

Hoists General Catalog

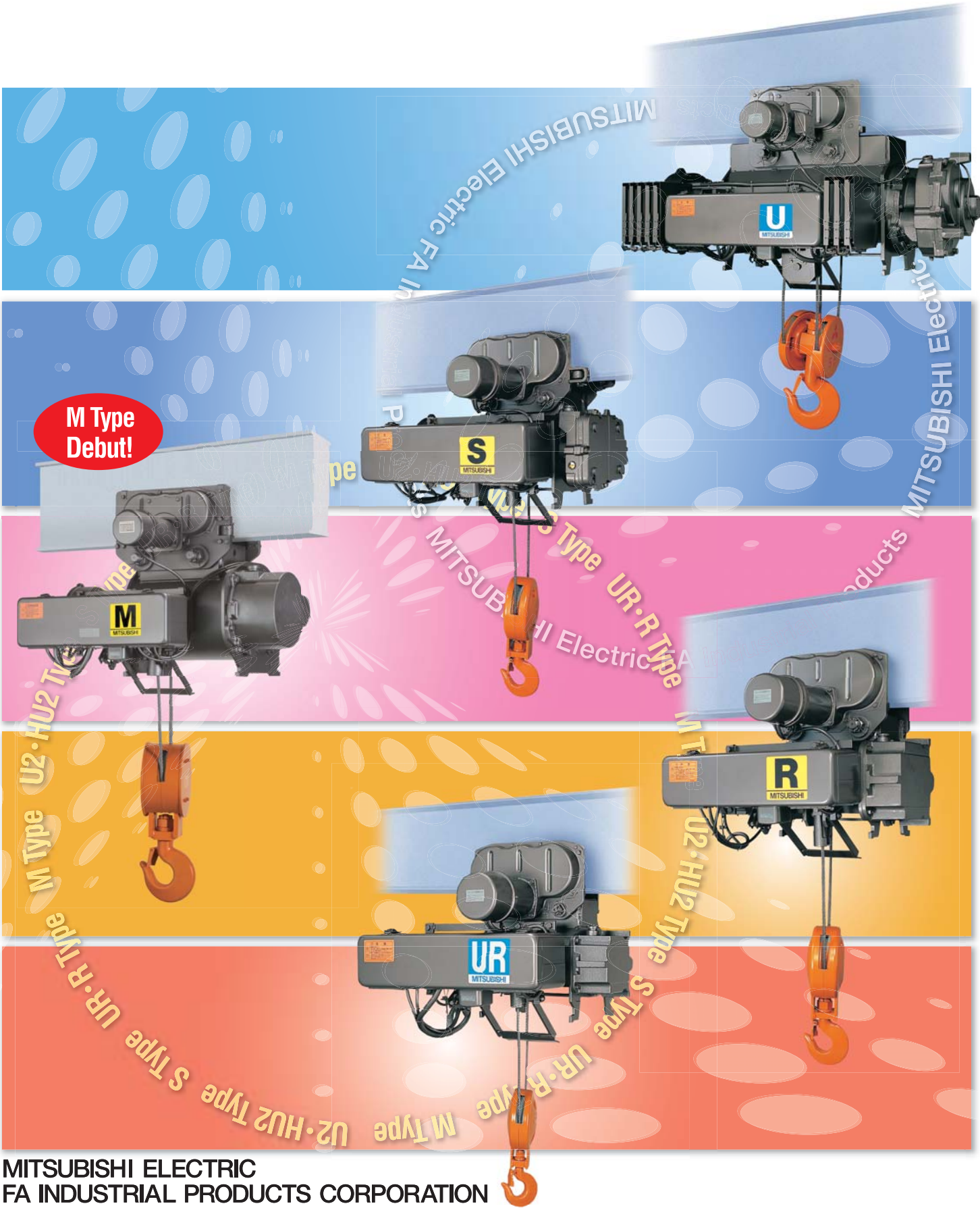
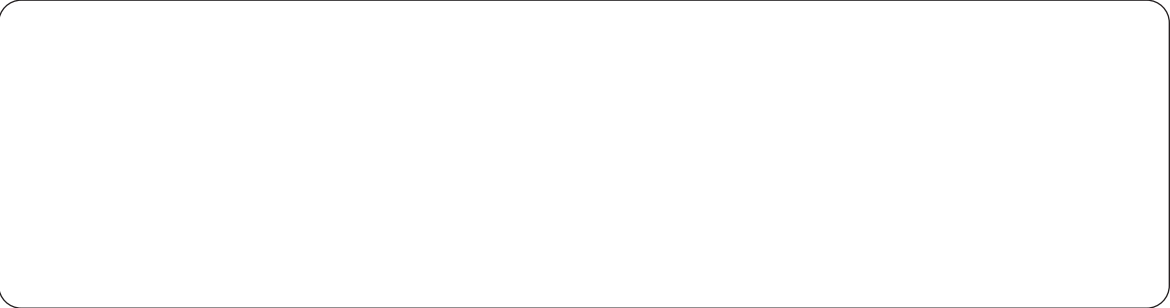
 caution

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

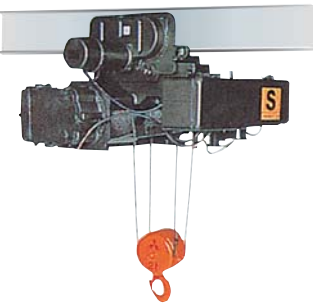
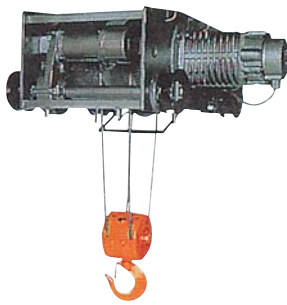
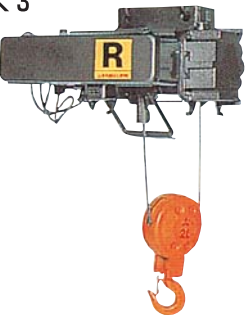
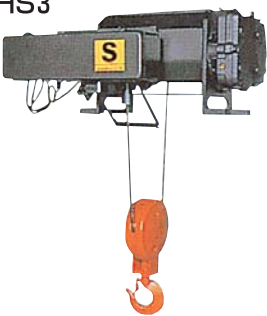


**MITSUBISHI ELECTRIC
FA INDUSTRIAL PRODUCTS CORPORATION**

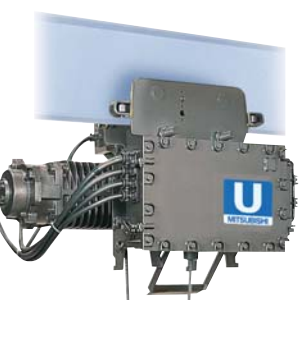
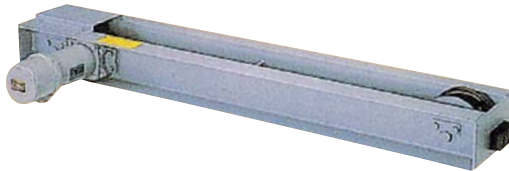


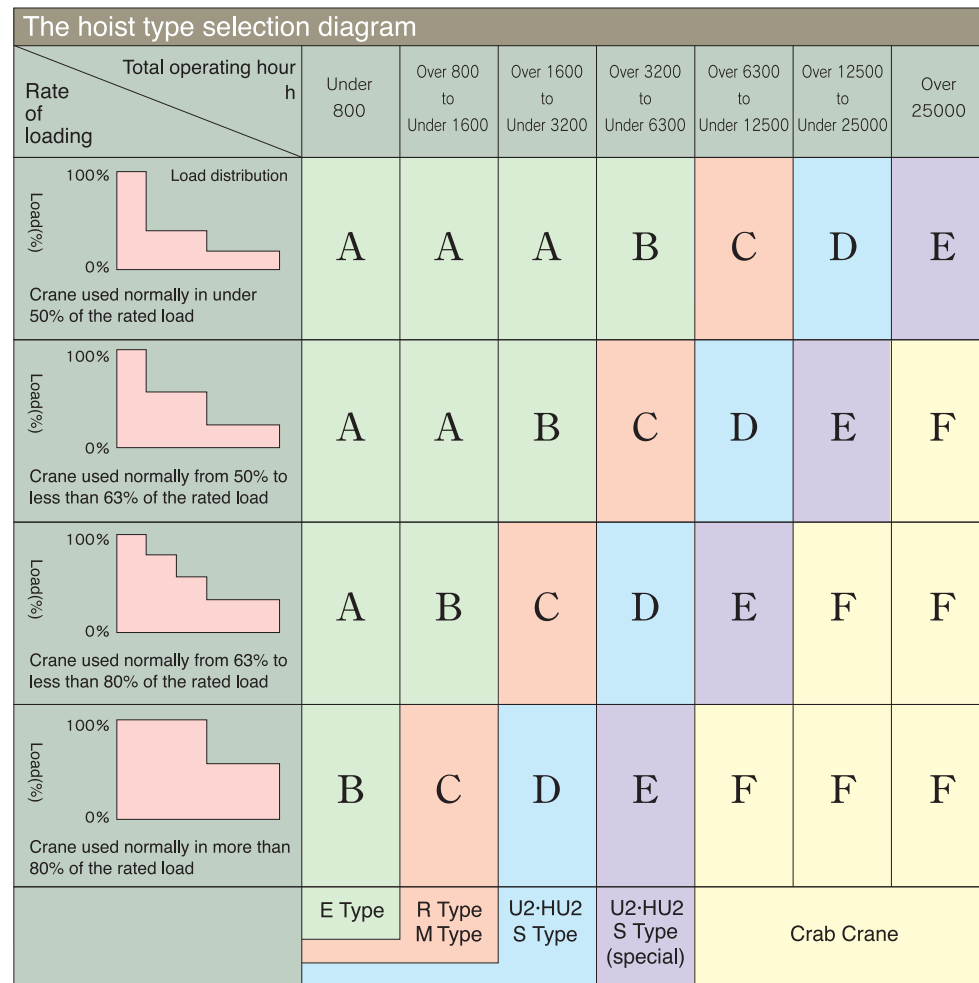
By the utilization of state-of-the-art technology, we realize highly developed safety and improved operation of our loading system.

■ Hoist Type (Shapes)

Monorail Type	Low-head Type	Double rail 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)	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)	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.)
R-2-LM3 	S-2-LD2 	S-2.8-LR3A 
Suspended Type	Frame mounted Type	
This hoist is fixed at the ceiling and used only for lifting and lowering cargo.	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.	
R-2-LK3 	S-2.8-HS3 	

■ Introduction of Products

Hoists	
 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 the duty class is the highest available. For more safety, a microprocessor control circuit which auto-matically prevents overloading is installed.	 U2,HU2 Type (1/2-60t) 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.
 M Type New (5t-10t) For medium frequency use M Type series has been developed based on the next generation concept. It has been designed for optimizing price and performance.	 UR Type (1-2.8(3)t) UR Type series is produced by utilizing the power electronics technology accumulated by MITSUBISHI ELECTRIC, and has new variable speed type. It is popular for excellent operation.
 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 Related Equipments <TIB> Inverter control box for saddle motor <LCV-B> Over load detection device (Detection of current) <LCM> Over load detection device (Detection of weight) ※ A LCM is sold with a hoist. A LCM is not sold as single item.   



- 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, U2, HU2 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.
Intermittent duty	
	E R S U2 HU2 UR M
	Percentage of duty cycle(%)ED 25 25 40 40 25 40
Lifting	Number of starts Per Hr(S/Hr) 150 250 400 400 150 240
	Percentage of duty cycle(%)ED 25 25
Traversing	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.

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

※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.

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 Machinery 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

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 Type has only 12M.

④ Hoisting(Lifting)/Lowering

Vertical motion of the load

⑤ Traversing

Motion of hoist

⑥ Travelling

Motion of crane

※Distance hoist moves (speed) Traversing distance(speed)

※Distance crane moves (speed)Travelling distance(speed)

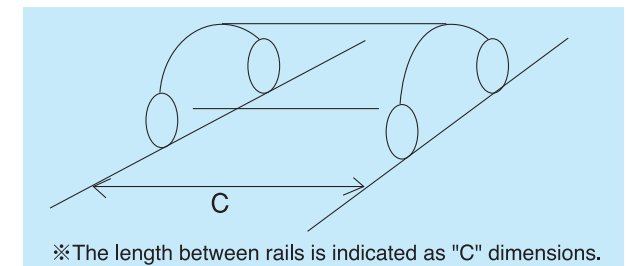
⑦ Minimum head room

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 indicated 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.

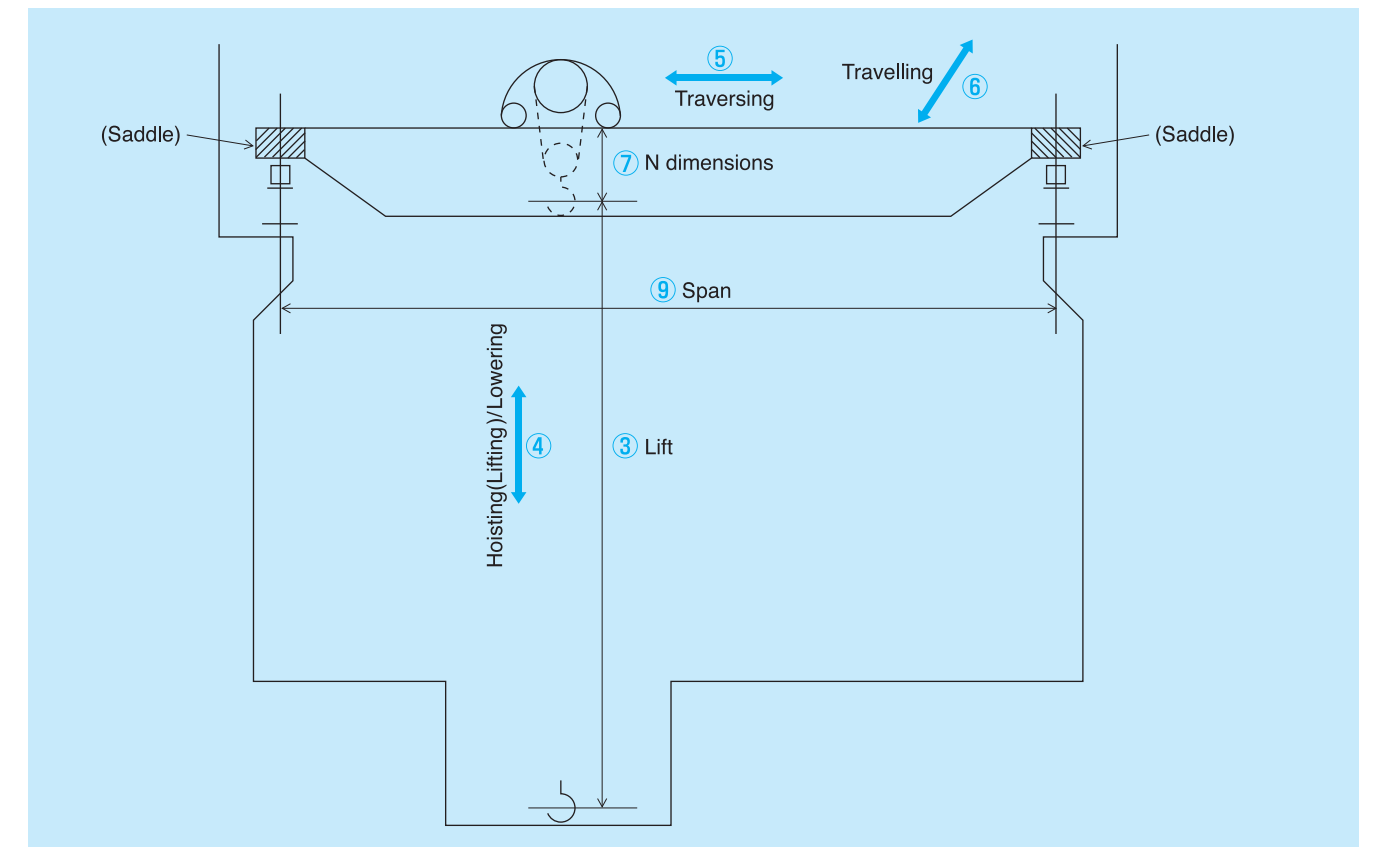
⑨ Span

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 frequency 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, U2 series: 1/2-60t, HU2 series: 10t - 60t R series, UR series: 1t - 2.8(3)t , M 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.

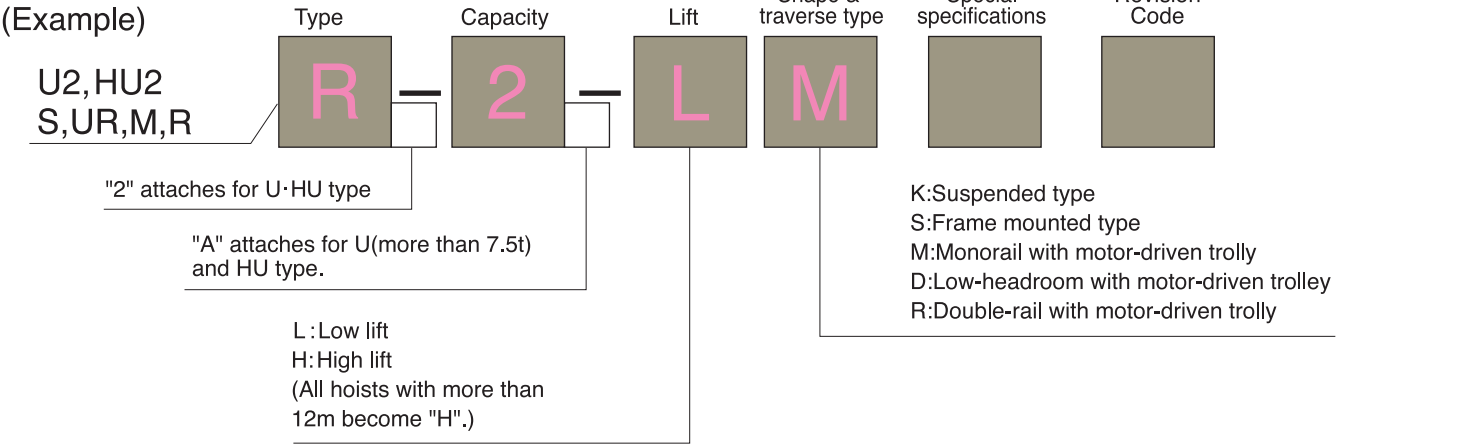
※ M Type has only 12M.

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



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

Special specifications	Code	Special specifications	Code
With hoisting inverter	H	With gear type limit swich	G
With hoisting and traversing inverter	S	With electric limit swich	E
With traversing inverter(S type, R type)	T	With emergency brake	B
		Explosion-proof type	X

The viewpoint of the catalogue

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	U2	High	○		○	○	○	○	○	○	○	○	○	○	○	○
	UR	Medium	○			○	○	○								
Fixed speed type	S	High		○	○	○	○	○	○	○	○	○	○	○	○	○
	R	Medium		○		○	○	○								
	M	Medium		○					○		○					

High speed series "HU2" type and Explosion-proof series "S-X" type are also available.

Production Overview Table

〈U2〉〈S〉 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		
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	—	—	—	—	—

〈HU2〉 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		
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

〈UR〉〈R〉 Type

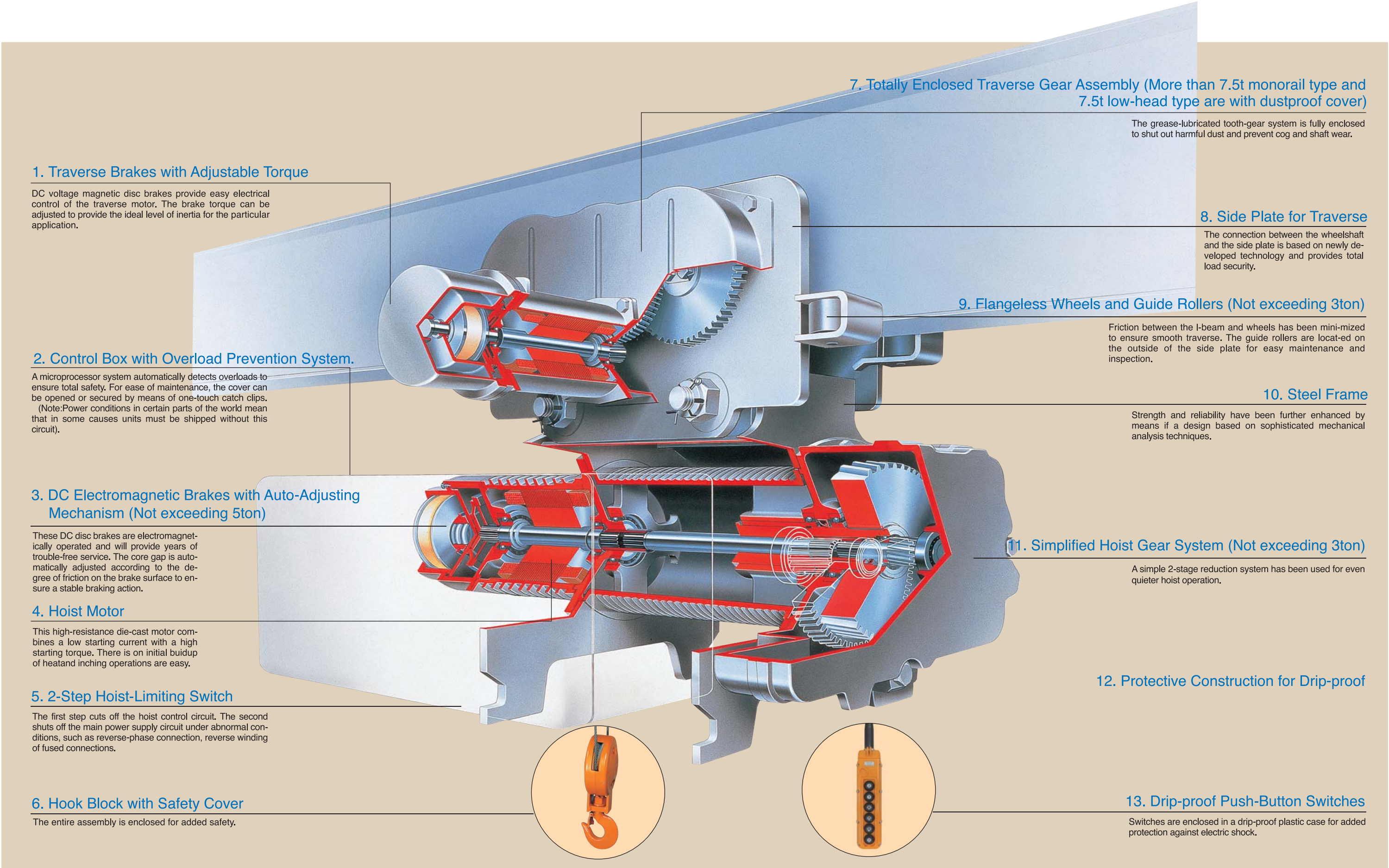
Capacity(t)	Motor Operated Traversing			Suspended Type
	Monorail Type	Low-head Type	Double Rail Type	
	LM/HM	LD/HD	LR/HR	
1	6m/12m	6m	—	6m/12m
2	6m/12m	6m	—	6m/12m
2.8(3)	6m/12m	6m	6m	6m/12m

〈M〉Type

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

SUPERB 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.



U2•HU2Type (200V/400 class)

Features of U2•HU2 type

- 1

Overload prevention function is included as standard.

Mitsubishi inverter hoists have an overload prevention function as standard, which stops hoisting when an overload is detected.
The overload judgment value is adjustable within a range from 100 to 125 percent of the rated load.
The overload detection signal is out put 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.)
- 2

Reduction of shock at starting and stopping

Mitsubishi 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 controlled as you like.
- 3

Adjustable hoisting speed

Hoisting speed can be adjusted freely in a range from minimum speed to standard speed. 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.
- 4

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.
- 5

Low wearing brake and machine parts

Mitsubishi inverter hoists can improve durability of brake discs, wire ropes, gears and sheaves because Mitsubishi inverter hoists drastically reduce load shock. (However, frequent use of light load, high speed mode may increase brake disc wear.)
Unlike conventional hoists(non inverter hoists), it is not necessary to replace the electromagnetic contacts.
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 has dropped.)
- 6

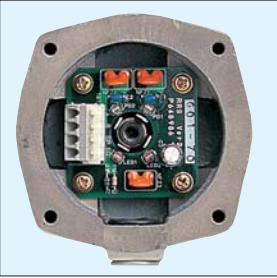
Electronic limit switches (for upper and lower limits)

Electronic limit switches can decelerate and stop the hook automatically by detecting the hook position. All position 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.

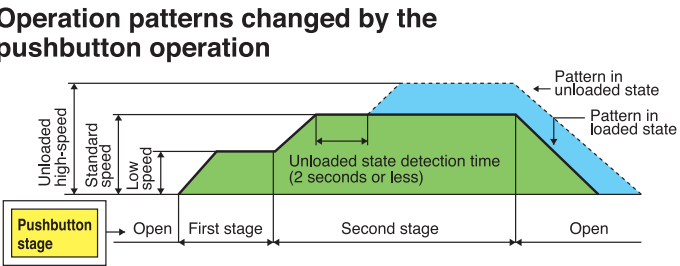
Rotation sensor

The rotation sensor monitors U2 type functions.

The rotation sensor's encoder constantly monitors rotation speed and direction of the motor shaft (the first gear shaft), displaying the following functions:



	Function	Description
1	Drop detection function	If rotation is in the "down" direction despite an "up" pushbutton command, this function immediately activates the hoist brake, preventing the load from dropping.
2	Electronic limit switch (for the upper and the lower limit)	This switch totals the number of rotation pulses and decelerate or stop at the specified deceleration or stop position, and stores the travel distance.
3	Unloaded high-speed function Light-load high-speed function	The amount of motor slip depends on the magnitude of the load. When the amount of slip falls below a preset level, the hoist is automatically judged to be in unloaded state, it switches over to high speed mode.
4	Speed-coordination function	This revises frequency to maintain constant speed when the load changes.



Operation history display function

Failure history display

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

Error history output

: The number of times of operation and the time when an error occurred are 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.

* Contact us for a specially-built product.

- 7

Light load, high speed operation function (Automatic speed change function)

This function detects the load and changes the hoisting speed automatically when the load is between 0% and 25% of the rated load. If hoist is less than 7.5 tons, hoisting speeds are changed automatically to 1.5x faster than standard speeds. And if over 10 ton hoists, they are changed to 2x faster than standard speeds. The judgment value is changeable in the range of 25% to 50% (in use) of the rated load for users who use a load handling device. This function can be used even under combined hoisting operation.
It can be set to output "R" phase voltage from 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 operation function can be changed.
(It is possible that hoists with special long lifts can not equip the light load, high speed operation function.)
- 8

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. Settings can be changed to get signals from OUT3 when light loading evaluation is done.
- 9

Speed coordination function

This function is to restrict the load slope attributed to combined hoisting operation. The low hoisting speed and low lowering speed are within $\pm 20\%$ (within JIS stipulated range). This function also enables very stable hoisting and lowering speed (within $\pm 1\%$).
- 10

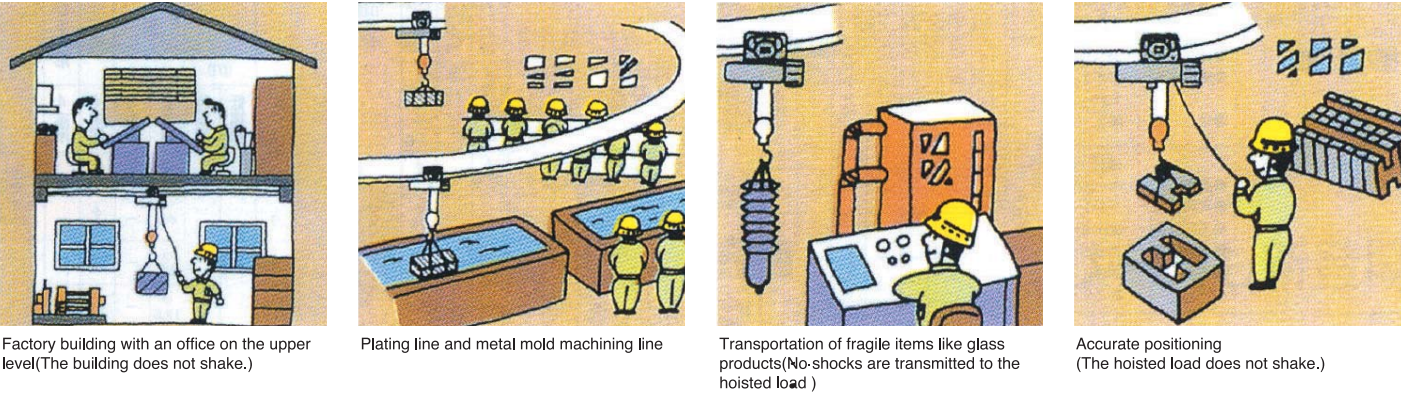
Environmental considerations

Efforts to remove environmental toxins from our products continued.
(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 trivalent chrome plating.)
Brake discs and packing do not contain asbestos.
Mitsubishi hoisting motors save energy by designing to restrict motor temperature rises during inching operation.
- 11

Protection function

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

U2 TYPE application examples



Options

* Improved ease of use

Synchronous by speed-coordination function

Controls tilt of load when hoisted by two or more hoists.

Multi-stage speed function

This function is useful in automatic operations using a 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 provides operation information on how the machine is being used.

Rotation signal output

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

Hoist-specific inverter control panel

* The compactly-designed control panel is also vibration resistant.

* Parameter settings have been simplified, requiring only four buttons.



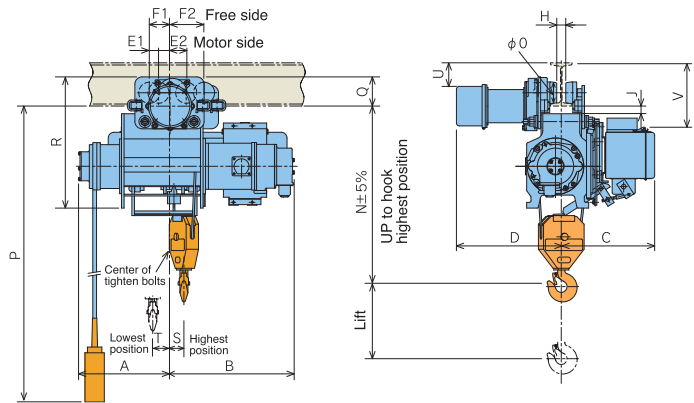
Attention in use

- The inverter hoist doesn't stop the push-button of turning off at once. It stops as the cushion working, and operate in consideration of the stopping distance, please.
- Using memory unit of the microcomputer data, Please avoid the entering cutting of a needless power supply.. (The longevity frequency of the memory unit is 100,000 times in the power supply interception.)
- Notes concerning the noise ... Disorder and the malfunction of the voice might be caused by the setting condition in a nearby television and an electronic equipment including the radio etc. For this case, we will recommend the installation of the noise filter.

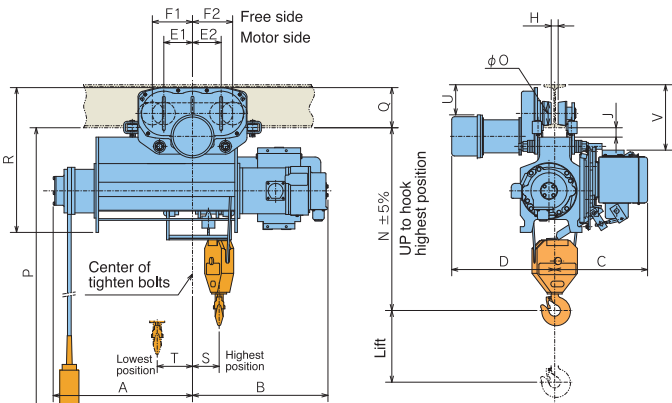
Monorail Type **U2** (1/2t·1t·2.8t·3t·5t)

※Contact us for 400V class outline

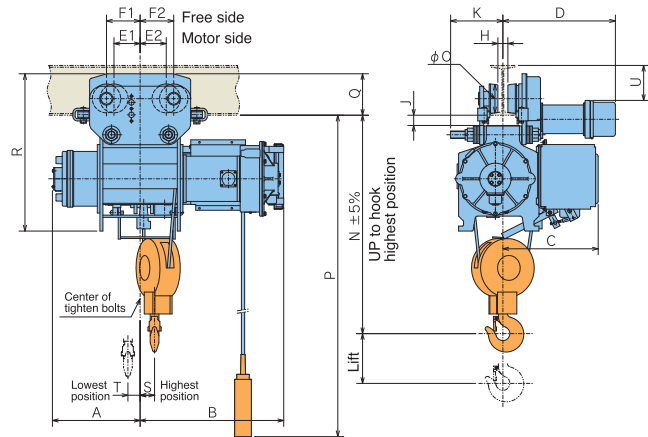
U2-1/2-LMH2



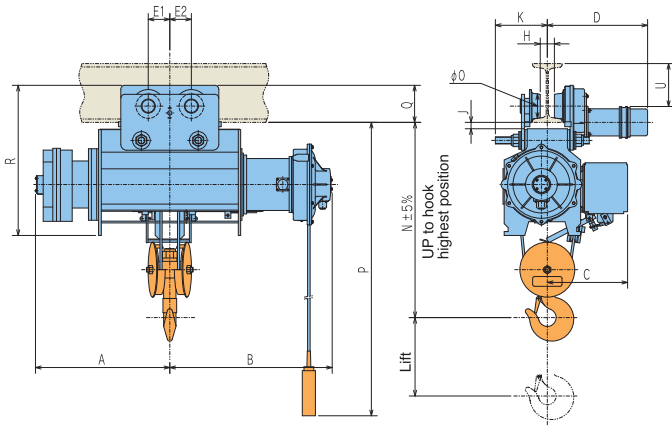
U2-1/2-HMH2



U2-1・2・2.8・3



U2-5



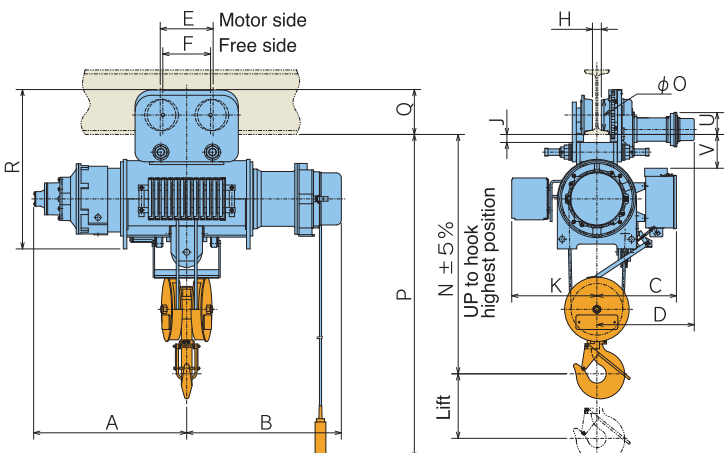
Model		U2-1/2												U2-1				U2-2				U2-2.8 (3)				U2-5											
		LMH2			LMS2			HMH2			HMS2			LMH2	LMS2	HMH2	HMS2	LMH2	LMS2	HMH2	HMS2	LMH3	LMS3	HMH3	HMS3	LMH3	LMS3	HMH3	HMS3								
Cap.(t)		1/2												1				2				2.8 (3)				5											
Lift(m)		6						12						6		12		6		12		8		12													
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	D	H	J	Q	U	D	H	J	Q	U				
Applicable I-Beam(mm)	150×75×5.5	364	30	27	100	75	216	360	24	33	140	105	227	360	24	33	140	105	—			—			—			—									
	200×100×7	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 U2-1/2, 1...150×75×5.5 U2-2...200×100×7 Note Applicable I-Beam =Standard =required special attachment

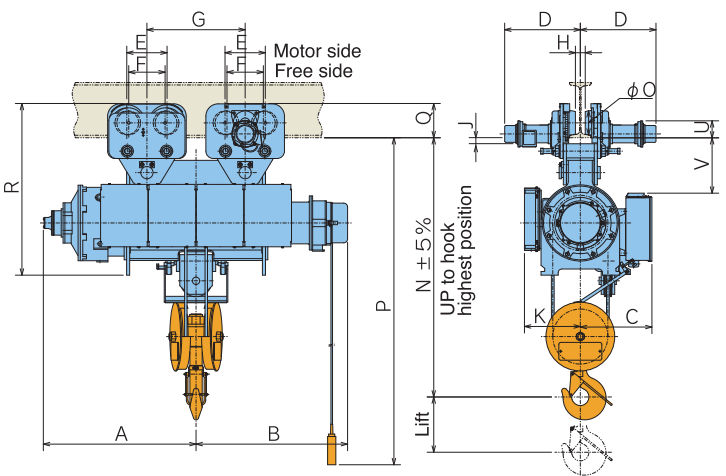
Monorail Type **U2** (7.5t·10t·15t·20t)

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U2-7.5A・10A



U2-15A・20A



Model		U2-7.5A				U2-10A				U2-15A				U2-20A											
		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(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						
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	348	624	96	50	278	140	452

Note Applicable I-Beam =Standard

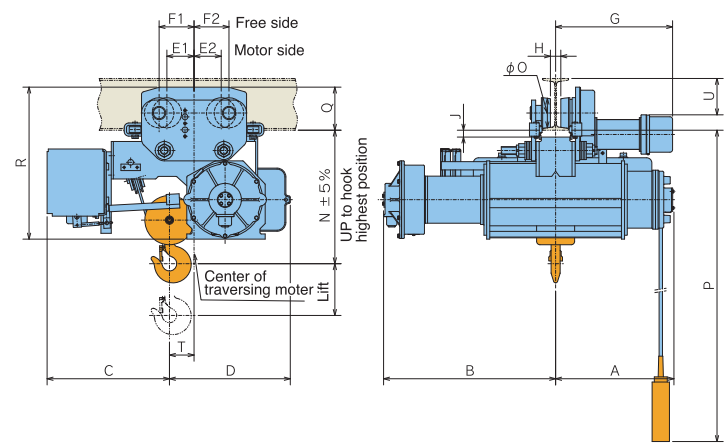
Low-head Type

U2

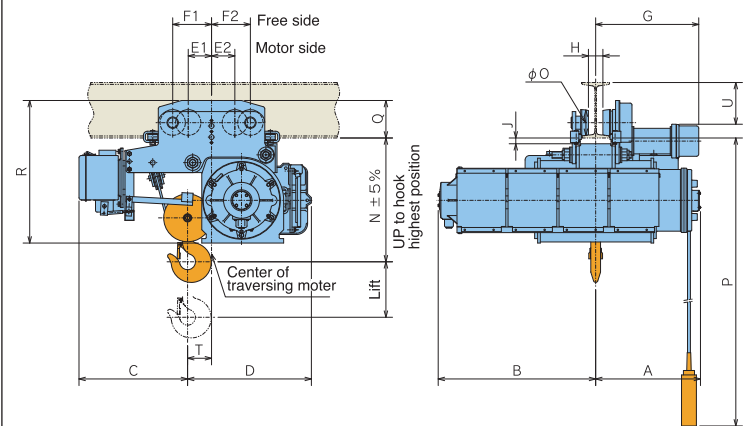
(1/2t·1t·2t·2.8t·3t·5t)

※Contact us for 400V class outline

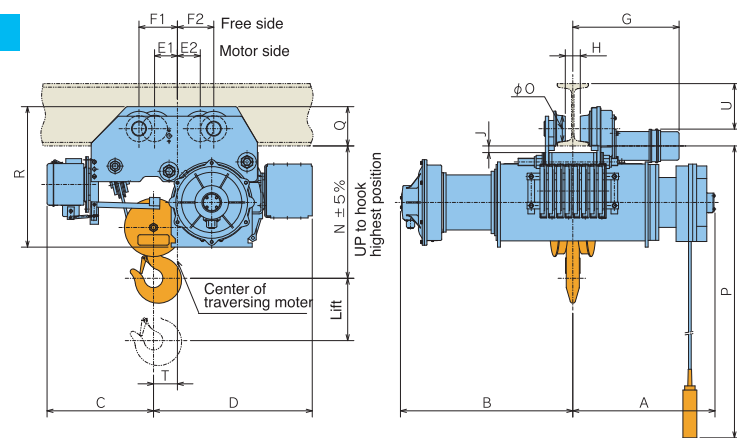
U2-1/2・1・2



U2-2.8・3



U2-5



Model		U2-1/2					U2-1					U2-2					U2-2.8 (3)					U2-5									
		LDH2		LDS2			LDH2	LDS2	HDH2	HDS2	LDH2	LDS2	HDH2	HDS2	LDH3	LDS3	HDH3	HDS3	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	433					444		611			457		635			472		622			685		810							
	B	528					616		784			668		847			711		861			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					535					650									
	O	73					80					114					114					125									
	P	6000					6000		12000			6000		12000			6000		12000			8000		12000							
R	410					495					588					643					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			405		440			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	G	H	J	Q	U					
Applicable I-Beam(mm)	150×75×5.5	364	30	19	101	75	360	24	21	140	105	—					—					—									
	200×100×7	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	188	465	64	26	169	188	—									
	300×150×8											478	90	23	170	237	—					—									
	300×150×11.5											478	90	14	179	228	478	90	16	179	228	512	72	31	189	219					
	450×175×13																					524					96	27	193	365	
600×190×13							—																								

Note,rad.cur() at I-Beam U2-1/2,1...150×75×5.5 U2-2...200×100×7 Note Applicable I-Beam =Standard =required special attachment

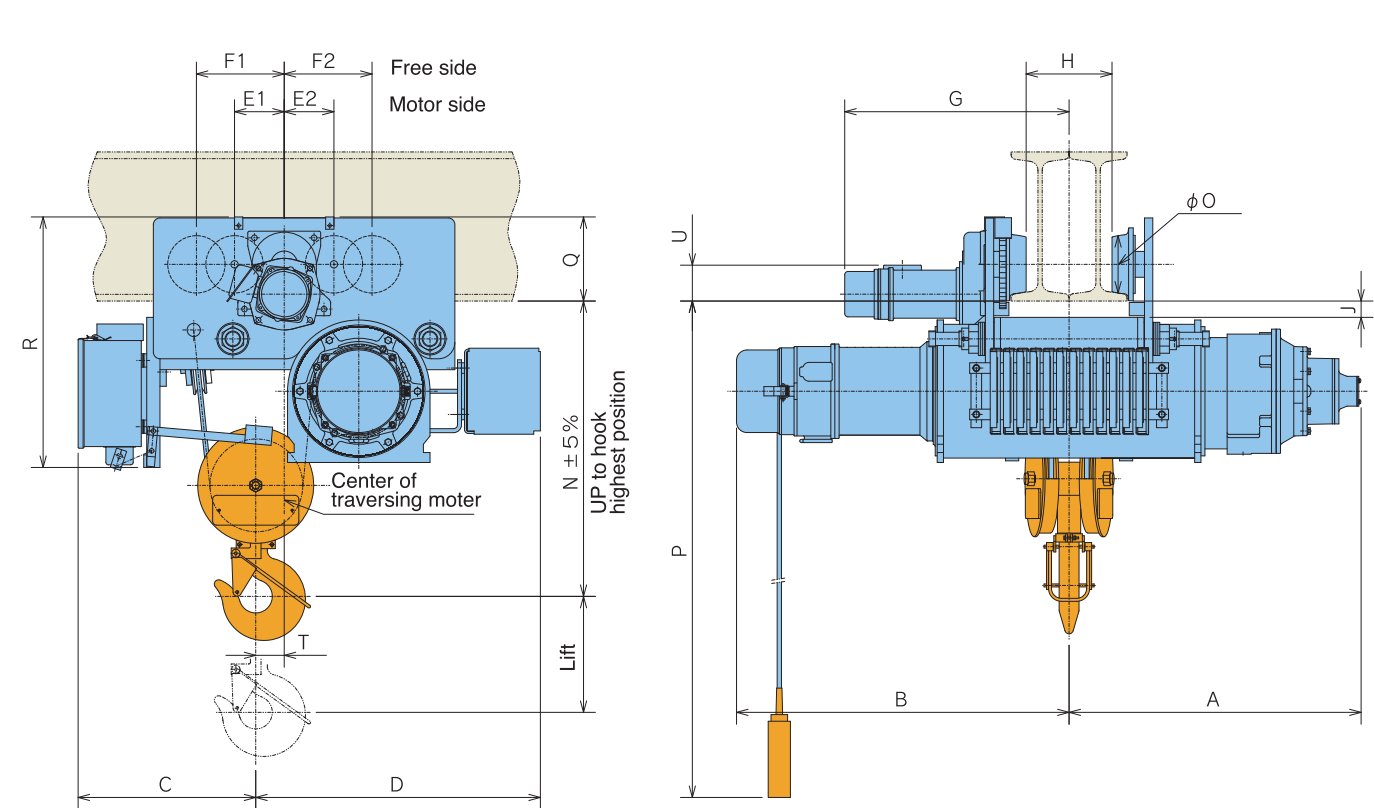
Low-head Type

U2

(7.5t·10t)

※Contact us for 400V class outline

U2-7.5・10



Model		U2-7.5A					U2-10A				
		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					946		
	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

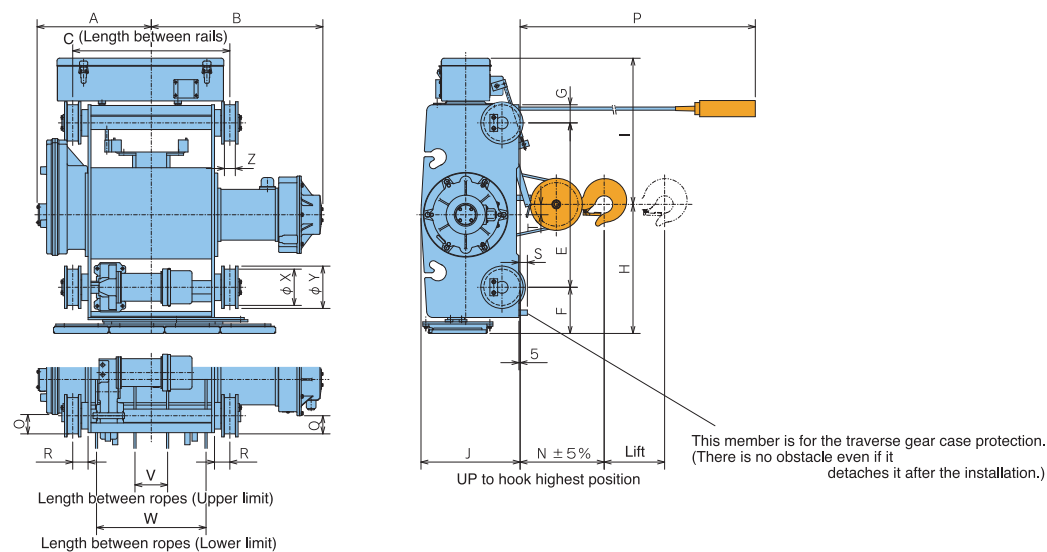
Double rail Type

U2

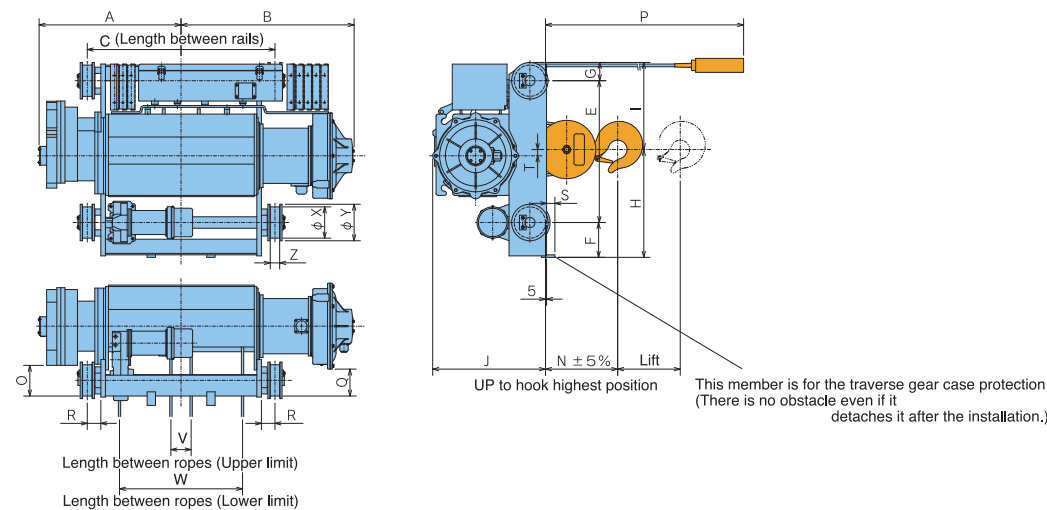
(2.8t·3t·5t)

※Contact us for 400V class outline

U2-2.8・3



U2-5



Model		U2-2.8 (3)				U2-5			
		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							

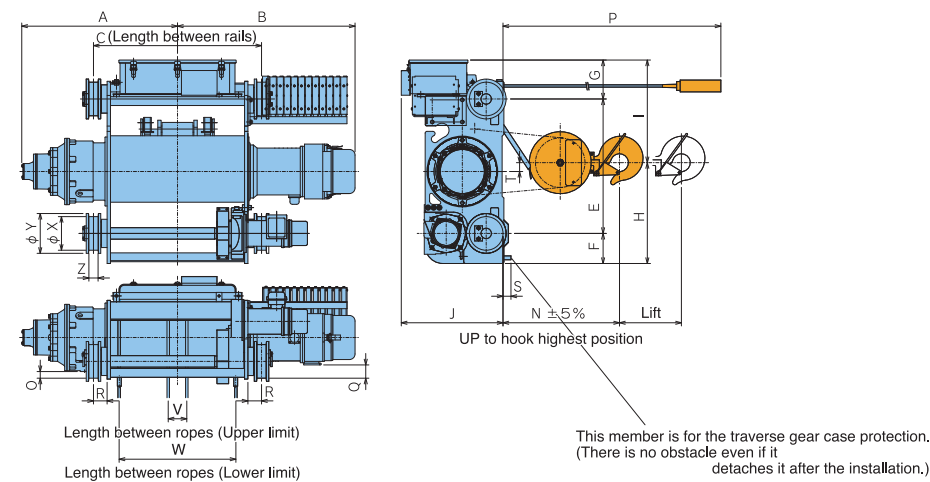
Double rail Type

U2

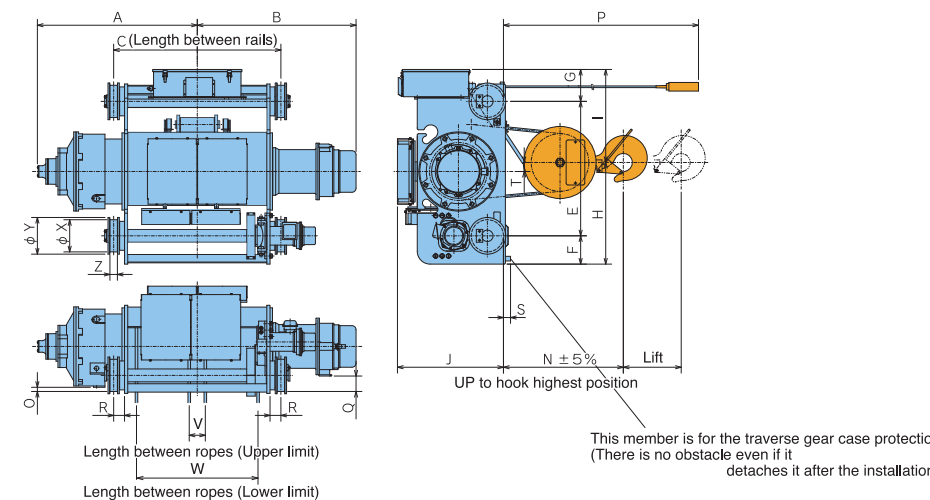
(7.5t·10t·15t·20t·30t)

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U2-7.5A・10A



U2-15A・20A・30A



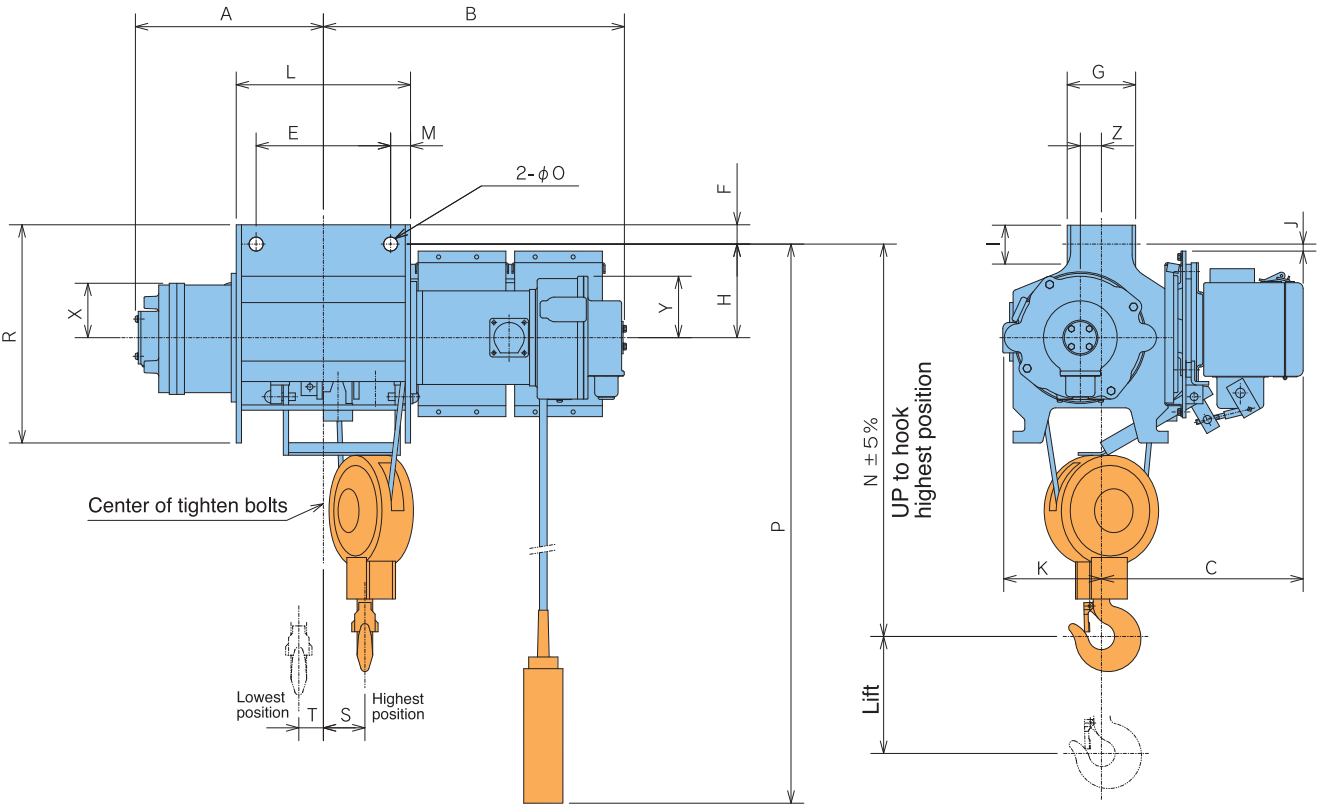
Model		U2-7.5A				U2-10A				U2-15A				U2-20A		U2-30A	
		LRH6	LRS6	HRH6	HRS6	LRH6	LRS6	HRH6	HRS6	LRH6	LRS6	HRH6	HRS6	HRH6	HRS6	HRH6	HRS6
Cap.(t)		7.5				10				15				20		30	
Lift(m)		8		12		8		12		8		12		12		12	
Dimensions(mm)	A	881		1006		949		1074		1045		1195		1243		1456	
	B	1004		1129		959		1084		1085		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				824		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		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)		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						37kg rails or 66mm steel square bars	

Suspended Type **U2** (1/2t・1t・2t・2.8t・3t)

※Contact us for 400V class outline

U2-1/2・1・2・2.8・3

＜LKH2, LKH3,
HKH2, HKH3＞



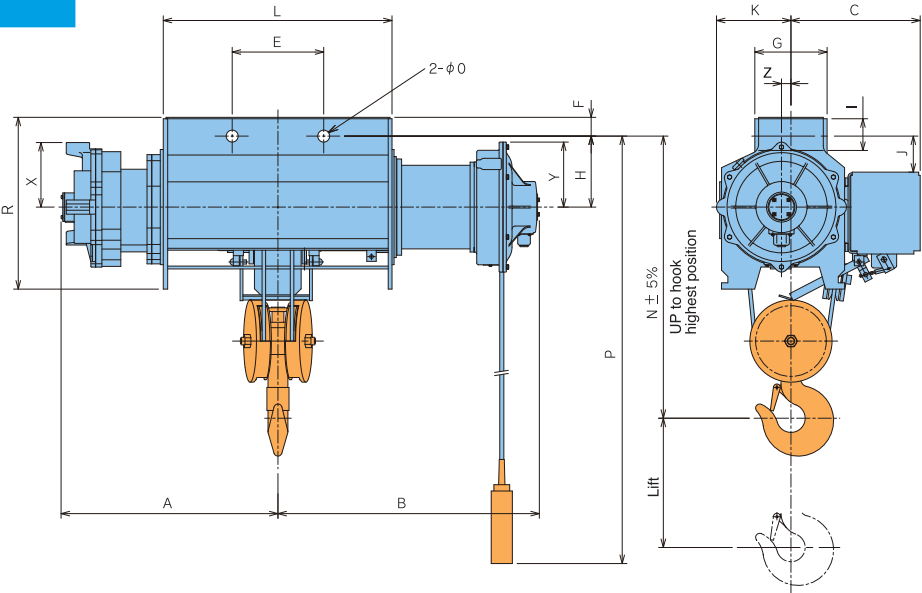
Remarks:Clamping bolts are available for 1/2t~2.8t models separately.

Model		U2-1/2		U2-1		U2-2		U2-2.8 (3)	
		LKH2	HKH2	LKH2	HKH2	LKH2	HKH2	LKH3	HKH3
Cap.(t)		1/2		1		2		2.8 (3)	
Lift(m)		6	12	6	12	6	12	6	12
Dimensions(mm)	A	315	486	321	508	352	509	373	542
	B	433	473	518	551	577	605	658	689
	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	3		12		21		89	
	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	83		105		150		150	
	Z	20		36		30		30	
Weight(kg)		100	110	145	160	230	255	325	360
Applicable I-Beam(mm)		4.5		7.5		15		27	

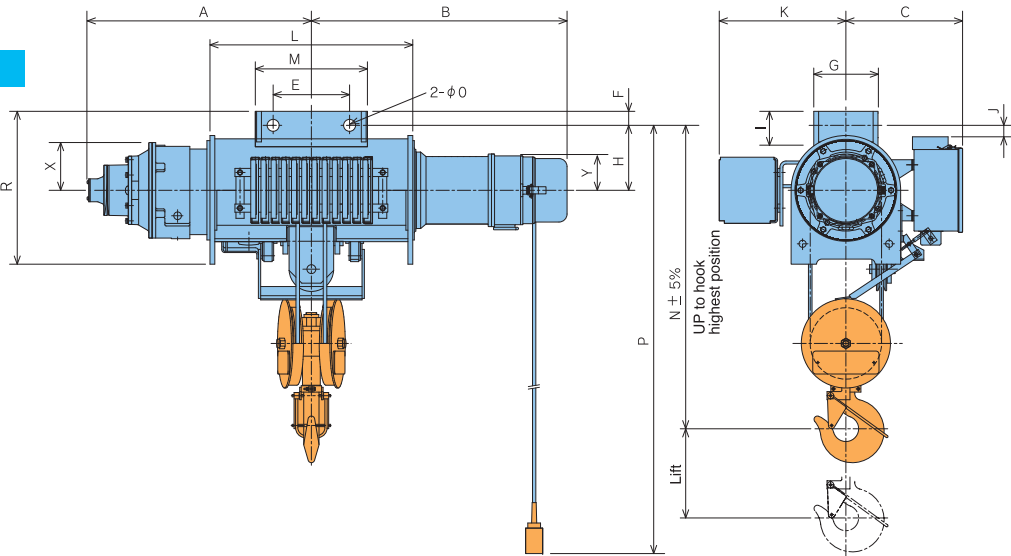
The pushbutton position of U2-1/2 is positioned on the side of hoisting deceleration part.

Suspended Type **U2** (5t・7.5t・10t)

U2-5



U2-7.5A・10A



Model		U2-5		U2-7.5A		U2-10A	
		LKH3	HKH3	LKH6	HKH6	LKH6	HKH6
Cap.(t)		5		7.5		10	
Lift(m)		8	12	8	12	8	12
Dimensions(mm)	A	685	810	881	1006	949	1074
	B	830	955	1004	1129	959	1084
	C	410		458		493	
	E	290		300		320	
	F	60	61	55		60	
	G	229		252		252	
	H	225		255		290	
	I	105	106	120		120	
	J	114		45		100	
	K	236		497		528	
	L	725	975	796	1046	786	1036
	M	—		440		460	
	N	905		1165		1380	
	O	38		47		53	
	P	8000	12000	8000	12000	8000	12000
	R	546		600		660	
	X	205		188		218	
	Y	206		152		220	
	Z	30		—		—	
Weight(kg)		580	650	700	770	1050	1150
Applicable I-Beam(mm)		42		80		100	

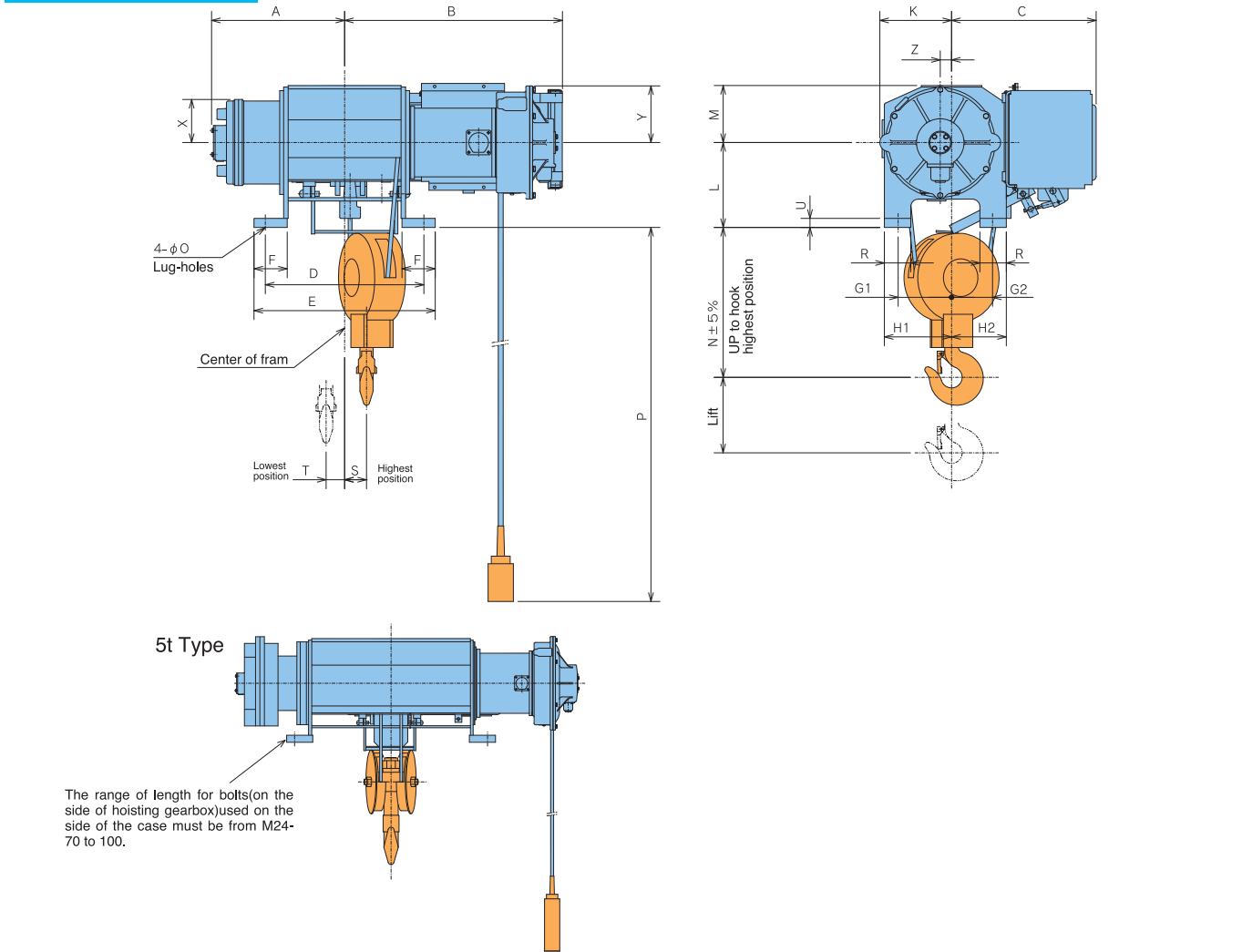
Frame mounted Type

U2

(1t·2t·2.8t·3t·5t)

※Contact us for 400V class outline

U2-1・2・2.8・3・5



Model		U2-1		U2-2		U2-2.8 (3)		U2-5	
		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	

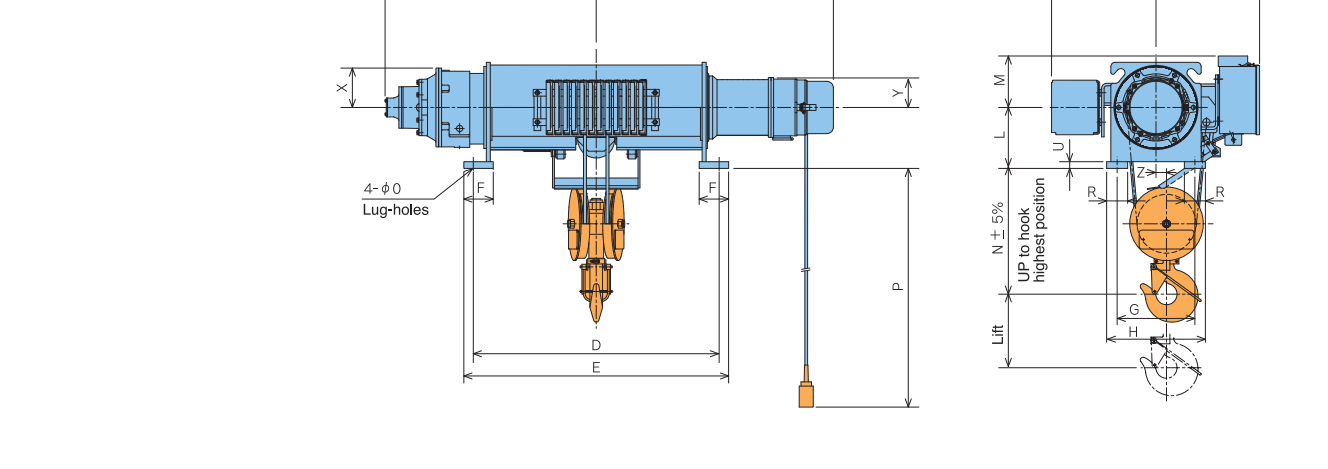
Frame mounted Type

U2

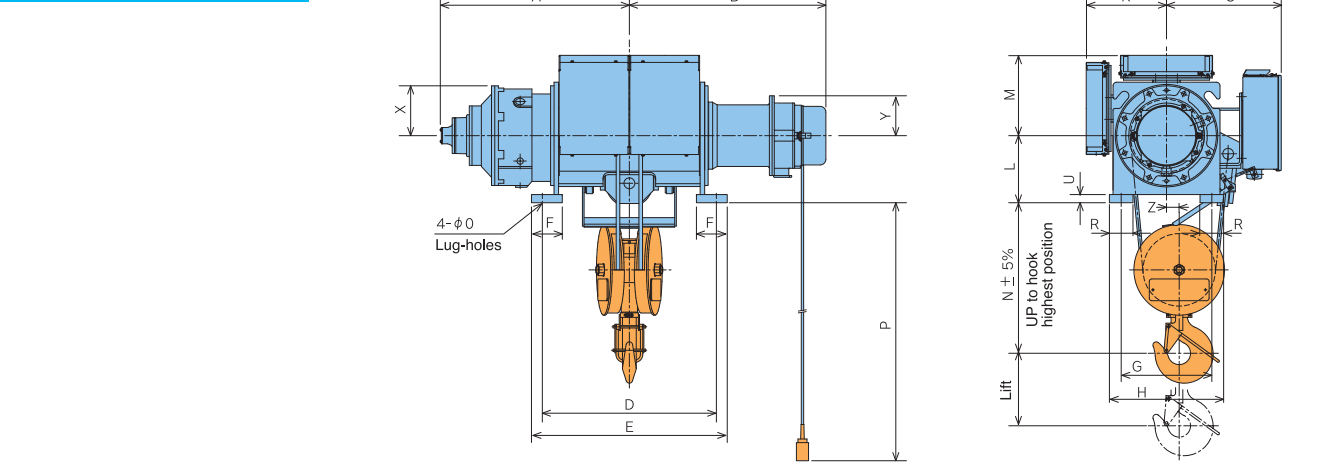
(7.5t·10t·15t·20t·30t)

※Contact us for 400V class outline

U2-7.5A・10A



U2-15A・20A・30A



Model		U2-7.5A		U2-10A		U2-15A		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	3300
Hook block weight(kg)		80		100		190		280	380

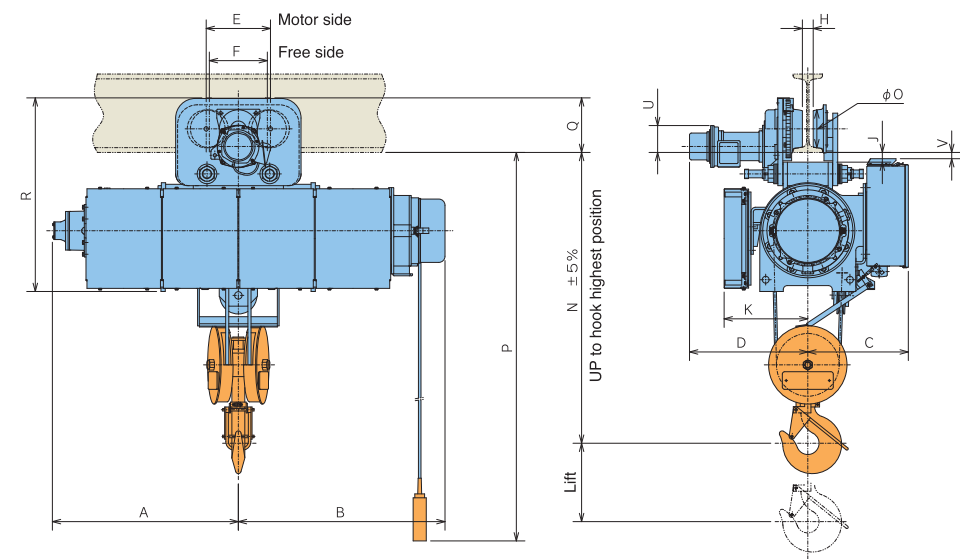
Monorail Type (High speed type)

HU2

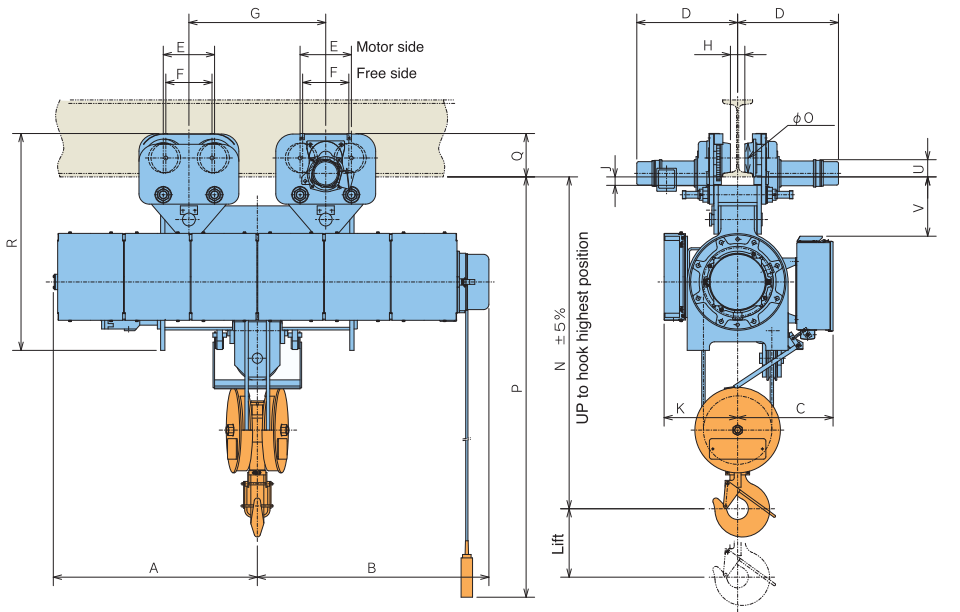
(10t・15t・20t)

※Contact us for 400V class outline

HU2-10A



HU2-15A・20A



Model		HU2-10A						HU2-15A						HU2-20A							
		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

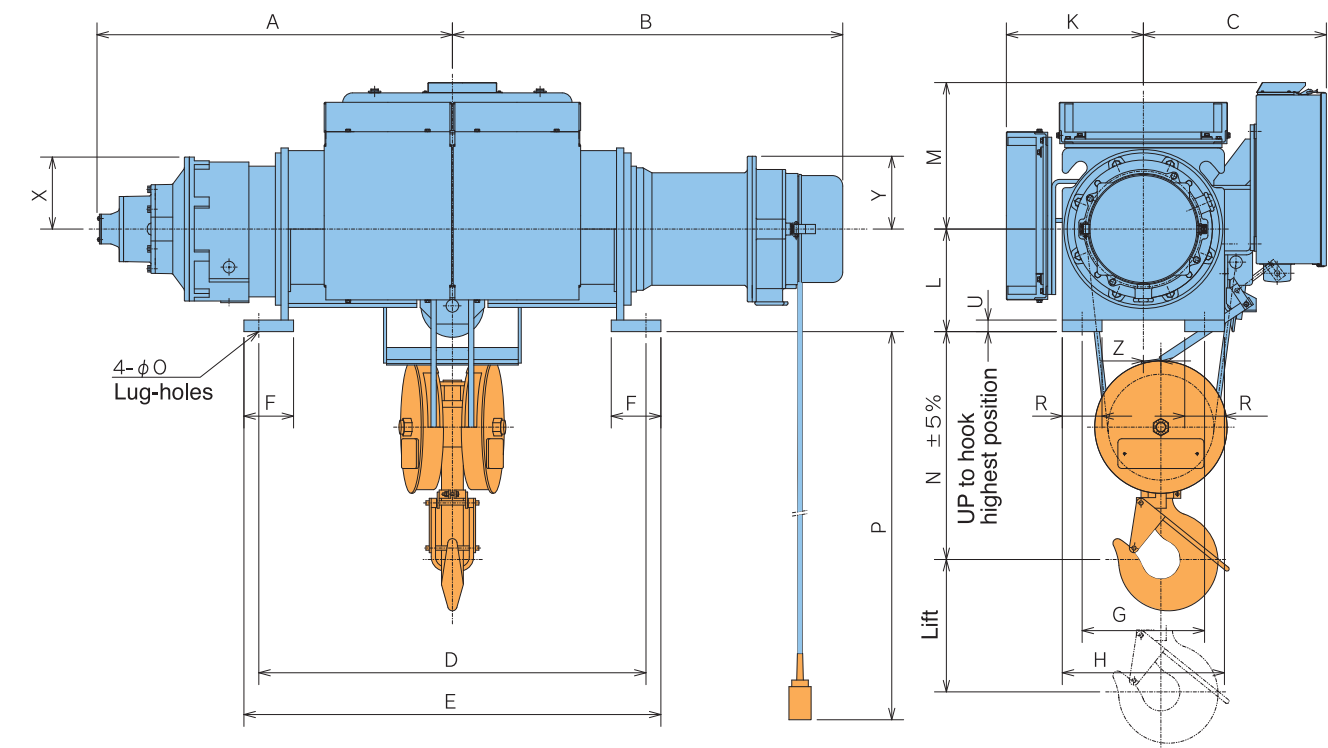
Frame mounted (High speed type)

HU2

(10t・15t・20t・30t)

※Contact us for 400V class outline

HU2-10A・15A・20A・30A



Model	HU2-10A		HU2-15A		HU2-20A	HU2-30A
	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
	B	1055	1180	1205	1355	1355
	C	553		633		663
	D	920	1170	960	1260	1260
	E	1010	1260	1080	1380	1380
	F	150		170		170
	G	370		500		500
	H	490		630		640
	K	414		458		470
	L	310		370		395
	M	443		443		468
	N	670		810		870
	O	35		47		47
	P	8000	12000	8000	12000	12000
	R	120		130		140
	U	35		41		41
	X	302 (to resister)	218	275		308
	Y	220		220		220
	Z	53		70		70
Weight(kg)	1200	1300	1700	1850	2200	3500
Hook block weight(kg)	100		190		280	380

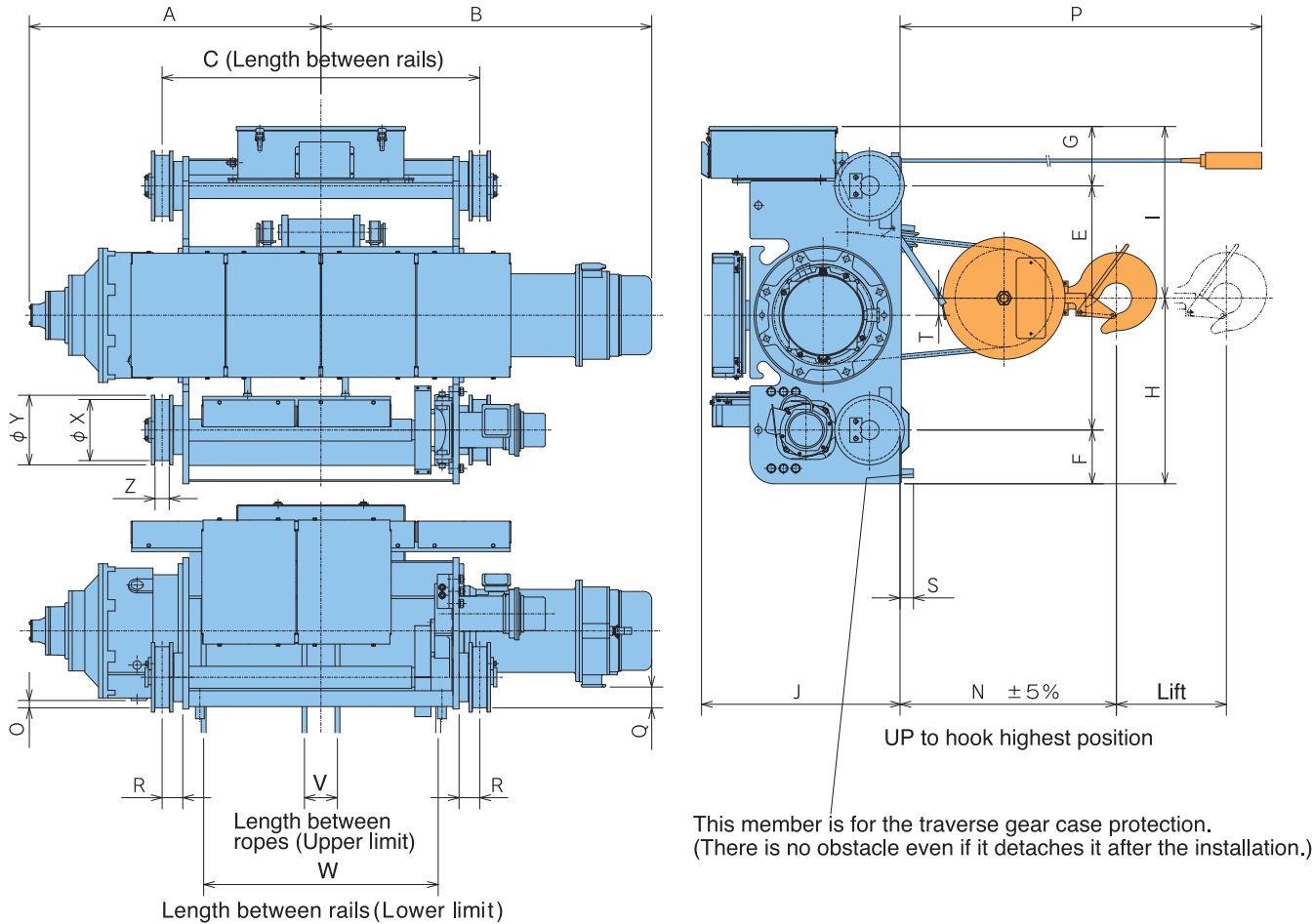
Double rail Type(High speed type)

HU2

(10t・15t・20t・30t)

※Contact us for
400V class outline

HU2-10A・15A・20A・30A



Model	HU2-10A				HU2-15A				HU2-20A		HU2-30A	
	LRH6	LRS6	HRH6	HRS6	LRH6	LRS6	HRH6	HRS6	HRH6	HRS6	HRH6	HRS6
Cap.(t)	10				15				20		30	
Lift(m)	8				12				12		12	
Dimensions(mm)	A	949	1074		1045	1195	1243		1243		1456	
	B	1055	1180		1205	1355	1355		1355		1405	
	C	950	1200		1000	1300	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				824	868	
	N	710				860				910	1020	
	O	38				30				32	15	
	P	8000	12000		8000	12000	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		125		150	
	W	620	870		660	960	945		945		990	
	X	190				250				250	250	
	Y	225				285				285	285	
	Z	52				58				58	73	
Weight(kg)	1450				2200	2400	2800		2800		3900	
Hook block weight(kg)	100				190		280		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			

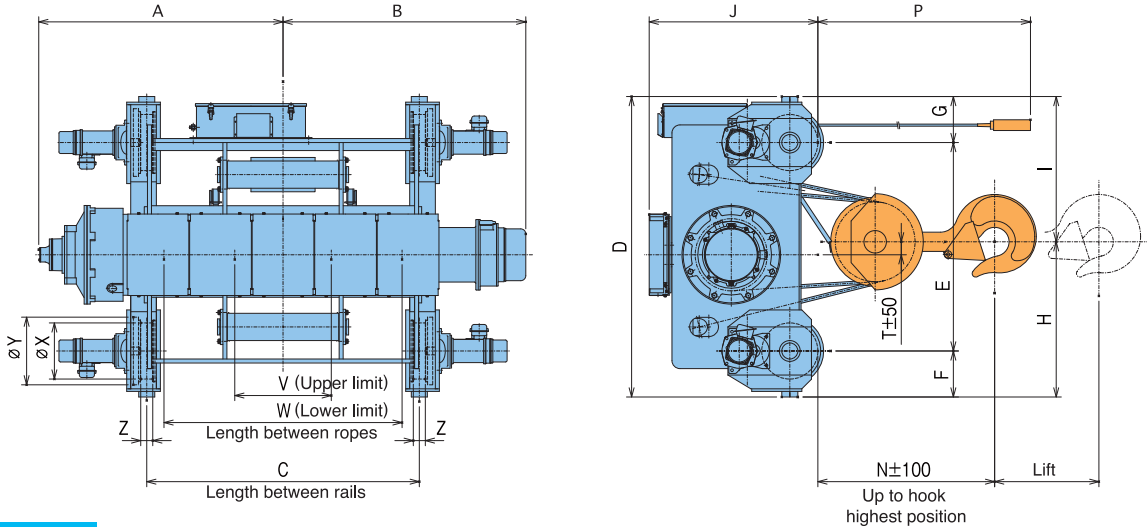
Double rail Type(High speed type)

U2・HU2

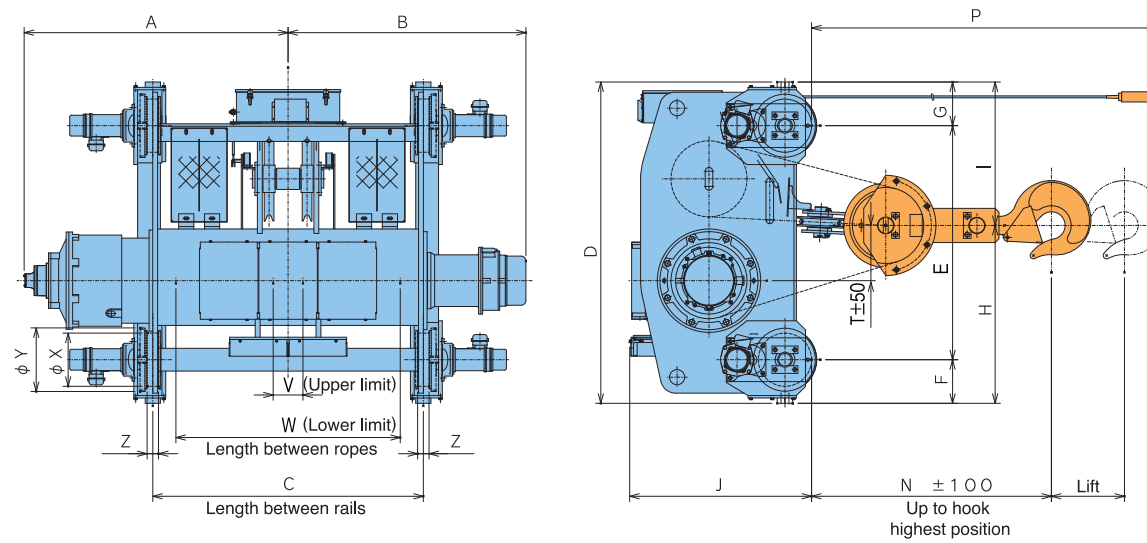
(40t・45t)

※Contact us for 400V class outline

U2-40A, HU2-40A



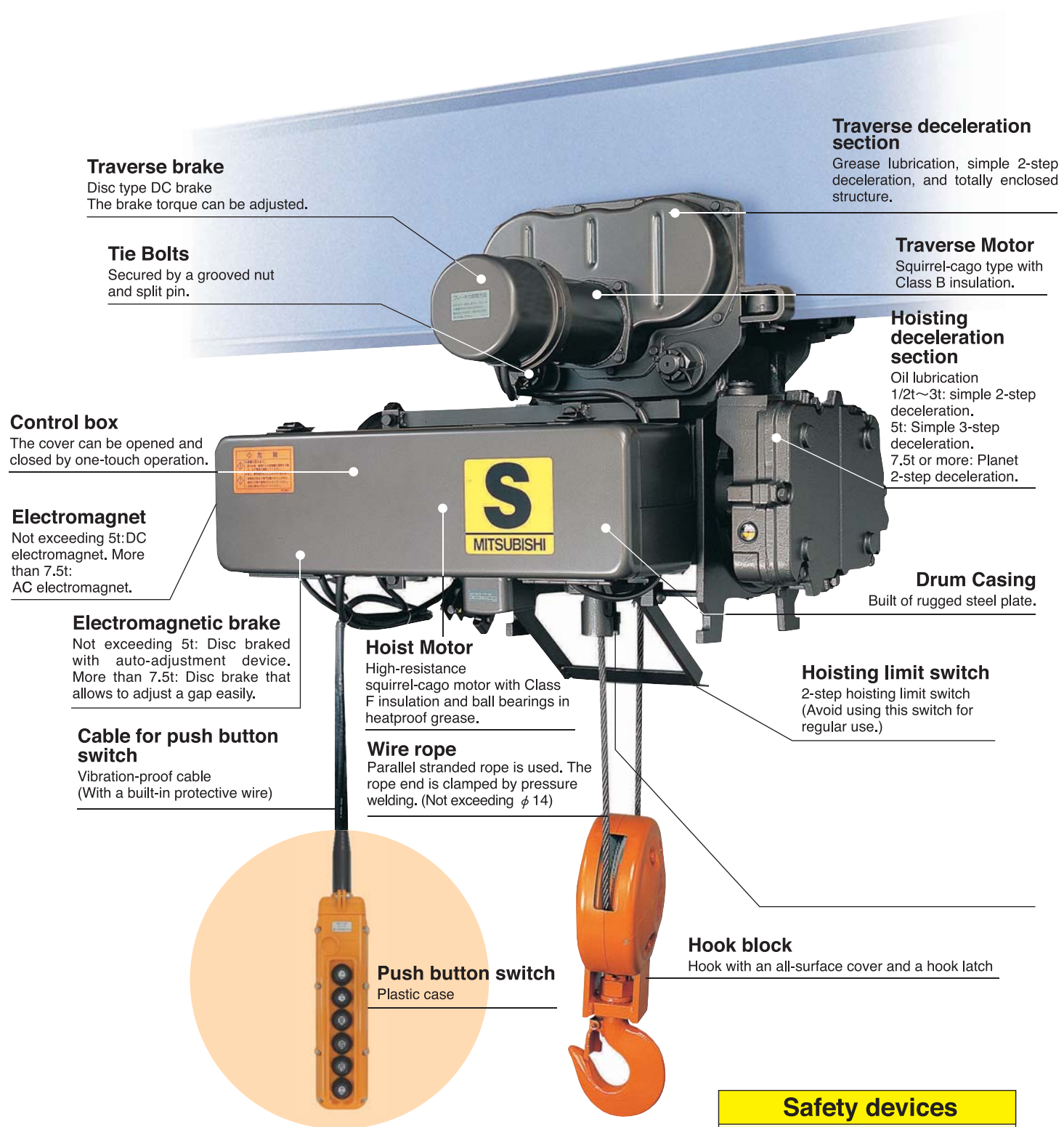
U2-45A, HU2-45A



Model		U2-40A		HU2-40A		U2-45A		HU2-45A	
		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



Safety devices
※Optional equipment: Over loading alarm (O.L.A) device, Emergency brake 1t~60t optional equipment

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

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

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

Standard specifications

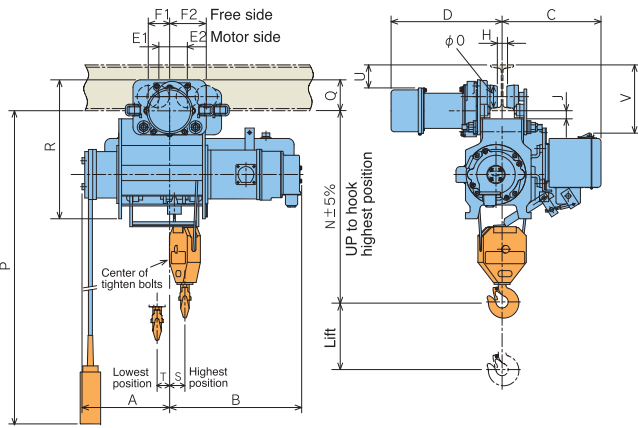
- Power supply·····3-phase 200V 50/60Hz control 200V, 220V 60Hz control 220V (400V class is also available)·····3-phase 400v 50/60Hz control 200V, 440V 60Hz control 220V 3-phase 380V 50Hz control 48V (100V and 24V are also available)
- Operating method·····Push button switch operations

	1/2~3t	5~45t
Suspended type	2 Points	4 Points
Frame mounted type	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

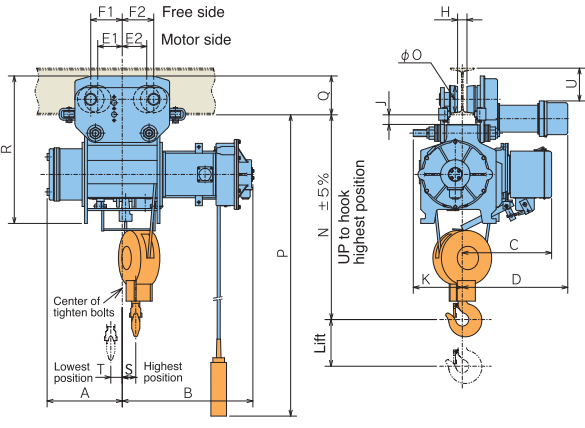
- Rating·····30 min.(JIS C 9620)
- Power supply system·····Both trolley feeding and cable feeding are available. However, neither trolley nor cable is attached.
- Enclosure·····Simplified out door type (JIS C0920, equivalent to IP44)
- Applicable standard·····JIS C 9620 electric hoist/crane structure standard
- Color coating·····Main body: Metallic gray(Equivalent to Munsell N4.0)
 Hook block: Munsell 7.5YR7/14
 Pushbutton: Equivalent to Munsell 7.5YR7/13
- 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)

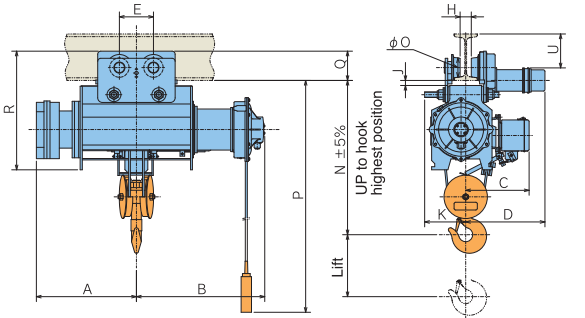
S-1/2



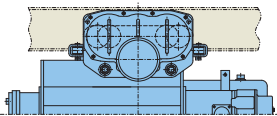
S-1·2·2.8·3



S-5



(Shape of S-1/2-HM)



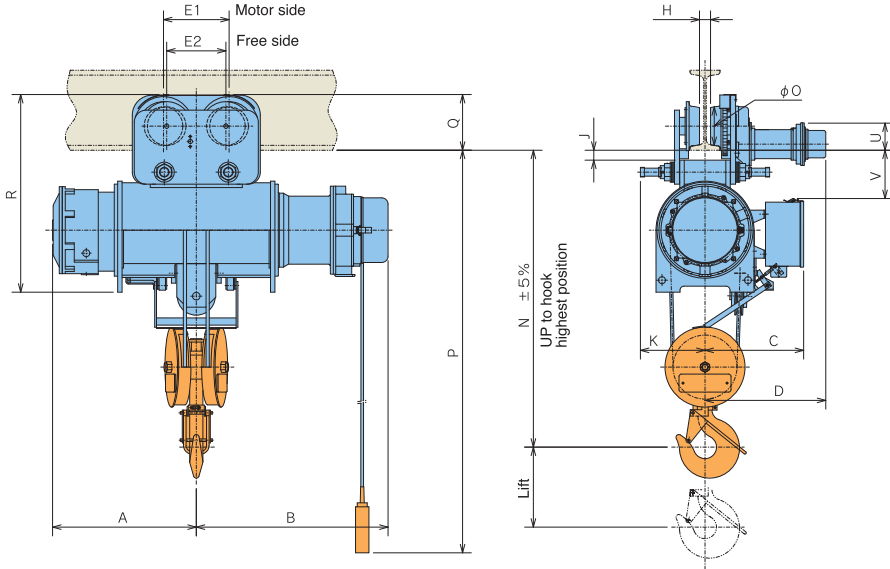
Note: In the case of trolley electric supply type, balance weight is required.

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			646			771							
	B	433						473						518			551			563			593			610			641			830			955							
	C	324												345						383						408						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						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										
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)	150×75×5.5	364	30	27	100	75	222	360	24	33	140	105	233	360	24	33	140	105	—						—						—											
	200×100×7	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	—						—						—																													

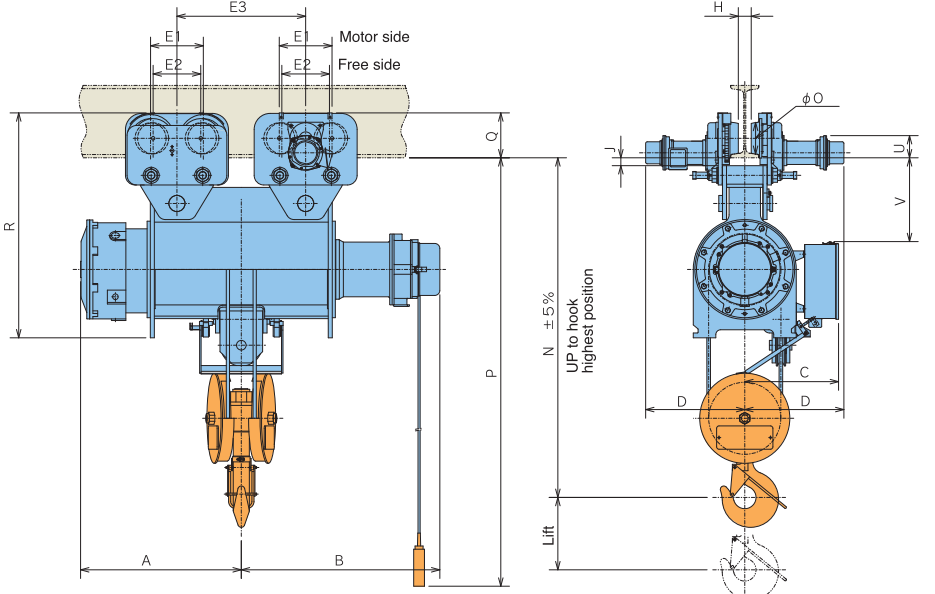
Note: rad.cur () at I-Beam ● S-1/2, S-1...150×75×5.5 ● S-2...200×100×7 Note Applicable I-Beam =Standard =required special attachment

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					988					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)		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	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

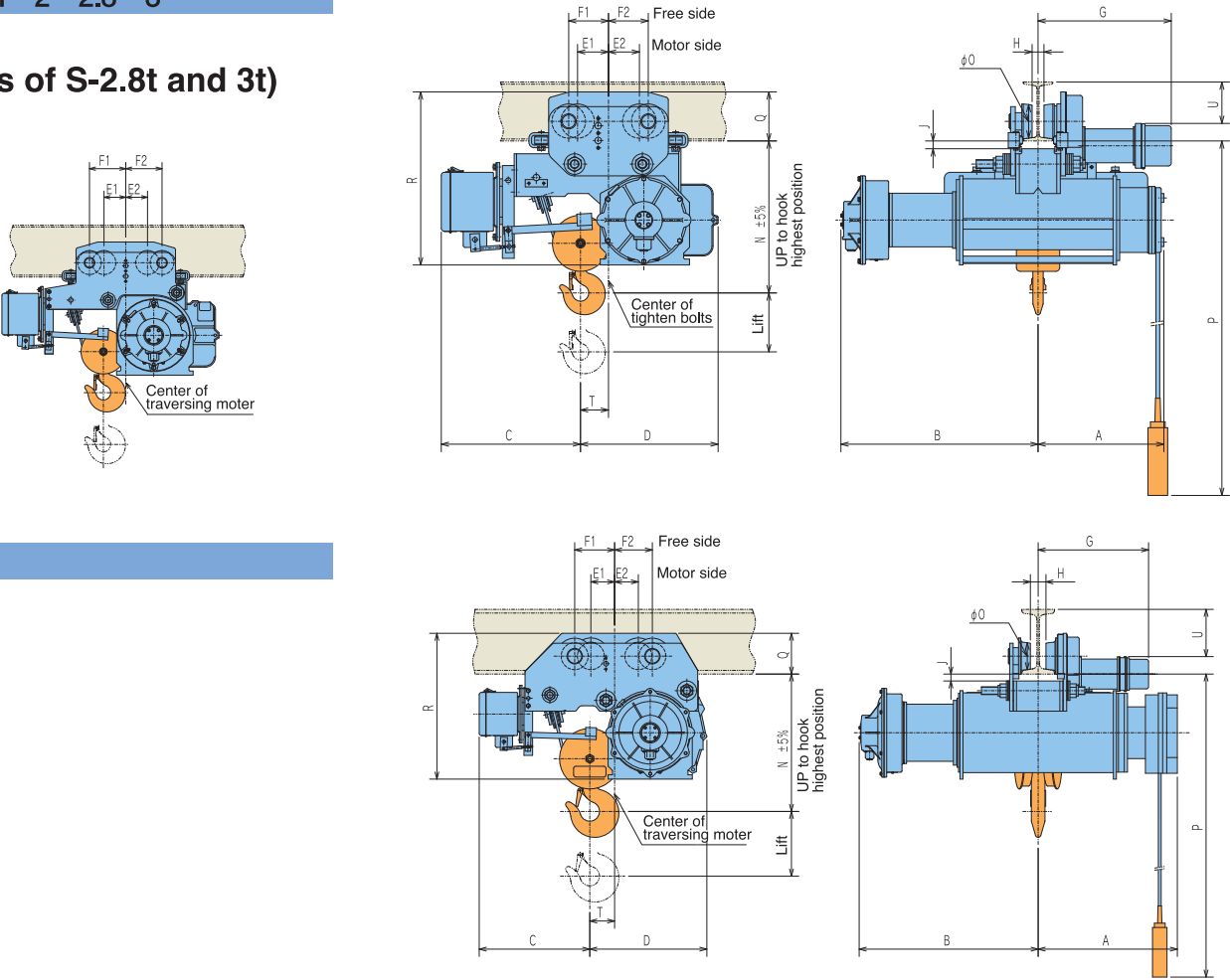
Low-head Type

S

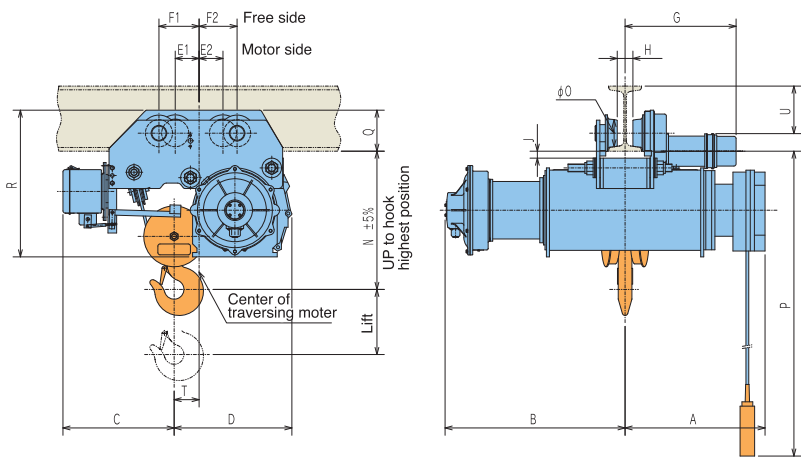
(1/2t·1t·2t·2.8t·3t·5t)

S-1/2 · 1 · 2 · 2.8 · 3

(Shapes of S-2.8t and 3t)



S-5



Model		S-1/2-LD2					S-1					S-2					S-2.8 (3)					S-5				
Cap.(t)		1/2					LD2					LD2					LD3					LD3				
Lift(m)		6					1					2					2.8 (3)					5				
Dimensions(mm)	A	407	429	597	427	605	440	590	646	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		535		650																	
	O	73	80		114		114		125																	
	P	6000	6000	12000	6000	12000	6000	12000	8000	12000																
	R	400	495		588		643		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					295					390					570				
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)	150×75×5.5	364	30	19	101	75	360	24	21	140	105															
	200×100×7	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	188	465	64	26	169	188					
	300×150×8											478	90	23	170	237										
	300×150×11.5											478	90	14	179	228	478	90	16	179	228	512	72	31	189	219
	450×175×13																					524	96	27	193	365
600×190×13																										

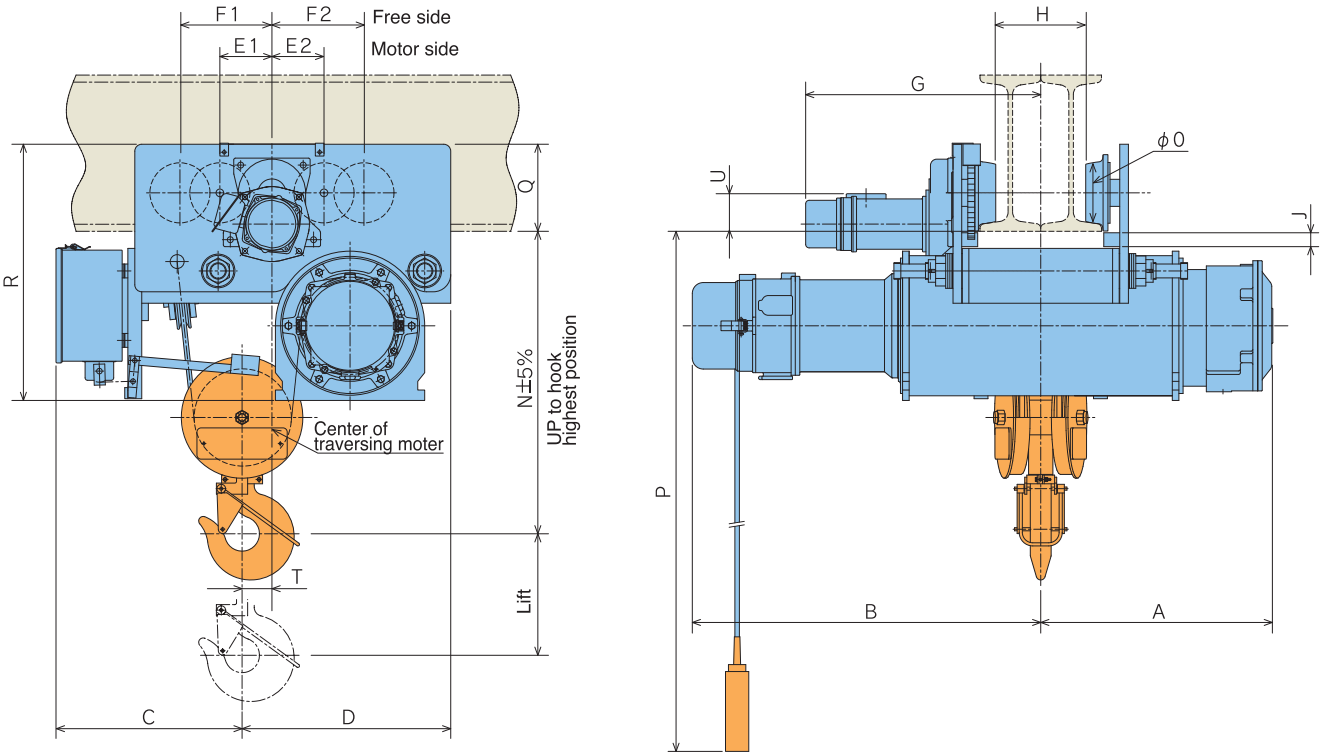
Note.rad.cur() at I-Beam ●S-1/2,S-1…150×75×5.5 ●S-2…200×100×7 Note Applicable I-Beam =Standard =required special attachment

Low-head Type

S

(7.5t·10t)

S-7.5 · 10



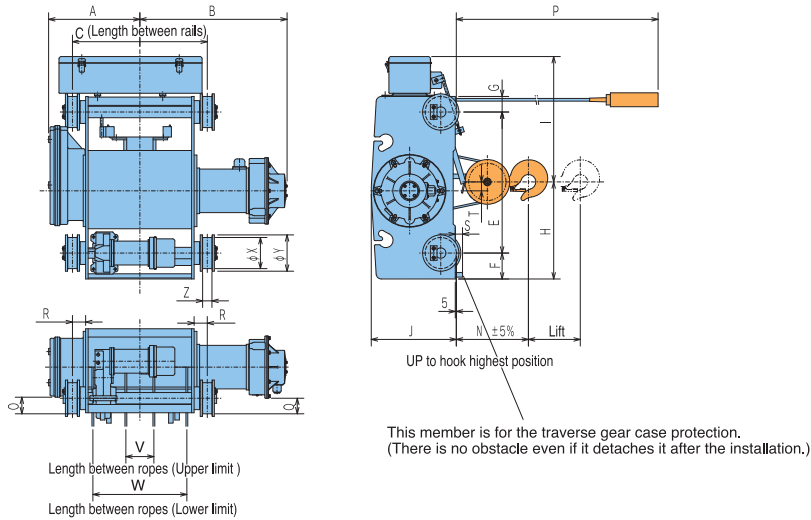
Model		S-7.5					S-10				
Cap.(t)		LD					LD				
Lift(m)		8					12				
Dimensions(mm)	A	669	794	719	844						
	B	1004	1129	959	1084						
	C	536	619								
	D	601	689								
	E1	150	528								
	E2	150	162								
	F1	265	604								
	F2	265	164								
	N	880	990								
	O	173	193								
	P	8000	12000	8000	12000						
	R	741	873								
	T	86	363								
Min.rad.curvature(m)		Straight line					Straight line				
Weight(kg)		950					1020				
Hook block weight(kg)		80					1500				
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

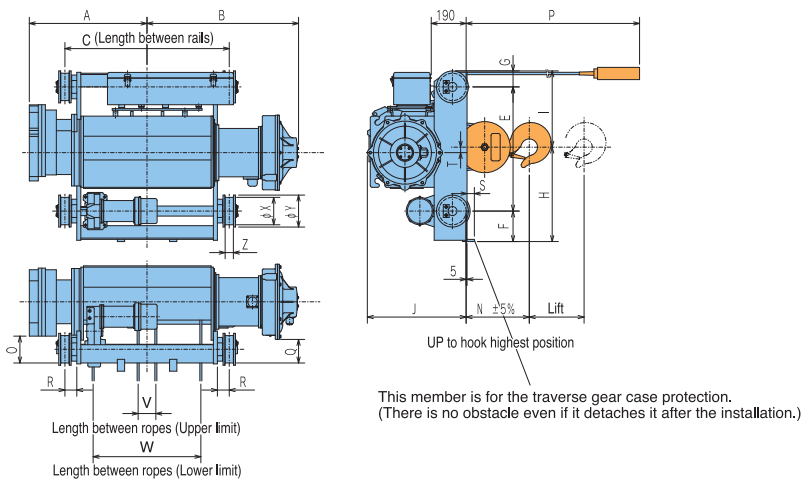
Double rail Type

S(2.8t·3t·5t)

S-2.8・3



S-5

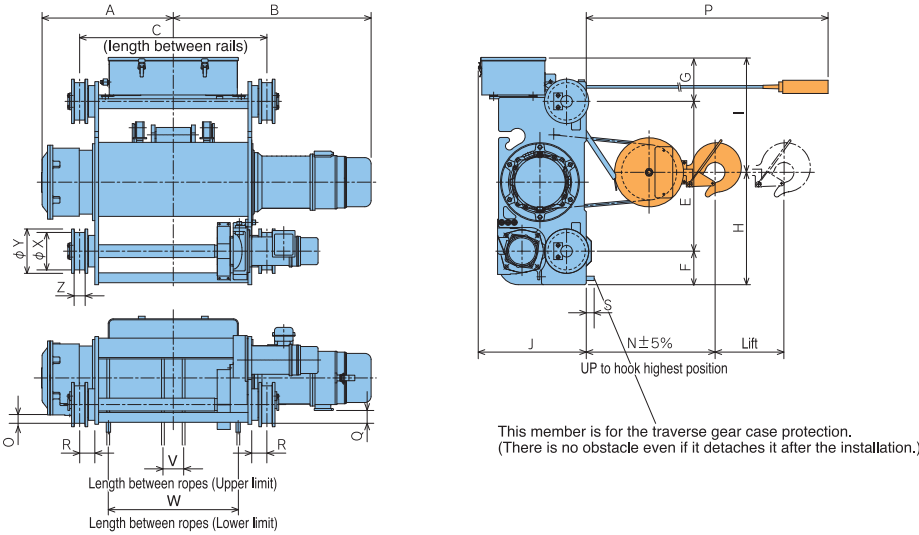


Model		S-2.8 (3)		S-5	
		LR3A	HR3A	LR3A	HR3A
Cap.(t)		2.8 (3)		5	
Lift(m)		6	12	8	12
Dimensions(mm)	A	440	590	646	771
	B	711	861	830	955
	C	650	950	900	1150
	E	680		680	
	F	125		167	
	G	75		88	
	H	468		517	
	I	605		418	
	J	410		541	
	N	345		346	
	O	52		125	
	P	6000	12000	8000	12000
	Q	75		129	
	R	63		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			

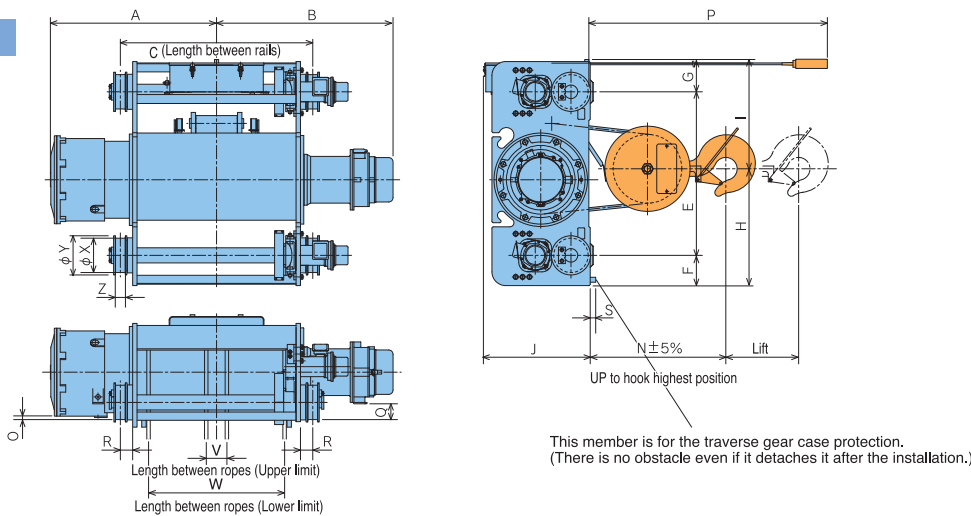
Double rail Type

S(7.5t·10t·15t·20t·30t)

S-7.5・10・15・20



S-30

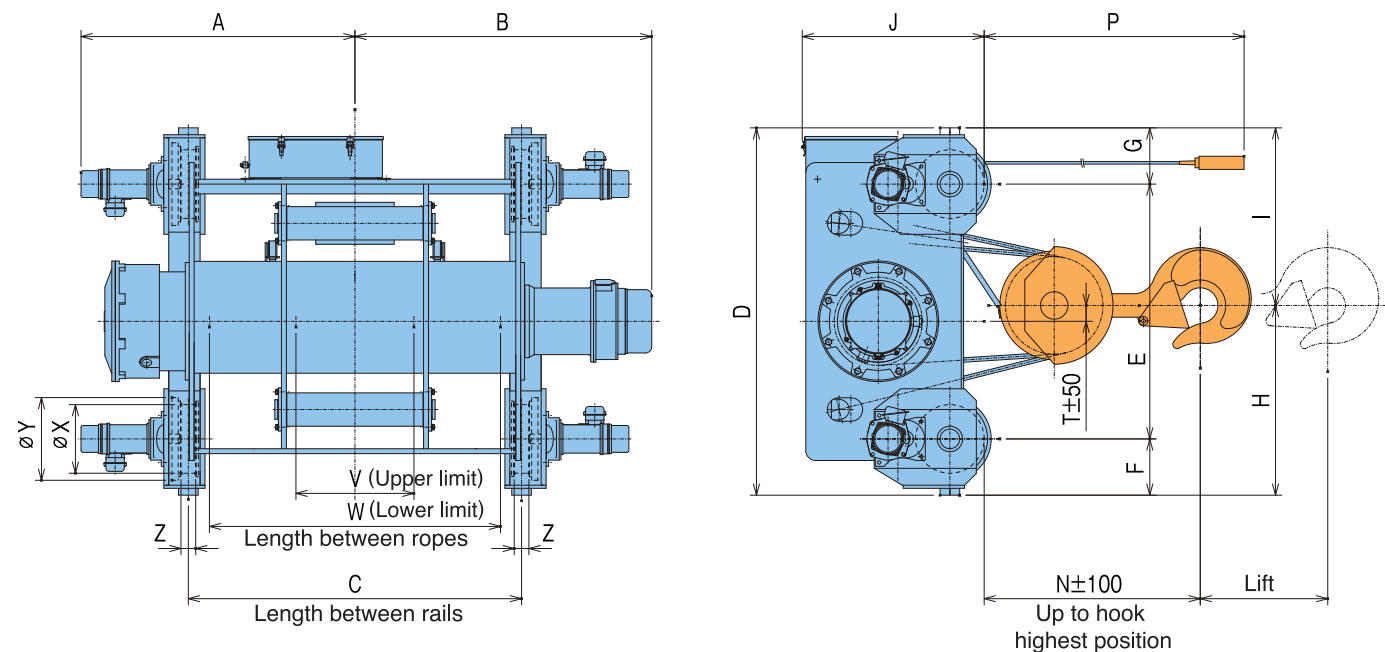


Model		S-7.5		S-10		S-15		S-20-HR	S-30-HR
		LR	HR	LR	HR	LR	HR		
Cap.(t)		7.5		10		15		20	30
Lift(m)		8	12	8	12	8	12	12	12
Dimensions(mm)	A	669	794	719	844	799	949	999	1209
	B	1004	1129	959	1084	1085	1235	1235	1285
	C	950	1200	950	1200	1000	1300	1300	1400
	E	760		840		1000		1045	1190
	F	170		170		220		220	220
	G	223		233		243		248	246
	H	570		613		760		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	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

S(40t)

S-40

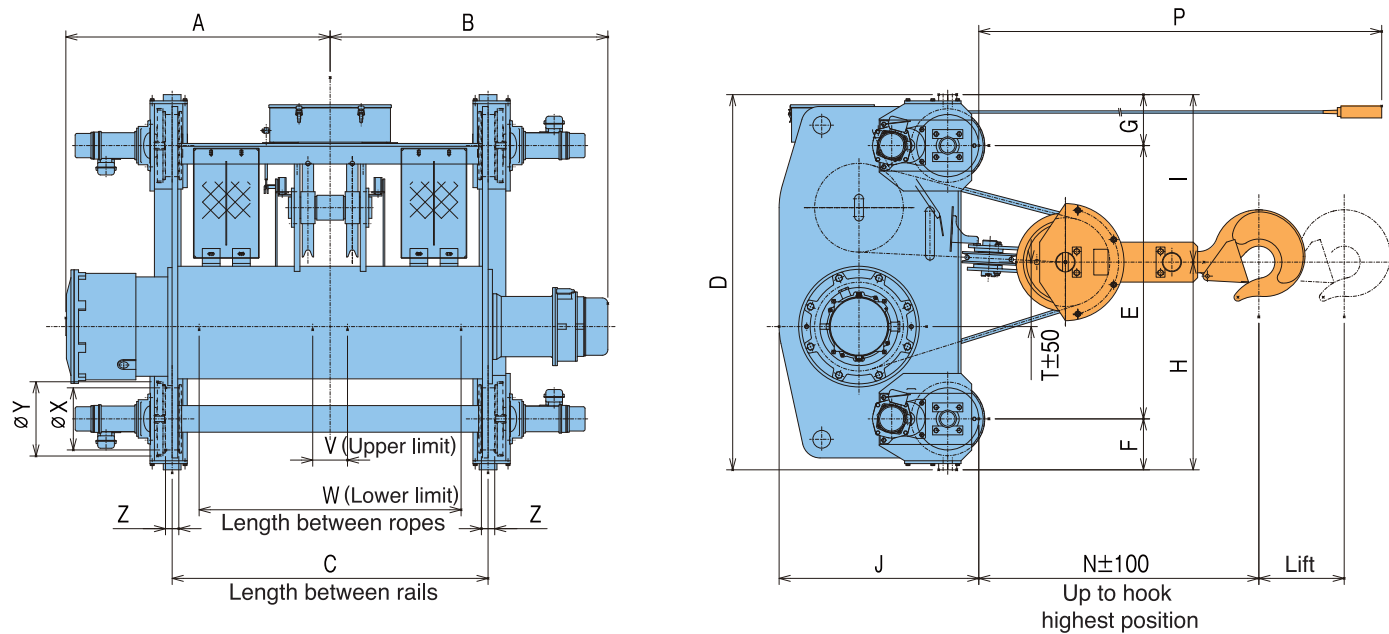


Model		S-40	
		LR	HR
Cap.(t)		40	
Lift(m)		6.5	11.5
Dimensions(mm)	A	1399	1749
	B	1515	1865
	C	1700	2400
	D	1874	
	E	1300	
	F	287	
	G	287	
	H	968	
	I	906	
	J	930	
	N	1110	
	P	7500	12500
	T	81	
	V	602	
	W	1485	2164
	X	350	
	Y	419	
	Z	75	
Weight(kg)		4800	5300
Hook block weight(kg)		640	
Applicable Rail		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	520	
	G	350	
	H	807	
	I	670	
	J	1125	
	N	1600	
	P	14000	20500
	T	637	
	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	

Frame mounted Type

S

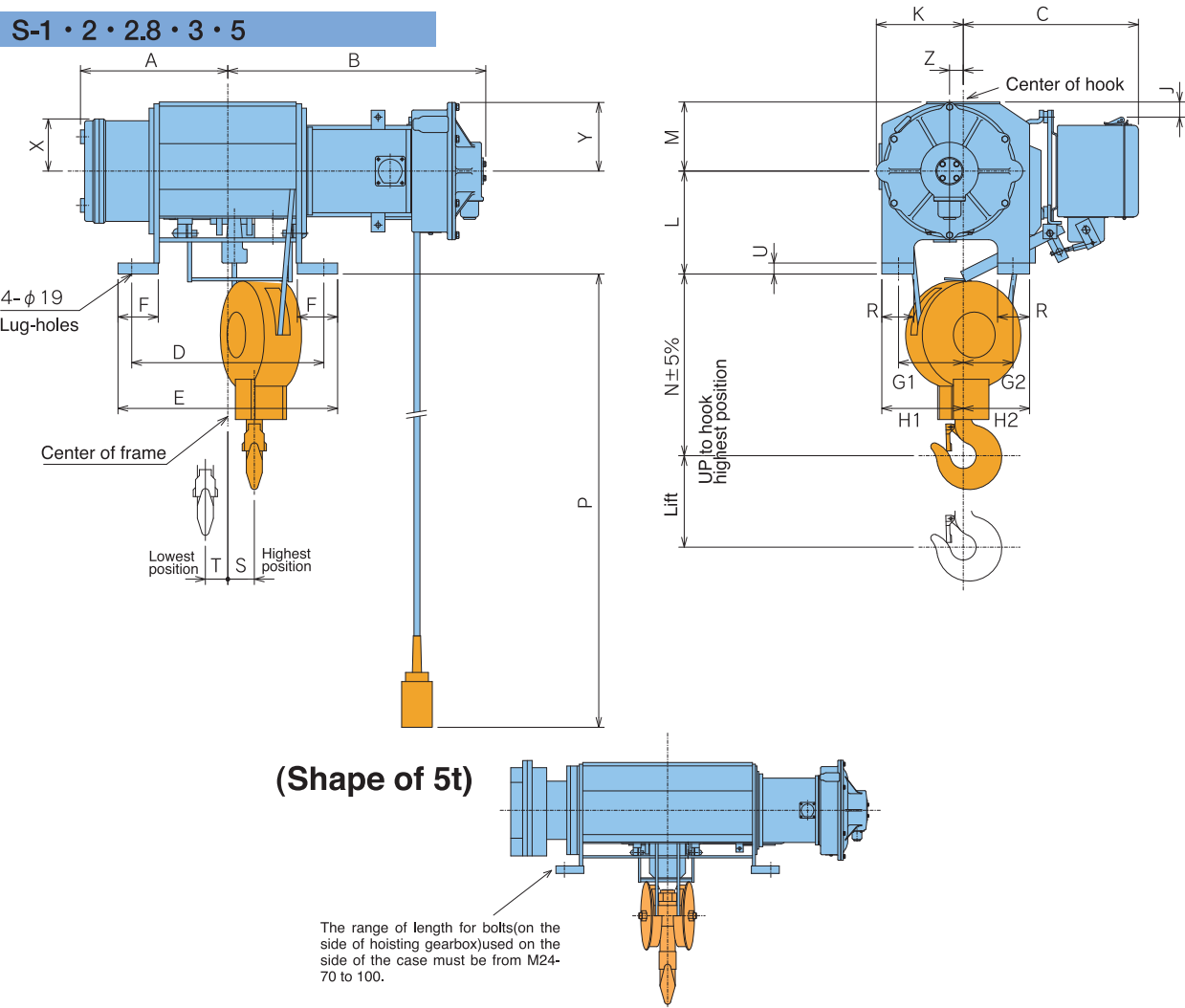
(1t · 2t · 2.8t · 3t · 5t)

Frame mounted Type

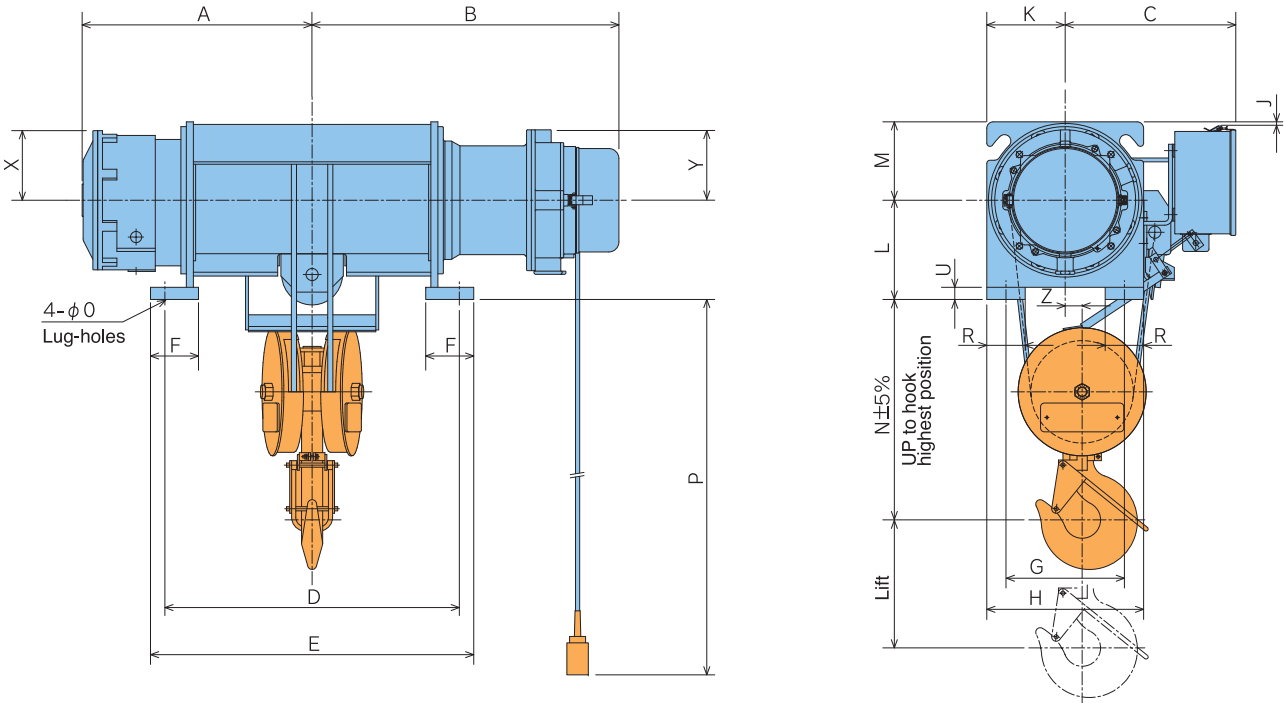
S

(7.5t · 10t · 15t · 20t · 30t)

S-1 · 2 · 2.8 · 3 · 5



S-7.5 · 10 · 15 · 20 · 30



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	18		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	

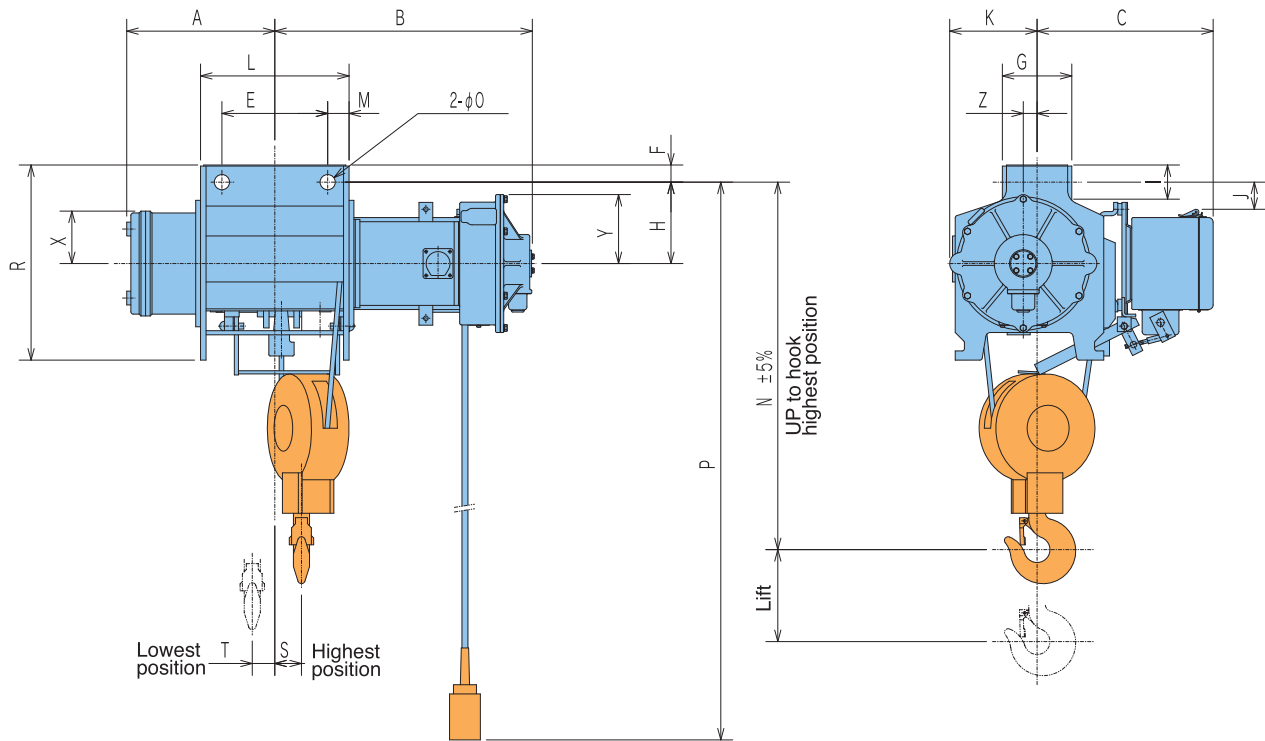
Model		S-7.5		S-10		S-15		S-20-HS	S-30-HS
		LS	HS	LS	HS	LS	HS		
Cap.(t)		7.5		10		15		20	30
Lift(m)		8	12	8	12	8	12	12	12
Dimensions(mm)	A	669	794	719	844	799	949	999	1209
	B	1004	1129	959	1084	1085	1235	1235	1285
	C	493		531		633		663	713
	D	920	1170	920	1170	960	1260	1260	1380
	E	1010	1260	1010	1260	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	3200
Hook block weight(kg)		80		100		190		280	380

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 available for 1/2t~2.8t models separately.

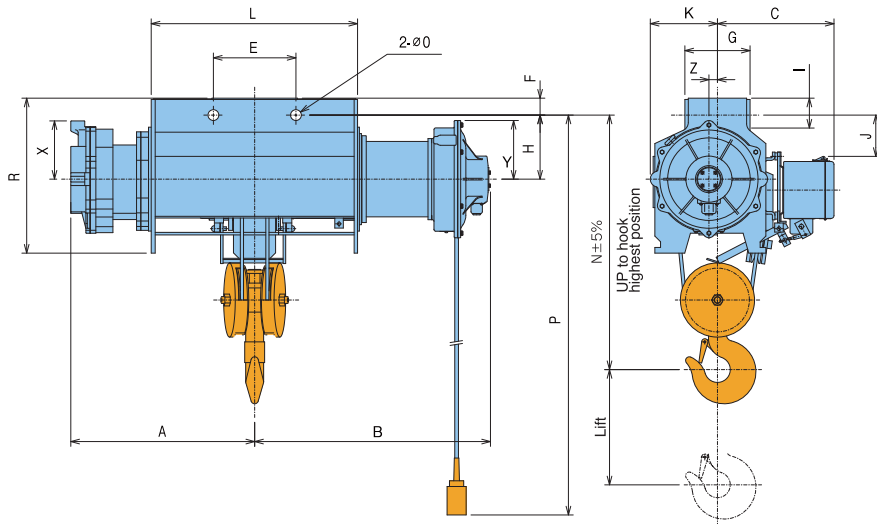
Model		S-1/2		S-1		S-2		S-2.8 (3)	
		LK2	HK2	LK2	HK2	LK2	HK2	LK3	HK3
Cap.(t)		1/2		1		2		2.8 (3)	
Lift(m)		6	12	6	12	6	12	6	12
Dimensions(mm)	A	287	457	287	474	322	479	341	510
	B	433	473	518	551	563	593	610	641
	C	324		345		383		408	
	E	170	230	230		230		230	
	F	28	33	33		38		43	
	G	140	117	117		151		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.

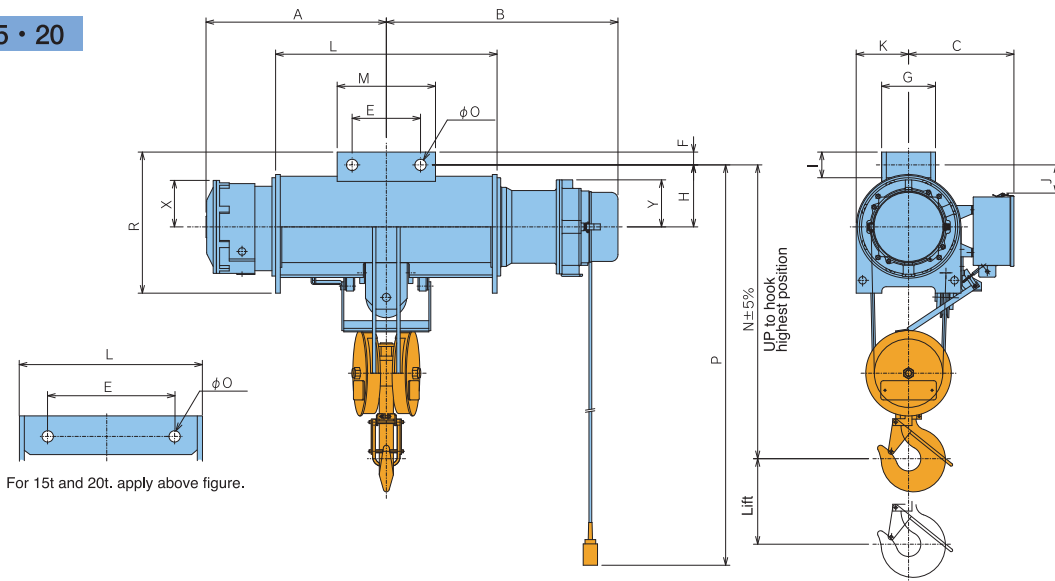
Suspended Type S

(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

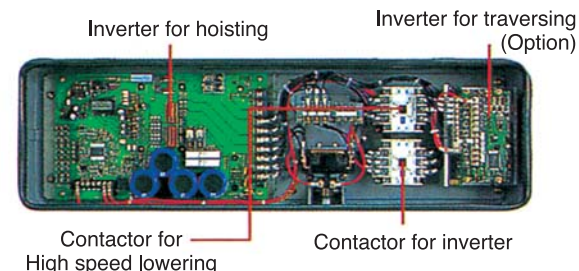
UR Type Series Inverter hoist 1t~2.8(3)t

400V class debut

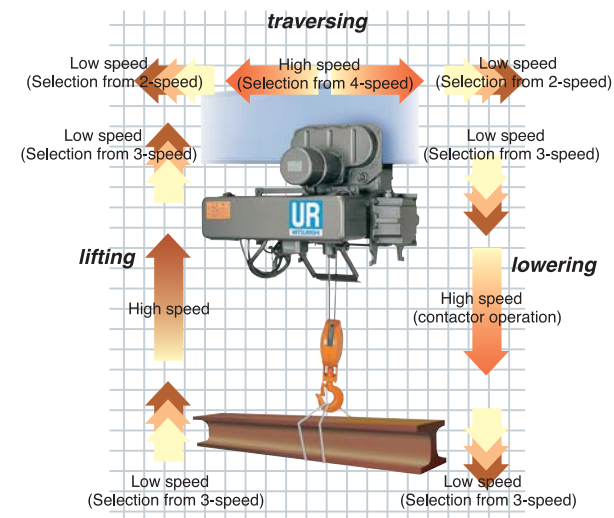
Inverter technology and creep speed technology are combined to make a variable speed hoist for twenty-first century.



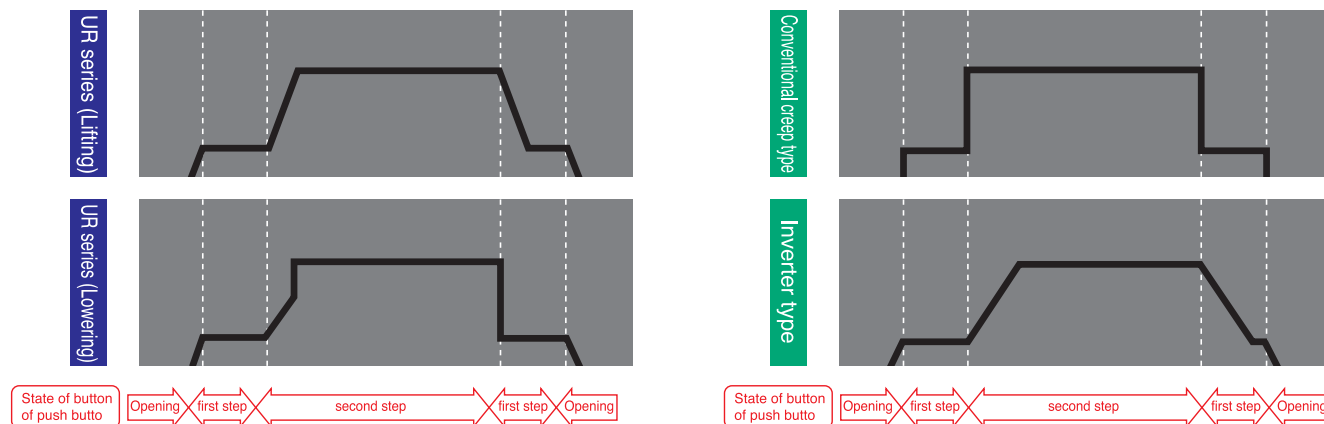
■The inside of Control box



■Operation image of inverter hoist



■Moving pattern by push button operation



●Excellent Operativeness

The new control system which combines Inverter operation and contactor operation for the first time in the industry realises smooth operativeness and quick response of stop and speed reduction. In addition, low hoisting speed can be selected from 3 speed types. In the case of hoist with traversing inverter, high speed can be selected from 4 speed types and low speed can be selected from 2 speed types. In comparison with the conventional creep type, the setting range is wider.

●Improvement of maintenance

Since its structure part is the same as general purpose hoist, the number of parts decreased significantly compared with the conventional creep type. And the maintenance is easy as its control parts are made into one board.

●Effect of conservation of energy

As UR type does not use a regenerative resistor, it is more power saving compared to U type. The durability of its brake disk becomes about double in comparison with that of the conventional creep type.

●Excellent cost performance

The UR series is variable speed hoist very high in cost performance.

Features(comparison with the U series, conventional creep type hoist)

Item	UR series	Conventional creep type	U series
Control system (Lifting/Lowering)	Inverter and contactor operation Lifting(both low and high speed): Inverter control Lowering at low speed:Inverter control Lowering at high speed:contactor operation	contactor operation Change two motors with clutch	Inverter
Control system(Traversing)	Inverter	Pole change or two motors	Inverter
Speed setting (Lifting/Lowering)	High speed: Fixed(Normal speed) Low speed: select from 1/10, 1/6, 1/4 of high speed	High speed:Fixed(Normal speed) Low speed: Fixed (1/10 of Normal speed)	Setting is possible at arbitrary speed with high speed, the low speed between 1/10 of normal speed - normal speed
Speed setting(Traversing)	High speed: select from 25, 20, 15, 10m/min Low speed: select from 2.5, 5/min	High speed: Fixed Low speed: Fixed ※Speed ratio 1:1/4 or 1:1/5	Setting is possible at arbitrary speed with high speed, the low speed between 1/10 of normal speed - normal speed
Respos for the operation	Slow start, Sudden stop ※	Sudden start, Sudden stop	Slow start, Slow stop
Operative cost	Medium	High	Low
Power consumption	Low	Low	Medium
Number of parts	Small	Large	Medium

※At lifting, it stops as the cushion working, and At lowring,it stops by sudden deceleration.

Specifications																					
Type	Capacity(t)	Lift(m)		Wire rope				Hoisting				Traversing									
				Monorail type	Low head type	Double rail type	Rope specification	Hoisting speed m/s (m/min)		Output (kW)	Rated Current(A)	Poles	Hoisting speed m/s (m/min)				Motor				
													Contactor operation		INV opration		Output (kW)		Rated Current (A)	Poles	
		2 falls	4 falls					4 falls	Low speed	High speed	50 Hz	60 Hz	Low speed	High speed	50 Hz	60 Hz	50 Hz	60 Hz			
UR	1	6	12	φ 8 ※1	φ 6.3	—	6×W(19) B class JIS-G3525	0.0133 (0.8)	0.133 (8)	1.4	10	4	0.35 (21)	0.417 (25)	0.0417 (2.5)	0.417 (25)	0.22	0.26	1.6	1.5	4
	φ 10			φ 8	—	6×Fi(29) B class JIS-G3525	0.012 (0.72)	0.12 (7.2)	2.6	16	0.5						0.6	3.2	3.1		
	2			φ 12 5	φ 9															φ 9	
	2.8 (3)																				

※1. Rope specification of 1t 2falls is 6×Fi(29)

Note 1: The values in the table are referential values.

Note 2: In the case of 400V class (Including 380V), there may be differences in outline dimension. Please contact us.

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.

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

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

●Applicable standard...JISC9620 Electric Hoist, Crane structure standard

●Rating...Hoisting:25% ED(63% of rating load), 150S/Hr JISC9620, Travelling:30 min. JISC9620

●Power supply system...Cable feeding, Trolley feeding (limited to Double trolley type)

●Ambient air temperature...-10℃~40℃ (Non congelation)

●Ambient relative humidity...Less than 90% RH (Non condensing)

●Enclosure...Simplified outdoor type(JISC 0920, Equivalent to IP44)

(Rainproof cover is required, when it is used in the open air.)

●Color coating...Main body:Metallic gray (Equevalent to Munsell N4.0)

Hook block:Munsell 7.5YR7/14

Pushbutton:Equivalent to Munsell 7.5YR7/13

Note:These hoists can not be used for lift (elevator for passengers.)

Remarks

- High lowering is contactor operation, speed is 6m/min in 1t and 6.7m/min in 2t~2.8t for the power supply of 50Hz.
- Lifting low speed is set to 1/10 of high-speed at shipment.
- High speed traversing/low speed traversing is set to 25/2.5m/min at shipment.

caution

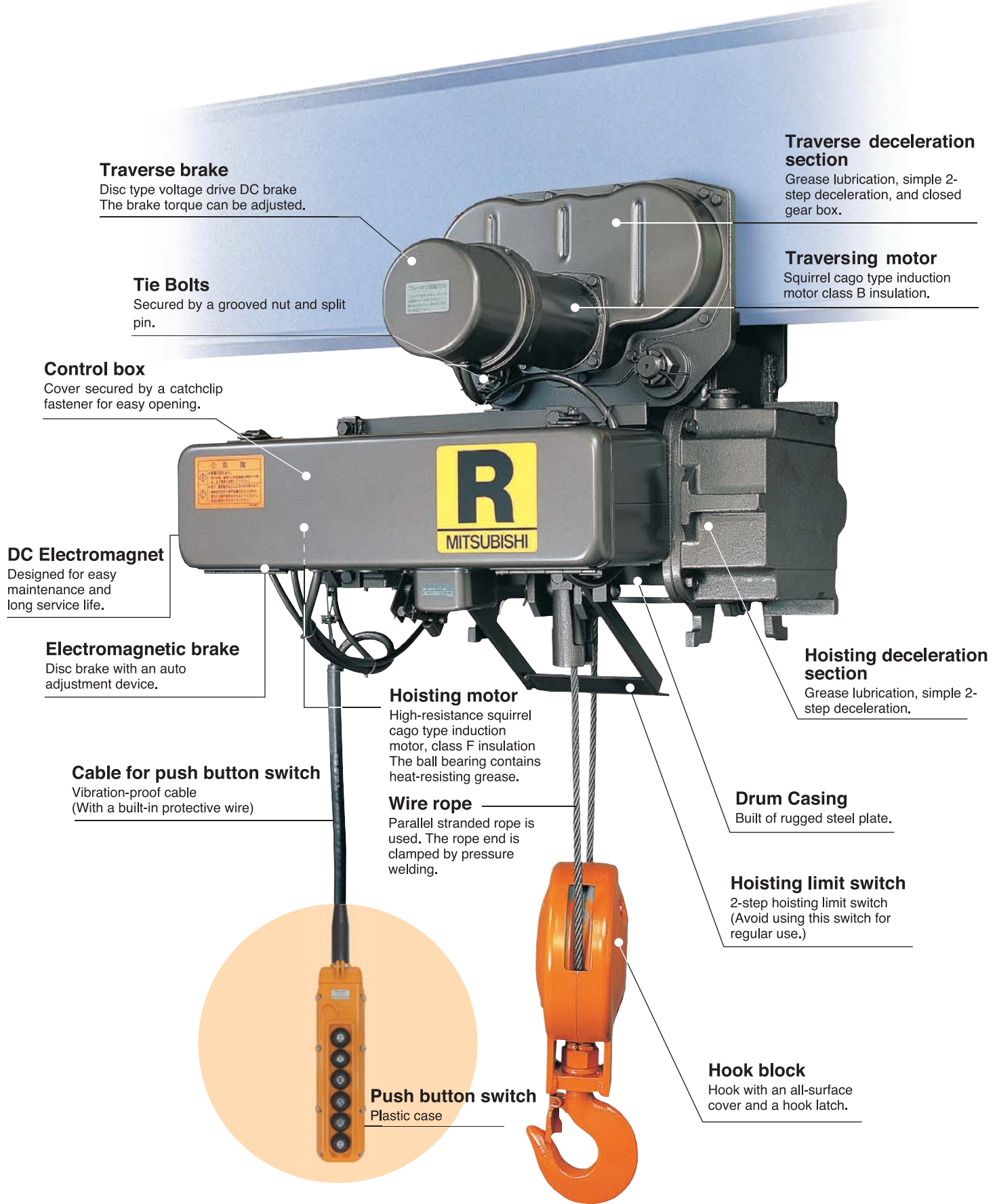
- UR Series are not possible to use for the lift.
- When the winding creep is done, it is not possible to operate smoothly by the traversing resistance. Please contact us.
- We recommend the installation of the noise filter because it might mis-operate in the point where a lot of power supply noises exist.
- Please contact us when you use the product in a lot of places such as the causticity gas and dust that are.
- Speed range of lifting and lowering in low speed is $\pm 40\%$ of the display value in the ratings load. The speed difference between much load and no load grows at the time of a low speed operating, too.

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)		Wire rope			Hoisting						Traversing																	
													Mono-rail・Low hearoom						Double-rail											
				Monorail type	Double rail type Low head type	Rope specification	Speed m/s (m/min)		Motor				Speed m/s (m/min)		Motor				Speed m/s (m/min)		Motor									
									Output (kW)	Rated Current (A)	Poles	Output (kW)			Rated Current (A)	Poles	Output (kW)	Rated Current (A)			Poles									
50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz									
R	1	6	12	φ ₈ ※1	φ _{6.3}	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	—	—	—	—							
	φ ₁₀			φ ₈	6×Fi(29) B class JIS-G3525	0.1 (6)	0.12 (7.2)	2.2	2.6	13.1	13.2	4								0.5	0.6	3.2	3.1	—	—	—	—			
	φ _{12.5}			φ ₉				3	3.6	19	19.4													0.35 (21)	0.417 (25)	0.5	0.6	3.2	3.1	4
	φ _{12.5}			φ ₉				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 available)

●Operating method…Push button switch operations.

	1/2~3t
Suspended type	2 Points
Frame mounted type	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)

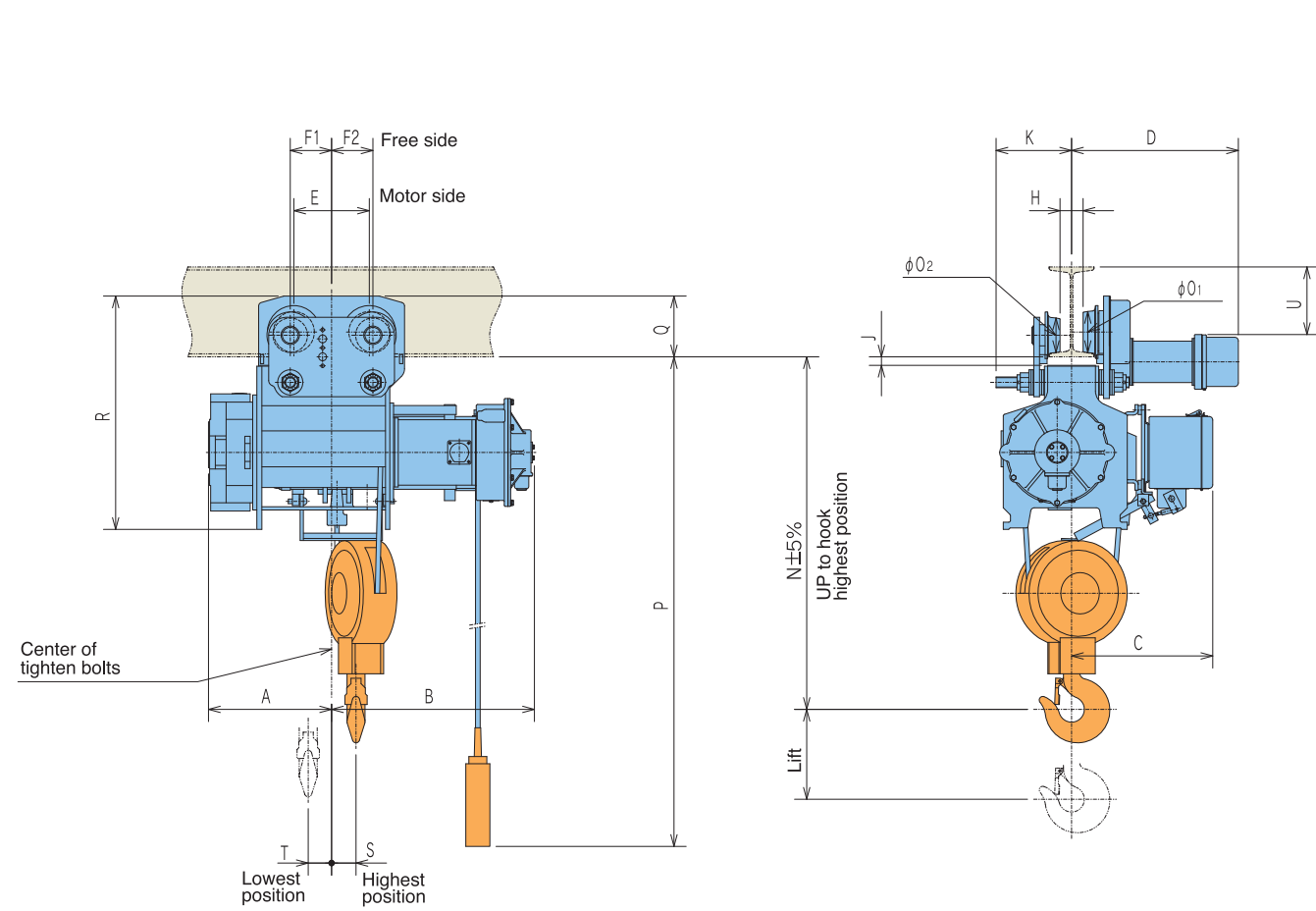
Note: These hoists cannot be used for lift (elevator for passengers.)

Monorail Type

UR•R

(1t·2t·2.8(3)t)

※UR type…Contact us for 400V class outline



Model		UR-1-LMH3 UR-1-LMS3 R-1-LM3					UR-1-HMH3 UR-1-HMS3 R-1-HM3					UR-2-LMH3 UR-2-LMS3 R-2-LM3					UR-2-HMH3 UR-2-HMS3 R-2-HM3					UR-2.8(3)-LMH2 UR-2.8(3)-LMS2 R-2.8(3)-LM2					UR-2.8(3)-HMH2 UR-2.8(3)-HMS2 R-2.8(3)-HM2				
Cap.(t)		1					2					2					2.8					2.8					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					368					393					393					610				
	E	200					210					210					210					210					610				
	F1	105					170					115					205					115					205				
	F2	120					170					115					165					115					165				
	K	182					210					210					210					210					610				
	N	730					840					840					980					980					610				
	O ₁ /O ₂	80/72					114/96					114/96					114/96					114/96					610				
	P	6000					12000					6000					12000					6000					12000				
	R	535					585					585					649					649					610				
	S	76					117					73					108					68					115				
	T	49					132					47					130					65					150				
Min.rad.curvature(m)		1.8 (3.0) / [4.5]					3.0 / [7.5]					2.5 / [6]					3.5 / [8.5]					2.5 / [6]					3.5 / [8.5]				
Weight(kg)		150					170					230					260					320					360				
Hook block weight(kg)		7.5					15					15					27					27					27				
I-Beam related dimensions		D	H	J	Q	U	D	H	J	Q	U	D	H	J	Q	U	D	H	J	Q	U	D	H	J	Q	U	D	H	J	Q	U
Applicable I-Beam(mm)	150×75×5.5	360	24	33	140	105	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200×100×7	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	465	64	24	169	188	465	64	24	169	188	465	64	24	169	188
	300×150×11.5						478	90	19	179	228	478	90	14	179	228	478	90	14	179	228	478	90	14	179	228	478	90	14	179	228
	450×175×13																														
	600×190×13																														

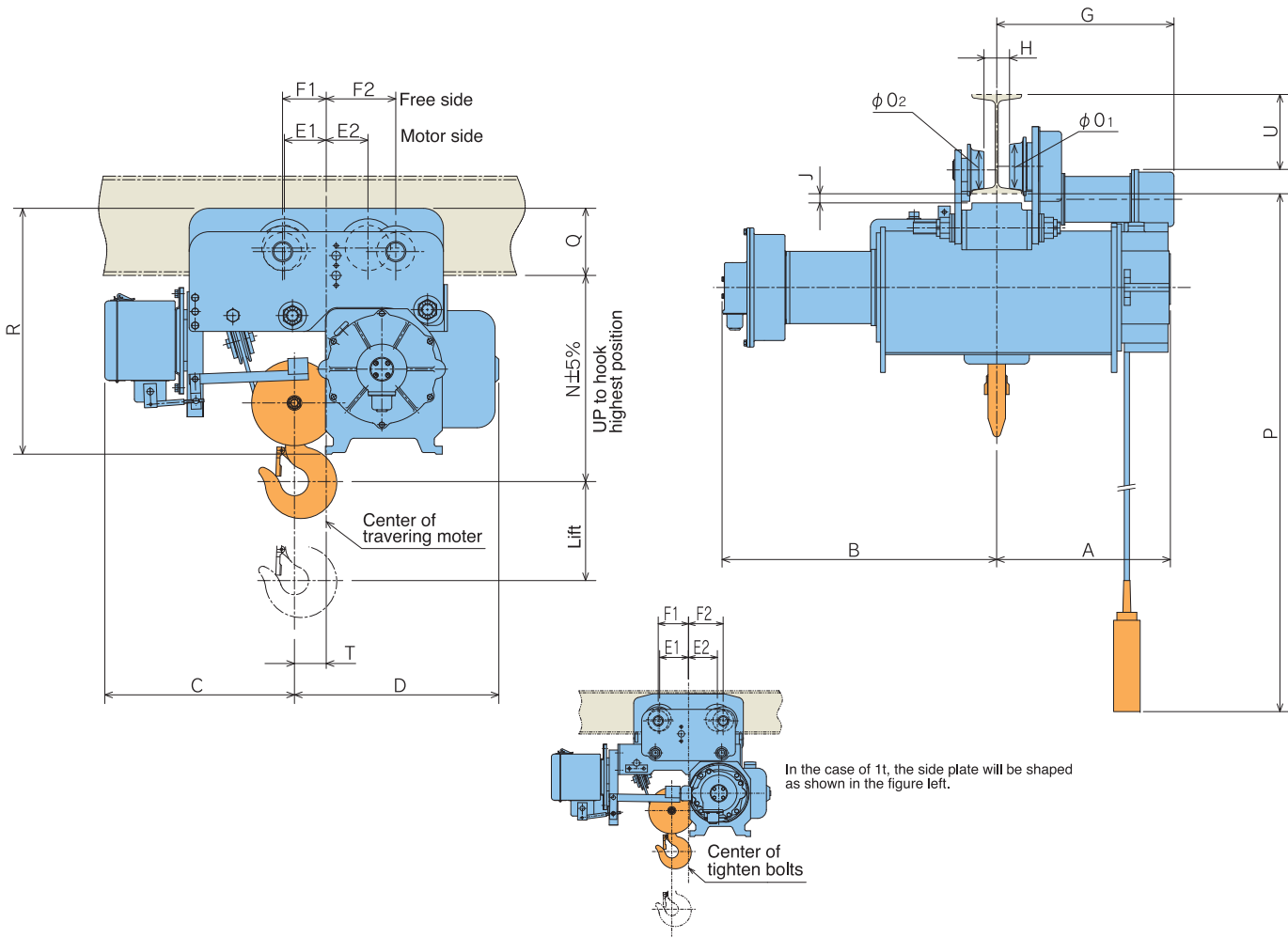
Note.1.Min.rad.cur()denotes the case of using below I beam. 2.Applicable I-Beam = Standard 3.Min.rad.cur [] UR Type with traversing inverter
R-1, UR-1…150×75×5.5 4. =required special attachment

Low-head Type

UR•R

(1t·2t·2.8(3)t)

※UR type…Contact us for 400V class outline



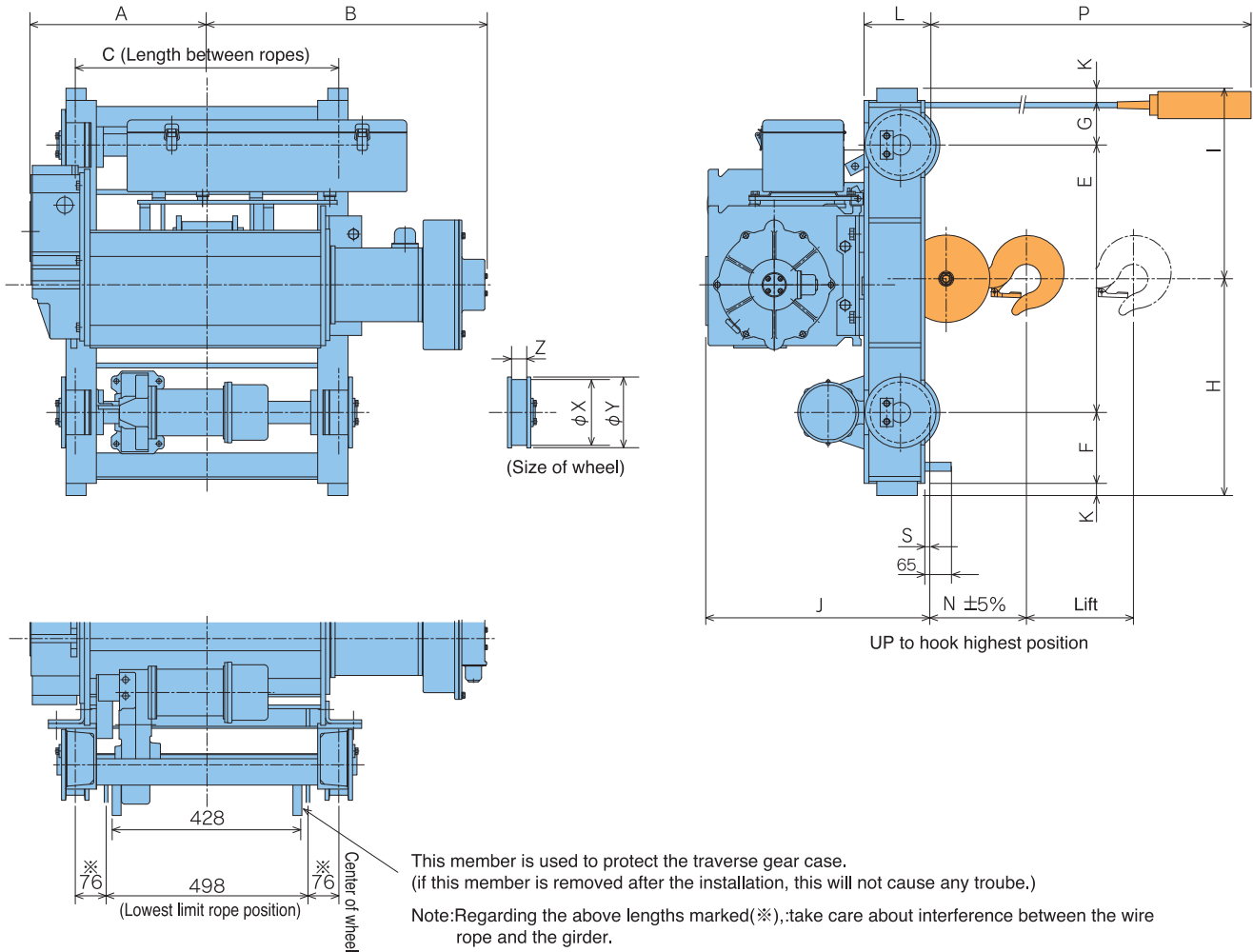
Model		UR-1-LDH3 UR-1-LDS3 R-1-LD3					UR-2-LDH3 UR-2-LDS3 R-2-LD3					UR-2.8(3)-LDH2 UR-2.8(3)-LDS2 R-2.8(3)-LD2				
Cap.(t)		1					2					2.8				
Lift(m)		6					6					6				
Dimensions(mm)	A	426					415					437				
	B	583					656					695				
	C	418					465					478				
	D	343					455					515				
	E1	100					105					105				
	E2	100					105					105				
	F1	105					110					110				
	F2	120					175					175				
	N	405					485					515				
	O ₁ /O ₂	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) / [5]					3.0/[7.5]					3.0/[7.5]				
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)	150×75×5.5	360	24	19	140	105	—	—	—	—	—	—	—	—	—	—
	200×100×7	372	48	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		—														

Double rail Type

UR•R

(2.8(3)t)

※UR type…Contact us for
400V class outline



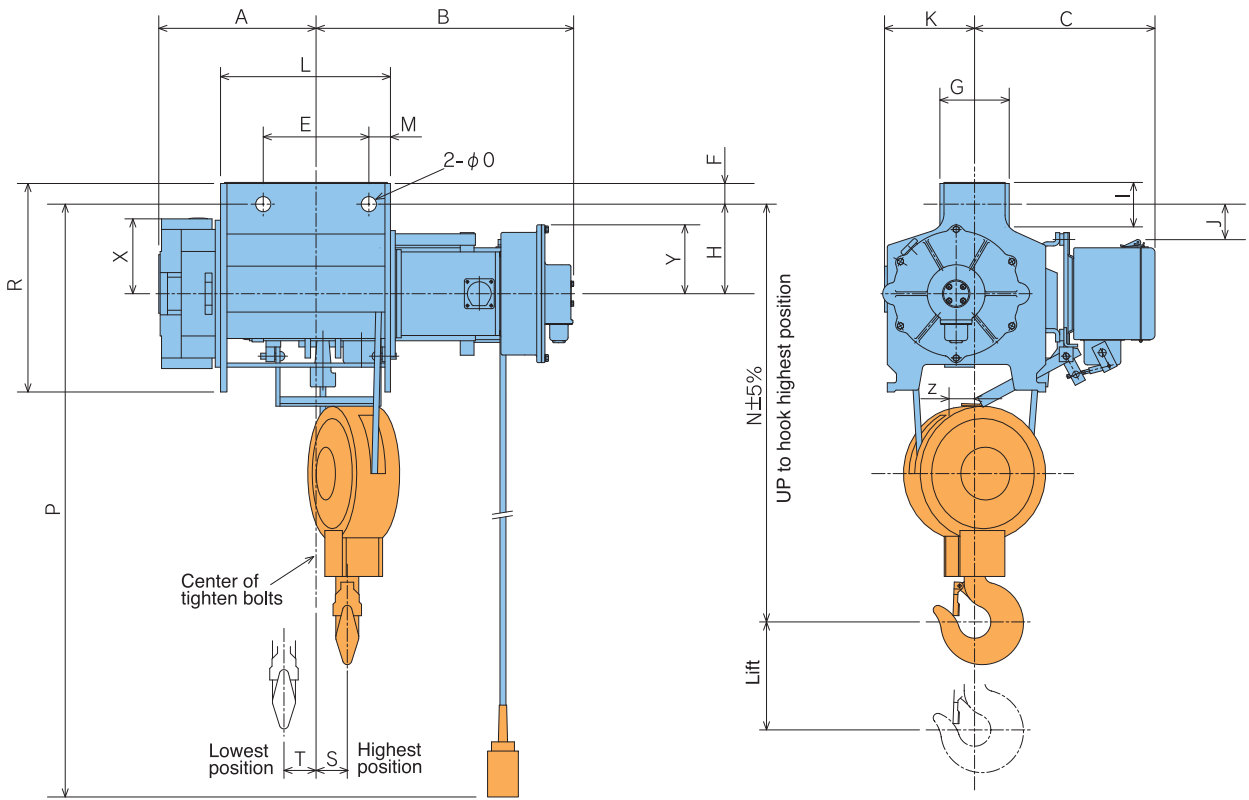
Model		UR-2.8(3)-LRH2A UR-2.8(3)-LRS2A R-2.8(3)-LR2A		
Cap.(t)		2.8		
Lift(m)		6		
Dimensions(mm)	A	437	K	30
	B	695	L	165
	C	650	N	233
	E	660	P	6000
	F	175	S	15
	G	110	T	15
	H	535	X	150
	I	470	Y	175
	J	556	Z	45
Weight(kg)		435		
Hook block weight(kg)		25		
Applicable Rail		12kg rails or 38mm steel square bars		

Suspended Type

UR•R

(1t·2t·2.8(3)t)

※UR type…Contact us for
400V class outline

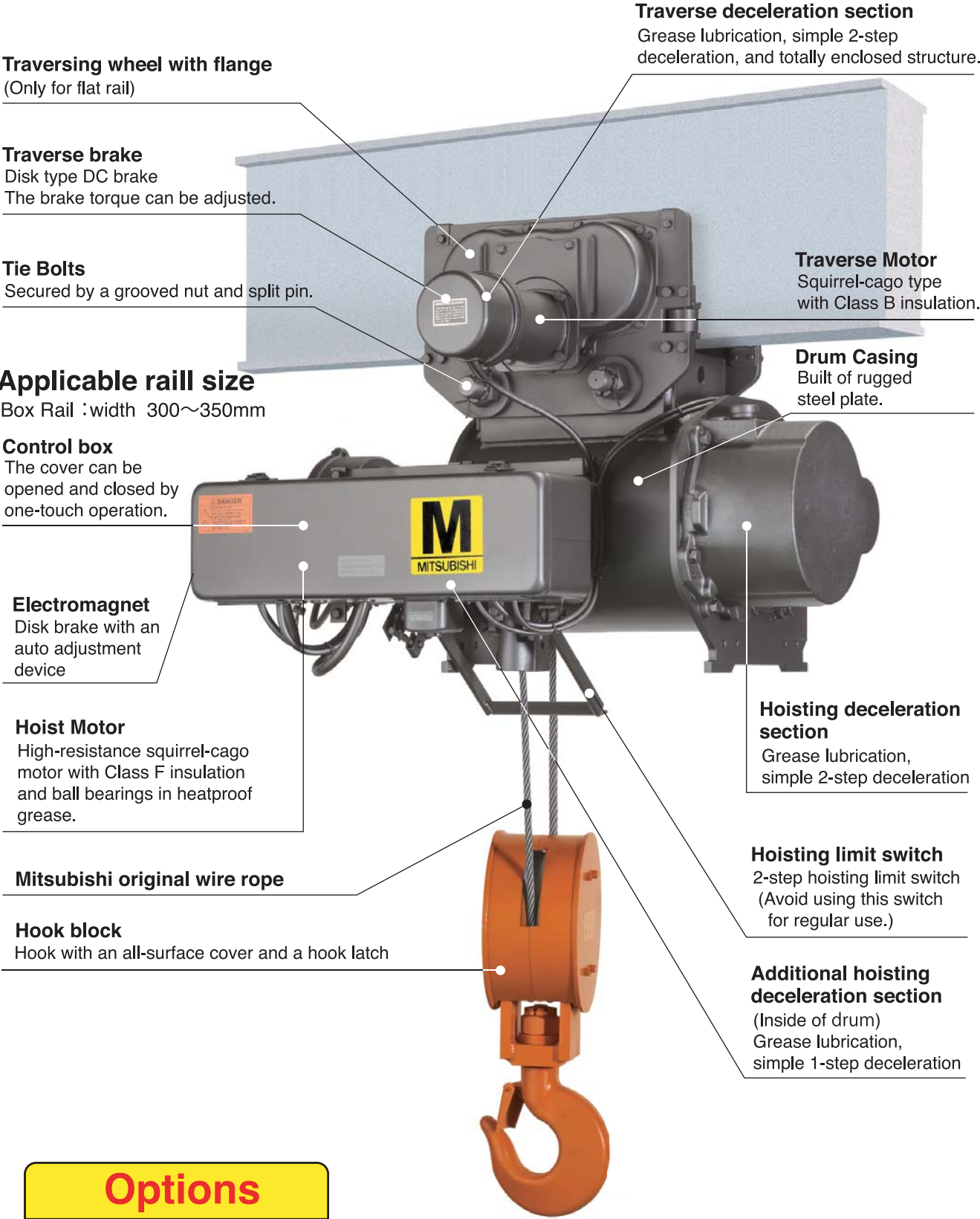


Remarks:Clamping bolts are available separately.

Model		UR-1-LKH3 R-1-LK3	UR-1-HKH3 R-1-HK3	UR-2-LKH3 R-2-LK3	UR-2-HKH3 R-2-HK3	UR-2.8(3)-LKH2 R-2.8(3)-LK2	UR-2.8(3)-HKH2 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	160		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



- Options
- Over loading alarm

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・Low hearoom				Double-rail			
				Monorail type	Double rail type Low head type	Rope specification	Speed m/s (m/min)	Motor			Speed m/s (m/min)	Motor			Speed m/s (m/min)	Motor		
		Output (kW)	Rated Current (A)					Poles	Output (kW)	Rated Current (A)		Poles	Output (kW)	Rated Current (A)		Poles		
		Low	High	2 falls(2/1)	4 falls(4/1)		50 Hz	50 Hz	50 Hz		50 Hz	50 Hz	50 Hz		50 Hz	50 Hz		
M	5	※1	12	12.5	—	Mitsubishi original wire rope ※2	5	5.0	4	21	0.5	4	21	0.5	4	0.75 × 2	4	
	10			—	12.5		2.5	5.0		12	0.85		21					

※ 1 Low lift models are not available
※ 2 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.

Suspended type Frame mounted type	5t・10t
	4 Points
Motor operated traversing hoist	ON OFF U D
	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)

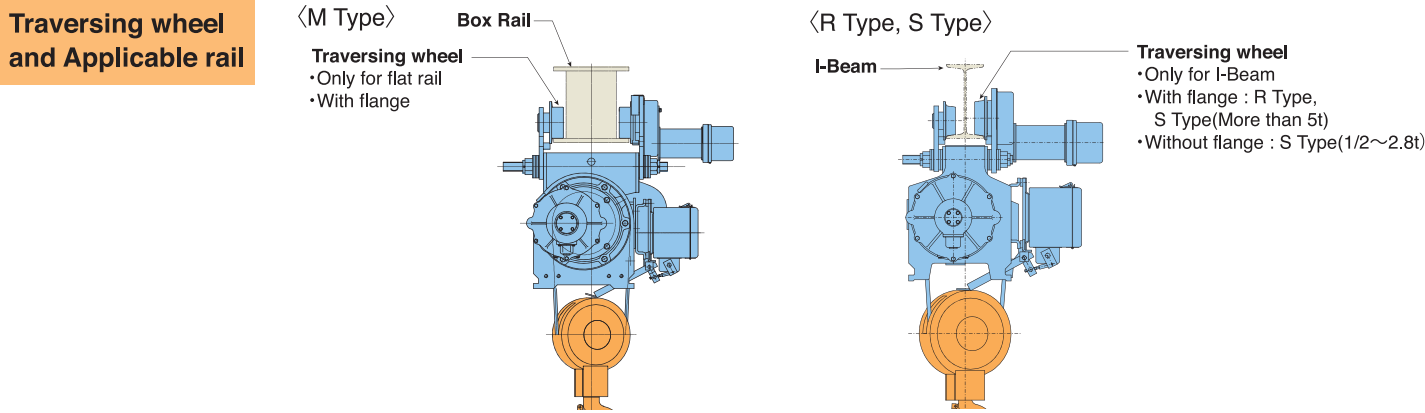
●Applicable standard … JIS C 9620 electric hoist/crane structure standard, FEM 9.683

●Hoist class(ISO 4301-1) … M5

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

●Ambient air temperature… -10℃~40℃ (Non condensing)

●Ambient air humidity…90% or less (Non condensing)

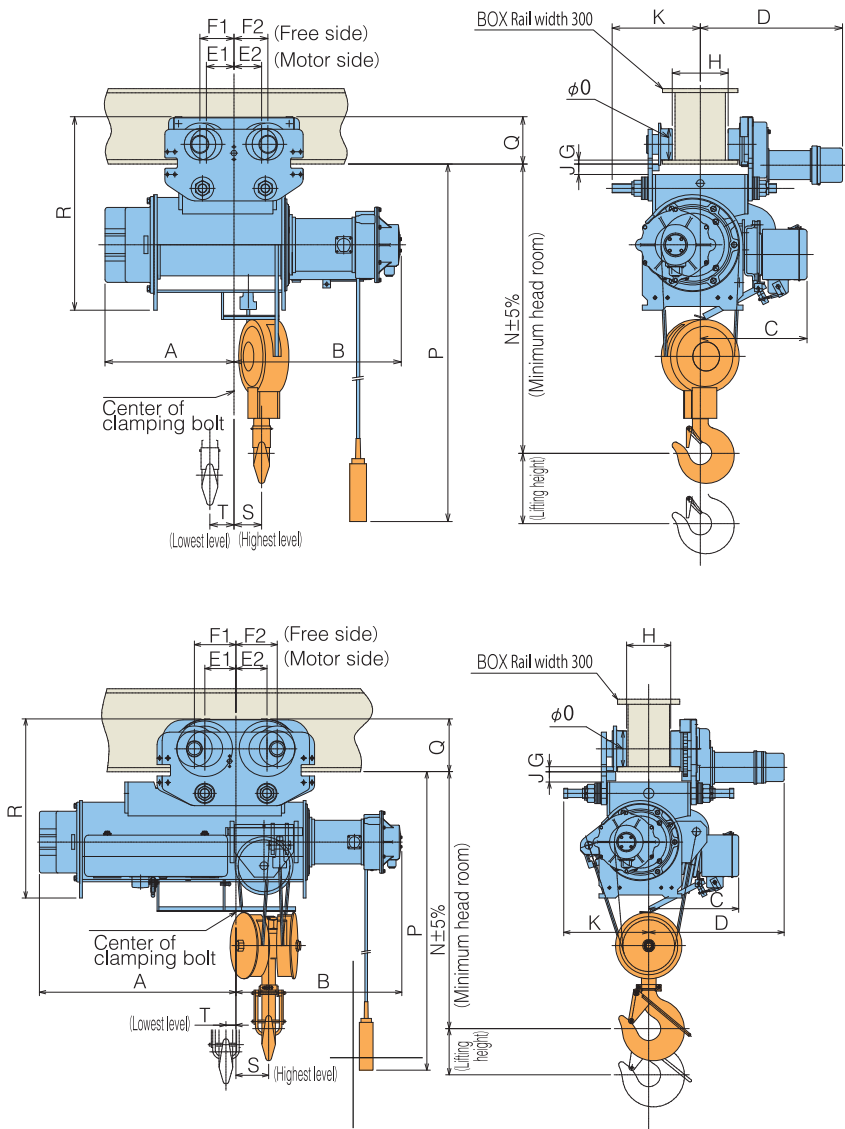


Monorail Type

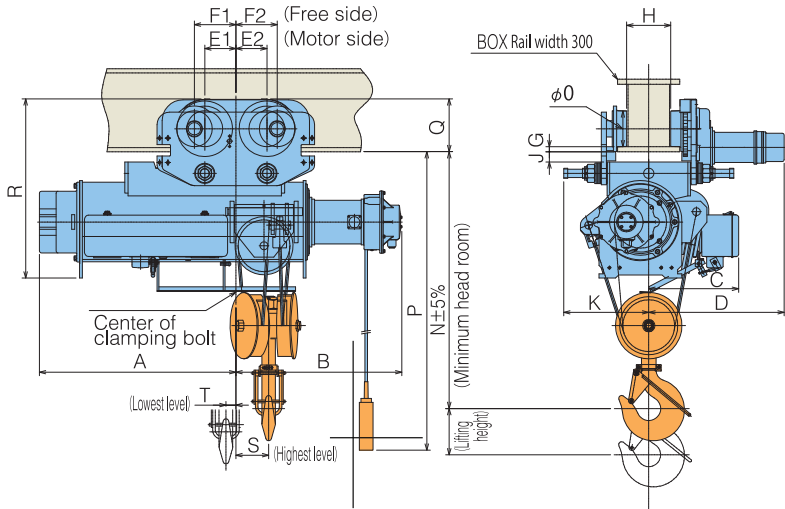
M

(5t·10t)

M-5-HM



M-10-HM

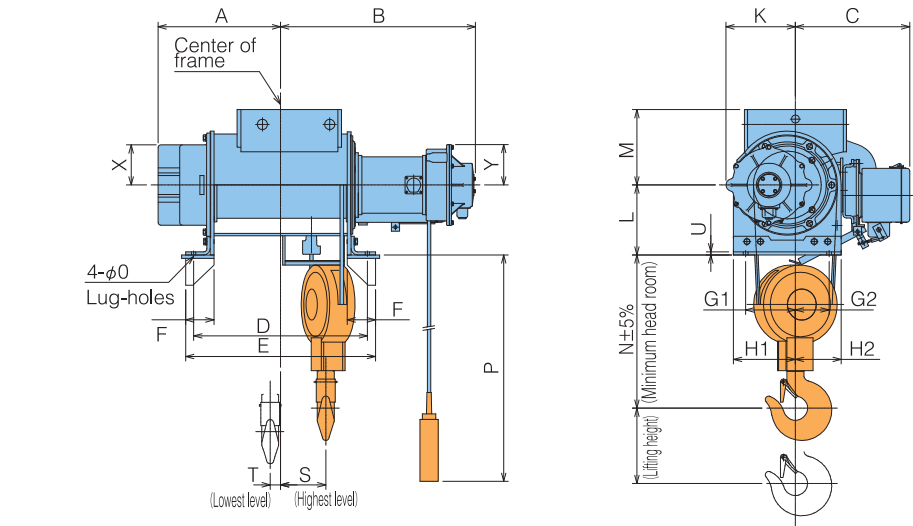


Frame mounted Type

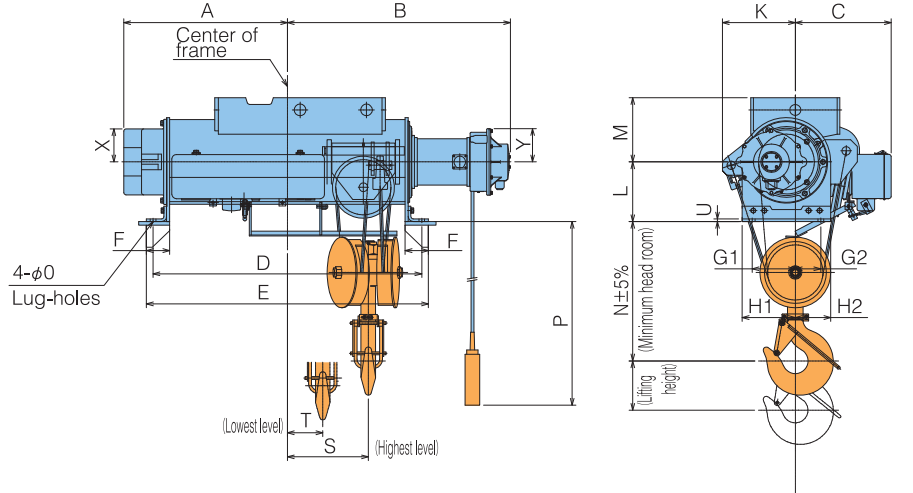
M

(5t·10t)

M-5-HS



M-10-HS



Model	M-5-HM	M-10-HM
Cap.(t)	5	10
Lift(m)	12	12
Dimensions(mm)	A	515
	B	665
	C	425
	D	566(591)
	E1	110
	E2	110
	F1	135
	F2	135
	G	※1 16
	H	222(272)
	J	※1 31
	K	350
	N	1145
	O	125
	P	12000
	Q	189
	R	770
	S	110
	T	96
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)

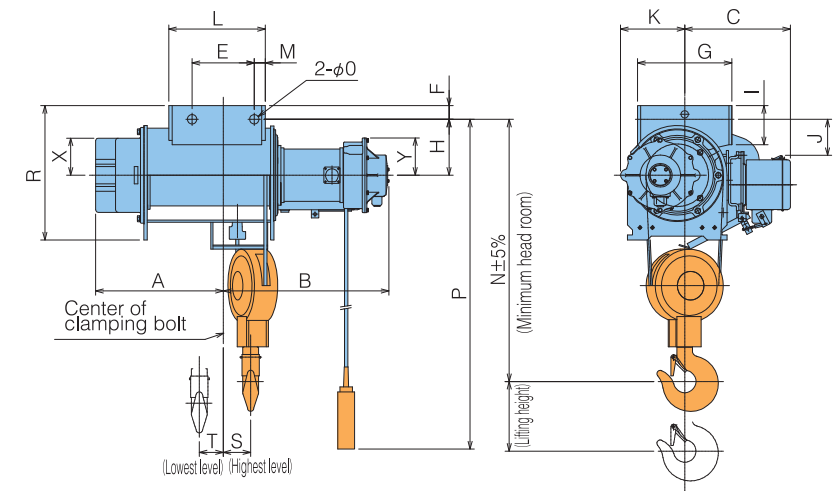
Model	M-5-HS	M-10-HS
Cap.(t)	5	10
Lift(m)	12	12
Dimensions(mm)	A	455
	B	724
	C	425
	D	645
	E	705
	F	105
	G1	185
	G2	125
	H1	230
	H2	170
	K	258
	L	260
	M	280
	N	570
	O	18
	P	12000
	S	168
	T	39
	X	150
	Y	150
Weight(kg)	440	645
Hook block weight(kg)	50	85

Suspended mounted Type

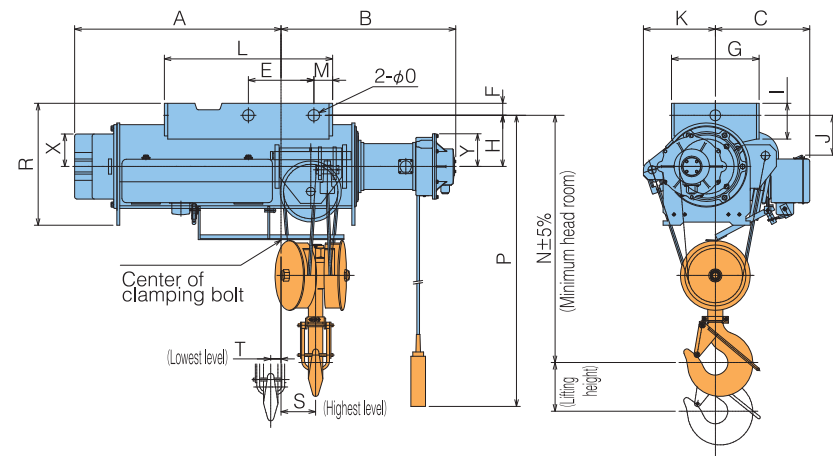
M

(5t・10t)

M-5-HK



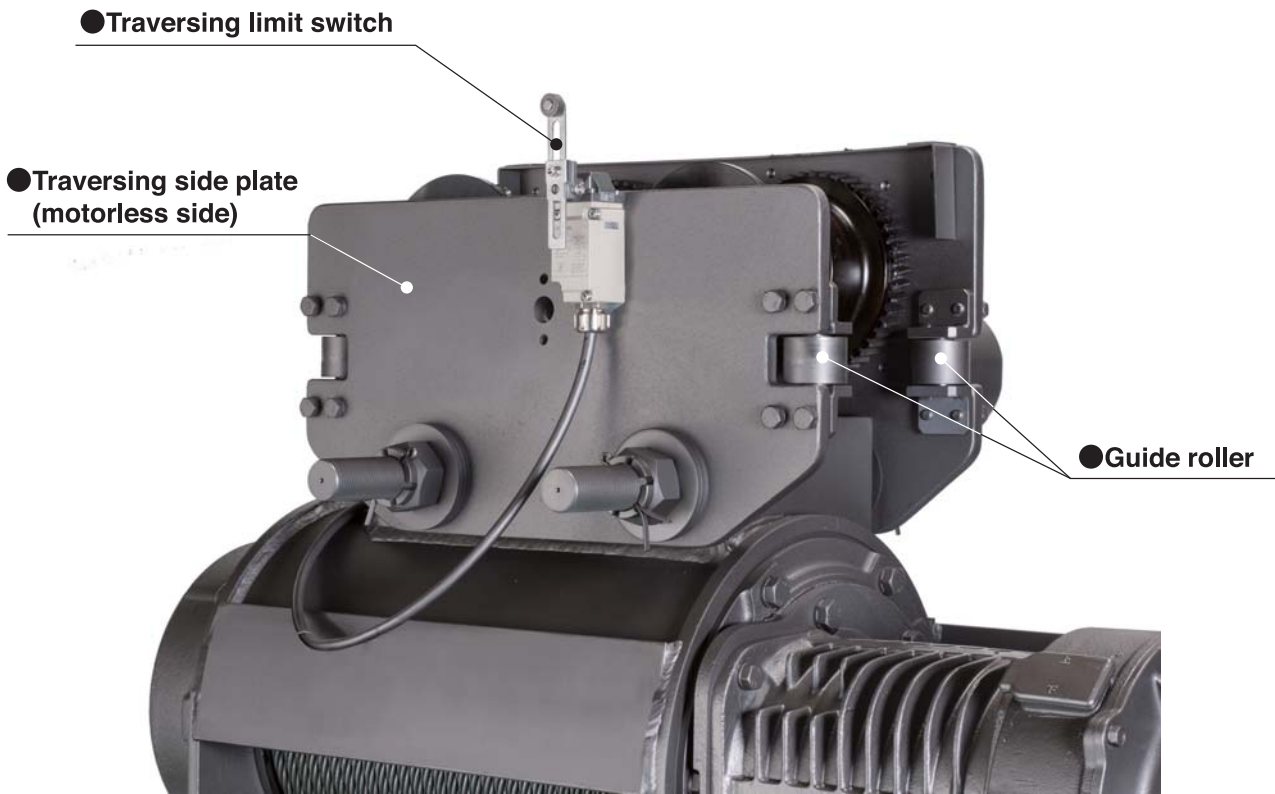
M-10-HK



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
	D	250	300
	E	55	55
	F	379	402
	G1	225	235
	G2	157	164
	H1	145	183
	H2	258	330
	K	388	772
	L	44	86
	M	1055	1135
	N	38	53
	O	12000	12000
	P	540	560
	S	110	158
	T	96	48
	X	150	150
	Y	150	150
Weight(kg)		440	645
Hook block weight(kg)		50	85

Options

(Photo : M-5-HM)



Option	Summary
Guide roller	Bolt installation is available (M Type has Lug holes)
Correspondence to a wide rail	Attachment : 350mm~400mm
Over loading alarm(OLA)	Standard S Type's alarm is available
Traversing limit switch	Bolt installation is available (M Type does not have Lug hole)

TIB 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.

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. Enhanced safety 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 (TIB-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 Mitsubishi models		
		Crane saddle		Gear motor for crane saddle
		ST, SP series	MT, MP series	
TIB-0.8(s)	5	Output of traveling motor Less than 0.4kW×2		SGM-0.4A-LK3×2 SGM-0.4A-HK3×2
TIB-2.2(s)	11	Output of traveling motor Less than 0.75kW×2		SGM-0.75A-LK3×2 SGM-0.75A-HK3×2
TIB-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
TIB-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		
TIB-15	61	Out of general purpose motor Less than 7.5kW×2		
TIB-22	90	Out of general purpose motor Less than 11kW×2		
TIB-30	115	Out of general purpose motor Less than 15kW×2		

※ 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.

※ Please contact us for dimensional details.

Standard specifications		
Power supply		3-phase 200V 50/60Hz, 220V 60Hz
Control system		Inverter control
Speed ratio		The range of settable speed 1/10 ~ standard speed
Operating method		Push button
Operating functions		Inching & plugging operations are possible
Percentage of duty cycle and number of starts per Hr (Allowable frequency of usage)		ED percent 25% ED
		Number of starts per hour 250S/Hr
Service condition	Air temperature	-10°C to 40°C (No congelation)
	Relative humidity	Ambient humidity 90% or less (Non condensation)
	Atmosphere	Non corrosive gas environment, non considerable dust environment
Enclosure		Equivalent to IP-44 except regenerative resistor: Symplified outdoor type
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 information.

※ Not equipped with a noise filter or an AC reactor. Install one as required.

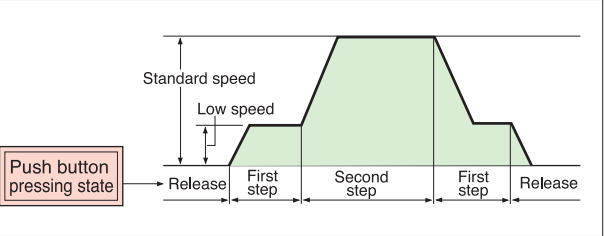
※ The TIB-H (HS) 400V series is a special model. Please contact us for further information.

※ To use the product outdoors, install a rain-proof cover or prepare an equipment shelter.

※ Settings need to be changed according to acceleration/deceleration time calculated using the mass, rated load and travelling speed of the crane.



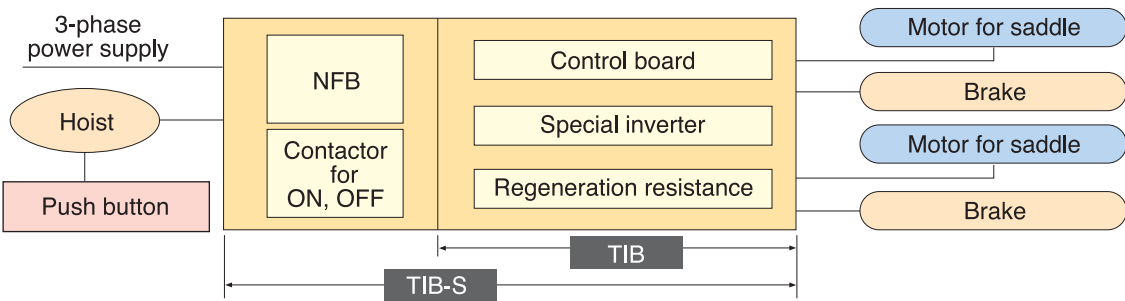
Push button operation and operation pattern



TIB-S TYPE

Type	NFB for main power	Contactor for main power	Space for Light, Buzzer and contactor
TIB-0.8S	50A	S-N35	Screw holes are provided for a couple of S-N11 or S-N21.
TIB-2.2S	60A	S-N50	
TIB-4.4S	125A	S-N80	
TIB-7.4S	175A	S-N125	

Function diagram

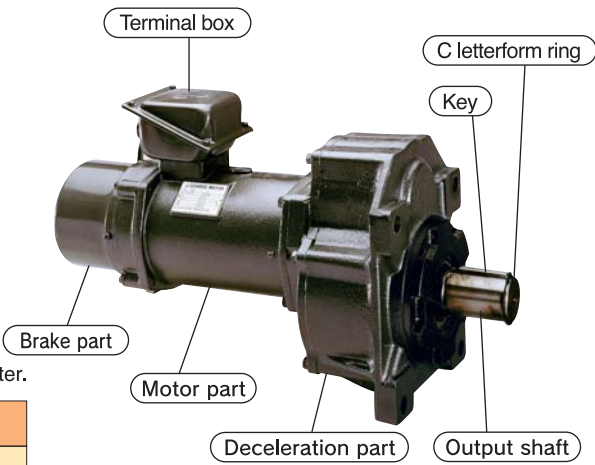


Geared motor for crane saddle

SGM-A

Standard specifications

Power supply : 3-phase 200V 50/60Hz(220V 60Hz is available.)
With brake
Enclosure : indoor type
Ambient air temperature : -10℃ to 40℃(Non congeration)
Ambient air humidity : 90% or less (Non condensing)
Color coating : Metallic gray
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.



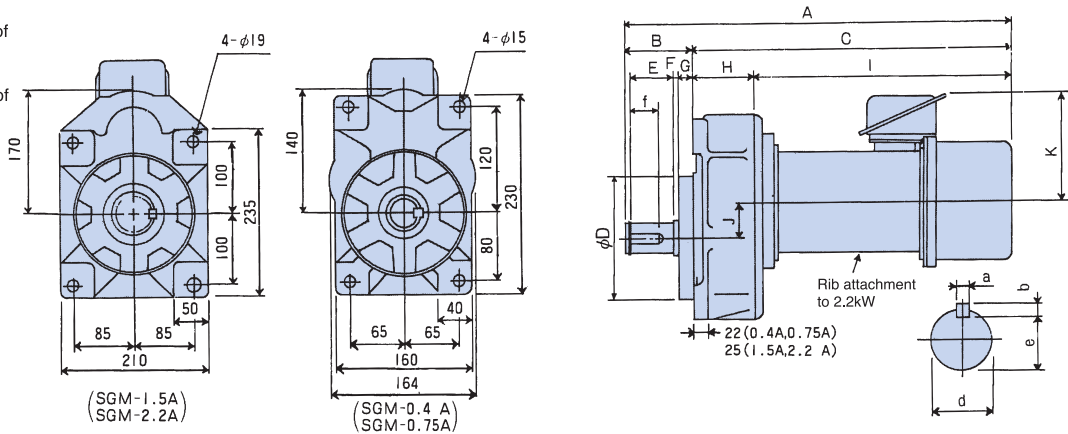
Line up and ratings

		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 poles	Current(A)50/60Hz	Permissible start frequency	Inertia Moment of motor(kg/m ²)	
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)

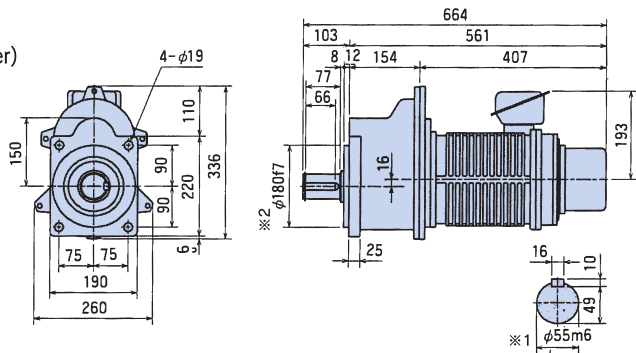
note
※1.Allowance of fixing match of ϕ d is m6→Recommended allowance of object is F7
2.Allowance of fixing match of ϕ D is f7→Recommended allowance of object is F7



type	Output (kW)	Poles	Key size (mm)	Dimensions																Weight (kg)
				a	b	d※1	e	f	A	B	C	D※2	E	F	G	H	I	J	K	
SGM-0.4A-LK3, HK3	0.4	4	10×8	10	8	55	55.5	80	466	75	391	140	50	5	15	70	321	39	129	28
SGM-0.75A-LK3, HK3	0.75		—36	10	8	55	55.5	80	486	75	411	140	50	5	15	70	341	39	135	34
SGM-1.5A-LK3, HK3	1.5		14×9	14	9	50	44.5	56	615.5	100	515.5	160	70	5	20	107.5	408	46	163	63
SGM-2.2A-LK2, HK2	2.2		—56	14	9	50	44.5	56	609	100	509	160	70	5	20	107.5	401.5	46	172	67

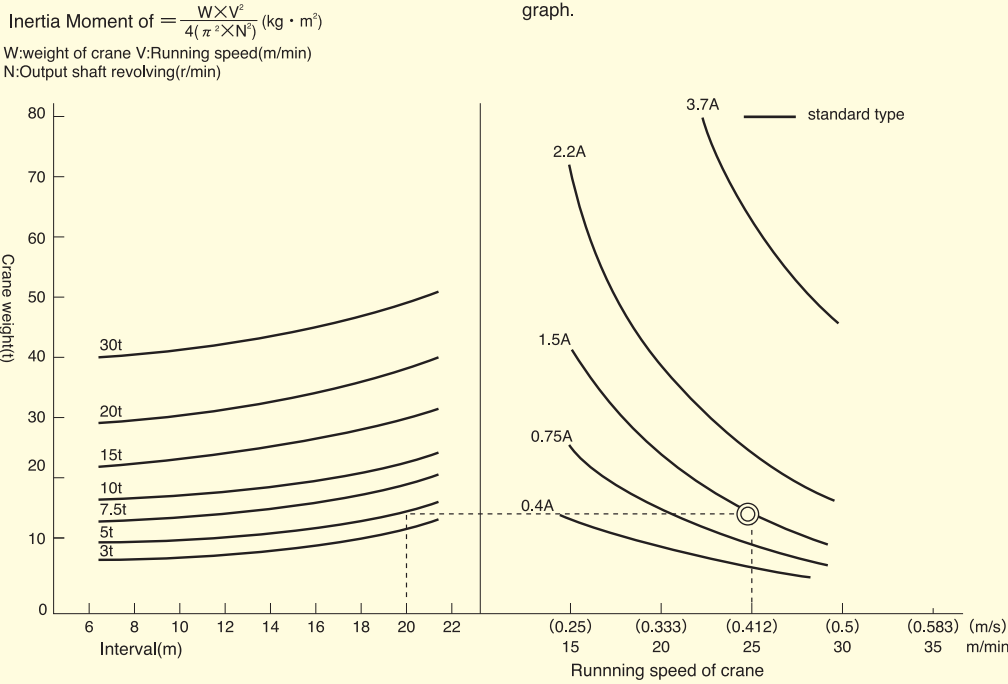
3.7kW Standard Low speed type (Weight:95kg)

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)



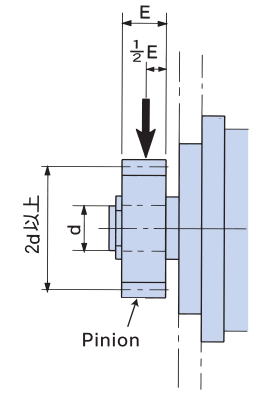
Model selection list

- Setting of crane saddle : box type, Steel thickness 6mm
- Inertia Moment of permissible load :
 - Standard type Ten times Inertia Moment of motor
 - With silicon coupling Seven times Inertia Moment of motor
- Do not exceed 25m/min at the running speed when using standard type without start accumulator such as inverters.
- Selection example
SGM-1.5A type(standard type) corresponds for 5t, 20m interval, 25m/min running speed, and to ◎sign in a lower graph.



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

Adjustment with crane saddle



- Diameter of pinion...
Diameter of pinion pitch ≥ 2 × Diameter of output shaft
- Point of gaining weight...
Center of width of pinion
- 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

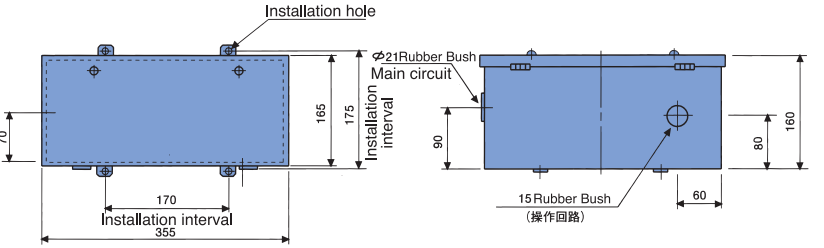
Over load detection device

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
	60Hz	1.2	2.9	3.5	4.9	7.5	10	12	20	20
Wight	6.5kg									