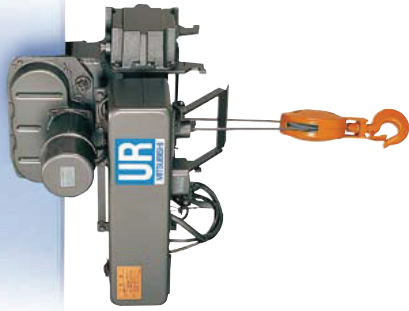


UR Type Series

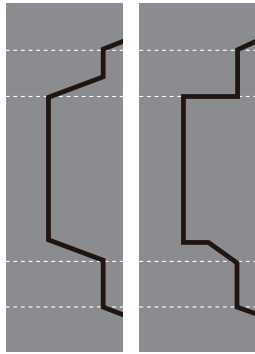
Inverter hoist 1t~2.8(3)t

400V class debut

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



Moving pattern by push button operation



States of button of push button
Opening → first step → Opening
second step

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.

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.

Improvement of maintenance

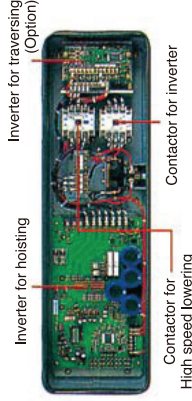
Effect of conservation of energy

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.

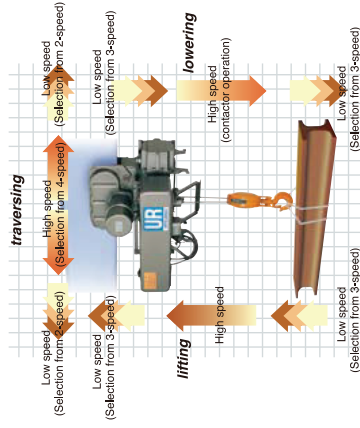
Excellent cost performance

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

The inside of Control box



Operation image of inverter hoist



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)	Conventional creep type 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, 10/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
Respons 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

*A1: Lifting, it stops as the cushion working, and A1: lowering, it stops by sudden deceleration.

Type	Capacity(t)	Lift(m)	Wire rope			Hoisting			Traversing							
			Monorail type	Low head type	Double rail type	Hoisting speed (m/min)	Output (kW)	Rated Current(A)	Poles	Hoisting speed (m/min)	Output (kW)	Rated Current (A)	Poles			
UR	1	6	2 falls	4 falls	4 falls	High speed 0.0133 (0.8)	1.4	10	4	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	4
	2		φ 8 φ 6.3 ※1	φ 8	φ 8	0.012 (0.72)	2.6	16	4	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	4
	2.8 (3)		φ 12.5 φ 9 φ 9	φ 9	φ 9	0.0417 (2.5)	3.6 (3.8)	23	4	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	4

※1: Rope specification of 1t, 2falls is 6 × F1(25)

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.

- 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
Frame mounted type	2 Points U D
Motor operated traversing hoist	6 Points U D E W S N

Standard specifications

- ※ 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: 10C ~ 40C (Non condensing)
- 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 (Equivalent to IP44) (Rainproof cover is required, when it is used in the open air.)
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.

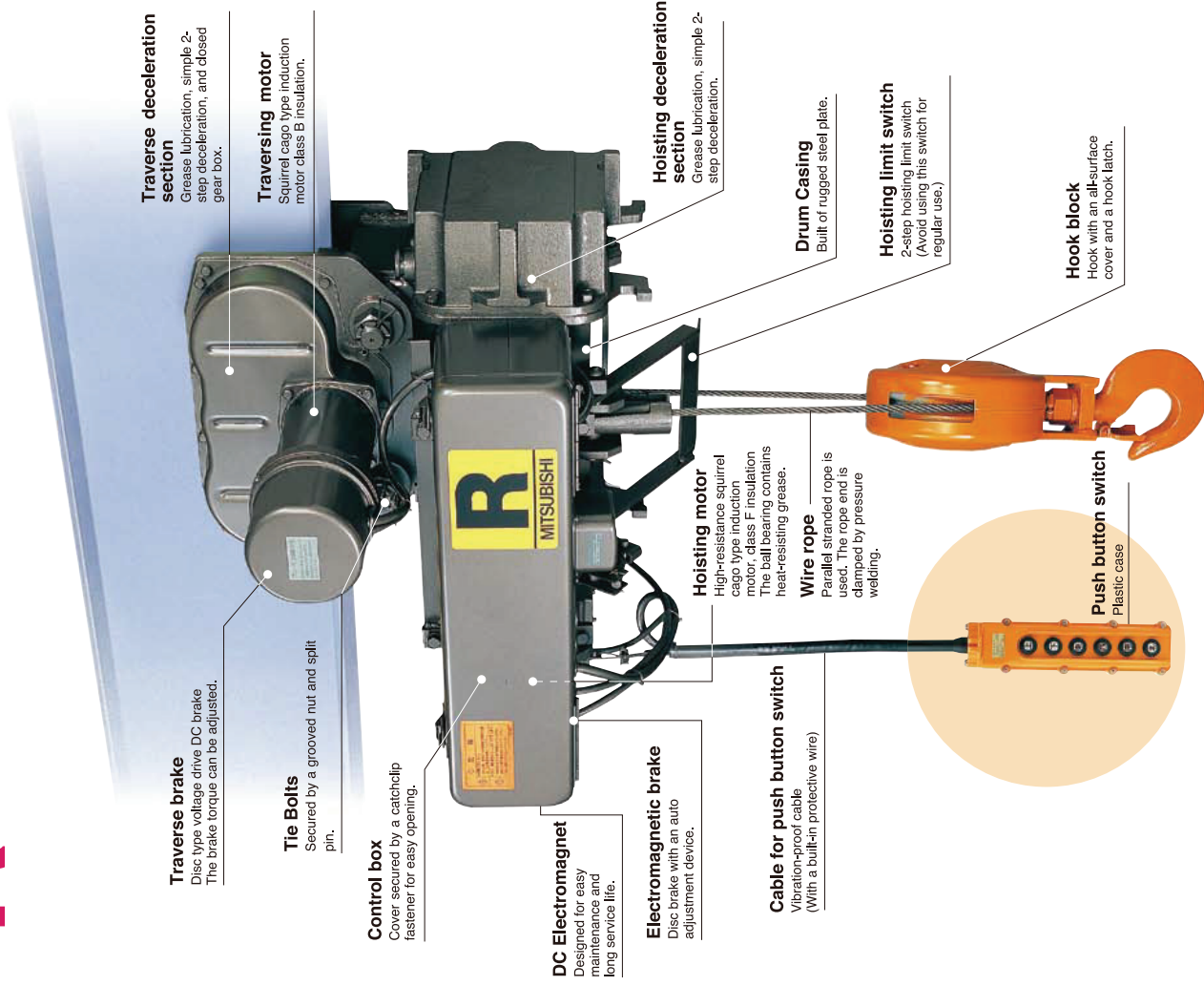
caution

- 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 resistances. 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 ±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				Hoisting				Traversing							
Type	Capacity(t)	Lift(m)		Wire rope		Motor		Mono-rail·Low hearoom		Double-rail					
		High	Low	Monorail type	Double rail type Low head type	Rope specification	Speed m/s (m/min)	Output (kW)	Rated Current (A)	Pole(s)	Speed m/s (m/min)	Output (kW)	Rated Current (A)	Pole(s)	
R	1	High	Low	2 falls	4 falls	6×W(19) B class JIS-G3525	50 60 Hz	1.2 1.4 7.4 7.9	0.22 0.26 1.6 1.5	4	50 60 Hz	50 60 50 60 Hz	50 60 Hz	50 60 Hz	4
		8	6.3	φ 8	φ 6.3	φ 8	0.12 0.12 (6) (7.2)	2.2 2.6 13.1 13.2	0.35 0.47 (21) (25)	4	0.35 0.47 (21) (25)	0.5 0.6 3.2 3.1	0.5 0.6 3.2 3.1	4	0.35 0.47 (21) (25)
R	2	High	Low	2 falls	4 falls	6×F(29) B class JIS-G3525	50 60 Hz	1.2 1.4 7.4 7.9	0.22 0.26 1.6 1.5	4	50 60 Hz	50 60 50 60 Hz	50 60 Hz	50 60 Hz	4
		8	6.3	φ 8	φ 6.3	φ 8	0.12 0.12 (6) (7.2)	2.2 2.6 13.1 13.2	0.35 0.47 (21) (25)	4	0.35 0.47 (21) (25)	0.5 0.6 3.2 3.1	0.5 0.6 3.2 3.1	4	0.35 0.47 (21) (25)
R	2.8	High	Low	2 falls	4 falls	6×F(29) B class JIS-G3525	50 60 Hz	1.2 1.4 7.4 7.9	0.22 0.26 1.6 1.5	4	50 60 Hz	50 60 50 60 Hz	50 60 Hz	50 60 Hz	4
		8	6.3	φ 8	φ 6.3	φ 8	0.12 0.12 (6) (7.2)	2.2 2.6 13.1 13.2	0.35 0.47 (21) (25)	4	0.35 0.47 (21) (25)	0.5 0.6 3.2 3.1	0.5 0.6 3.2 3.1	4	0.35 0.47 (21) (25)
R	3	High	Low	2 falls	4 falls	6×F(29) B class JIS-G3525	50 60 Hz	1.2 1.4 7.4 7.9	0.22 0.26 1.6 1.5	4	50 60 Hz	50 60 50 60 Hz	50 60 Hz	50 60 Hz	4
		8	6.3	φ 8	φ 6.3	φ 8	0.12 0.12 (6) (7.2)	2.2 2.6 13.1 13.2	0.35 0.47 (21) (25)	4	0.35 0.47 (21) (25)	0.5 0.6 3.2 3.1	0.5 0.6 3.2 3.1	4	0.35 0.47 (21) (25)

*1 Rope specification of 1.2falls is 6×F(29)
 Note 1: High lift models (Low-head type1~2.8t, Double rail type2.8t) are not available.

Standard specifications

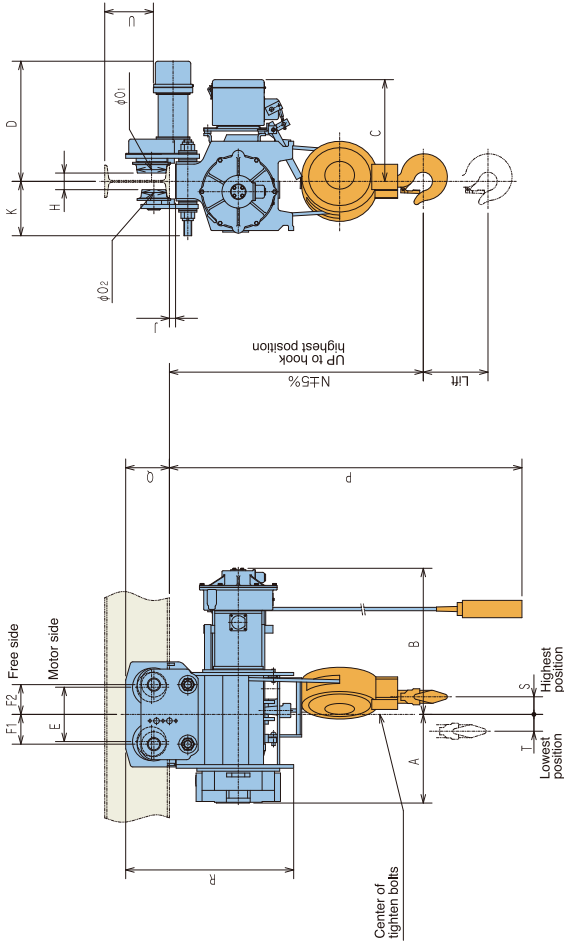
- **Power supply**...3-phase 200V 50/60Hz control 200V, 220V 60Hz control 220V (400V class is also available) ...3-Phase 400V 50/60Hz control 200V, 440V 60Hz control 220V (400V class is also available) ...3-Phase 380V 50Hz control 48V (100V and 24V are also available)
 - **Operating method**...Push button switch operations.
- | | |
|---------------------------------|-------------|
| Suspended type | 1/2~3t |
| 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. However, neither trolley nor cable is attached.
 - **Enclosure**...Simplified outdoor type(JISC 0920, Equivalent to IP44)
 - **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°C to 40°C (Non condensation)
 - **Ambient relative humidity**...90% or less (Non condensing)
- Note: These hoists cannot be used for lift (elevator for passengers.)

Monorail Type



(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-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	
	1	2	6	12	485	566	343	565	610	558
Cap.(t)	6	12	6	12	6	12	6	12	12	12
Lift(m)	283	489	284	485	343	566	343	565	610	558
Dimensions(mm)	A	468	507	566	566	566	565	565	610	610
	B	347	347	368	368	393	393	393	393	393
	C	200	210	210	210	210	210	210	210	210
	E1	105	170	115	205	115	115	115	115	205
	E2	120	170	115	165	115	115	115	115	165
	K	182	170	210	210	210	210	210	210	210
	N	730	840	840	980	980	980	980	980	980
	O ₁ /O ₂	80/72	114/96	114/96	114/96	114/96	114/96	114/96	114/96	114/96
	P	6000	12000	6000	12000	6000	12000	6000	12000	12000
	R	535	585	585	585	585	585	585	585	585
Min.rad.curvature(m)	S	76	117	108	68	68	68	68	115	115
	T	49	132	47	130	65	65	65	150	150
Weight(kg)	1.8(3.0)/(4.5)		2.5(6)		3.5/(8.5)		2.5(6)		3.5/(8.5)	
	150	170	230	260	320	360	320	360	360	360
Hook block weight(kg)	7.5		15		27		27		27	
	D	H	J	Q	U	D	H	J	Q	U
I-Beam related dimensions	360	24	33	140	105	-	-	-	-	-
	372	48	33	140	155	453	40	31	167	140
	385	74	31	142	203	465	64	29	169	188
	478	90	19	179	228	478	90	14	179	228
Applicable I-Beam(mm)	450X150X11.5 600X190X13		450X175X13 600X190X13		450X175X13 600X190X13		450X175X13 600X190X13		450X175X13 600X190X13	

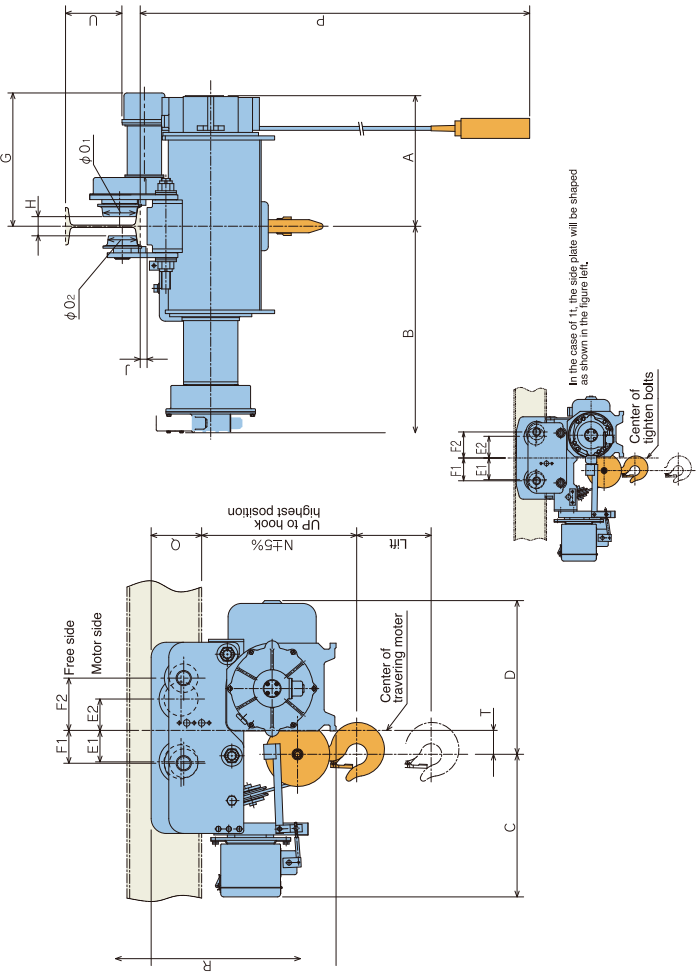
Note.1 Min.rad.cur denotes the case of using below I beam.
R-1, UR-1...150X75X5.5 4. =required special attachment

Low-head Type



(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					
	1	2	6	12	6	2.8				
Cap.(t)	6	12	6	12	6	2.8				
Lift(m)	426	415	415	437	437	437				
Dimensions(mm)	A	583	583	583	583	583				
	B	418	465	465	478	478				
	C	343	343	343	343	343				
	E1	100	105	105	105	105				
	E2	100	105	105	105	105				
	F1	105	110	110	110	110				
	F2	120	175	175	175	175				
	N	405	485	485	515	515				
	O ₁ /O ₂	80/72	114/96	114/96	114/96	114/96				
	P	6000	6000	6000	6000	6000				
Min.rad.curvature(m)	R	495	572	572	572	572				
	T	58	77	77	80	80				
Weight(kg)	2.0(3.5)/(5)		3.0/(7.5)		3.0/(7.5)					
	170	260	260	350	350	350				
Hook block weight(kg)	8		15		25					
	G	H	J	Q	U	G	H	J	Q	U
I-Beam related dimensions	360	24	19	140	105	-	-	-	-	-
	372	48	19	140	155	453	40	23	167	140
	385	74	17	142	203	465	64	21	169	188
	478	90	11	179	228	478	90	13	179	228
Applicable I-Beam(mm)	450X150X11.5 600X190X13		450X175X13 600X190X13		450X175X13 600X190X13		450X175X13 600X190X13		450X175X13 600X190X13	

Note.1 Min.rad.cur denotes the case of using below I beam.
R-1, UR-1...150X75X5.5 4. =required special attachment

