
(Solders for printed-circuit boards, alloys for wire rope ends, and coating materials were modified to be lead-free.
Hexavalent chrome plating was changed to trivalert chrome plating.)

13 Protection function

Protection function is to stop the hoist temporarily for safety when the hoist detects power failure, abnomal power supply voltage and over current, etc.
Error canceling can be stopped by pushing the button exclusing some error mode.
(When a stop mode is required to reset the power, checking the hoist is recommended.)

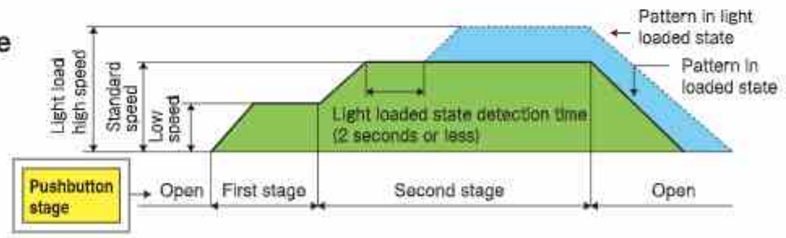
Encoder

The encoder monitors U3 Type functions

The encoder constantly monitors rotation speed and direction of the shaft(the first gearshaft), displaying the follwing functions.

	Function	Description
1	Drop detection function	If the rotation is in the "down" direction despite an "up" pushbutton command, Drop detection function immediately activates the hoist brake, preventing the load from dropping.
2	Electronic limit switch (for the upper and the lower limit)	The position of the hook is monitored by accumulating the number of rotation pulse. Electronic limit switch works reliably at deceleration and stop positions set in advance.
3	Light load high speed function	The amount of motor slip depends on the magnitude of the load. When the amount of motor slip falls below a preset level, the hoist is automatically judged to be in unloaded state. It switches over to high speed mode. ※The judgement levels of light load and overload vary depending on the environment(voltage, temperature, etc) in which the hoists are used. (Please be sure to adjust them on site.)
4	Drop detection function	Speed coordination function corrects the frequency to maintain constant speed when the load changes.

Operation patterns of the pushbutton operation



Operation history display function

Failure history display : When a failure occurs, stopping the hoist, Failure history display function helps to track down the cause of failure by showing the history of past failure. It helps to solve the problem when a failre has occurred.

Error history output : The number of times of operation and the time when an error occurred can be output.

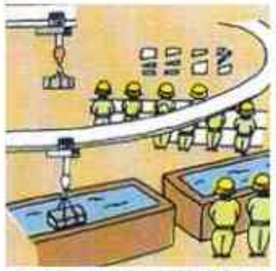
Number of starts/ operating hours display : This display shows the hoist's working history. It is also useful in determining when to replace consumables.

※Please contact us for special product.

U3·HU3 Type (200V/400 class)

U3 TYPE application examples

Factory building with an office on the upper level(The building does not shake.)



Plating line and metal mold machining line

Transportation of fragile items like glass products(No shocks are transmitted to the hoisted load.)

Accurate positioning
(The hoisted load does not shake.)

Hoist-specific inverter control panel

* The compactly-designed control panel is also vibration resistant.
* Parameter settings have been simplified, requiring only four buttons.

Precautions for use

- Inverter hoist does not stop immediately when turning off push-button. For operation, please consider stopping distance due to cushion stop effect.
- Using microcomputer's memory unit data, please avoid unnecessary turning on/off power supply.
  (Lifetime of memeory unit is 100,000 times power supply interception)
- Precautions for noise··· Malfunction and voice disorder might occur due to setting condition of nearby television setting and radio electronic equipment. In this case, installation of the noise filter is highly recommended.
- Conditions of power supply···
  ①Allowable voltage fluctuation : ±10%
  ②Allowable frequency fluctuation : ±3%
  ③Allowable interphase power supply voltage unbalance rate : 2% or less
  ④High frequency current distortion rate : 5% or less

Options

*** Improved ease of use**

Exclusively designed hoist inverter control panel

*Control panel is vibration resistant and compactly designed.
*Simple parameter setting is available by adjusting four buttons.

Multi-stage speed function

Multi-stage speed function is useful in automatic operations using sequencer, for one of eight-stage inputs for either hoisting or lowering a load, the machine can be operated at the desired speed.

Position detection multi-point output

Using an ELS circuit board, this function can provide the opetaion information on how the hoist is being used.

Rotation signal output

Using a BTS circuit board, this function allows a two-phase signal to be sent the sequencer or similar devices.

External signal output

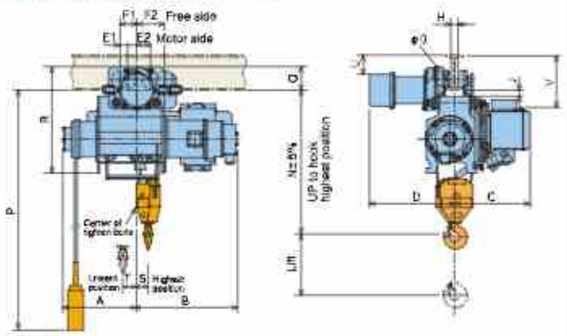
Various signals can be output acoroding to customers' request.

MEMO

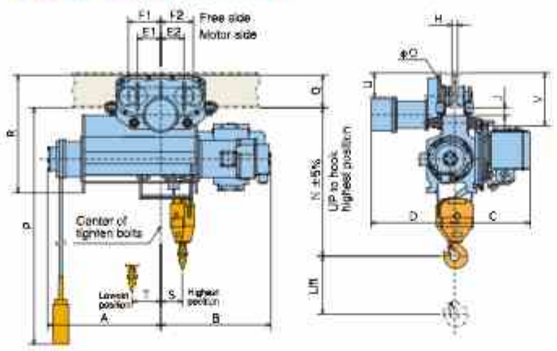
Monorail Type U3 (1/2t·1t·2.8t·3t·5t)

※Contact us for 400V class outline

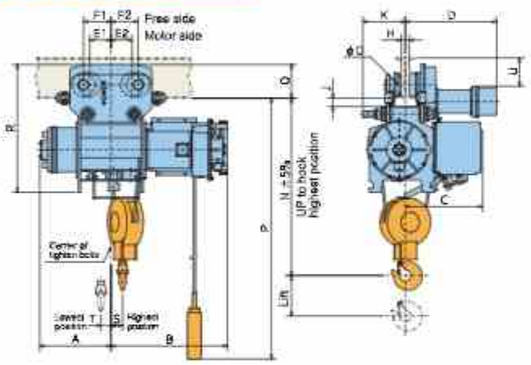
U3-1/2-LMH2



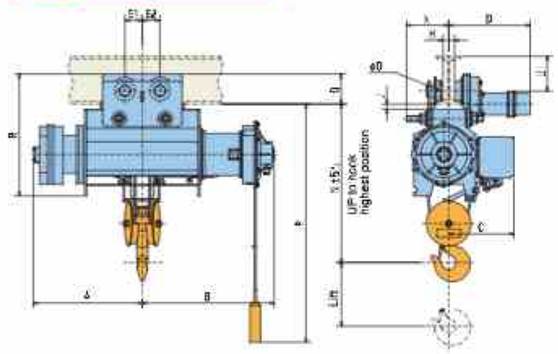
U3-1/2-HMH2



U3-1・2・2.8・3



U3-5



Model		U3-1/2				U3-1				U3-2				U3-2.8(3)				U3-5			
		LMH2	LMS2	HMH2	HMS2	LMH2	LMS2	HMH2	HMS2	LMH2	LMS2	HMH2	HMS2	LMH3	LMS3	HMH3	HMS3	LMH3	LMS3	HMH3	HMS3
Cap.(t)		1/2				1				2				2.8(3)				5			
Lift(m)		6		12		6	12			6	12			6	12			8	12		
Dimensions(mm)	A	315		485		321	508			352	509			373	542			685	810		
	B	433		473		518	551			577	605			658	689			830	955		
	C	324				345				383				408				410			
	E1	38		100		100				105				105				110			
	E2	58		100		100				105				105				110			
	F1	70		140		140				135				135				—			
	F2	120		140		140				135				135				—			
	K	—				208	167			210				216				265			
	N	625		635		735				875				1045				996			
	O	73		80		80				114				114				125			
	P	6000		12000		6000	12000			6000	12000			6000	12000			8000	12000		
	R	455		505		545				632				720				766			
	S	50		93		71	105			58	101			60	97			—			
	T	58		123		42	119			49	113			47	115			—			
Min.rad.curvature(m)		1.2(4.0)		1.8(7.0)		1.8(7.0)				1.8(5.0)				2.0				5.0	6.3	5.0	6.3
Weight(kg)		120	120	150	150	175	190			290	315			390	425			630	700		
Hook block weight(kg)		4.5				7.5				15				27				42			
I-Beam related dimensions		D	H	J	Q	U	V	D	H	J	Q	U	V	D	H	J	Q	U	D	H	J	Q	U
Applicable I-Beam(mm)	200×100×7*1	376	54	26	101	125	265	372	48	33	140	155	277	372	48	33	140	155	453	40	41	167	140	—					
	250×125×7.5							385	74	31	142	203	325	385	74	31	142	203	465	64	39	169	188	465	64	34	169	188	—				
	300×150×8																		478	90	38	170	237	—				
	300×150×11.5	—																	478	90	29	179	228	478	90	24	179	228	512	72	31	189	219
	450×175×13	—																											524	96	27	193	365
	600×190×13	—				—				—																							

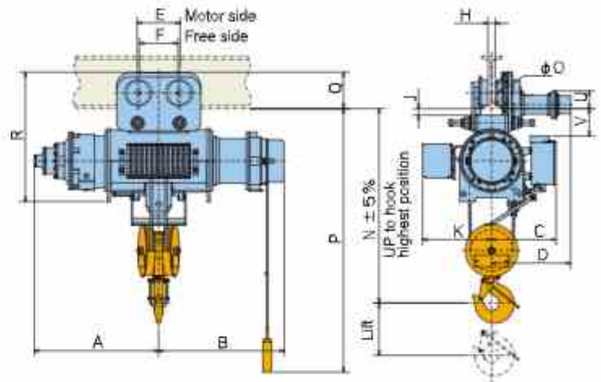
Note rad.cur( )at I-Beam U3-1/2, 1…150×75×5.5 U3-2…200×100×7 Note Applicable I-Beam =Standard =required special attachment

※1 150×75×5.5 is applicable

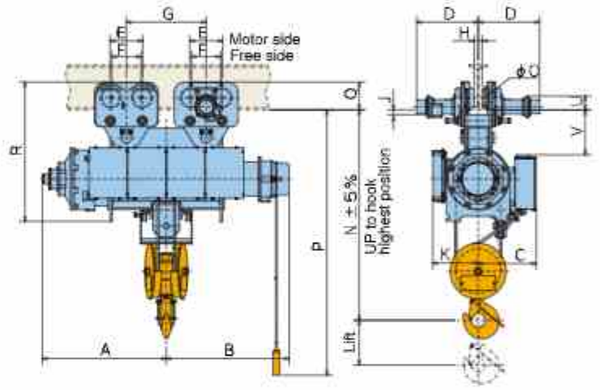
Monorail Type U3 (7.5t·10t·15t·20t)

※Contact us for 400V class outline

U3-7.5A・10A



U3-15A・20A



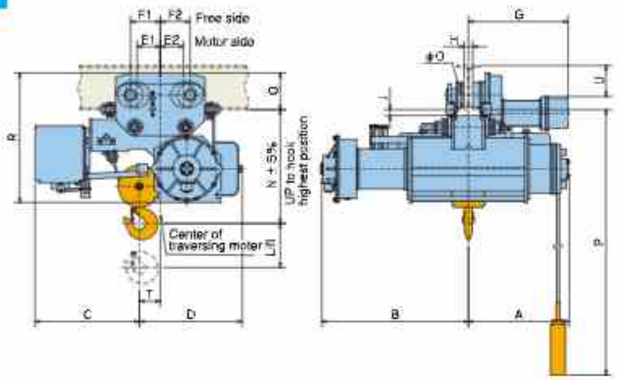
Model		U3-7.5A				U3-10A				U3-15A				U3-20A		
		LMH6	LMS6	HMH6	HMS6	LMH6	LMS6	HMH6	HMS6	LMH6	LMS6	HMH6	HMS6	HMH6	HMS6	
Cap.(t)		7.5				10				15				20		
Lift(m)		8		12		8		12		8		12		12		
Dimensions(mm)	A	881		1006		949		1074		1045		1195		1243		
	B	1004		1129		959		1084		1085		1235		1235		
	C	458				493				558				583		
	E	300				328				300				328		
	F	270				296				270				296		
	G	—				—				620		800		800		
	K	497				528				430				455		
	N	1270				1450				1930				2090		
	O	173				193				173				193		
	P	8000		12000		9000		13000		9000		13000		13000		
	R	903				988				1268				1398		
Min.rad.curvature(m)		5.0	12.5	5.0	12.5	5.0	12.5	5.0	12.5	Straightline				Straightline		
Weight(kg)		900		970		1250		1350		2200		2350		2700		
Hook block weight(t)(kg)		80				100				190				280		
I-Beam related dimensions		D	H	J	Q	U	V	D	H	J	Q	U	V	D	H	J	Q	U	V	D	H	J	Q	U	V
Applicable I-Beam(mm)	400×150×12.5	578	60	49	254	117	150	604	54	49	279	141	210	—						—					
	450×175×13	590	85	49	254	117	150	617	78	49	279	141	210	590	85	49	254	117	347	616	81	49	279	141	451
	600×190×13	598	100	50	253	116	151	624	94	50	278	140	211	598	100	50	253	116	346	624	96	50	278	140	452

Note Applicable I-Beam =Standard

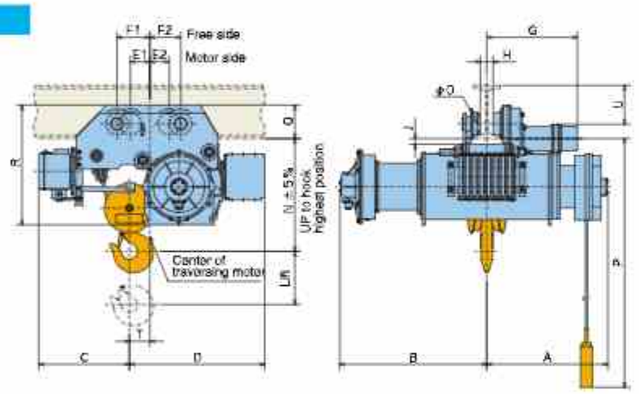
Low-head Type U3 (1/2t·1t·2t·2.8t·3t·5t)

※Contact us for 400V class outline

U3-1/2・1・2・2.8・3



U3-5



Model		U3-1/2		U3-1				U3-2				U3-2.8 (3)				U3-5			
		LDH2	LDS2	LDH2	LDS2	HDH2	HDS2	LDH2	LDS2	HDH2	HDS2	LDH3A	LDS3A	HDH3A	HDS3A	LDH3	LDS3	HDH3	HDS3
Cap.(t)		1/2		1				2				2.8 (3)				5			
Lift(m)		6		6		12		6		12		6		12		8		12	
Dimensions(mm)	A	444		444		611		457		635		472		622		685		810	
	B	528		616		784		668		847		711		881		830		955	
	C	371		423				473				490				513			
	D	272		356				467				558				764			
	E1	58		100				105				105				110			
	E2	38		100				105				105				110			
	F1	120		140				135				175				185			
	F2	70		140				135				175				175			
	N	345		410				505				565				650			
	O	73		80				114				114				125			
	P	6000		6000		12000		6000		12000		6000		12000		8000		12000	
	R	410		495				588				673				676			
	T	66		58				95				108				115			
Min.rad.curvature(m)		1.2 (4.0)		1.8 (7.0)				1.8 (5.0)				2.0				6.3			
Weight(kg)		150	150	200		215		305		340		440		470		640		710	
Hook block weight(kg)		5.5		8				15				25				42			
I-Beam related dimensions		G	H	J	Q	U	G	H	J	Q	U	G	H	J	Q	U	G	H	J	Q	U
Applicable I-Beam(mm)	200×100×7 *1	376	54	20	101	125	372	48	21	140	155	453	40	26	167	140	—				
	250×125×7.5						385	74	19	142	203	465	54	24	169	188	465	64	37	169	188	—				
	300×150×8											478	90	23	170	237	—					—				
	300×150×11.5	—										478	90	14	179	228	478	90	27	179	228	512	72	31	189	219
	450×175×13	—																				524	96	27	193	365
	600×190×13	—					—																			

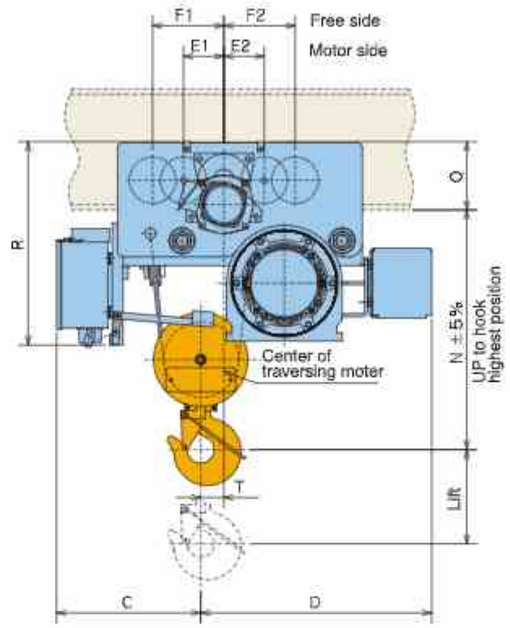
Note.rad.cur( )at I-Beam U3-1/2、1…150×75×5.5 U3-2…200×100×7 Note Applicable I-Beam =Standard =required special attachment

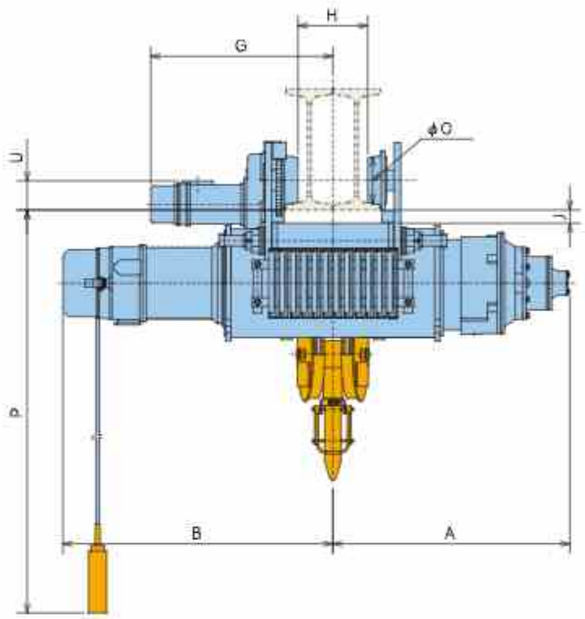
※1 150×75×5.5 is applicable

Low-head Type U3 (7.5t·10t)

※Contact us for 400V class outline

U3-7.5・10





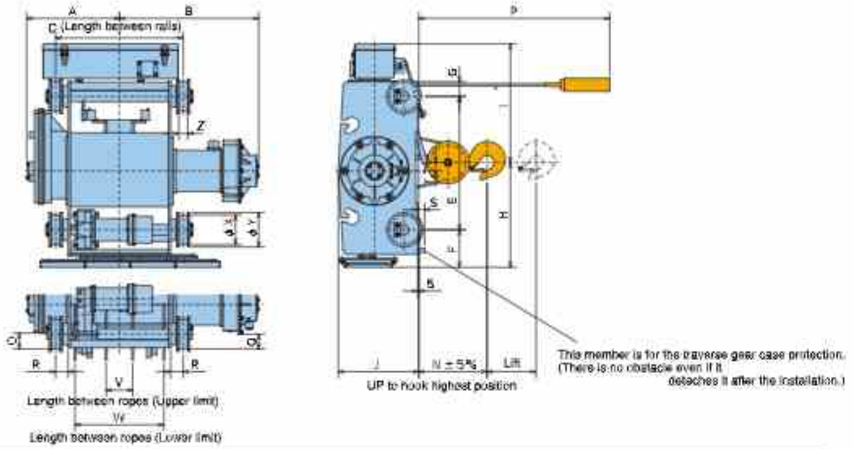
Model		U3-7.5A				U3-10A				
		LDH6	LDS6	HDH6	HDS6	LDH6	LDS6	HDH6	HDS6	
Cap.(t)		7.5				10				
Lift(m)		8		12		8		12		
Dimensions(mm)	A	881		1006		949		1074		
	B	1004		1129		959		1084		
	C	536				619				
	D	859				945				
	E1	150				604				
	E2	150				164				
	F1	265				528				
	F2	265				162				
	N	880				990				
	O	173				193				
	P	8000		12000		8000		12000		
	R	756				873				
	T	86				363				
Weight(kg)		1000		1070		1550		1650		
Hook block weight(kg)		80				100				
I-Beam related dimensions		G	H	J	Q	U	G	H	J	Q	U
Applicable I-Beam(mm)	450×175×13 2 rails	678	257	49	254	109	711	253	49	279	141
	600×190×13 2 rails	693	288	50	253	108	726	284	50	278	140

Note Applicable I-Beam =Standard

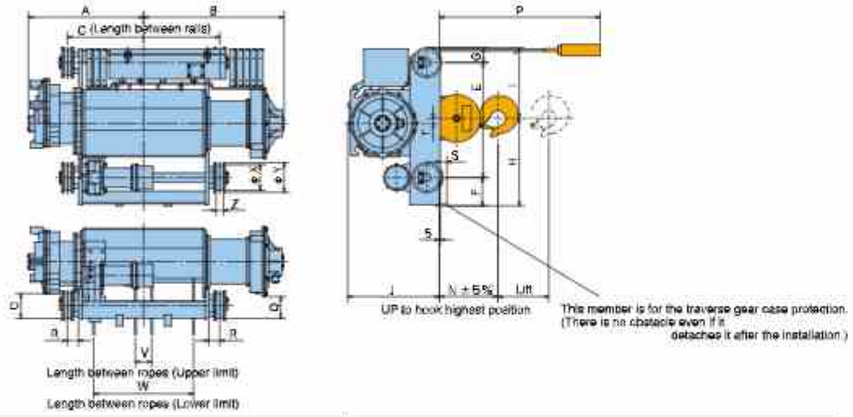
Double rail Type U3 (2.8t·3t·5t)

※Contact us for 400V class outline

U3-2.8 · 3



U3-5

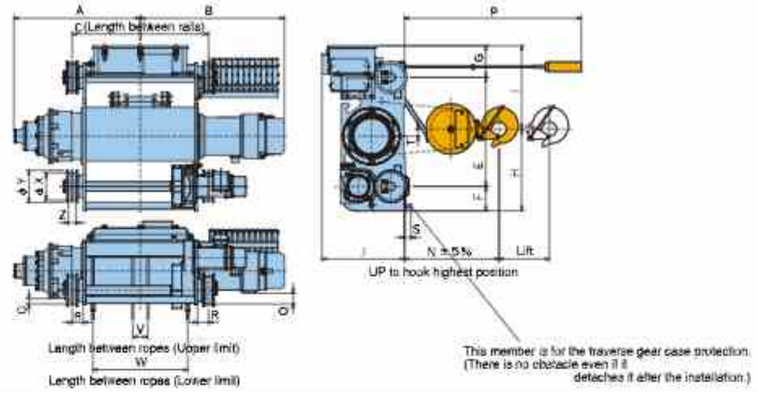


Model		U3-2.8(3)				U3-5			
		LRH3A	LRS3A	HRH3A	HRS3A	LRH3A	LRS3A	HRH3A	HRS3A
Cap.(t)		2.8(3)				5			
Lift(m)		6		12		8		12	
Dimensions(mm)	A	472		622		685		810	
	B	711		861		830		955	
	C	650		950		900		1150	
	E	680				680			
	F	191				167			
	G	75				88			
	H	534				517			
	I	605				418			
	J	410				541			
	N	345				346			
	O	52				125			
	P	6000		12000		8000		12000	
	Q	75				129			
	R	63				65			
	S	35				40			
	T	43				30			
	V	113		105		97		100	
	W	433		733		590		840	
	X	150				150			
	Y	175				175			
	Z	45				45			
Weight(kg)		440		490		690		770	
Hook block weight(kg)		25				42			
Applicable Rail		12kg rails or 38mm steel square bars							

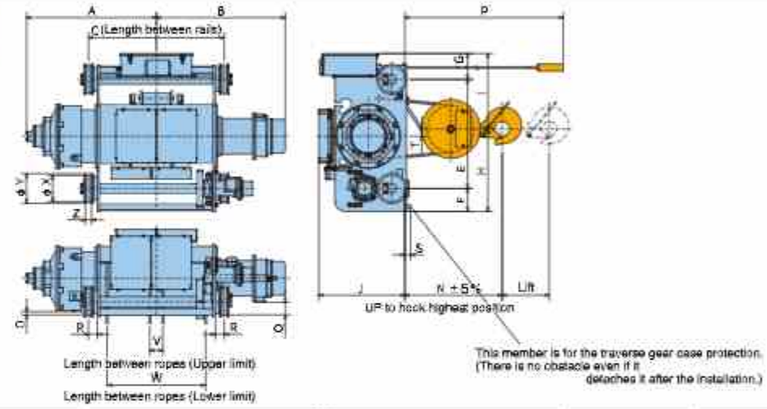
Double rail Type U3 (7.5t·10t·15t·20t·30t)

※Contact us for 400V class outline

U3-7.5A · 10A



U3-15A · 20A · 30A

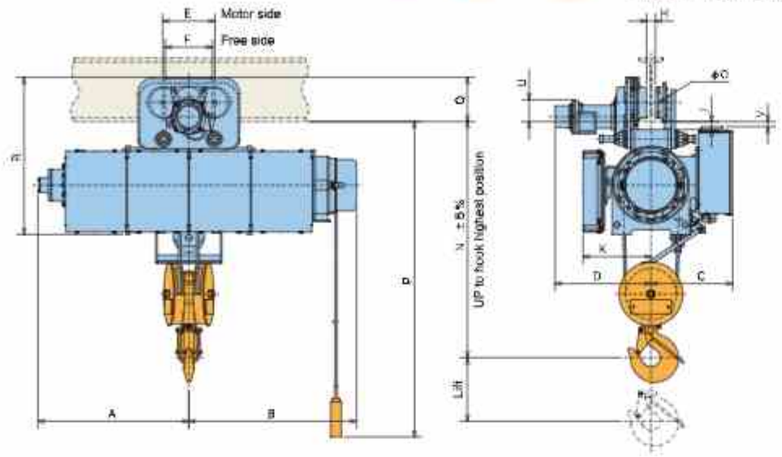


Model		U3-7.5A				U3-10A				U3-15A				U3-20A		U3-30A	
		LRH5	LRS5	HRH6	HRS6	LRH6	LRS6	HRH6	HRS6	LRH6	LRS6	HRH6	HRS6	HRH6	HRS6	HRH6	HRS6
Cap.(t)		7.5				10				15				20		30	
Lift(m)		8		12		8		12		8		12		12		12	
Dimensions(mm)	A	881		1006		949		1074		1045		1195		1243		1456	
	B	1004		1129		959		1084		1085		1235		1235		1285	
	C	950		1200		950		1200		1000		1300		1300		1400	
	E	760				840				1000				1045		1190	
	F	170				170				220				220		220	
	G	223				233				243				248		246	
	H	570				613				760				790		850	
	I	583				630				703				723		806	
	J	575				575				813				818		868	
	N	630				710				860				910		1020	
	O	40				38				30				32		15	
	P	8000		12000		8000		12000		8000		12000		12000		12000	
	Q	75				30				85				120		115	
	R	77				82				84				84		89	
	S	45				55				55				55		45	
	T	50				53				70				70		80	
	V	105		90		100		100		110		135		125		150	
	W	660		910		620		870		660		960		845		990	
	X	190				190				250				250		250	
	Y	225				225				285				285		285	
	Z	52				52				58				58		73	
Weight(kg)		950		1030		1300		1410		2000		2200		2600		3700	
Hook block weight(kg)		80				100				190				280		380	
Applicable Rail		15kg rails or 44mm steel square bars								22kg rails or 50mm steel square bars						[illegible]	

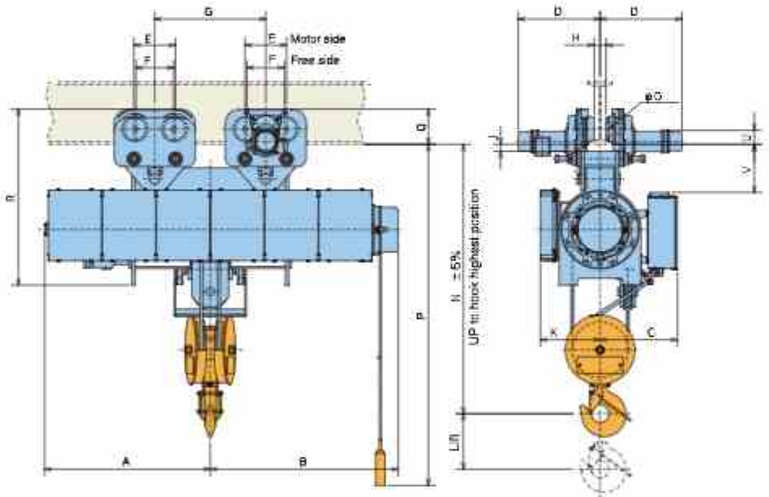
Monorail Type (High speed type) HU3 (10t・15t・20t)

※Contact us for 400V class outline

HU3-10A



HU3-15A・20A



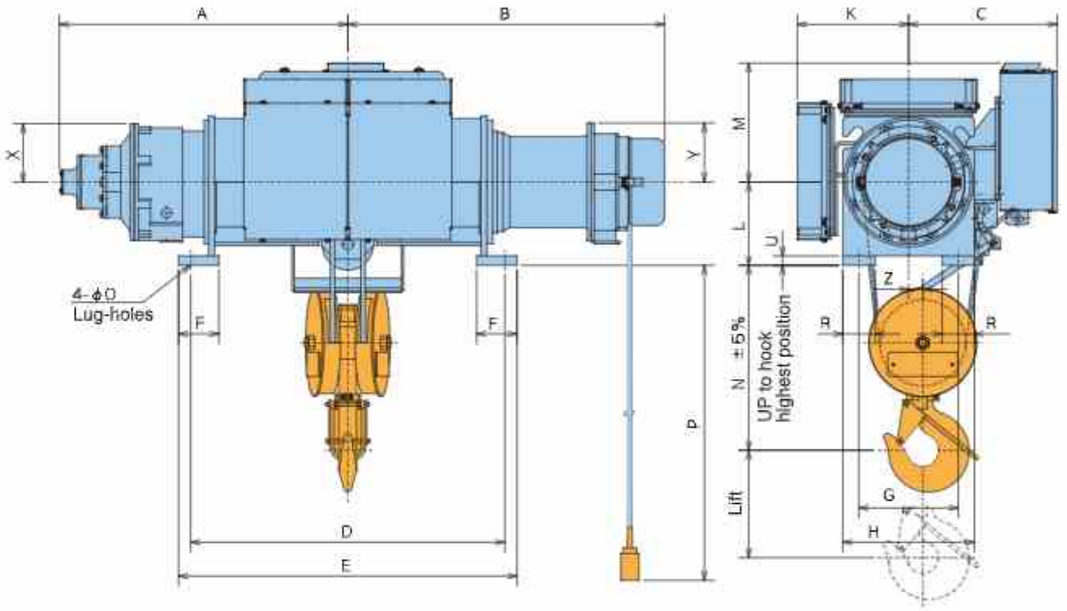
Model		HU3-10A						HU3-15A						HU3-20A					
		LMH6	LMS6	HMH6	HMS6			LMH6	LMS6	HMH6	HMS6			HMH6	HMS6				
Cap.(t)		10						15						20					
Lift(m)		8		12				8		12				12					
Dimensions(mm)	A	949		1074				1045		1195				1243					
	B	1055		1180				1205		1355				1355					
	C	513						558						583					
	E	328						300						328					
	F	296						270						296					
	G							620		800				800					
	K	427						443						455					
	N	1450						1930						2090					
	O	193						173						193					
	P	9000		13000				9000		13000				13000					
	R	988						1268						1398					
Min.rad.curvature(m)		5.0	12.5	5.0	12.5			Straight line						Straight line					
Weight(kg)		1400		1500				2400		2550				3050					
Hook block weight(kg)		100						190						280					
I-Beam related dimensions		D	H	J	O	U	V	D	H	J	O	U	V	D	H	J	O	U	V
Applicable I-Beam(mm)	400X150X12.5	604	54	49	279	141	32												
	450X175X13	617	78	49	279	141	32	590	85	49	254	117	347	616	78	49	279	141	451
	600X190X13	624	94	50	278	140	33	598	100	50	253	116	348	624	94	50	278	140	452

Note Applicable I-Beam ■=Standard

Frame mounted (High speed type) HU3 (10t・15t・20t・30t)

※Contact us for 400V class outline

HU3-10A・15A・20A・30A

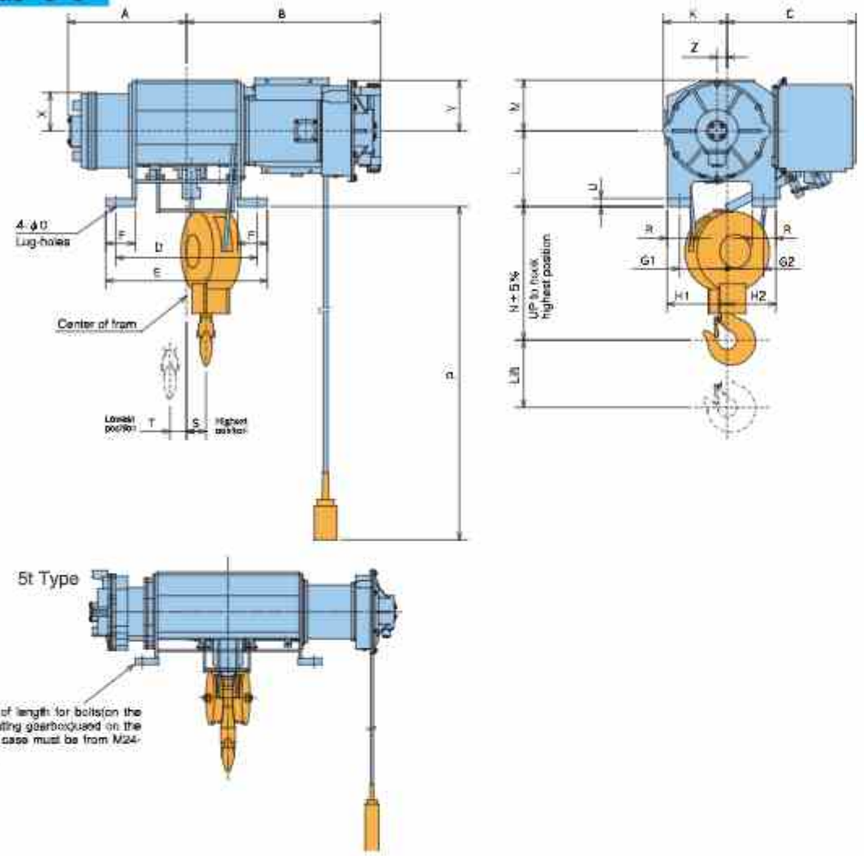


Model		HU3-10A		HU3-15A		HU3-20A	HU3-30A
		LSH6	HSH6	LSH6	HSH6	HSH6	HSH6
Cap.(t)		10		15		20	30
Lift(m)		8	12	8	12	12	12
Dimensions(mm)	A	949	1074	1045	1195	1243	1456
	B	1055	1180	1205	1355	1355	1405
	C	553		633		663	713
	D	920	1170	960	1260	1260	1380
	E	1010	1260	1080	1380	1380	1480
	F	150		170		170	200
	G	370		500		500	620
	H	490		630		640	770
	K	414		458		470	567
	L	310		370		395	435
	M	443		443		468	522
	N	670		810		870	960
	O	35		47		47	54
	P	8000	12000	8000	12000	12000	12000
	R	120		130		140	150
	U	35		41		41	49
	X	302 (to resister)	218	275		308	320
	Y	220		220		220	220
	Z	53		70		70	80
Weight(kg)		1200	1300	1700	1850	2200	3200
Hook block weight(kg)		100		190		280	380

Frame mounted Type U3 (1t·2t·2.8t·3t·5t)

※Contact us for 400V class outline

U3-1·2·2.8·3·5

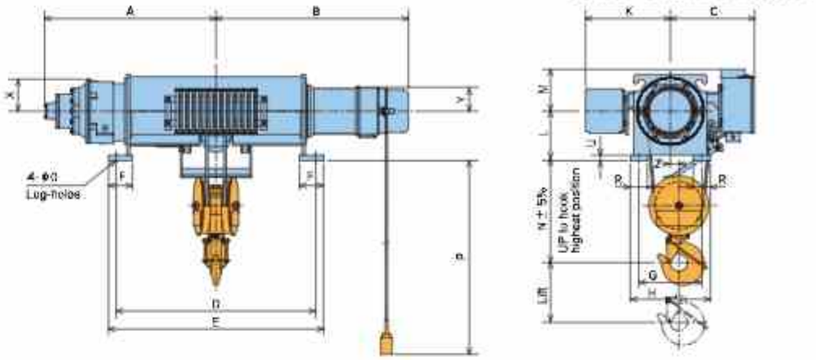


Model		U3-1		U3-2		U3-2.8(3)		U3-5	
		LSH2	HSH2	LSH2	HSH2	LSH3	HSH3	LSH3	HSH3
Cap.(t)		1		2		2.8(3)		5	
Lift(m)		6	12	6	12	6	12	8	12
Dimensions(mm)	A	321	431	352	445	373	473	685	810
	B	518	628	577	670	658	758	830	955
	C	345		383		408		410	
	D	385	605	420	605	430	630	850	1100
	E	435	655	480	665	500	700	920	1170
	F	75		88		99		115	
	G1·G2	121/84		141/109		170/130		175/145	
	H1·H2	151/114		178/145		210/170		220/190	
	K	167		190		216		236	
	L	180		225		275		260	
	M	148		157		181		206	
	N	330		410		490		420	
	O	15		19		24		28	
	P	6000	12000	6000	12000	6000	12000	8000	12000
	R	60		70		80		90	
	S	71	182	58	165	60	166	—	
	T	42	42	49	49	47	47	—	
	U	18		24		27		31	
	X	107		140		172		205	
	Y	105		150		150		206	
	Z	36		30		30		30	
Weight(kg)		125	145	185	225	320	360	580	650
Hook block weight(kg)		7.5		15		27		42	

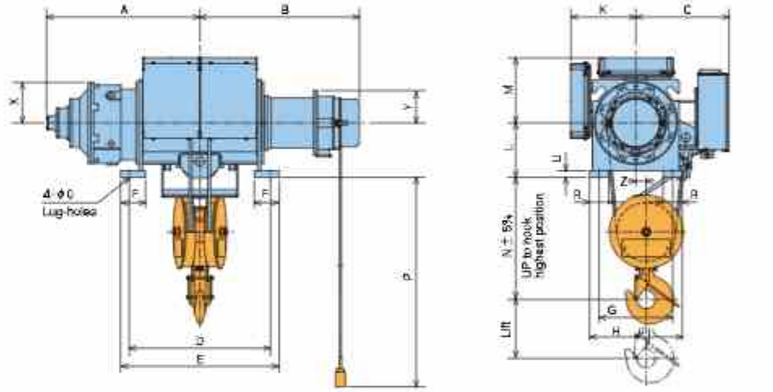
Frame mounted Type U3 (7.5t·10t·15t·20t·30t)

※Contact us for 400V class outline

U3-7.5A·10A



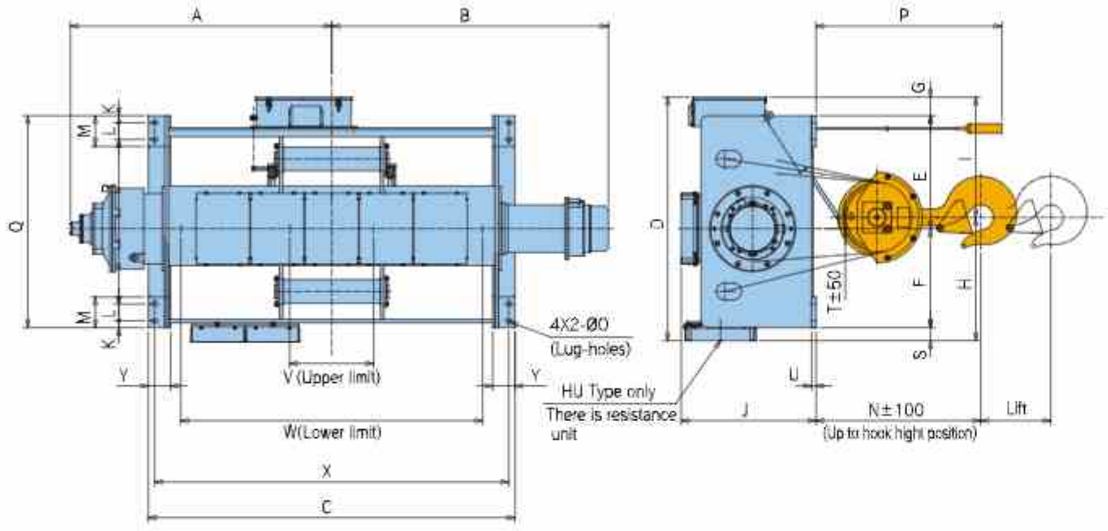
U3-15A·20A·30A



Model		U3-7.5A		U3-10A		U3-15A		U2-20A-HSH6	U2-30A-HSH6
		LSH6	HSH6	LSH6	HSH6	LSH6	HSH6		
Cap.(t)		7.5		10		15		20	30
Lift(m)		8	12	8	12	8	12	12	12
Dimensions(mm)	A	881	1006	949	1074	1045	1195	1243	1456
	B	1004	1129	959	1084	1085	1235	1235	1284
	C	493		531		633		663	713
	D	920	1170	920	1170	960	1260	1260	1380
	E	1010	1260	1010	1260	1080	1380	1380	1480
	F	140		150		170		170	200
	G	370		370		500		500	620
	H	470		490		630		640	770
	K	497		500		458		470	457
	L	290		310		370		395	435
	M	245		265		443		468	522
	N	580		670		810		870	960
	O	35		35		47		47	54
	P	8000	12000	8000	12000	8000	12000	12000	12000
	R	100		120		130		140	150
	U	31		35		41		41	49
	X	188		218		275		308	320
	Y	152		220		220		220	220
	Z	50		53		70		70	80
Weight(kg)		700	770	1050	1150	1500	1650	2000	3000
Hook block weight(kg)		80		100		190		280	380

Frame mounted Type U3·HU3 (40t)

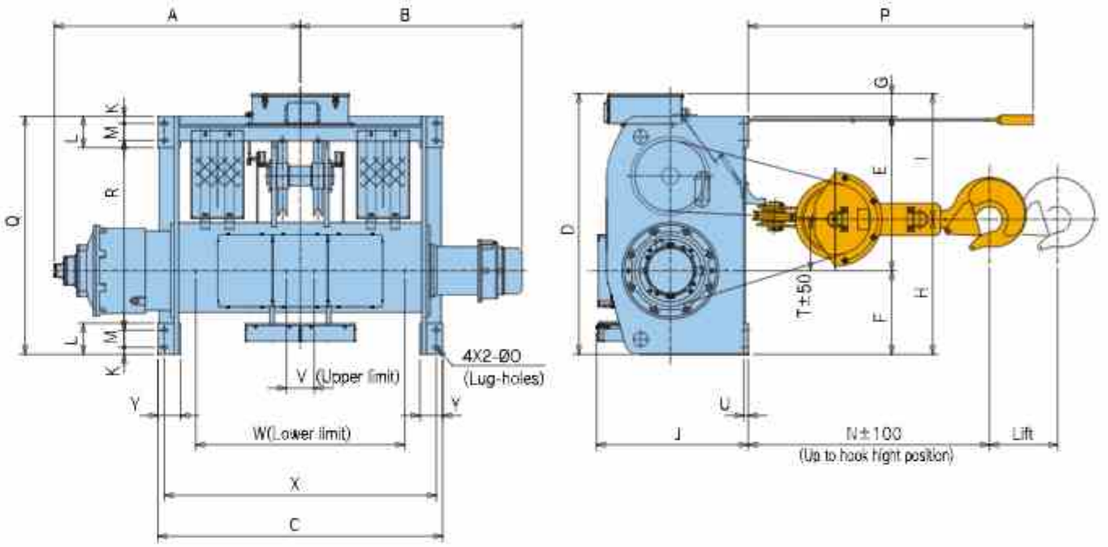
U3-40A、HU2-40A



Model		U3-40A		HU3-40A	
		LSH6	HSH6	LSH6	HSH6
Cap.(t)		40		40	
Lift(m)		6.5	11.5	6.5	11.5
Dimensions(mm)	A	1525	1875	1525	1875
	B	1515	1865	1635	1985
	C	1930	2630	1930	2630
	D	1653		1746	
	E	810		810	
	F	710		710	
	G	133		133	
	H	791		884	
	I	862		862	
	J	967		967	
	K	50		50	
	L	120		120	
	M	220		220	
	N	1190		1190	
	O	35		35	
	P	7500	12500	7500	12500
	Q	1520		1520	
	R	1180		1180	
	S	—		93	
	T	81		81	
	U	32		32	
	V	602		602	
	W	1485	2164	1485	2164
	X	1840	2540	1840	2540
	Y	160		160	
Weight(kg)		4400	4900	4500	5000
Hook block weight(kg)		640		640	

Frame mounted Type U3·HU3 (45t)

U3-45A、HU2-45A

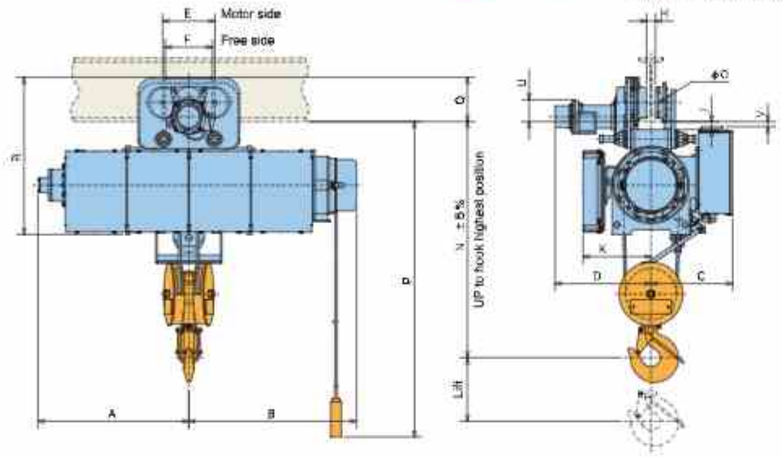


Model		U3-45A		HU3-45A	
		HSH6	HSH6	HSH6	HSH6
Cap.(t)		45		45	
Lift(m)		12.5	19	12.5	19
Dimensions(mm)	A	1740	2090	1740	2090
	B	1565	1915	1685	2035
	C	2010	2710	2010	2710
	D	1840		1840	
	E	1090		1090	
	F	590		590	
	G	160		160	
	H	953		953	
	I	887		887	
	J	1072		1072	
	K	50		50	
	L	120		120	
	M	220		220	
	N	1725		1725	
	O	35		35	
	P	14000	20500	14000	20500
	Q	1680		1680	
	R	1340		1340	
	T	363		363	
	U	32		32	
	V	196		196	
	W	1478	2141	1478	2141
	X	1920	2620	1920	2620
	Y	160		160	
Weight(kg)		5600	6100	5700	6200
Hook block weight(kg)		590		590	

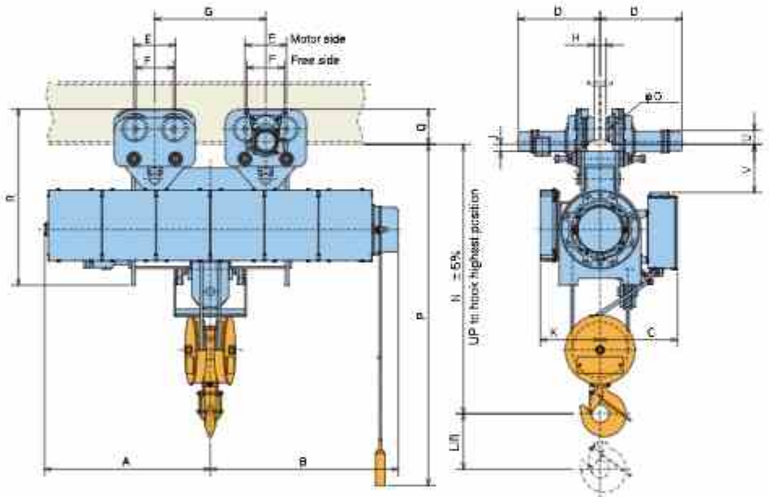
Monorail Type (High speed type) HU3 (10t・15t・20t)

※Contact us for 400V class outline

HU3-10A



HU3-15A・20A



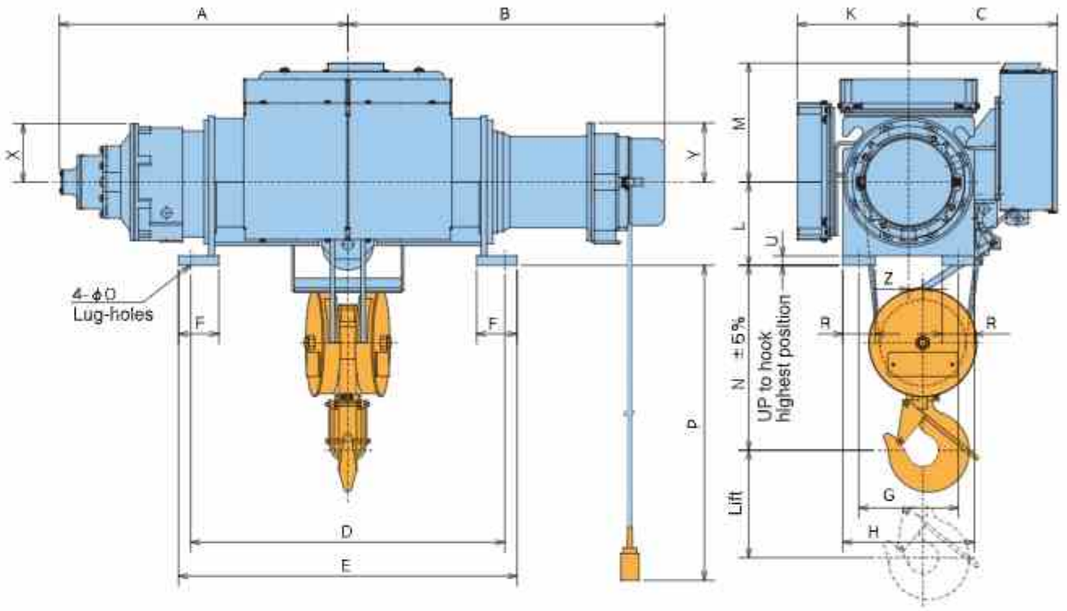
Model		HU3-10A						HU3-15A						HU3-20A					
		LMH6	LMS6	HMH6	HMS6			LMH6	LMS6	HMH6	HMS6			HMH6	HMS6				
Cap.(t)		10						15						20					
Lift(m)		8		12				8		12				12					
Dimensions(mm)	A	949		1074				1045		1195				1243					
	B	1055		1180				1205		1355				1355					
	C	513						558						583					
	E	328						300						328					
	F	296						270						296					
	G							620		800				800					
	K	427						443						455					
	N	1450						1930						2090					
	O	193						173						193					
	P	9000		13000				9000		13000				13000					
	R	988						1268						1398					
Min.rad.curvature(m)		5.0	12.5	5.0	12.5			Straight line						Straight line					
Weight(kg)		1400		1500				2400		2550				3050					
Hook block weight(kg)		100						190						280					
I-Beam related dimensions		D	H	J	Q	U	V	D	H	J	Q	U	V	D	H	J	Q	U	V
Applicable I-Beam(mm)	400X150X12.5	604	54	49	279	141	32												
	450X175X13	617	78	49	279	141	32	590	85	49	254	117	347	616	78	49	279	141	451
	600X190X13	624	94	50	278	140	33	598	100	50	253	116	348	624	94	50	278	140	452

Note Applicable I-Beam ■=Standard

Frame mounted (High speed type) HU3 (10t・15t・20t・30t)

※Contact us for 400V class outline

HU3-10A・15A・20A・30A

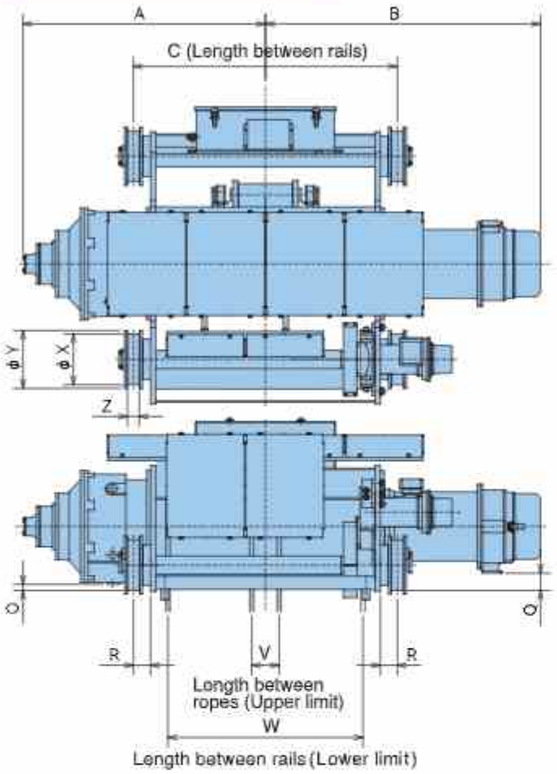


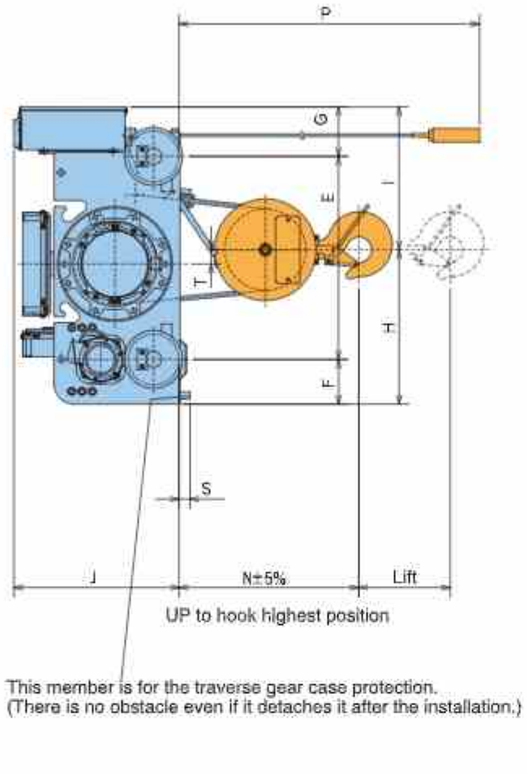
Model		HU3-10A		HU3-15A		HU3-20A	HU3-30A
		LSH6	HSH6	LSH6	HSH6	HSH6	HSH6
Cap.(t)		10		15		20	30
Lift(m)		8	12	8	12	12	12
Dimensions(mm)	A	949	1074	1045	1195	1243	1456
	B	1055	1180	1205	1355	1355	1405
	C	553		633		663	713
	D	920	1170	960	1260	1260	1380
	E	1010	1260	1080	1380	1380	1480
	F	150		170		170	200
	G	370		500		500	620
	H	490		630		640	770
	K	414		458		470	567
	L	310		370		395	435
	M	443		443		468	522
	N	670		810		870	960
	O	35		47		47	54
	P	8000	12000	8000	12000	12000	12000
	R	120		130		140	150
	U	35		41		41	49
	X	302 (to resister)	218	275		308	320
	Y	220		220		220	220
	Z	53		70		70	80
Weight(kg)		1200	1300	1700	1850	2200	3200
Hook block weight(kg)		100		190		280	380

Double rail Type(High speed type) HU3 (10t・15t・20t・30t)

※Contact us for 400V class outline

HU3-10A・15A・20A・30A





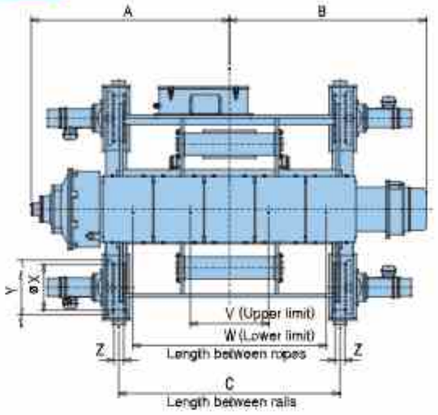
This member is for the traverse gear case protection.
(There is no obstacle even if it detaches it after the installation.)

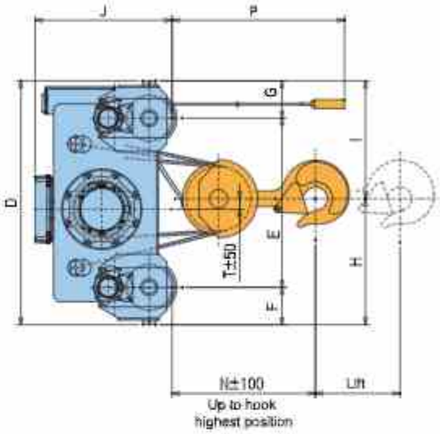
Model		HU3-10A				HU3-15A				HU3-20A		HU3-30A	
		LRH6	LRS6	HRH6	HRS6	LRH6	LRS6	HRH6	HRS6	HRH6	HRS6	HRH6	HRS6
Cap.(t)		10				15				20		30	
Lift(m)		8		12		8		12		12		12	
Dimensions(mm)	A	949		1074		1045		1195		1243		1456	
	B	1055		1180		1205		1355		1355		1405	
	C	950		1200		1000		1300		1300		1400	
	E	840				1000				1045		1190	
	F	170				220				220		220	
	G	253				243				248		246	
	H	613				760				790		850	
	I	650				703				723		806	
	J	753				813				818		868	
	N	710				860				910		1020	
	O	38				30				32		15	
	P	8000		12000		8000		12000		12000		12000	
	Q	30				85				120		115	
	R	82				84				84		89	
	S	55				55				55		45	
	T	53				70				70		80	
	V	100		100		110		135		125		150	
	W	620		870		660		960		945		990	
	X	190				250				250		250	
	Y	225				285				285		285	
	Z	52				58				58		73	
Weight(kg)		1450		1560		2200		2400		2800		3900	
Hook block weight(kg)		100				190				280		380	
Applicable Rail		15kg rails or 44mm steel square bars				22kg rails or 50mm steel square bars						37kg rails or 65mm steel square bars	

Double rail Type(High speed type) U3・HU3 (40t・45t)

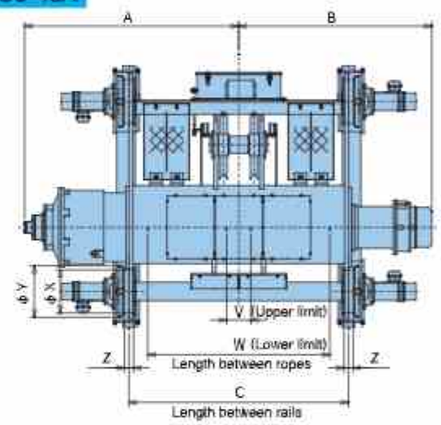
※Contact us for 400V class outline

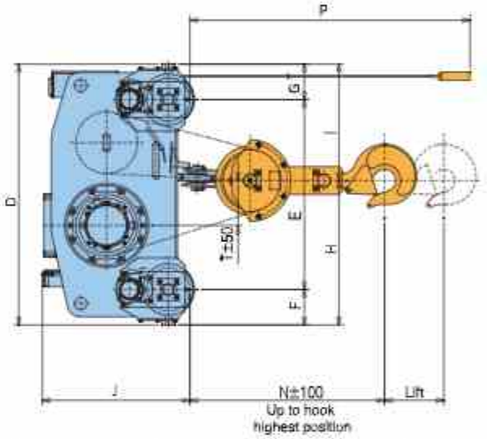
U3-40A、HU3-40A





U3-45A、HU3-45A

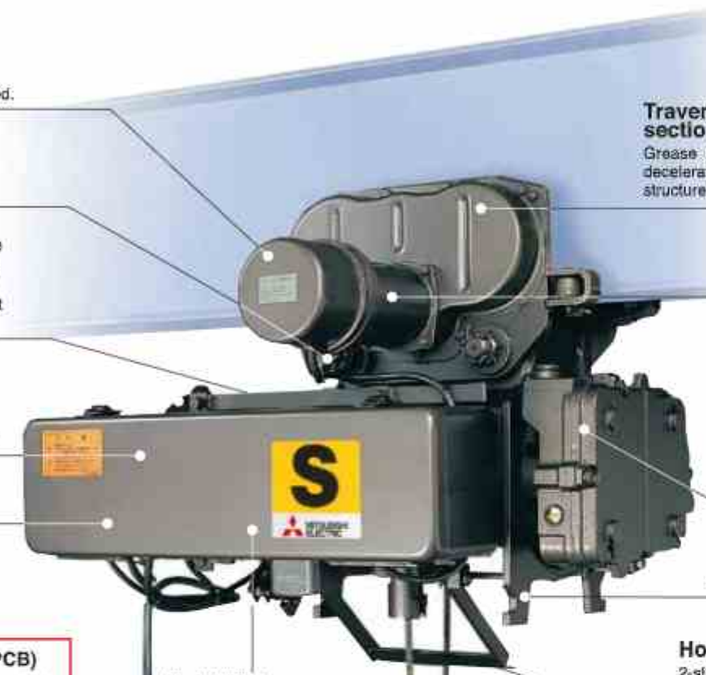




Model		U3-40A		HU3-40A		U3-45A		HU3-45A	
		LRH6	HRH6	LRH6	HRH6	HRH6	HRH6	HRH6	HRH6
Cap.(t)		40		40		45		45	
Lift(m)		6.5	11.5	6.5	11.5	12.5	19	12.5	19
Dimensions(mm)	A	1525	1875	1525	1875	1740	2090	1740	2090
	B	1515	1865	1635	1985	1565	1915	1685	2035
	C	1700	2400	1700	2400	1780	2480	1780	2480
	D	1874		1874		2114		2114	
	E	1300		1300		1540		1540	
	F	287		287		287		287	
	G	287		287		287		287	
	H	968		968		1170		1170	
	I	906		906		944		944	
	J	1055		1055		1200		1200	
	N	1110		1110		1600		1600	
	P	7500	12500	7500	12500	14000	20500	14000	20500
	T	81		81		363		363	
	V	602		602		196		196	
	W	1485	2164	1485	2164	1476	2141	1476	2141
	X	350		350		350		350	
	Y	419		419		419		419	
	Z	75		75		75		75	
Weight(kg)		5000	5500	5100	5600	6200	6700	6300	6800
Hook block weight(kg)		640		640		590		590	
Applicable Rail		37kg rails or 65mm steel square bars							

S Type Series

Strong type **High speed type** **1/2t～60t**



Traverse brake
Disc type DC brake
The brake torque can be adjusted.

Tie Bolts
Secured by a grooved nut and split pin.

Electromagnetic brake
Not exceeding 5t; Disc braked with auto-adjustment device.
More than 7.5t; Disc brake that allows to adjust a gap easily.

Control box
The cover can be opened and closed by one-touch operation.

Traverse deceleration section
Grease lubrication, simple 2-step deceleration, and totally enclosed structure.

Traverse Motor
Squirrel-cago type with Class B insulation.

Hoisting deceleration section
Oil lubrication
1/2t～3t: simple 2-step deceleration.
5t: Simple 3-step deceleration.
7.5t or more: Planet 2-step deceleration.

Drum·Casing
Built of rugged steel plate.

Hoisting limit switch
2-step hoisting limit switch (Avoid using this switch for regular use.)

●Safety monitor(OLM PCB)
- ·OLM PCB has safety functions which are overload alarm function etc.
- ·7-segment LED indicator ease various settings and history check.
(Please refer「safety function」section about other functions.)

Hoist Motor
High-resistance squirrel-cago motor with Class F insulation and ball bearings in heatproof grease.

Wire rope
Parallel stranded rope is used. The rope end is clamped by pressure welding. (Not exceeding ϕ 14)

Hook block
Hook with an all-surface cover and a hook latch

Cable for push button switch
Vibration-proof cable
(With a built-in protective wire)

Push button switch
Plastic case

Safety devices

※Optional equipment:
Over loading monitor (O.L.M) device,
Emergency brake
1t～60t optional equipment

Safety Function

●Over loading monitor
- ·Overload is electrically detected.(at only hoisting operation)
- ·The buzzer is factory-set to activate at a 125% load.

※However,the buzzer activate at 100% or lower loads in certain environments,based on the power voltage etc.It is not trouble, please make the adjustment to turn the volume.

●Number of starts ·Operating hours display
- ·Checking the suage conditions which are from the point of purchase. Having erasable operating hours and number of starts counter. The time to change the consumptive parts is visible,and contribute to preventive maintenance.

●Failure history display
- ·Checking a monitor if a hoist stops operation, It contributes to identify the reason for the failure.

S type offers the best lifting speed, power and durability in this class.

Specifications

Type	Capacity(t)	Lift(m) Low	Lift(m) High	Wire rope: Monorail type	Wire rope: Lowhead type	Wire rope: Double railtype	Wire rope: Rope specification	Hoisting: Speed m/s (m/min) 50Hz	Hoisting: Speed m/s (m/min) 60Hz	Hoisting: Motor Output (kW) 50Hz	Hoisting: Motor Output (kW) 60Hz	Hoisting: Motor Rated Current (A) 50Hz	Hoisting: Motor Rated Current (A) 60Hz	Hoisting: Motor Poles	Traversing: Mono-rail·Low-head: Speed m/s (m/min) 50Hz	Traversing: Mono-rail·Low-head: Speed m/s (m/min) 60Hz	Traversing: Mono-rail·Low-head: Motor Output (kW) 50Hz	Traversing: Mono-rail·Low-head: Motor Output (kW) 60Hz	Traversing: Mono-rail·Low-head: Motor Rated Current (A) 50Hz	Traversing: Mono-rail·Low-head: Motor Rated Current (A) 60Hz	Traversing: Mono-rail·Low-head: Motor Poles	Traversing: Double-rail: Speed m/s (m/min) 50Hz	Traversing: Double-rail: Speed m/s (m/min) 60Hz	Traversing: Double-rail: Motor Output (kW) 50Hz	Traversing: Double-rail: Motor Output (kW) 60Hz	Traversing: Double-rail: Motor Rated Current (A) 50Hz	Traversing: Double-rail: Motor Rated Current (A) 60Hz	Traversing: Double-rail: Motor Poles
S	1/2	6	12	ϕ6.3 2falls	—	ϕ4	6×W(19) B class JISG3525	0.183 (11)	0.217 (13)	1.0	1.2	6.9	6.5	4	0.35 (21)	0.417 (25)	0.22	0.26	1.6	1.5	4	—	—	—	—	—	—	4
	1			ϕ8 ※3	—	ϕ6.3	—			2.0	2.4	12.6	12.4									—	—	—	—	—	—	
	2			ϕ10	—	ϕ8	—			2.9	3.5	17.5	18.5									—	—	—	—	—	—	
	2.8			ϕ12.5	—	ϕ9	ϕ9	0.14 (8.4)	0.167 (10)	4.1	4.9	25.5	27.5				0.5	0.6	3.2	3.1							
	3			ϕ12.5	—	ϕ9	ϕ9			4.4	5.3	27	28.5									0.35 (21)	0.417 (25)	0.5	0.6	3.2	3.1	
	5			—	ϕ11.2	ϕ11.2	ϕ11.2	0.112 (6.7)	0.133 (8)	6.2	7.5	31	35.5				0.85	1.0	4.8	4.7							
	7.5	8		—	ϕ14	ϕ14	ϕ14	0.0967 (5.8)	0.117 (7)	8.3	10	37	44		0.2 (12)	0.25 (15)								0.85	1.0	4.8	4.7	
	10			—	ϕ16	ϕ16	ϕ16	0.0833 (5)	0.1 (6)	10	12	51	55				1.5	1.8	8.5	8.1				0.85	1.0	4.8	4.7	
	15			—	ϕ20	—	ϕ20					71	75				0.85×2	1.0×2	4.8×2	4.7×2								
	20	—		—	ϕ22.4	—	ϕ22.4	0.07 (4.2)	0.0833 (5)			75	83				1.5×2	1.8×2	8.5×2	8.1×2		0.25 (15)	0.3 (18)	1.5	1.8	8.5	8.1	
	30			—	—	—	ϕ25 IWRC 6×Fi(29) B class JISG3525	0.0467 (2.8)	0.055 (3.3)	17	20	77	84	6	—	—	—	—	—	—	—				1.5×2	1.8×2	8.5×2	8.1×2	
	40	6.5 —		—	—	—	ϕ22.4 Brake ※1 6×Fi(29) B class JISG3525	0.035 (2.1)	0.0417 (2.5)			75	83												0.75×4	0.75×4	4.1×4	3.6×4	
	45	— 12.5 — 19		—	—	—	ϕ25 Brake ※1 IWRC 6×Fi(29) B class JISG3525	0.03 (1.8)	0.0367 (2.2)			77	84															
	60 ※2	—	—	—	—	—	—	1.4	1.65	17	20	77	84	6	—	—	—	—	—	—	—	—	—	—	—	—	—	

※1 40t has 8falls and 45t has 6falls.(Regarding 60t, please inquire sepately)
※2 Please contact us for 60t separatly
※3 Rope specification of 11.2falls is 6×Fi(29)

Standard specifications

●Power supply……3-phase 200V 50/60Hz control 200V, 220V 60Hz control 220V
(400V class is also available)…3-phase 400v 50/60Hz control 200V, 440V 60Hz control 220V
3-phase 380V 50Hz control 48V (100V and 24V are also available)

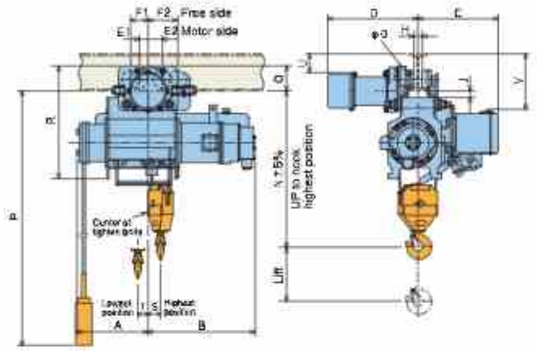
●Operating method……Push button switch operations

	1/2～3t	5～45t
Suspended type Frame mounted type	2 Points	4 Points
	U D	ON OFF U D
Motor operated traversing hoist	6 Points	8 Points
	U D E W S N	ON OFF U D E W S N

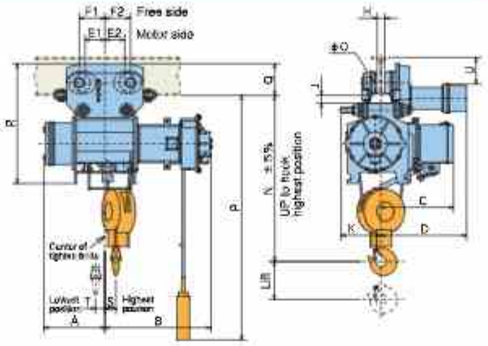
●Rating…30 min.(JIS C 9620)
●Power supply system…Both trolley feeding and cable feeding are available. However, neither trolley nor cable is attached.
●Enclosure…Simplified out door type (JIS C0920, equlvalent to IP44)
●Applicable standard…JIS C 9620 electric hoist/crane structure standard
●Color coating… Main body:Metallic gray(Equivalent to Munsell N4.0)
Hook block:Munsell7.5YR7/14
Pushbutton:Equivalent to Munsell7.5YR7/13
●Ambient air temperature…-10℃ to 40℃(Non congelation)
●Ambient air humidity…90% or less(Non condensing)

Monorail Type S (1/2t·1t·2.8t·3t·5t)

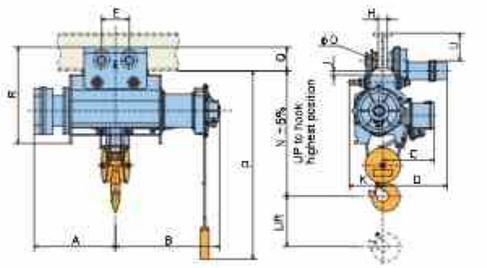
S-1/2



S-1·2·2.8·3



S-5



(Shape of S-1/2-HM)

Note: In the case of trolley electric supply type, balance weight is required.

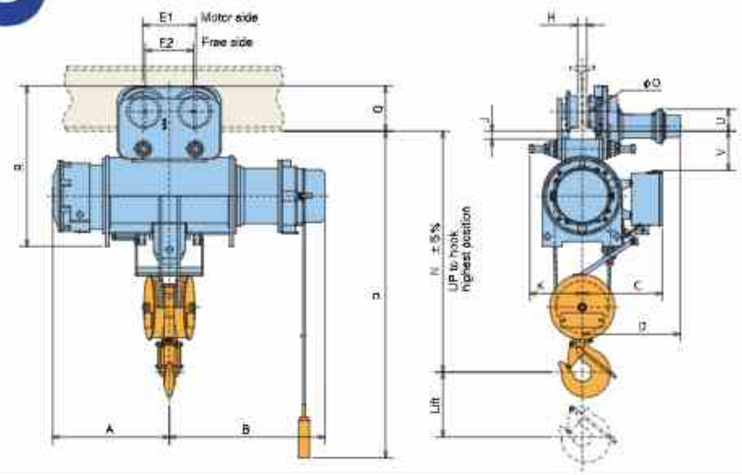
Model		S-1/2												S-1					S-2					S-2.8(3)					S-5				
		LM2						HM2						LM2		HM2			LM2		HM2			LM3		HM3			LM3		HM3		
Cap.(t)		1/2												1					2					2.8(3)					5				
Lift(m)		6						12						6		12			6		12			6		12			8		12		
Dimensions(mm)	A	287						457						287		474			322		479			341		510			645		771		
	B	433						473						518		551			563		593			610		641			830		955		
	C	324												345					383					409					410				
	E1	38						100						100					105					105					220				
	E2	58						100						100					105					105									
	F1	70						140						140					135					135					—				
	F2	120						140						140					135					135					—				
	K	—												167					210					215					265				
	N	625						635						735					875					1045					996				
	O	73						80						80					114					114					125				
	P	6000						12000						6000		12000			6000		12000			6000		12000			8000		12000		
	R	455						505						545					632					720					766				
	S	50						93						71		105			58		101			60		97			—				
	T	58						123						42		119			49		113			47		115			—				
Min.rad.curvature(m)		1.2(4.0)						1.8(7.0)						1.8(7.0)					1.8(5.0)					2.0					5.0				
Weight(kg)		115						135						165		180			280		305			375		410			560		630		
Hook block weight(kg)		4.5												7.5					15					27					42				
I-Beam related dimensions		D	H	J	Q	U	V	D	H	J	Q	U	V	D	H	J	Q	U	D	H	J	Q	U	D	H	J	Q	U	D	H	J	Q	U
Applicable I-Beam(mm)	200×100×7*1	376	54	26	101	125	271	372	48	33	140	155	283	372	48	33	140	155	453	40	41	167	140	—					—				
	250×125×7.5							385	74	31	142	203	331	385	74	31	142	203	465	64	39	169	188	465	64	34	169	188	—				
	300×150×8																		478	90	38	170	237	—					—				
	300×150×11.5	—																	478	90	29	179	228	478	90	24	179	228	512	72	31	189	219
	450×175×13	—																											524	96	27	193	365
	600×190×13	—						—						—																			

Note.rad.cur( )at I-Beam ●S-1/2,S-1…150×75×5.5 ●S-2…200×100×7 Note Applicable I-Beam =Standard =required special attachment

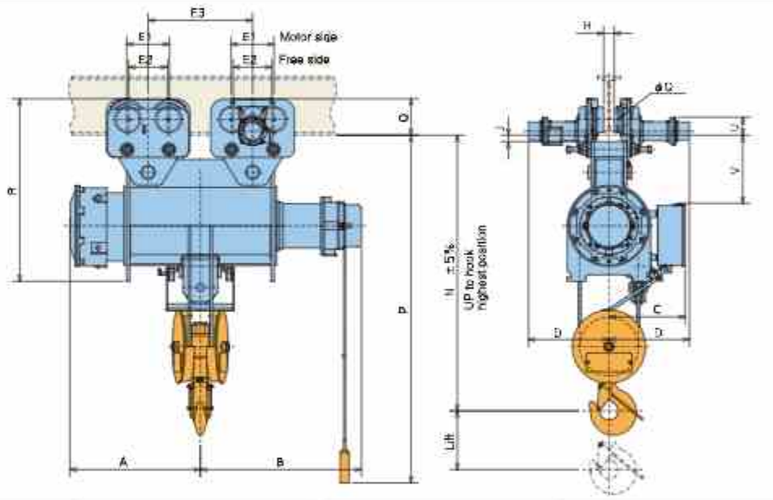
※1 150×75×5.5 is applicable

Monorail Type S (7.5t·10t·15t·20t)

S-7.5·10



S-15·20

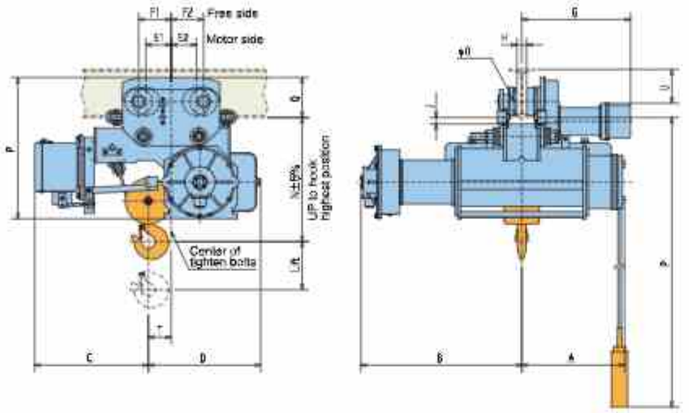


Model		S-7.5						S-10						S-15						S-20					
		LM					HM	LM					HM	LM					HM	HM					
Cap.(t)		7.5						10						15						20					
Lift(m)		8					12	8					12	8					12	12					
Dimensions(mm)	A	669					794	719					844	799					949	999					
	B	1004					1129	959					1084	1085					1235	1235					
	C	458						493						558						583					
	E1	300						328						300						328					
	E2	270						296						270						296					
	E3	—						—						620					800	800					
	K	314						323						—						—					
	N	1270						1450						1930						2090					
	O	173						193						173						193					
	P	8000					12000	9000					13000	9000					13000	13000					
	R	903						928						1268						1398					
Min.rad.curvature(m)		5.0						5.0						Straight line						Straight line					
Weight(kg)		850					920	1200					1300	2100					2250	2600					
Hook block weight(kg)		60						100						190						280					
I-Beam related dimensions		D	H	J	Q	U	V	D	H	J	Q	U	V	D	H	J	Q	U	V	D	H	J	Q	U	V
Applicable I-Beam(mm)	400×150×12.5	578	60	49	254	117	181	604	54	49	279	141	241	—						—					
	450×175×13	590	85	49	254	117	181	616	78	49	279	141	241	590	85	49	254	117	416	616	81	49	279	141	521
	600×190×13	598	100	50	253	116	182	624	94	50	278	140	242	598	100	50	253	116	417	624	96	50	278	140	522

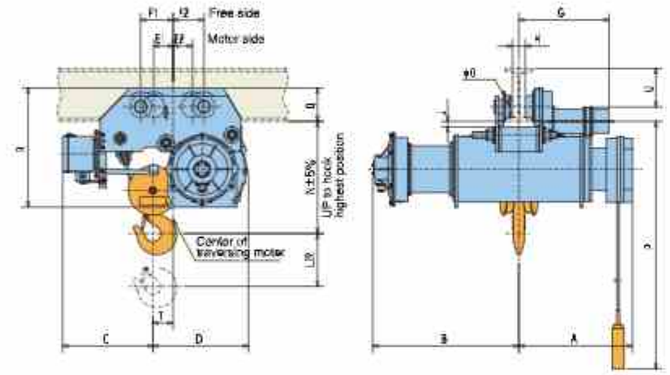
Note Applicable I-Beam =Standard

Low-head Type S (1/2t·1t·2t·2.8t·3t·5t)

S-1/2・1・2・2.8・3



S-5

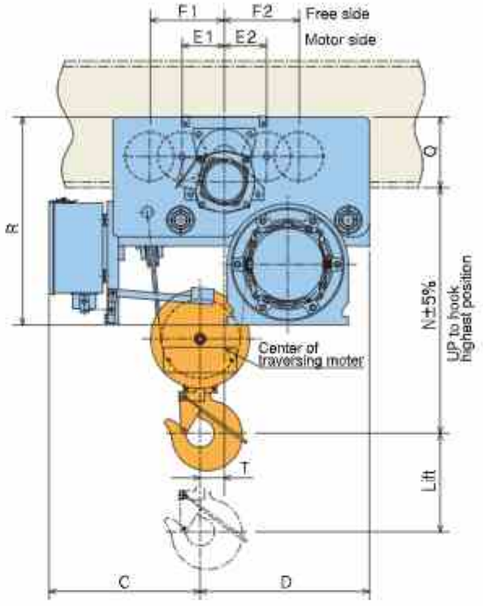


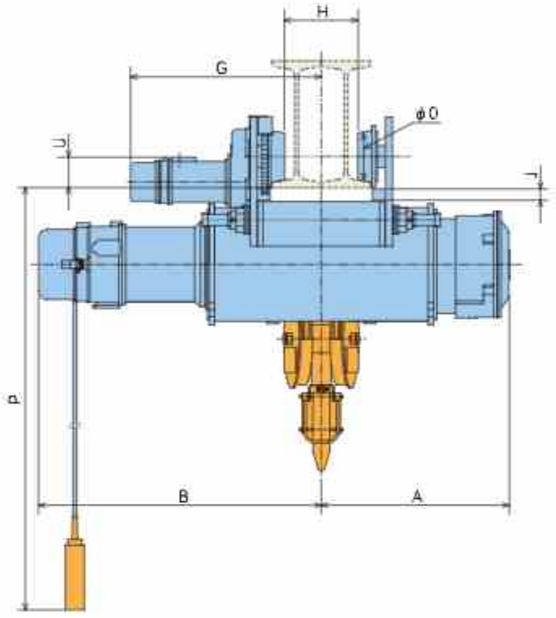
Model		S-1/2-LD2	S-1		S-2		S-2.8(3)		S-5	
			LD2	HD2	LD2	HD2	LD3A	HD3A	LD3	HD3
Cap.(t)		1/2	1		2		2.8(3)		5	
Lift(m)		6	6	12	6	12	6	12	8	12
Dimensions(mm)	A	407	429	597	427	605	440	590	648	771
	B	528	616	784	668	847	711	861	830	955
	C	371	423		473		490		513	
	D	272	356		467		558		542	
	E1	58	100		105		105		110	
	E2	38	100		105		105		110	
	F1	120	140		135		175		185	
	F2	70	140		135		175		175	
	N	345	410		505		565		650	
	O	73	80		114		114		125	
	P	6000	6000	12000	6000	12000	6000	12000	8000	12000
	R	400	495		588		673		676	
	T	66	58		95		108		115	
Min.rad.curvature(m)		1.2(4.0)	1.8(7.0)		1.8(5.0)		2.0		6.3	
Weight(kg)		130	195	205	295	330	390	425	570	640
Hook block weight(kg)		5.5	8		15		25		42	
I-Beam related dimensions		G H J Q U	G H J Q U		G H J Q U		G H J Q U		G H J Q U	
Applicable I-Beam(mm)	200×100×7※1	376 54 20 101 125	372 48 21 140 155		453 40 26 167 140		—		—	
	250×125×7.5		385 74 19 142 203		465 64 24 169 168		465 64 37 169 188		—	
	300×150×8				478 90 23 170 237		—		—	
	300×150×11.5	—			478 90 14 179 228		478 90 27 179 228		512 72 31 189 219	
	450×175×13	—							524 96 27 193 365	
	600×190×13	—	—							

Note.rad.cur( )at I-Beam ●S-1/2,S-1…150×75×5.5 ●S-2…200×100×7 Note Applicable I-Beam =Standard =required special attachment
※1 150×75×5.5 is applicable

Low-head Type S (7.5t·10t)

S-7.5・10



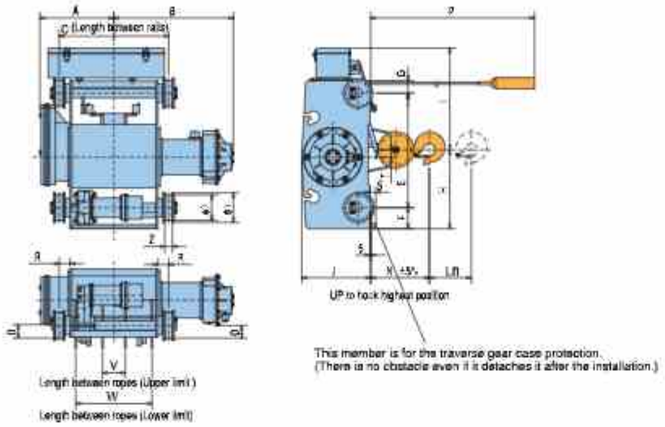


Model		S-7.5		S-10	
		LD	HD	LD	HD
Cap.(t)		7.5		10	
Lift(m)		8	12	8	12
Dimensions(mm)	A	669	794	719	844
	B	1004	1129	959	1084
	C	536		619	
	D	601		689	
	E1	150		528	
	E2	150		162	
	F1	265		604	
	F2	265		164	
	N	660		990	
	O	173		193	
	P	8000	12000	8000	12000
	R	741		873	
	T	86		363	
Min.rad.curvature(m)		Straight line		Straight line	
Weight(kg)		950	1020	1500	1600
Hook block weight(kg)		80		100	
I-Beam related dimensions		G H J Q U		G H J Q U	
Applicable I-Beam(mm)	450×175×13 2rails	678 257 49 254 109		711 253 49 279 141	
	600×190×13 2rails	693 288 50 253 108		726 284 50 278 140	

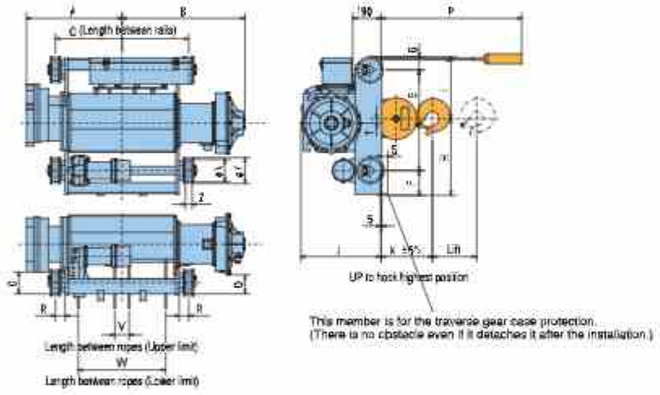
Note Applicable I-Beam =Standard

Double rail Type S (2.8t·3t·5t)

S-2.8 · 3



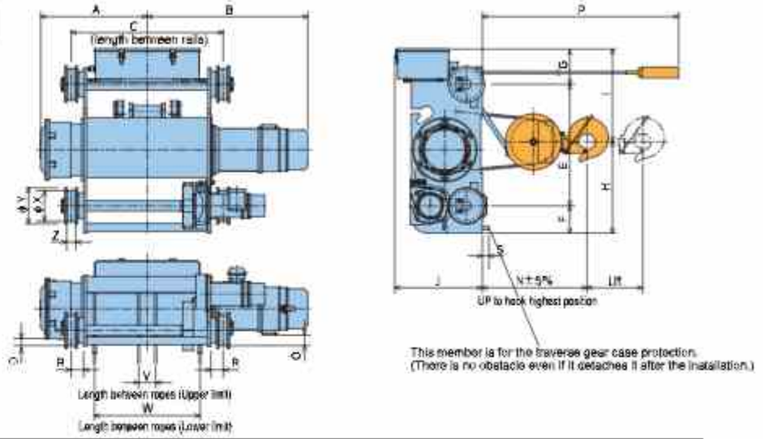
S-5



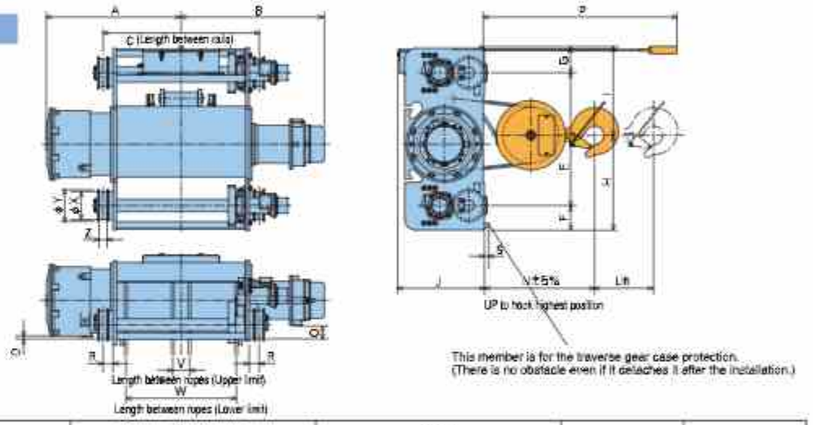
Model		S-2.8 (3)		S-5	
		LR3A	HR3A	LR3A	HR3A
Cap.(t)		2.8 (3)		5	
Lift(m)		6	12	8	12
Dimensions(mm)	A	440	590	646	771
	B	711	861	830	955
	C	650	950	900	1150
	E	680		680	
	F	125		167	
	G	75		88	
	H	468		517	
	I	605		418	
	J	410		541	
	N	345		346	
	O	52		125	
	P	6000	12000	8000	12000
	Q	75		129	
	R	63		65	
	S	35		40	
	T	43		30	
	V	113	105	97	100
	W	433	733	590	840
	X	150		150	
	Y	175		175	
	Z	45		45	
Weight(kg)		425	475	660	740
Hook block weight(kg)		25		42	
Applicable Rail		12kg rails or 38mm steel square bars			

Double rail Type S (7.5t·10t·15t·20t·30t)

S-7.5 · 10 · 15 · 20



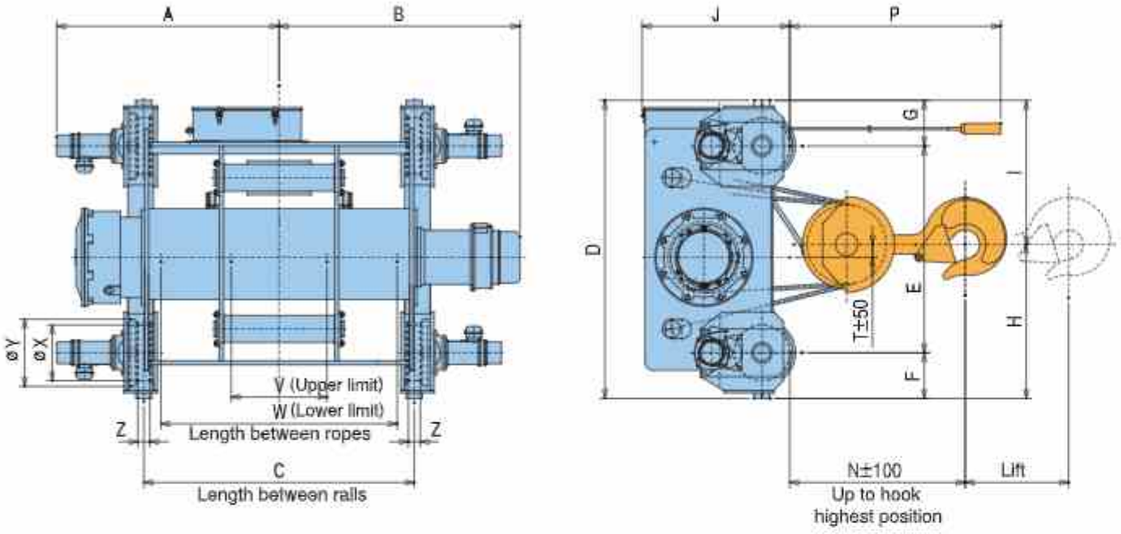
S-30



Model		S-7.5		S-10		S-15		S-20-HR	S-30-HR
		LR	HR	LR	HR	LR	HR		
Cap.(t)		7.5		10		15		20	30
Lift(m)		8	12	8	12	8	12	12	12
Dimensions(mm)	A	669	794	719	844	799	949	999	1209
	B	1004	1129	959	1084	1085	1235	1235	1285
	C	950	1200	950	1200	1000	1300	1300	1400
	E	760		840		1000		1045	1190
	F	170		170		220		220	220
	G	223		233		243		248	246
	H	570		613		750		790	850
	I	583		630		703		723	806
	J	543		543		743		748	763
	N	630		710		860		910	1020
	O	40		38		30		32	15
	P	8000	12000	8000	12000	8000	12000	12000	12000
	Q	75		30		85		120	115
	R	77		82		84		84	89
	S	45		55		55		55	45
	T	50		53		70		70	80
	V	105	80	100	100	110	135	125	150
	W	660	910	620	870	660	960	945	990
	X	190		190		250		250	250
	Y	225		225		285		285	285
	Z	52		52		58		58	73
Weight(kg)		900	980	1250	1360	1900	2100	2500	3600
Hook block weight(kg)		80		100		190		280	330
Applicable Rail		15kg rails or 44mm steel square bars				22kg rails or 50mm steel square bars			Typical 65mm steel square bars

Double rail Type S (40t)

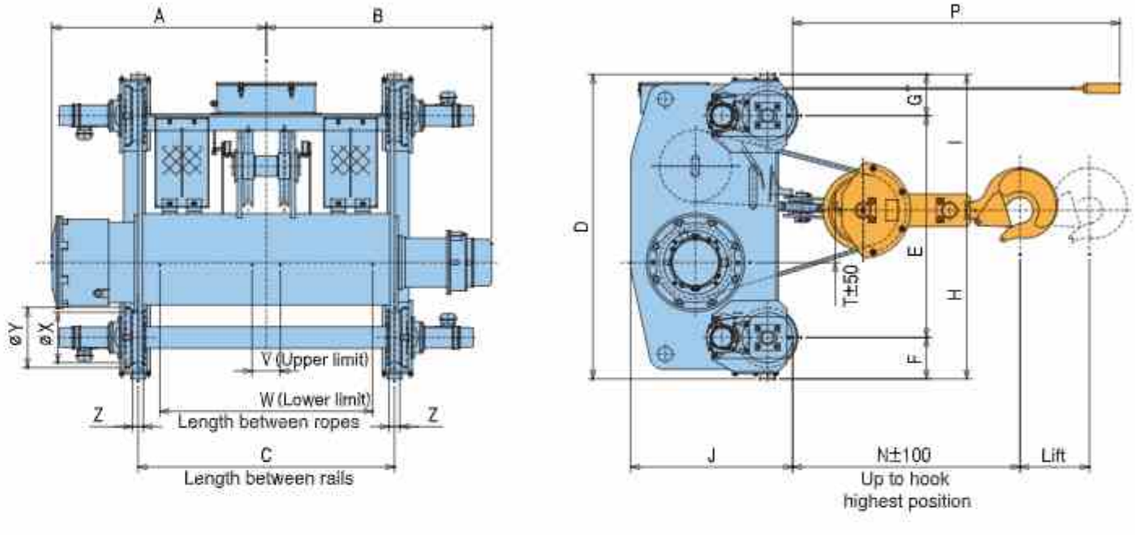
S-40



Model		S-40	
		LR	HR
Cap.(t)		40	
Lift(m)		6.5	11.5
Dimensions(mm)	A	1399	1749
	B	1515	1865
	C	1700	2400
	D	1874	
	E	1300	
	F	287	
	G	287	
	H	968	
	I	906	
	J	930	
	N	1110	
	P	7500	12500
	T	61	
	V	602	
	W	1485	2164
	X	350	
	Y	419	
	Z	75	
Weight(kg)		4800	5300
Hook block weight(kg)		640	
Applicable Rail		37kg rails or 65mm steel square bars	

Double rail Type S (45t)

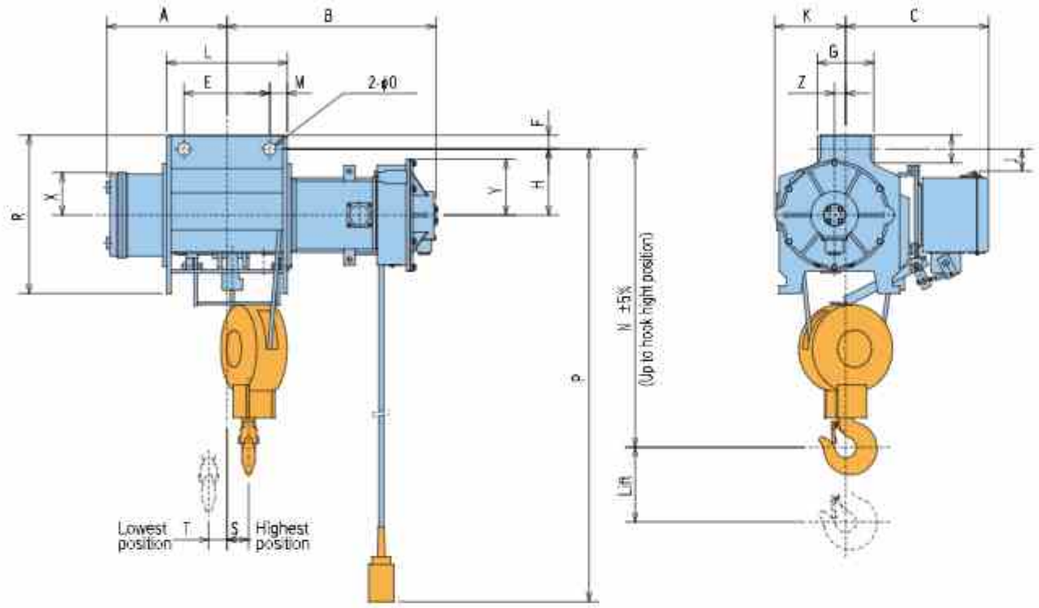
S-45



Model		S-45	
		HR	HR
Cap.(t)		45	
Lift(m)		12.5	19.0
Dimensions(mm)	A	1490	1840
	B	1565	1915
	C	1780	2480
	D	2114	
	E	1540	
	F	287	
	G	287	
	H	1170	
	I	944	
	J	1125	
	N	1600	
	P	14000	20500
	T	363	
	V	196	
	W	1476	2141
	X	350	
	Y	419	
	Z	75	
Weight(kg)		6000	6500
Hook block weight(kg)		590	
Applicable Rail		37kg rails or 65mm steel square bars	

Suspended Type S (1/2t・1t・2t・2.8t・3t)

S-1/2・1・2・2.8・3
〈LK2, HK2, LK3, HK3〉



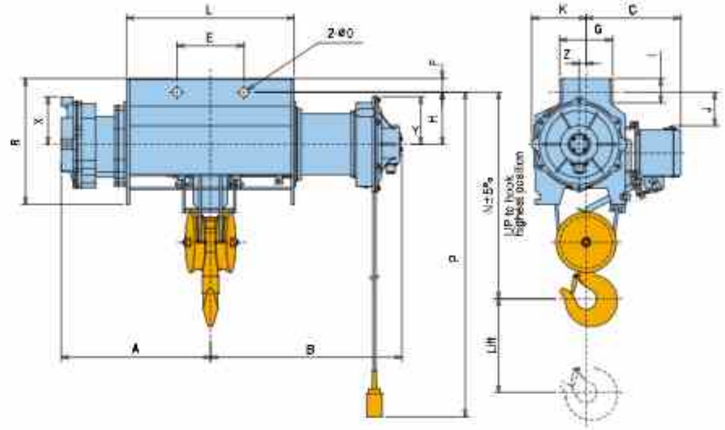
Remarks:Clamping bolts are avavilable for 1/2t~2.8t models separately.

Model		S-1/2		S-1		S-2		S-2.8(3)	
		LK2	HK2	LK2	HK2	LK2	HK2	LK3	HK3
Cap.(t)		1/2		1		2		2.8(3)	
Lift(m)		6	12	6	12	6	12	6	12
Dimensions(mm)	A	287	457	287	474	322	479	341	510
	B	433	473	518	551	563	593	610	641
	C	324		345		383		408	
	E	170	230	230		230		230	
	F	28	33	33		38		43	
	G	140	117	117		151		176	
	H	155		160		177		215	
	I	75	78	63		67		80	
	J	18		47		59		127	
	K	151		167		190		216	
	L	283	493	298	518	323	508	323	523
	M	32	42	34	67	47	75	46	77
	N	570		670		800		965	
	O	20	24	24		33		33	
	P	6000	12000	6000	12000	6000	12000	6000	12000
	R	328	333	373		425		518	
	S	50	93	71	105	58	101	60	97
	T	58	123	42	119	49	113	47	115
	X	87		107		140		172	
	Y	85		105		150		150	
	Z	20		36		30		30	
Weight(kg)		90	105	135	150	220	245	310	345
Hook block weight(kg)		4.5		7.5		15		27	

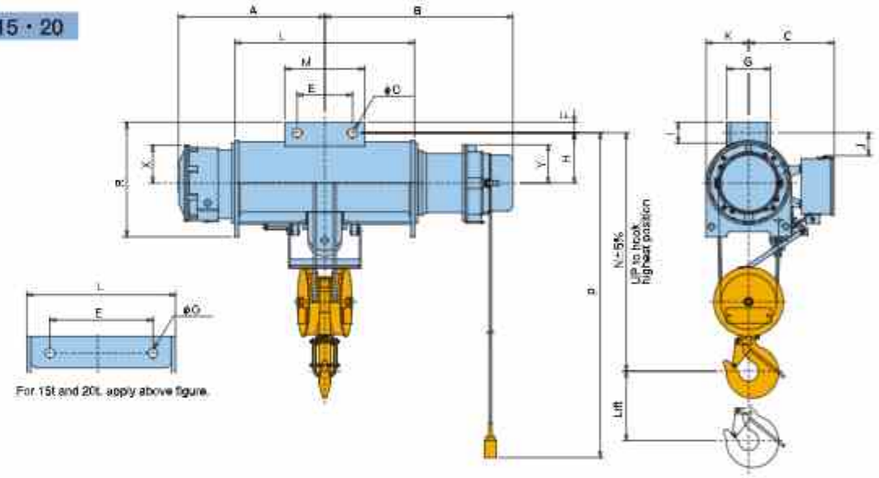
Note:In the case of S-1/2, the position of pendent push button is on the side of hoisting deceleration section.

Suspended Type S (5t・7.5t・10t・15t・20t)

S-5



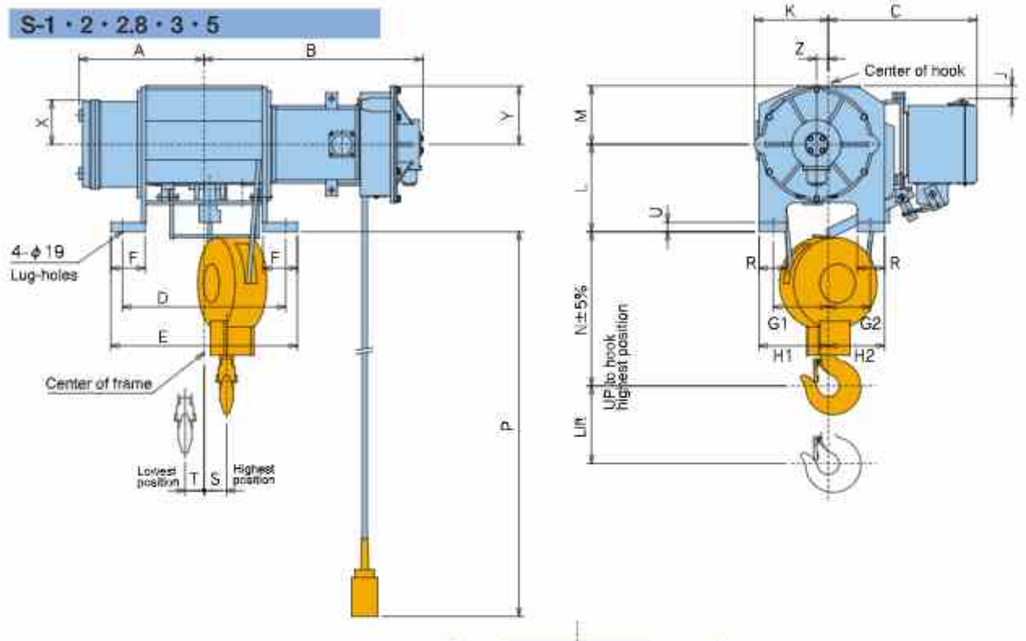
S-7.5・10・15・20



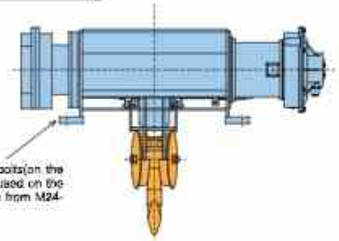
Model		S-5		S-7.5		S-10		S-15		S-20-HK
		LK3	HK3	LK	HK	LK	HK	LK	HK	
Cap.(t)		5		7.5		10		15		20
Lift(m)		8	12	8	12	8	12	8	12	12
Dimensions(mm)	A	646	771	669	794	719	844	799	949	999
	B	830	955	1004	1129	959	1084	1085	1235	1235
	C	410		458		493		558		583
	E	290		300		320		620	800	800
	F	60	61	55		60		80		100
	G	229		252		252		225		225
	H	225		255		290		365		410
	I	105	106	120		120		178		217
	J	145		77		132		167		237
	K	236		215		245		295		320
	L	725	975	796	1046	786	1036	831	1131	1131
	M	—		440		460		—		—
	N	905		1165		1380		1680		1800
	O	38		47		53		78		103
	P	8000	12000	8000	12000	8000	12000	8000	12000	12000
	R	546		600		660		845		935
	X	205		188		218		275		308
	Y	206		152		220		220		220
	Z	30		—		—		—		—
Weight(kg)		510	580	650	720	1000	1100	1400	1550	1900
Hook block weight(kg)		42		80		100		190		280

Frame mounted Type S (1t · 2t · 2.8t · 3t · 5t)

S-1 · 2 · 2.8 · 3 · 5



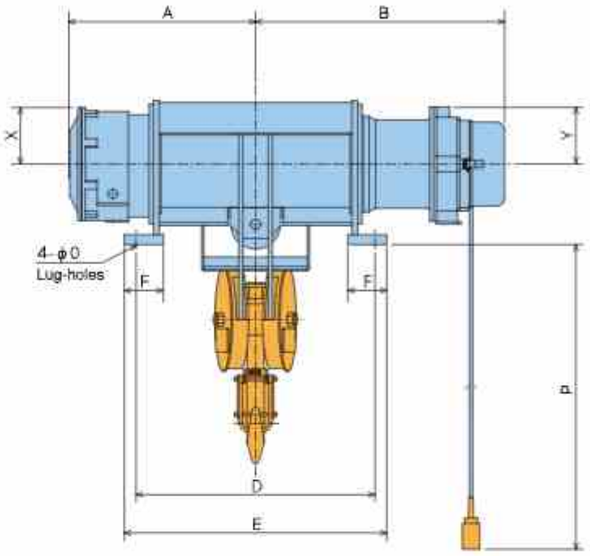
(Shape of 5t)

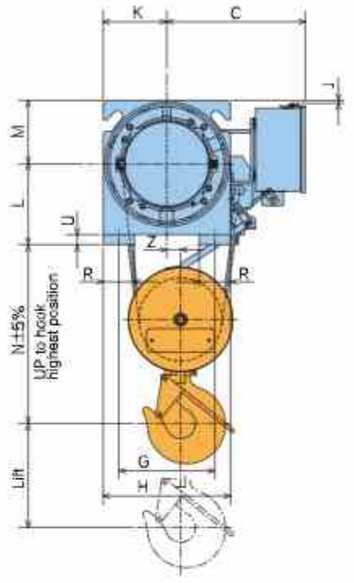


Model		S-1		S-2		S-2.8(3)		S-5	
		LS2	HS2	LS2	HS2	LS3	HS3	LS3	HS3
Cap.(t)		1		2		2.8(3)		5	
Lift(m)		6	12	6	12	6	12	8	12
Dimensions(mm)	A	287	397	322	415	341	441	646	771
	B	518	628	563	657	610	710	830	955
	C	345		383		408		410	
	D	385	605	420	605	430	630	850	1100
	E	435	655	480	665	500	700	920	1170
	F	75		88		99		115	
	G1/G2	121/84		141/109		170/130		175/145	
	H1/H2	151/114		178/145		210/170		220/190	
	J	23		33		93		125	
	K	167		190		216		236	
	L	180		225		275		260	
	M	136		151		181		206	
	N	330		410		490		420	
	O	15		19		24		28	
	P	6000	12000	6000	12000	6000	12000	8000	12000
	R	60		70		80		90	
	S	71	182	58	165	60	166	—	
	T	42	42	49	49	47	47	—	
	U	16		24		27		31	
	X	107		140		172		205	
	Y	105		150		150		206	
	Z	36		30		30		30	
Weight(kg)		115	135	175	215	305	345	510	580
Hook block weight(kg)		7.5		15		27		42	

Frame mounted Type S (7.5t · 10t · 15t · 20t · 30t)

S-7.5 · 10 · 15 · 20 · 30

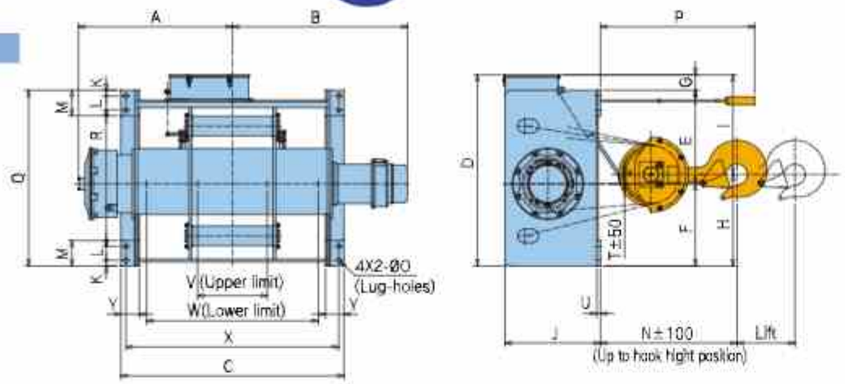




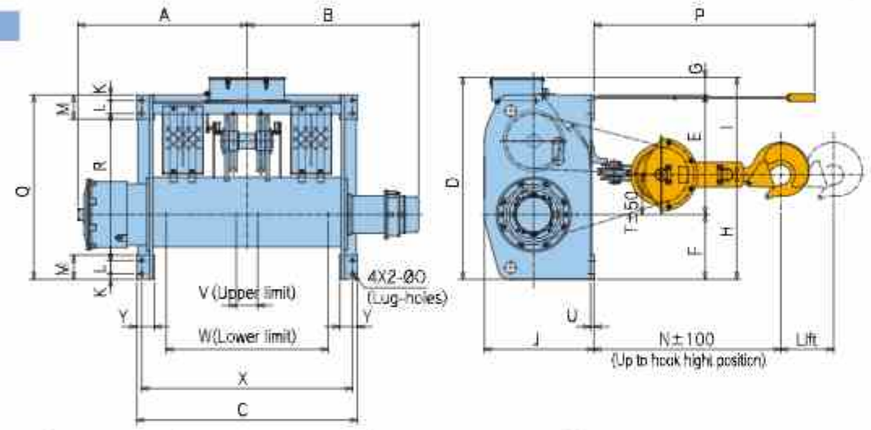
Model		S-7.5		S-10		S-15		S-20-HS	S-30-HS
		LS	HS	LS	HS	LS	HS		
Cap.(t)		7.5		10		15		20	30
Lift(m)		8	12	8	12	8	12	12	12
Dimensions(mm)	A	669	794	719	844	799	949	999	1209
	B	1004	1129	959	1084	1085	1235	1235	1285
	C	493		531		633		663	713
	D	920	1170	920	1170	960	1260	1260	1380
	E	1010	1260	1010	1260	1080	1380	1380	1480
	F	140		150		170		170	200
	G	370		370		500		500	620
	H	470		490		630		640	770
	J	2		12		2		12	12
	K	215		245		295		320	385
	L	290		310		370		395	435
	M	215		245		295		320	355
	N	580		670		810		870	960
	O	35		35		47		47	54
	P	8000	12000	8000	12000	8000	12000	12000	12000
	R	100		120		130		140	150
	U	31		35		41		41	49
	X	188		218		275		308	320
	Y	152		220		220		220	220
	Z	50		53		70		70	80
Weight(kg)		650	720	1000	1100	1400	1550	1900	2900
Hook block weight(kg)		80		100		190		280	380

Frame mounted Type S (40t·45t)

S-40



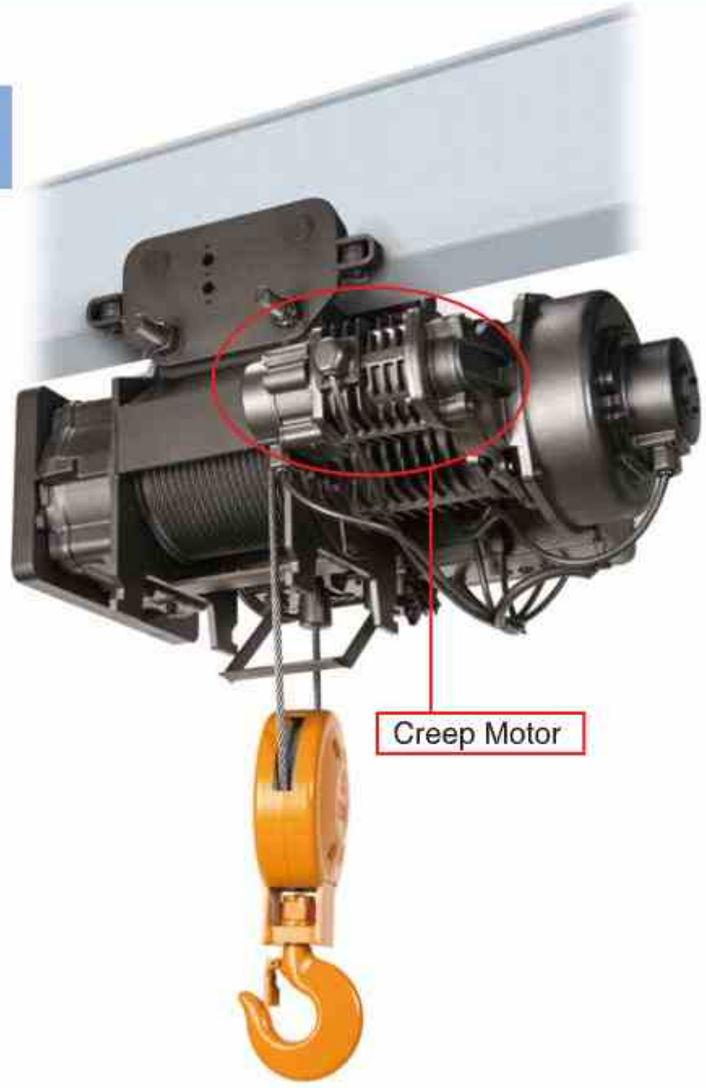
S-45



Model		S-40		S-45	
		LS	HS	HS	HS
Cap.(t)		40		45	
Lift(m)		6.5	11.5	12.5	19
Dimensions(mm)	A	1333	1683	1543	1893
	B	1515	1865	1565	1915
	C	1930	2630	2010	2710
	D	1653		1840	
	E	810		1090	
	F	710		590	
	G	133		160	
	H	791		953	
	I	862		887	
	J	845		1000	
	K	50		50	
	L	120		120	
	M	220		220	
	N	1190		1725	
	O	35		35	
	P	7500	12500	14000	20500
	Q	1520		1680	
	R	1180		1340	
	T	81		363	
	U	32		32	
	V	602		196	
	W	1485	2164	1476	2141
	X	1840	2540	1920	2620
	Y	160		160	
Weight(kg)		4200	4700	5400	5900
Hook block weight(kg)		540		590	

MEMO

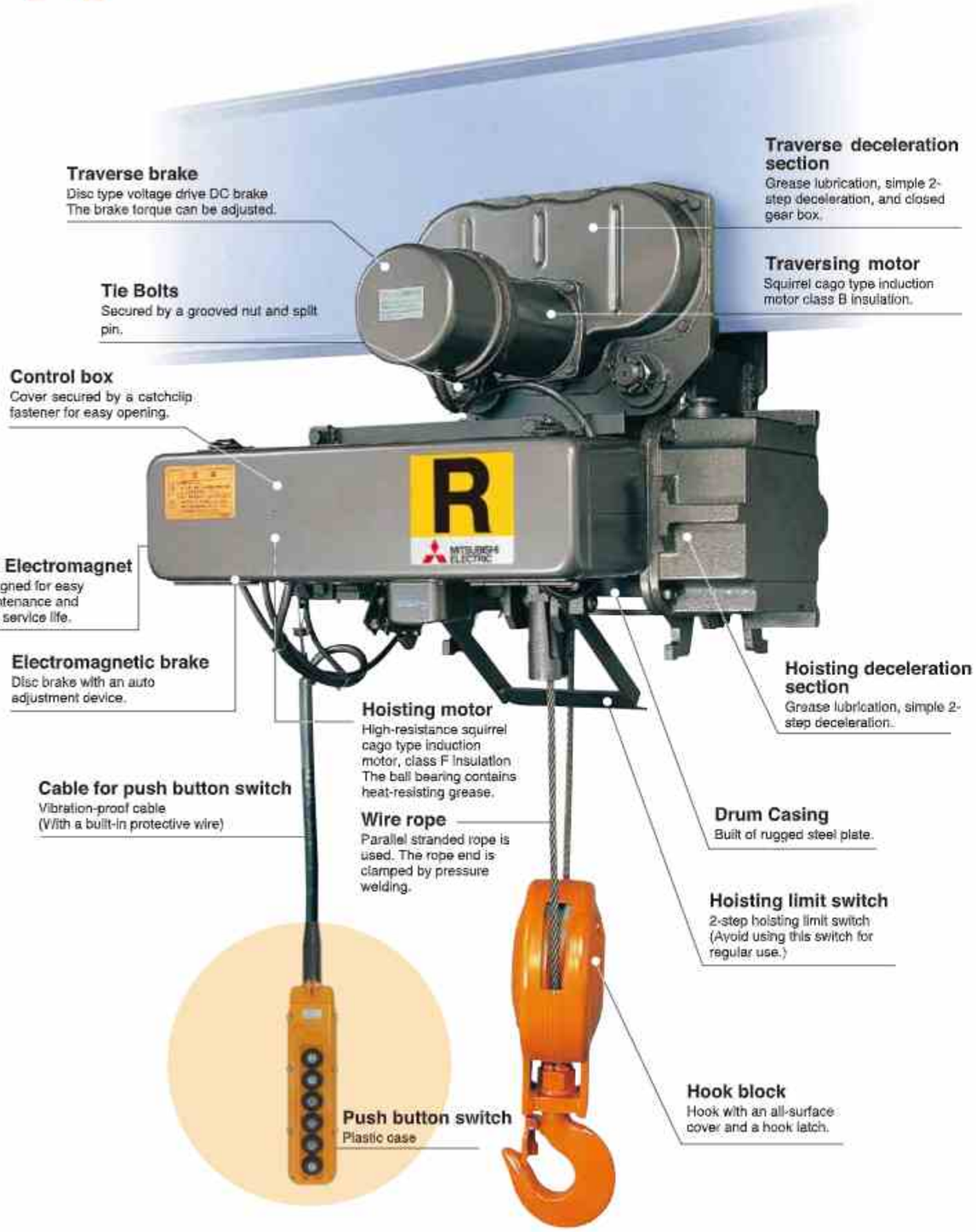
Hoist with creep speed



- 2 Speeds which are creep speed and standard speed are available by the creep speed motor.
- having useful functions for mechanical assembly work, die matching, die cutting work at a foundry etc.

Cap. (t)	Hoisting					Traversing															
	Hoisting speed m/sec (m/min)		Output (kW)		Poles	With hoisting creep speed (VT)									With hoisting and traversing creep speed (VS)								
						Monaural-Low-head type					Double rail type				Monaural-Low-head type					Double rail type			
						Hoisting speed m/sec (m/min)		Motor			Hoisting speed m/sec (m/min)		Motor		Hoisting speed m/sec (m/min)		Motor			Hoisting speed m/sec (m/min)		Motor	
								Output (kW)		Poles			Output (kW)				Output (kW)		Poles			Output (kW)		Poles
	50Hz	60Hz	50Hz	60Hz		50Hz	60Hz	50Hz	60Hz		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz		50Hz	60Hz	50Hz	60Hz	
1	0.0183/0.183 (1.1/11)	0.0217/0.217 (1.3/13)	0.5/2.0	0.6/2.4	4/4	0.35 (21)	0.417 (25)	0.22	0.26	4	—	—	—	—	0.0875/0.35 (5.2/21)	0.104/0.417 (6.2/25)	0.06/0.22	0.07/0.26	16/4	—	—	—	—	—
2	0.014/0.14 (0.84/8.4)	0.0167/0.167 (1.0/10)	0.5/2.9	0.6/3.5				0.5	0.6		0.35 (21)	0.417 (25)	0.5	0.6			0.13/0.5	0.15/0.6		0.0875/0.35 (5.2/21)	0.104/0.417 (6.2/25)	0.13/0.5	0.15/0.6	16/4
2.8			0.5/4.1	0.6/4.9																				
3			0.5/4.4	0.6/5.3																				
5	0.0112/0.112 (0.67/6.7)	0.0133/0.133 (0.8/8)	1.0/6.2	1.2/7.5				0.85	1.0								0.2/0.75	0.24/0.9						
7.5	0.00967/0.0967 (0.58/5.8)	0.0117/0.117 (0.7/7)	1.0/8.3	1.2/10		0.2 (12)	0.25 (15)				0.25 (15)	0.3 (18)	0.85	1.0	0.04/0.2 (2.4/12)	0.05/0.25 (3/15)	0.22/0.85	0.26/1.0	4/4	0.05/0.25 (3/15)	0.06/0.3 (3.6/18)	0.22/0.85	0.26/1.0	4/4
10	0.00833/0.0833 (0.5/5)	0.01/0.1 (0.6/6)	2.0/10	2.4/12	4/6			1.5	1.8								0.37/1.5	0.45/1.8						
15			2.0/17	2.4/20				0.85×2	1.0×2				1.5	1.8			0.22/0.85 ×2	0.26/1.0 ×2				0.37/1.5	0.45/1.8	
20	0.007/0.07 (0.42/4.2)	0.00833/0.0833 (0.5/5)						1.5×2	1.8×2								0.37/1.5 ×2	0.45/1.8 ×2						
30	0.00467/0.0467 (0.28/2.8)	0.0055/0.055 (0.33/3.3)				—	—	—	—				1.5×2	1.8×2	—	—	—	—	—			0.37/1.5 ×2	0.45/1.8 ×2	

R Type Series Regular type Utilitarian type 1t～2.8(3)t



R type copes with both one-class higher capability and economical efficiency.

Specifications

Type	Capacity(t)	Lift(m) Low	Lift(m) High	Wire rope: Monorail type 2 falls	Wire rope: Double rail type Low head type 4 falls	Wire rope: Rope specification	Hoisting: Speed m/s (m/min) 50 Hz	Hoisting: Speed m/s (m/min) 60 Hz	Hoisting: Motor Output (kW) 50 Hz	Hoisting: Motor Output (kW) 60 Hz	Hoisting: Motor Rated Current (A) 50 Hz	Hoisting: Motor Rated Current (A) 60 Hz	Hoisting: Motor Poles	Traversing: Mono-rail・Low hearoom: Speed m/s (m/min) 50 Hz	Traversing: Mono-rail・Low hearoom: Speed m/s (m/min) 60 Hz	Traversing: Mono-rail・Low hearoom: Motor Output (kW) 50 Hz	Traversing: Mono-rail・Low hearoom: Motor Output (kW) 60 Hz	Traversing: Mono-rail・Low hearoom: Motor Rated Current (A) 50 Hz	Traversing: Mono-rail・Low hearoom: Motor Rated Current (A) 60 Hz	Traversing: Mono-rail・Low hearoom: Motor Poles	Traversing: Double-rail: Speed m/s (m/min) 50 Hz	Traversing: Double-rail: Speed m/s (m/min) 60 Hz	Traversing: Double-rail: Motor Output (kW) 50 Hz	Traversing: Double-rail: Motor Output (kW) 60 Hz	Traversing: Double-rail: Motor Rated Current (A) 50 Hz	Traversing: Double-rail: Motor Rated Current (A) 60 Hz	Traversing: Double-rail: Motor Poles
R	1	6	12	φ8 ※1	φ6.3	6×W(19) B class JIS-G3525	0.112 (6.7)	0.133 (8)	1.2	1.4	7.4	7.9	4	0.35 (21)	0.417 (25)	0.22	0.26	1.6	1.5	4	—	—	—	—	—	—	—
	2			φ10	φ8	6×Fi(29) B class JIS-G3525	0.1 (6)	0.12 (7.2)	2.2	2.6	15.1	13.2				0.5	0.6	3.2	3.1		—	—	—	—	—	—	—
	2.8			φ12.5	φ9				3	3.6	19	19.4									0.35 (21)	0.417 (25)	0.5	0.6	3.2	3.1	4
	3			φ12.5	φ9				3.2	3.8																	

※1 Rope specification of 1t 2falls is 6×Fi(29)
Note 1: High lift models (Low-head type1~2.8t,Double rail type2.8t)are not available.

Standard specifications

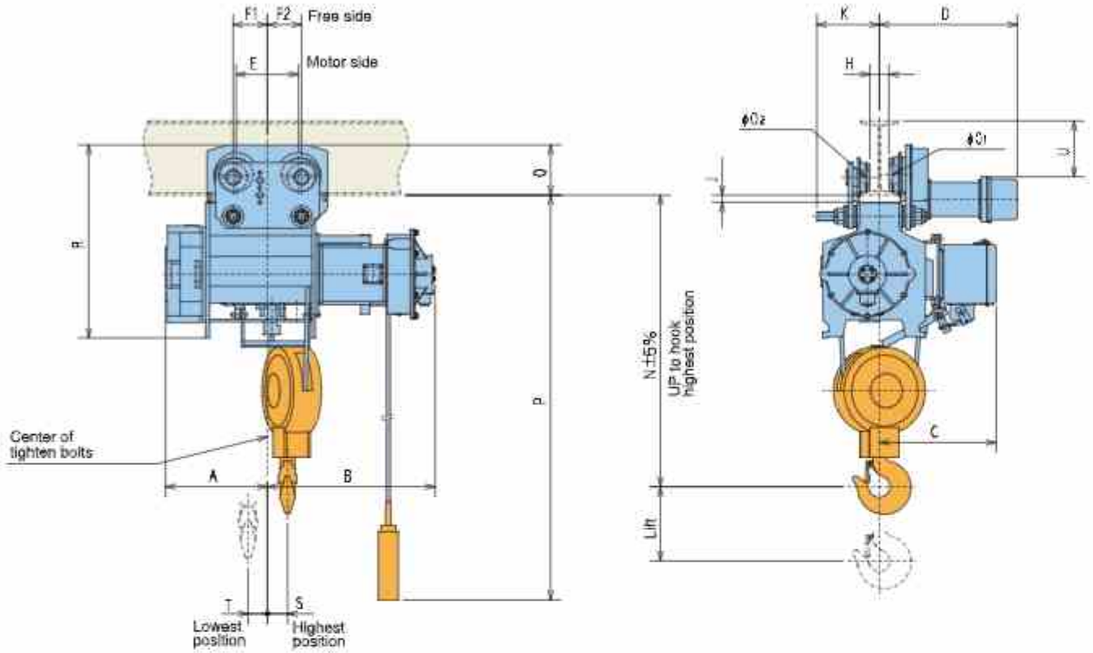
●**Power supply**···3-phase 200V 50/60Hz control 200V, 220V 60Hz control 220V
(400V class is also available)···3-Phase 400V 50/60Hz control 200V, 440V 60Hz control 220V
3-Phase 380V 50Hz control 48V (100V and 24V are also abailable)

●**Operating method**···Push button switch operations.

	1/2~3t
Suspended type Frame mounted type	2 Points
	U D
Motor operated traversing hoist	6 Points
	U D E W S N

●**Rating**···30 min. (JIS C 9620)
●**Power supply system**···Both trolley feeding and cable feeding are available. Howeve, neither trolley nor cable is attached.
●**Enclosure**···Simplified outdoor type(JISC 0920, Equivalent to IP44)
(Rainproof cover is required, when it is used in the open air.)
●**Applicable standard**···JIS C 9620 electric hoist/crane structure standard
●**Color coating**···Main body:Metallic gray (Equivalent to MunsellN4.0)
Hook block:Munsell 7.5YR7/14
Pushbutton:Equivalent to Munsell 7.5YR7/14
●**Ambient air temperature**····10℃ to 40℃(Non congelation)
●**Ambient relative humidity**···90% or less (Non condensing)
Note:These hoists cannot be used for lift (elevator for passengers.)

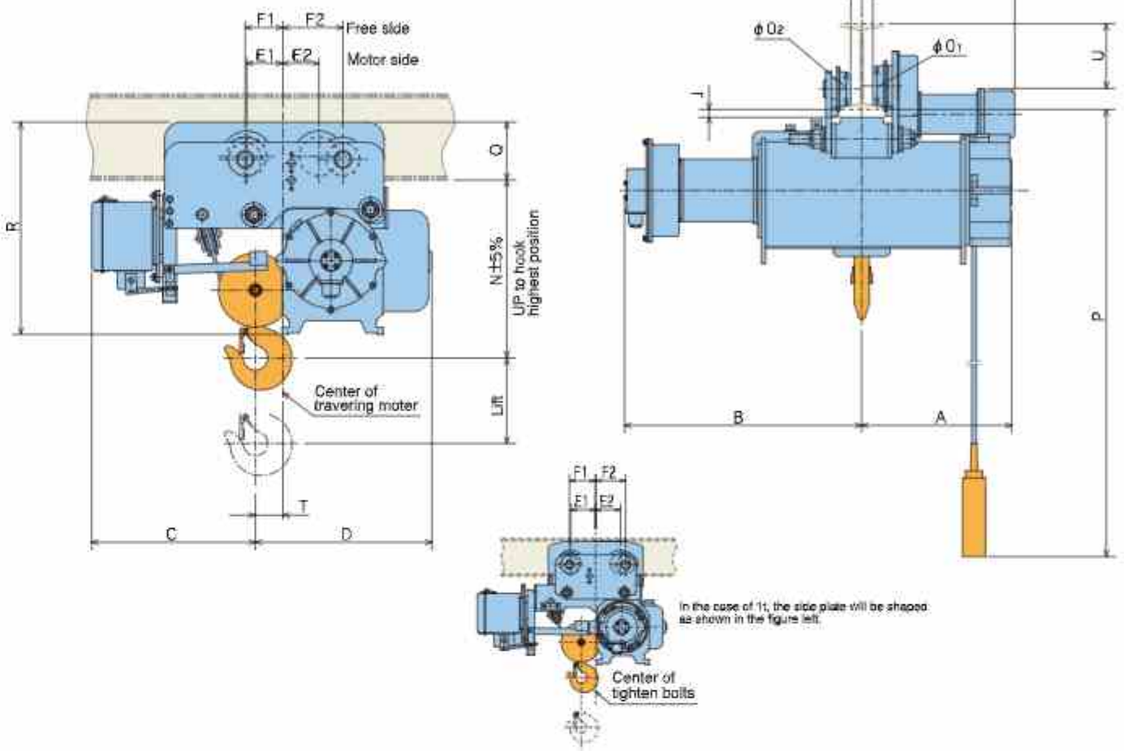
Monorail Type R (1t·2t·2.8(3)t)



Model		R-1-LM3		R-1-HM3			R-2-LM3			R-2-HM3		R-2.8(3)-LM2			R-2.8(3)-HM2	
Cap.(t)		1					2					2.8				
Lift(m)		6		12			6			12		6			12	
Dimensions(mm)	A	283		489			284			485		343			558	
	B	468		507			532			566		565			610	
	C	347					368					393				
	E	200					210					210				
	F1	105		170			115			205		115			205	
	F2	120		170			115			165		115			165	
	K	182					210					210				
	N	730					840					980				
	O1/O2	80/72					114/96					114/96				
	P	6000		12000			6000			12000		6000			12000	
	R	535					585					649				
	S	76		117			73			108		68			115	
	T	49		132			47			130		65			150	
Min.rad.curvature(m)		1.8(3.0)		3.0			2.5			3.5		2.5			3.5	
Weight(kg)		150		170			230			260		320			360	
Hook block weight(kg)		7.5					15					27				
I-Beam related dimensions		D	H	J	Q	U	D	H	J	Q	U	D	H	J	Q	U
Applicable I-Beam(mm)	200×100×7 *1	372	48	33	140	155	453	40	31	167	140	—	—	—	—	—
	250×125×7.5	385	74	31	142	203	465	64	29	169	188	465	64	24	169	188
	300×150×11.5						478	90	19	179	228	478	90	14	179	228
	450×175×13															
	600×190×13	—														

Note.1.Min.rad.cur( )denotes the case of using below I beam. 2.Applicable I-Beam = Standard 3. =required special attachment
※1 150×75×5.5 is applicable

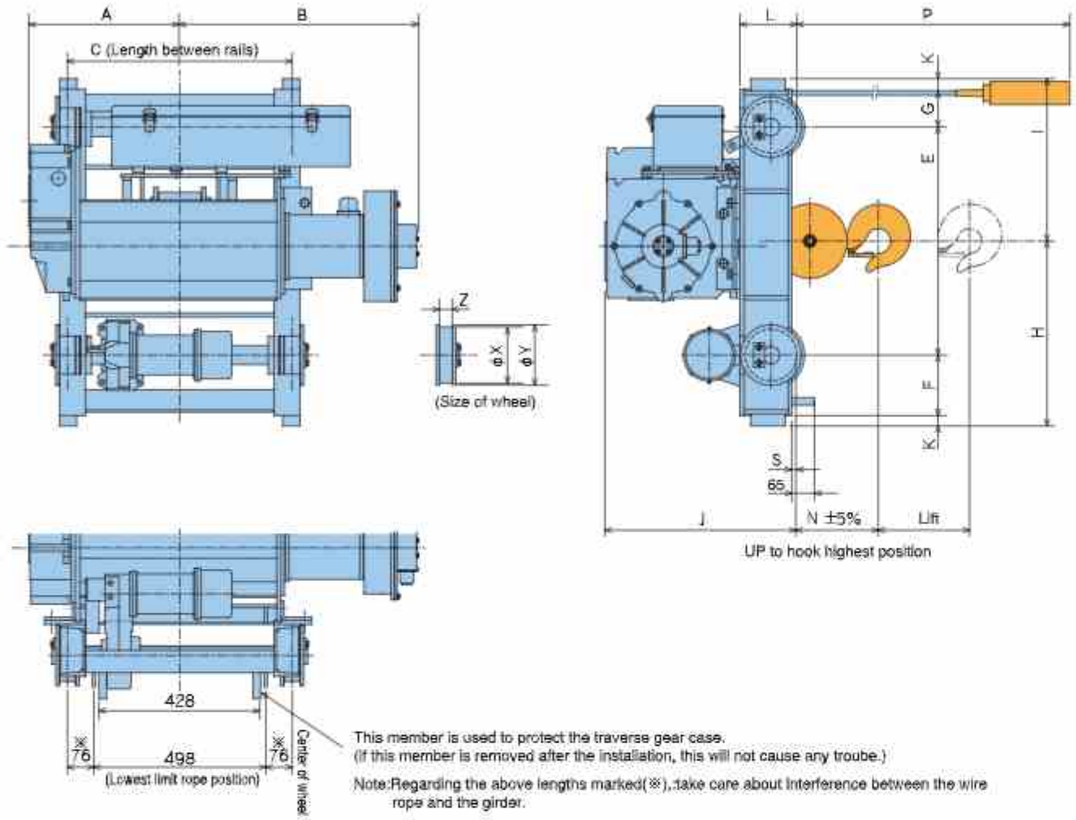
Low-head Type R (1t·2t·2.8(3)t)



Model		R-1-LD3					R-2-LD3					R-2.8(3)-LD2				
Cap.(t)		1					2					2.8				
Lift(m)		6					6					6				
Dimensions(mm)	A	426					415					437				
	B	583					656					695				
	C	418					465					478				
	D	343					455					515				
	E1	100					105					105				
	E2	100					105					105				
	F1	105					110					110				
	F2	120					175					175				
	N	485					485					515				
	O1/O2	80/72					114/96					114/96				
	P	6000					6000					6000				
	R	495					572					619				
	T	58					77					80				
Min.rad.curvature(m)		2.0(3.5)					3.0					3.0				
Weight(kg)		170					260					350				
Hook block weight(kg)		8					15					25				
I-Beam related dimensions		G	H	J	Q	U	G	H	J	Q	U	G	H	J	Q	U
Applicable I-Beam(mm)	200×100×7 *1	372	46	19	140	155	453	40	23	167	140	—	—	—	—	—
	250×125×7.5	385	74	17	142	203	465	64	21	169	188	465	64	23	169	188
	300×150×11.5						478	90	11	179	228	478	90	13	179	228
	450×175×13															
	600×190×13	—														

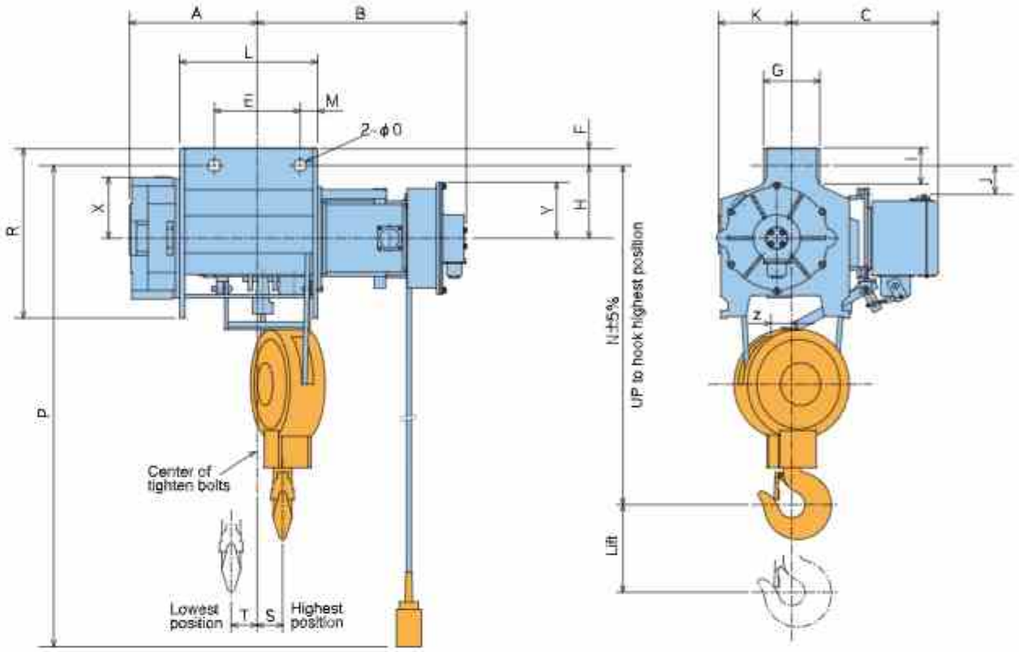
Note.1.Min.rad.cur( )denotes the case of using below I beam. 2.Applicable I-Beam = Standard 3. =required special attachment
※1 150×75×5.5 is applicable

Double rail Type R (2.8(3)t)



Model		R-2.8(3)-LR2A		
Cap.(t)		2.8		
Lift(m)		6		
Dimensions(mm)	A	437	K	30
	B	695	L	165
	C	650	N	233
	E	660	P	6000
	F	175	S	15
	G	110	T	15
	H	535	X	150
	I	470	Y	175
	J	556	Z	45
Weight(kg)		435		
Hook block weight(kg)		25		
Applicable Rail		12kg rails or 38mm steel square bars		

Suspended Type R (1t·2t·2.8(3)t)



Remarks:Clamping bolts are avaviliable separately.

Model		R-1-LK3	R-1-HK3	R-2-LK3	R-2-HK3	R-2.8(3)-LK2	R-2.8(3)-HK2
Cap.(t)		1		2		2.8	
Lift(m)		6	12	6	12	6	12
Dimensions(mm)	A	283	489	284	485	343	558
	B	468	507	532	566	565	610
	C	347		368		393	
	E	230		230		230	
	F	33		43		48	
	G	117		151		151	
	H	180		170		195	
	I	71		83		94	
	J	47		57		77	
	K	182		174		200	
	L	323	568	326	561	370	630
	M	37	76	48	82	47	92
	N	665		765		910	
	O	24		33		33	
	P	6000	12000	6000	12000	6000	12000
	R	363		388		457	
	S	76	117	73	108	68	115
	T	49	132	47	130	65	150
	X	109		141		165	
	Y	85		105		150	
	Z	46		41		40	
Weight(kg)		120	135	170	200	260	300
Hook block weight(kg)		7.5		15		27	

M Type Series

5t·10t

Traversing wheel with flange
(Only for flat rail)

Traverse brake
Disk type DC brake
The brake torque can be adjusted.

Tie Bolts
Secured by a grooved nut and split pin.

Applicable raill size
Box Rail ：width 300～350mm

Hoist Motor
High-resistance squirrel-cago motor with Class F insulation and ball bearings in heatproof grease.

Electromagnet brake
Disk brake with an auto adjustment device

Control box
The cover can be opened and closed by one-touch operation.

Mitsubishi original wire rope

Hook block
Hook with an all-surface cover and a hook latch

Traverse deceleration section
Grease lubrication, simple 2-step deceleration, and totally enclosed structure.

Traverse Motor
Squirrel-cago type with Class B insulation.

Drum Casing
Built of rugged steel plate.

Hoisting deceleration section
Grease lubrication, simple 2-step deceleration

Hoisting limit switch
2-step hoisting limit switch (Avoid using this switch for regular use.)

Additional hoisting deceleration section
(Inside of drum)
Grease lubrication, simple 1-step deceleration

Options

Over loading monitor
Guide roller
Traversing limit switch

※Photo is an optional wearing product. Please refer for the optional details separately.

M Type has been designed for optimizing price and performance.

Specifications

Type	Capacity(t)	Lift(m)	Wire rope			Hoisting				Traversing							
										Mono-rail				Double-rail			
							Motor				Motor				Motor		
			2 falls(2/1)	4 falls(4/1)	Rope specification	Speed m/s (m/min)	Output (kW)	Rated Current (A)	Poles	Speed m/s (m/min)	Output (kW)	Rated Current (A)	Poles	Speed m/s (m/min)	Output (kW)	Rated Current (A)	Poles
		High				50 Hz	50 Hz	50 Hz		50 Hz	50 Hz	50 Hz		50 Hz	50 Hz	50 Hz	
M	5	12	12.5	—	Mitsubishi original wire rope ※1	5	5.0	12.5	4	21	0.5	1.5	4	21	0.5	1.5	4
	10		—	12.5		2.5	5.0	12.5		12	0.85	2.2		15	0.85	2.2	

※1 Using non genuine wire ropes causes low safety factor has an increased risk of short product cycle

Standard specifications

●**Power supply**···3-phase 380V 50Hz control 48V(24V is also available)

●**Operating method**···Push button switch operations.

	5t·10t
Suspended type Frame mounted type	4 Points
	ON OFF U D
Motor operated traversing hoist	8 Points
	ON OFF U D E W S N

●**Rating**···Hoisting : 40%ED(100% of load rating), 240S/Hr (FEM 9.683),※only 50Hz
Traversing : 25%ED (100% of load rating), 150S/Hr ※only 50Hz

●**Power supply system**···Cable feeding, trolley feeding

●**Enclosure**···Simplified out door type(JIS C 9620 Equivalent to IP-44)

●**Applicable standard**···JIS C 9620 electric hoist/crane structure standard, FEM 9.683

●**Hoist class(ISO 4301-1)**···M5

●**Color coating**···Main body : Metallic gray (Eqivarent to Munsell N4.0)
Hook block : Munsell 7.5YR 7/14
Push button : Equivarent to Munsell 7.5YR 7/13

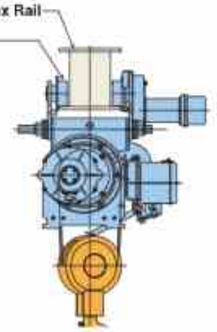
●**Ambient air temperature**···−10°C～40°C (Non condensing)

●**Ambient air humidity**···90% or less 〈Non condensing〉

Traversing wheel and Applicable rail

〈M,UM Type〉 Box Rail

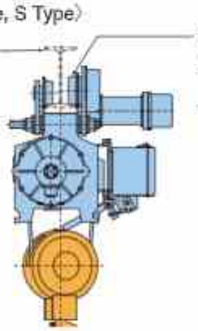
Traversing wheel
・Only for flat rail
・With flange



〈R Type, S Type〉

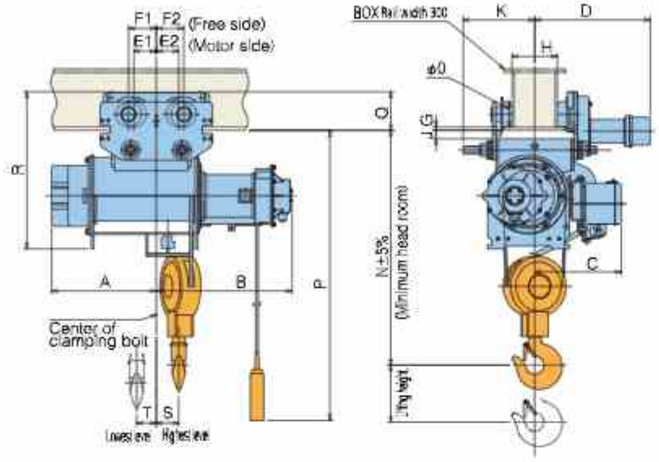
I-Beam

Traversing wheel
・Only for I-Beam
・With flange : R Type, S Type(More than 5t)
・Without flange : S Type(1/2～2.8t)

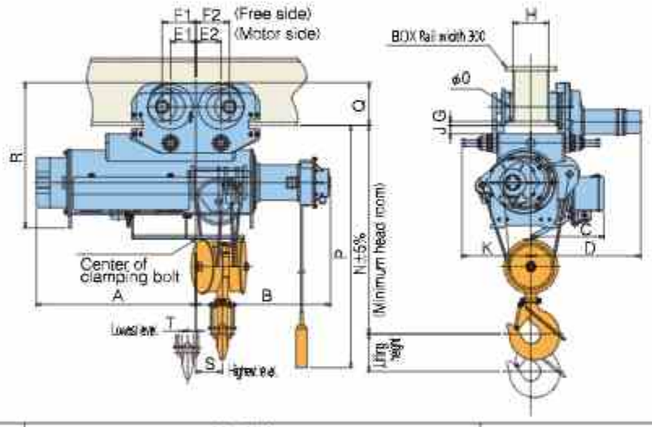


Monorail Type M (5t·10t)

M-5-HM



M-10-HM

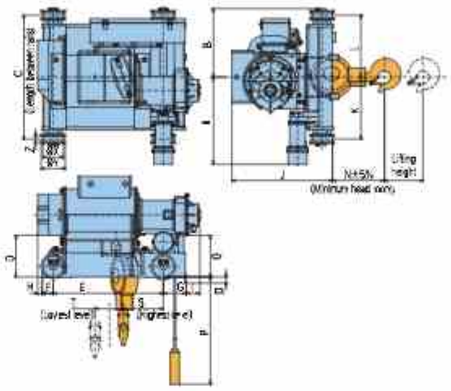


Model		M-5-HM	M-10-HM
Cap.(t)		5	10
Lift(m)		12	12
Dimensions(mm)	A	515	947
	B	665	801
	C	425	433
	D	566(591)	654(679)
	E1	110	150
	E2	110	150
	F1	135	200
	F2	135	200
	G	※1 16	※1 24
	H	222(272)	212(262)
	J	※1 31	※1 49
	K	350	411(436)
	N	1145	1245
	O	125	173
	P	12000	12000
	Q	189	255
	R	770	865
	S	110	158
	T	96	48
Min.rad.curvature(m)		Only straight line	Only straight line
Weight(kg)		540	875
Hook block weight(kg)		50	85
Applicable Box Rail Width(mm)		300(350)	300(350)

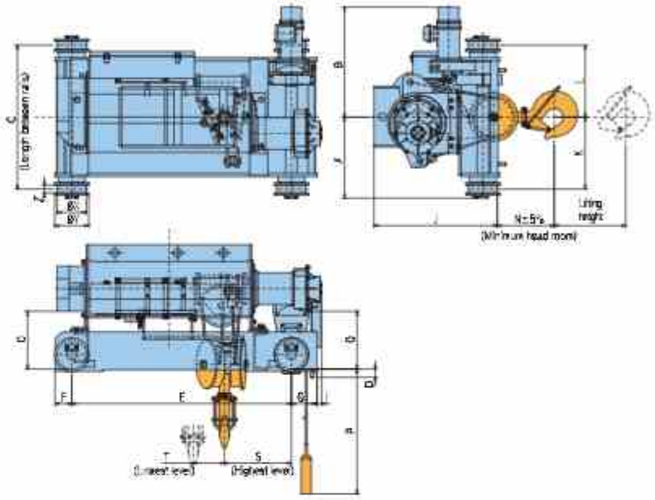
※G and J are reference levels (Because of no rail standard)

Double rail Type M (5t·10t)

M-5-HR



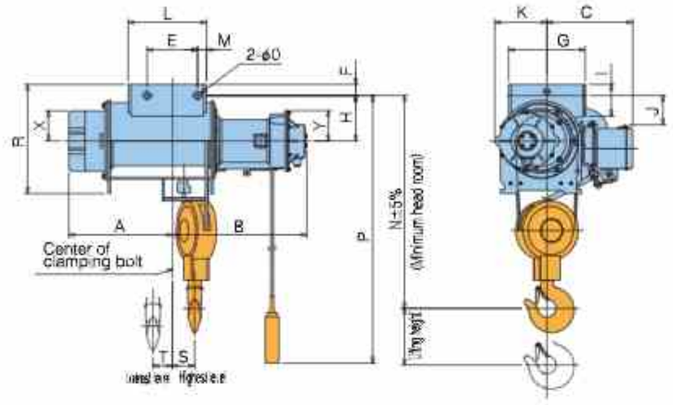
M-10-HR



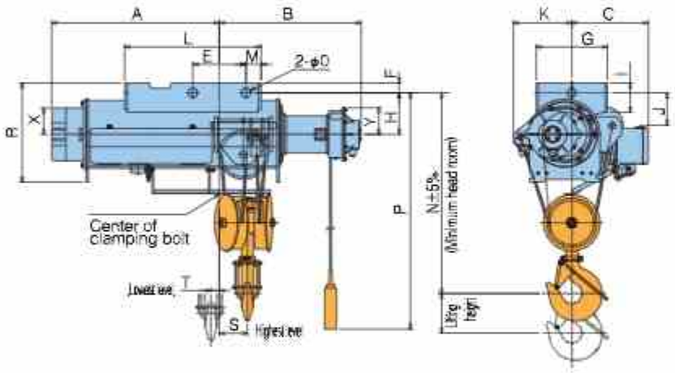
Model		M-5-HR	M-10-HR
Cap.(t)		5	10
Lift(m)		12	12
Dimensions(mm)	A		535
	B	498	727
	C	900	950
	D	45	55
	E	800	1450
	F	80	110
	G	167	170
	H	33	-
	I	99	31
	J	731	814
	K	450	475
	L	450	475
	N	375	380
	O	302	382
	P	12000	12000
	Q	301	381
	S	290	442
	T	206	206
	X	150	190
	Y	175	225
	Z	45	52
Weight(kg)		675	1130
Hook block weight(kg)		50	85
Applicable Rail		12kg rails or 38mm steel square bars	15kg rails or 44mm steel square bars

Suspended mounted Type M (5t·10t)

M-5-HK



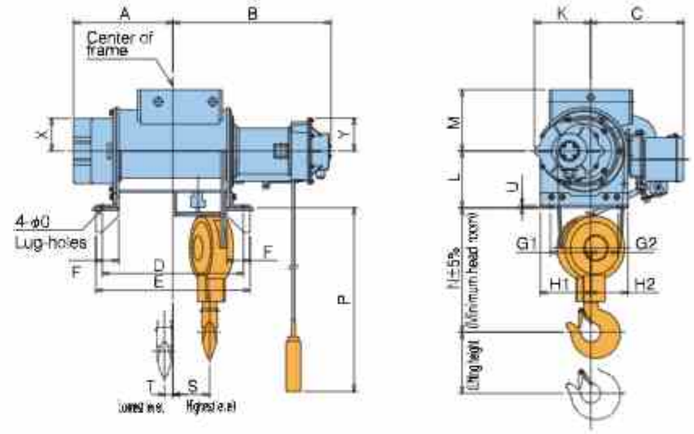
M-10-HK



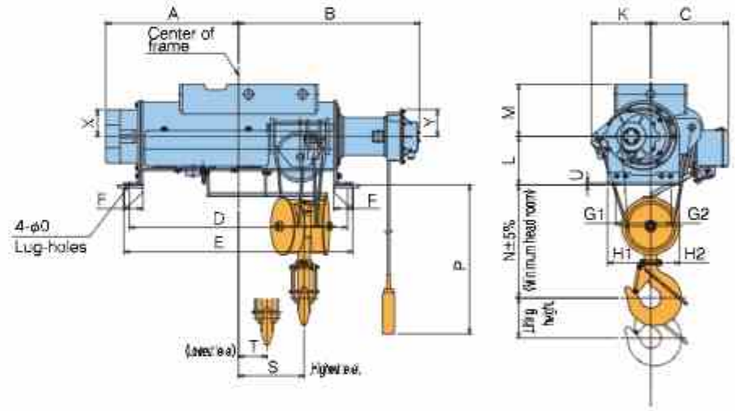
Model		M-5-HK	M-10-HK
Cap.(t)		5	10
Lift(m)		12	12
Dimensions(mm)	A	515	947
	B	665	801
	C	425	433
	E	250	300
	F	55	55
	G	379	402
	H	225	235
	I	157	164
	J	145	183
	K	258	330
	L	388	772
	M	44	86
	N	1055	1135
	O	38	53
	P	12000	12000
	R	540	560
	S	110	158
	T	96	48
	X	150	150
	Y	150	150
Weight(kg)		440	645
Hook block weight(kg)		50	85

Frame mounted Type M (5t·10t)

M-5-HS



M-10-HS



Model		M-5-HS	M-10-HS
Cap.(t)		5	10
Lift(m)		12	12
Dimensions(mm)	A	455	740
	B	724	1009
	C	425	433
	D	645	1215
	E	705	1275
	F	105	105
	G1	185	195
	G2	125	115
	H1	230	240
	H2	170	160
	K	258	330
	L	260	270
	M	280	290
	N	570	630
	O	18	26
	P	12000	12000
	S	168	366
	T	39	160
	X	150	150
	Y	150	150
Weight(kg)		440	645
Hook block weight(kg)		50	85

UM Type Series

5t・10t

Adoption of M Type body

This series is based on the model M which is designed for optimizing price and performance.

Traversing wheel with flange

(Only for flat rail)

Applicable raill size

Box Rail ：width 300～350mm

Low-wearing electromagnet brake

- Heat-generation and wear are small under severe inching operations accompanied by braking operations at low motor-speeds in the inverter-driven power train. Abatement heat-generation and wear contribute to long-span operation.

Resistance unit

- Cement resistances are unitized for downsizing.
- Adoption of the connector system facilitates hoist work.

Control panel integrating purpose-built inverter

- The control panel, made compact with an integrated inverter only for hoist, has improved environmental resistance.
- Simple parameter setting operation
  - ＊Allows operating speed to be specified freely.
  - ＊Allows selection of light-load high-speed function.
  - ＊Allows the position detection point to be specified freely.
- Troubleshooting facilitated by abnormality display.

Encoder

- Full-time monitoring of hoist motor motion; detects abnormalities and stops the machine if necessary as a safety precaution.
- Detects position using rotation pulses ; reduces machine speed when approaching the upper or the lower limit and stops it there.
- Detects light-load and automatically operates light-load high-speed.

Smooth operation

- Infinitesimal and light-moving inching operations
- Smooth changeover between high- and low-speed operations

Options

Guide roller

Traversing limit switch

※ Photo is an optional wearing product. Please refer for the optional details separately.

UM Type has been designed for optimizing price and performance.

Specifications

Type	Capacity(t)	Lift(m)	Wire rope			Hoisting						Traversing											
												Mono-rail						Double-rail					
						Speed m/s (m/min)			Motor			Speed m/s (m/min)			Motor			Speed m/s (m/min)			Motor		
		High	2 falls(2/1)	4 falls(4/1)	Rope specification	Low speed	High speed	Light load hight speed	Output(kw)	Rated Current(A)	Poles	Magnetic contactor operation	INV Operation		Output(kw)	Rated Current(A)	Poles	Magnetic contactor operation	INV Operation		Output(kw)	Rated Current(A)	Poles
												50 Hz	Low speed	High speed	50 Hz	50 Hz		50 Hz	Low speed	High speed	50 Hz	50 Hz	
UM	5	12	12.5	—	Mitsubishi original wire rope ※1	0.6	6	9	6.0	15	4	21	2.5	25	0.5	1.5	4	21	2.5	25	0.5	1.5	4
	10		—	12.5		0.3	3	4.5	6.0	15		12	1.5	15	0.85	2.2		15	1.8	18	0.85	2.2	

※1 Using non genuine wire ropes causes low safety factor has an increased risk of short product cycle

Standard specifications

- **Power supply**…3-phase 380V 50Hz control 48V(24V is also available)
- **Operating method**…Push button switch operations.

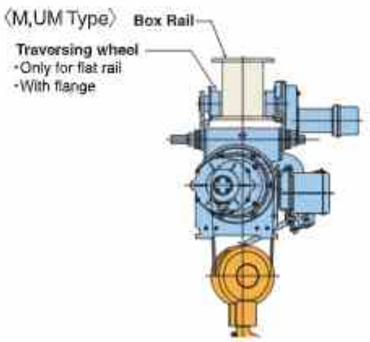
	5t・10t
Suspended type Frame mounted type	4 Points
	ON OFF U D*3
Motor operated traversing holst	8 Points
	ON OFF U D E W S N

※3 "U" and "D" are 2 step push button.

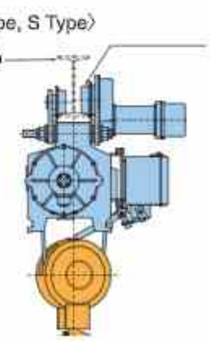
- **Rating**…Hoisting : 40%ED(100% of load rating), 240S/Hr (FEM 9.683), ※only 50Hz
  Traversing : 25%ED (100% of load rating), 150S/Hr ※only 50Hz
- **Power supply system**…Cable feeding, trolley feeding
- **Enclosure**…Simplified out door type(JIS C 9620 Equivalent to IP-44)
- **Applicable standard** … JIS C 9620 electric hoist/crane structure standard, FEM 9.683
- **Hoist class(ISO 4301-1)** … M5
- **Color coating**…Main body : Metallic gray (Eqivarent to Munsell N4.0)
  Hook block : Munsell 7.5YR 7/14
  Push button : Equivarent to Munsell 7.5YR 7/13
- **Ambient air temperature**… −10°C～40°C (Non condensing)
- **Ambient air humidity**…90% or less (Non condensing)

Traversing wheel and Applicable rail

〈M,UM Type〉

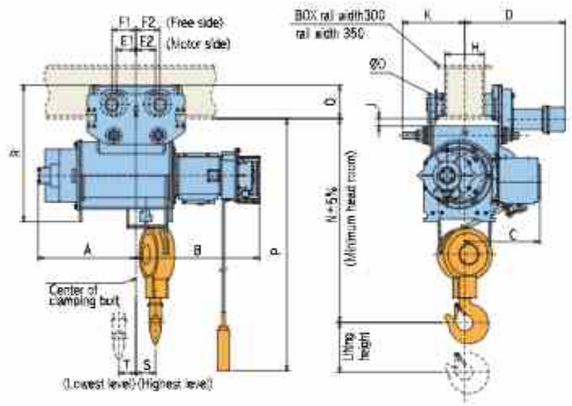


〈R Type, S Type〉

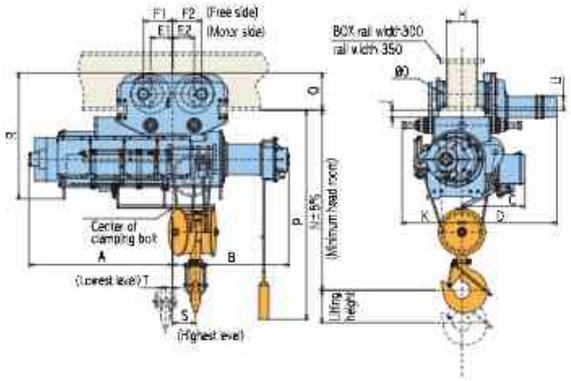


Monorail Type UM (5t·10t)

UM-5



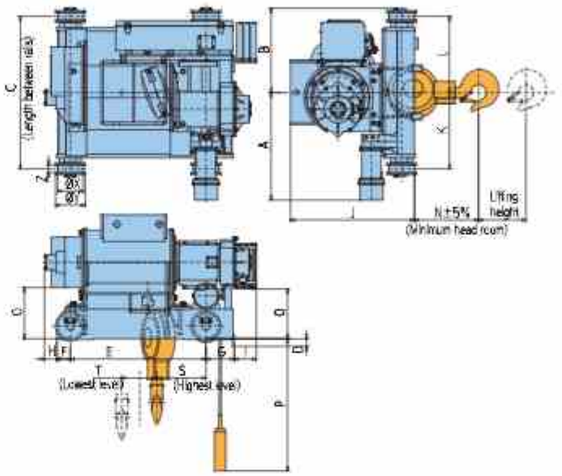
UM-10



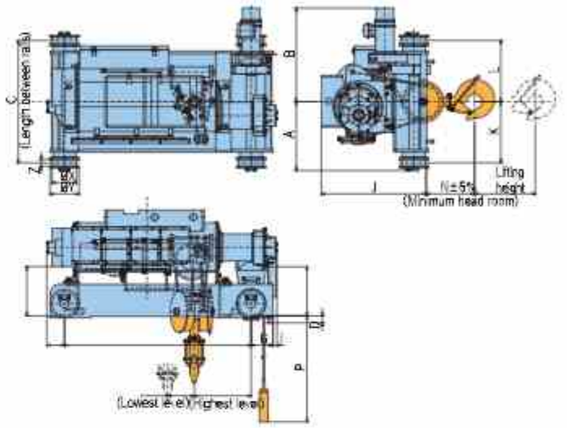
Model		UM-5		UM-10	
		HMH	HMS	HMH	HMS
Cap.(t)		5		10	
Lift(m)		12		12	
Dimensions(mm)	A	552		947	
	B	697		801	
	C	425		433	
	D	568(591)		654(679)	
	E1	110		150	
	E2	110		150	
	F1	135		200	
	F2	135		200	
	H	222(272)		212(262)	
	J	—		49	
	K	350		411(436)	
	N	1145		1245	
	O	125		173	
	P	12000		12000	
	Q	—		255	
	R	770		865	
	S	110		158	
	T	96		48	
	U	—		100	
Min.rad.curvature(m)		Only straight line		Only straight line	
Weight(kg)		555		890	
Hook block weight(kg)		50		85	
Applicable Box Rail Width(mm)		300(350)		300(350)	

Double rail Type UM (5t·10t)

UM-5



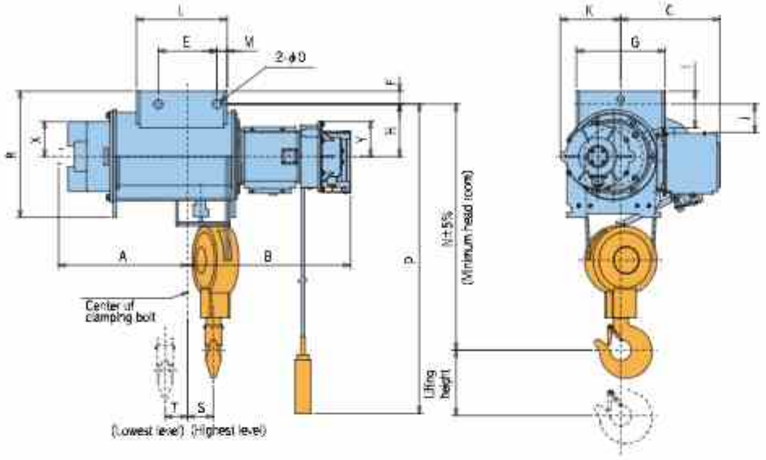
UM-10



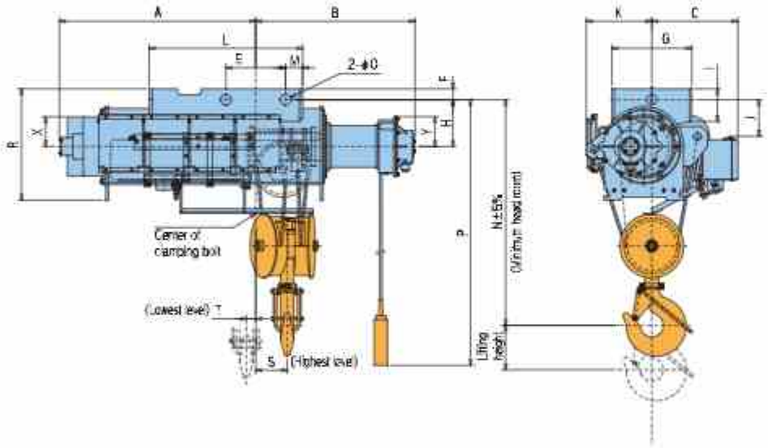
Model		UM-5		UM-10	
		HRH	HRS	HRH	HRS
Cap.(t)		5		10	
Lift(m)		12		12	
Dimensions(mm)	A	634		535	
	B	498		727	
	C	900		950	
	D	45		55	
	E	800		1450	
	F	80		110	
	G	167		170	
	H	73		—	
	I	129		31	
	J	731		814	
	K	450		475	
	L	450		475	
	N	375		380	
	O	302		382	
	P	12000		12000	
	Q	290		381	
	S	290		442	
	T	206		206	
	X	150		190	
	Y	175		225	
	Z	45		52	
Weight(kg)		690		1145	
Hook block weight(kg)		50		85	
Applicable Rail		12kg rails or 38mm steel square bars		15kg rails or 44mm steel square bars	

Suspended mounted Type UM (5t·10t)

UM-5-HKH



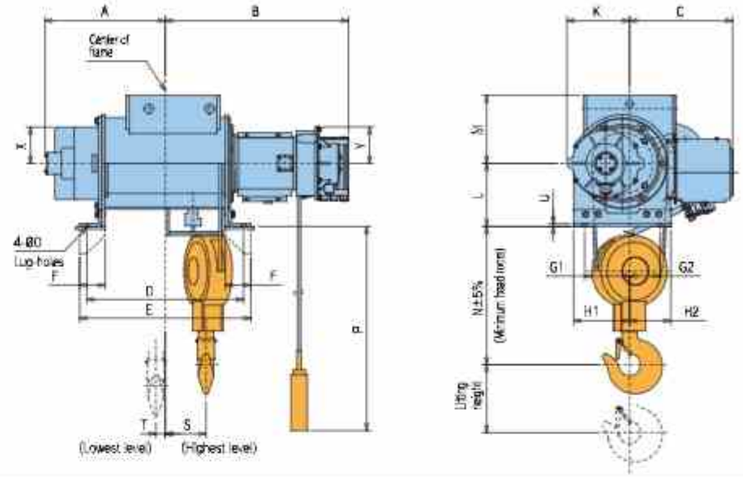
UM-10-HKH



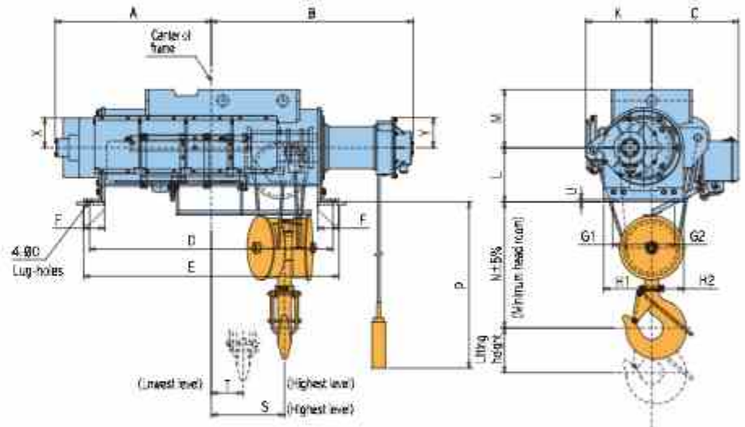
Model		UM-5-HKH	UM-10-HKH
Cap.(t)		5	10
Lift(m)		12	12
Dimensions(mm)	A	552	947
	B	697	801
	C	425	433
	E	250	300
	F	55	55
	G	379	402
	H	225	235
	I	157	164
	J	120	183
	K	258	330
	L	388	772
	M	44	86
	N	1055	1135
	O	38	53
	P	12000	12000
	R	540	560
	S	110	158
	T	96	48
	X	150	150
	Y	150	150
Weight(kg)		455	660
Hook block weight(kg)		50	85

Frame mounted Type UM (5t·10t)

UM-5-HSH



UM-10-HSH



Model		UM-5-HSH	UM-10-HSH
Cap.(t)		5	10
Lift(m)		12	12
Dimensions(mm)	A	495	740
	B	754	1009
	C	425	433
	D	645	1215
	E	705	1275
	F	105	105
	G1	185	195
	G2	125	115
	H1	230	240
	H2	170	160
	K	258	330
	L	260	270
	M	280	290
	N	570	630
	O	18	26
	P	12000	12000
	S	168	366
	T	39	160
	X	150	150
	Y	150	150
Weight(kg)		455	660
Hook block weight(kg)		50	85

TIB2 Inverter control box for saddle motor

Feature

1. Reduction of starting & stopping shock.

- The swing of load and building is reduced by the smooth inverter performance which restrains the shock of starting and stopping.

2. Settable traveling speed for efficient operation

- The optimal operation speed (High and Low speed) can be set in the range from 1/10 to standard speed.
- Inching and plugging operations are possible.

7. With Anti-sway function (TIB2 Type)

- Anti-sway function can reduce swing of the load.
- By setting length of the pendulum (length of the center of work) and the stop time,optimum Anti-sway function can be realized according to the usage pattern of the crane.

※TIB-2 is scheduled to be released in April 2022. (Order-receiving starting)

3. Small body and easy installation.

- TIB is equipped with a regenerative resistor unit as a standard equipment, and it can be installed directly to a crane girder with ease.

4. Improved ease of maintenance

- In case a defect occurs, the function that displays failure mode facilitates the judgment of locating fault.
- The main circuit (noncontact) enhances reliability and improves ease of maintenance.

5. Ehhanced safty functions

- In addition to the conventional functions (over load, the protection of regenerative over voltage), the function of detecting input circuit fault is equipped as a standard.

6. Shared protection board function (TIB2-S)

- Circuit breaker box and contactors for on and off (electric power supply) are standard equipment. The box can combine with shared protection board for crane.
- Screw holes are provided for the contactors of light, buzzer and etc.

Type name and applicable models

Type	Rated Current (A)	Applicable Mistsubishi models		
		Crane saddle		Gear motor for crane sadle
		ST, SP series	MT, MP series	
TIB2-0.8(s)	5	Output of traveling motor Less than 0.4kW×2		SGM-0.4A-LK3×2 / SGM-0.4A-HK3×2
TIB2-2.2(s)	11	Output of traveling motor Less than 0.75kW×2		SGM-0.75A-LK3×2 / SGM-0.75A-HK3×2
TIB2-4.4(s)	22	Output of traveling motor Less than 2.2kW×2		SGM-1.5A-LK3×2 / SGM-1.5A-HK3×2
				SGM-2.2A-LK2×2 / SGM-2.2A-HK2×2
TIB2-7.4(s)	33	Output of traveling motor Less than 3.7kW×2		SGM-3.7A-LK3×2 / SGM-3.7A-HK3×2
TIB-11	46	Out of general purpose motor		Less than 5.5kW×2 , Less than 2.2kW×4
TIB-15	61	Out of general purpose motor		Less than 7.5kW×2 , Less than 3.7kW×4
TIB-22	90	Out of general purpose motor		Less than 11kW×2 , Less than 5.5kW×4
TIB-30	115	Out of general purpose motor		Less than 15kW×2 , Less than 7.5kW×4

※ To use with the ST, SP and SGM series produced in 1987 and before, a special model compatible with a current brake is required. Please contact us for further information.
※ For types TIB-11 to TIB-30, a model equipped with a shared protection board function (S model) cannot be produced.
※ The range of TIB2 is from 0.8 to 7.4
(Model of TIB11 and above are made by special custom order; therefore, please contact is individually to determine whether Anti-sway function can be supported.)

Standard specifications		TIB2-○○(S)	TIB2-H○○(S)
Power supply		3-PHASE 200V 50/60Hz, 220V 60Hz	3-PHASE 400V 50/60Hz, 440V 60Hz(380V 50Hz is available)
Control system		Inverter control	
Speed ratio		The range of settable speed 1/10~standard speed	
Operating method		Push button	
Operationg function		Equipped with Anti-sway function(TIB2 Type)	
Percentage of duty cycle and number of		Percentage of duty cycle 25%ED	
Starts per Hr (Allowable frequency of usage)		Number of starts per hour 250 S/Hr	
Service condition	Air temprature	-10℃ to 40℃ (No congelation)	
	Relative humidity	Ambient humidity 90% or less (Non condensation)	
	Atmosphere	Non corrosive gas environment, non considerable dust environment	
Enclosure		IP20 Indoor	
Protective functions		Over load, over voltage in regenerative(braking)	
Power supply system		Cable feeding	
Color coating		Metallic gray(Equivalent to Munsell N4.0)	

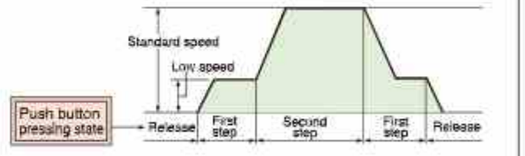
※Noises and other abnormalities may occur when installed on crane saddles or gear motors for crane saddle, which are produced by manufacturers other than us. Please contact us for further infomation.
※Not equipped with a noise filter or an AC reactor. Install one as required.
※The TIB2-H(S) 400V series is a soecuial model. Please contact us for further information.
※To use the product outdoors, install a rain-proof cover or prepare an equipment shelter.
※Setting need to be changed according to acceleration/deceleration time calculated using the mass, rated load and traveling speed of the crane.
※There is a possibility that the sense of inching operation use is different from the conventional sense of inching operation use When using Anti-sway function.
(If push button is equipped with a switching switch, function can be turned ON and OFF on your end.)

The picture is TIB2-2.2

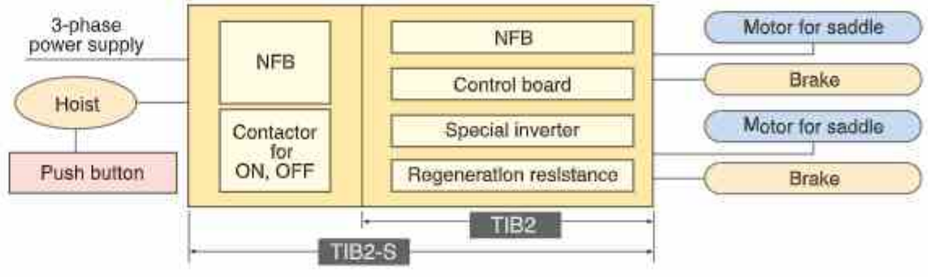
The storaged equipments of TIB2-S Type

Type	NFB for main power	Contactor for main power	Space for Light, Buzzer and contactor
TIB2-0.8S	50A	S-T35	Screw holes are provided for a couple of S-N11 or S-N21.
TIB2-2.2S	60A	S-T50	
TIB2-4.4S	125A	S-T80	
TIB2-7.4S	175A	S-N125	

Push button operation and operation pattern



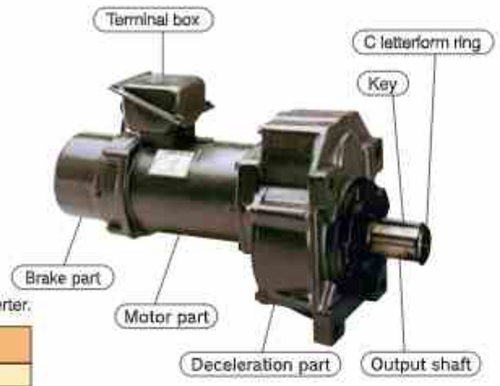
Function diagram



Geared motor for crane saddle
SGM-A

Standard specifications

Power supply : 3-phase 200V 50/60Hz (220V 60Hz, 400V 50/60Hz,
With brake 440V 60Hz, 380V 50Hz is available.)
Enclosure : indoor type
Ambient air temperature : -10℃ to 40℃(Non congeration)
Ambient air humidity : 90% or less (Non condensing)
Color coating : Metallic glay
note:(1)SGM-3.7A-HK3 are Made-to-order product.
(2)Inertia Moment of permissible load :
Standard type Ten times Inertia Moment of motor
(3)Start accumulator such as inverters is necessary for HK type.
Assume the brake circuit to be another power supply when you use inverter.



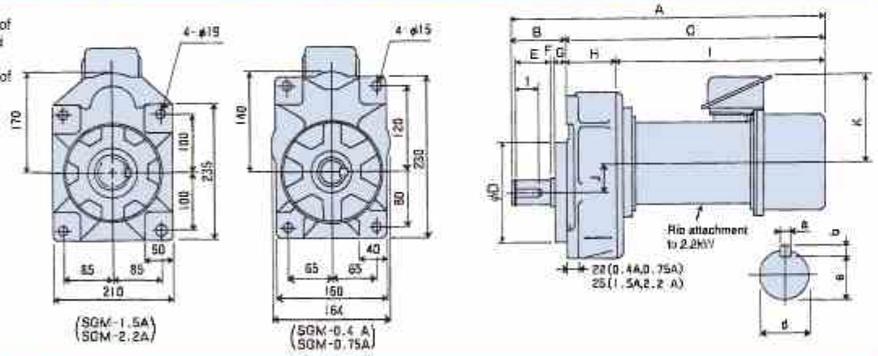
Line up and ratings

		low speed type		high speed type
		LK type(standard type)		HK type(standard type)
Output shaft revolving(r/min)	50Hz	75		125
	60Hz	90		150
Energizing rate		25%ED		
Capacity	Number of pole	Current(A)/50/60Hz	Permissible start frequency	Inertia Moment of motor(kg·m²)
0.4 KW	4P	3.0/2.4	150	0.0015
0.75KW		4.5/3.8	120	0.0025
1.5 KW		8.5/7.0	120	0.0037
2.2 KW		9.7/9.1	100	0.0062
3.7 KW		15.8/15.0	75	0.0160

※contact us for further information about B type

0.4～2.2kW Standard type(Low speed type, High speed type)

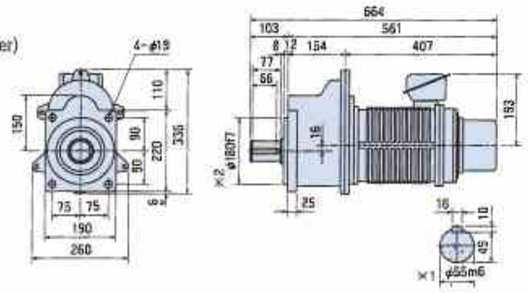
note
※1.Allowance of fixing match of ϕd is m6→Recommended allowance of object is F7
2.Allowance of fixing match of ϕD is f7→Recommended allowance of object is F7



type	Output (kW)	Poles	Key size (mm)	Dimensions a	b	d※1	e	f	A	B	C	D※2	E	F	G	H	I	J	K	Weight (kg)
SGM-0.4A-LK3,HK3	0.4	4	10×8 −36	10	8	35	30.0	36	465	75	391	140	50	5	15	70	321	39	129	28
SGM-0.75A-LK3,HK3	0.75								486	75	411	140	50	5	15	70	341	39	135	34
SGM-1.5A-LK3,HK3	1.5		14×9 −56	14	9	50	44.5	56	515.5	100	515.5	160	70	5	20	107.5	408	46	163	53
SGM-2.2A-LK2,HK2	2.2								609	100	509	160	70	5	20	107.5	401.5	46	172	67

3.7kW Standard Low speed type (Weight:95kg)

SGM-3.7A-LK3
SGM-3.7A-HK3(Made by order)
note
Recommended allowance of ※1 is F7
Recommended allowance of ※2 is F7(JIS-B0401)



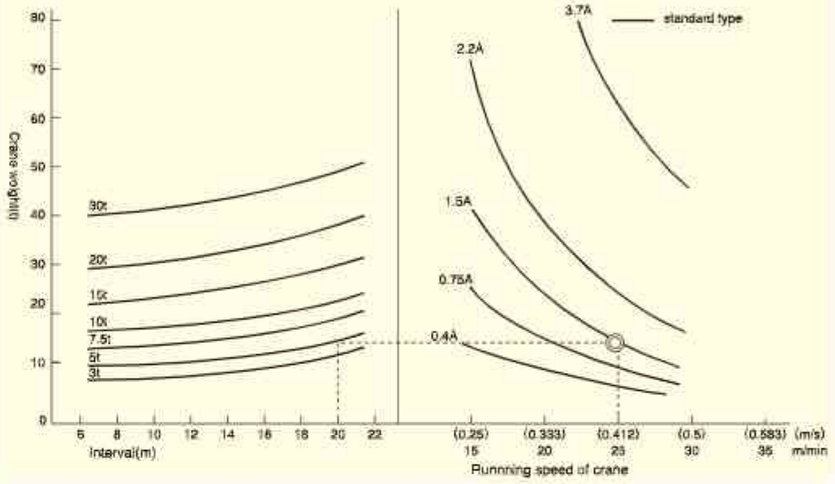
Model selection list

1.Setting of crane saddle : box type, Steel thickness 6mm
2.Inertia Moment of permissible load :
Standard type Ten times Inertia Moment of motor
With silicon coupling Seven times Inertia Moment of motor

Inertia Moment of $= \frac{WGV^2}{4(\pi^2 GN^2)}$ (kg · m²)

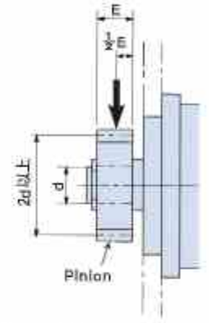
W:weight of crane V:Running speed(m/min)
N:Output shaft revolving(r/min)

3.Do not exceed 25m/min at the running speed when using standard type without start accumulator such as inverters.
4.Selection example
SGM-1.5A type(standard type) corresponds for 5t, 20m interval, 25m/min runnning speed, and to ○sign in a lower graph.



(1)Avoid the collision of the saddle to the stopper as much as possible, and install the buffer in the saddle.
(2)Contact us for further information about use excluding general factory like explosion-proof environment etc.

Adjustment with crane saddle



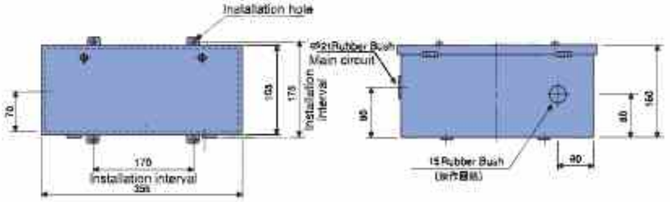
(1)Diameter of pinion…
Diameter of pinion pitch≧2×Diameter of output shaft
(2)Point of gaining weight…
Center of width of pinion
(3)Permissible overhang Load P(kg)

type	LK	HK
SGM-0.4A	150	90
SGM-0.75A	290	160
SGM-1.5A	400	230
SGM-2.2A	580	340
SGM-3.7A	900	540

Over load detection device
LCV-B

"Weight Checker"(detection of current)

It prevent and secure safety of the hoist overload work.
And it can raise an alarm in case of the overload, stop hoisting motor by detecting the current value of motor.



Type		LCV-20B							LCV-30B		
Corresponded hoist(t) (S Type)		1/2	1	2	2.8	5	7.5	10	15	20	30
Hoisting motor (kW)	50Hz	1.0	2.0	2.9	4.1	6.2	8.3	10	17	17	17
	60Hz	1.2	2.9	3.5	4.9	7.5	10	12	20	20	20
Wight		6.5kg									

Standard Hoist Push Button List

Model	R	S		S-VT		S-VS		S-X	
Cap.	1~2.8t	1/2~3t	5~60t	1/2~3t	5~60t	1/2~3t	5~60t	1/2~3t	5~60t
Suspended Type	①	①	③	②	④	—	—	⑬	⑬
Frame mounted Type									
Monorail Type	⑤	⑤	⑨	⑥	⑩	⑦	⑪	⑭	⑭
Low-head Type									
Double Rail Type								⑮	⑮

Model	U3-H	U3-S	HU3-H	HU3-S	M	UM-H	UM-S
Cap.	1/2~60t	1/2~45t	10~60t	10~45t	5t,10t	5t,10t	5t,10t
Suspended Type	④	—	④	—	③	③	—
Frame mounted Type							
Monorail Type	⑩	⑫	⑩	⑫	⑩	⑩	⑫
Low-head Type							
Double Rail Type							

	Points	No.	1	2	3	4	5	6	7	8	Applicable Models	Using Cable	Spare Lead
Standard Push button	2Points	①	U	D							R,S(1/2~3t)	VCT-CCH-0.75-3C	—
		②	U	D							S-VT(1/2~3t)	VCT-CCH-0.75-7C	1
	4Points	③	ON	OFF	U	D					S(5~60t),M(5t,10t)	VCT-CCH-0.75-5C	—
		④	ON	OFF	U	D					U3-H(1/2~60t)	VCT-CCH-0.75-7C	1
											UM-H(5t,10t),S-VT(5~60t)	VCT-CCH-0.75-12C	4
	6Points	⑤	U	D	E	W	S	N			R,S(1/2~3t)	VCT-CCH-0.75-7C	—
		⑥	U	D	E	W	S	N			S-VT(1/2~3t)	VCT-CCH-0.75-12C	1
		⑦	U	D	E	W	S	N			S-VS(1/2~3t)	VCT-CCH-0.75-12C	—
		⑧	U	D	E	W	S	N			U3-S(1/2~3t)	VCT-CCH-0.75-12C	2
	8Points	⑨	ON	OFF	U	D	E	W	S	N	S(5~60t),M(5t,10t)	VCT-CCH-0.75-12C	3
		⑩	ON	OFF	U	D	E	W	S	N	U3-H(1/2~60t)	VCT-CCH-0.75-12C	2
							E	W	S	N	UM-H(5t,10t),S-VT(5~60t)	VCT-0.75-16C	3
		⑪	ON	OFF	U	D	E	W	S	N	S-VS(5~60t)	VCT-0.75-16C	2
		⑫	ON	OFF	U	D	E	W	S	N	U3-S(1/2~60t), UM-S(5t,10t)	VCT-CCH-0.75-12C	—
Explosion-proof (S-X) Push button	2Points	⑬	U	D							S-X(1/2~60t)	3PNCT-2.0-4C	—
	4Points	⑭	U	D	R	L					S-X(1/2~60t)	3PNCT-2.0-6C	—
	6Points	⑮	U	D	E	W	S	N			S-X(2.8~Except Double Rail Type)	3PNCT-2.0-6C	—
											S-X(2.8~Double Rail Type)	3PNCT-2.0-4C	—

Note 1 ▭=2step push button
2 VCT,VCT-CCH cable has push button hanging wire
3 Using 3PNCT cable is attached to with other hanging wire
4 Model

S-VT	With hoisting creep speed		U3-H	With hoisting inverter	
S-VS	With hoisting and traversing creep speed		U3-S	With hoisting and traversing inverter	
S-X	Explosion-proof	UM-H	With hoisting Inverter	HU3-H	<High speed>With hoisting inverter
		UM-S	With hoisting and traversing inverter	HU3-S	<High speed>With hoisting and traversing inverter

Correspond to the RoHS

Please contact us about the hoists which are accepted the RoHS

MEMO