

AIR BALANCER RAIL SYSTEM

ENDO

YouTube

ENDO KOGYO 

ENDO ENDO KOGYO CO., LTD.

3-14-7, Akibacho, Tsubame, Niigata, Japan
TEL : +81-256-62-5131 FAX. +81-256-62-5772
<http://www.endo-kogyo.co.jp>



ISO9001 JP97/010458
SCOPE : Head office, Plant



ISO14001 JP10/070952
SCOPE : Head office, Plant

ENDO
ENDO KOGYO INDIA PVT.LTD.

ENDO KOGYO INDIA PVT. LTD.

101, First Floor, Aditya Towers
LullaNagar, Off Kondhwa Road, Pune - 411 040
TEL : +91-86-00042752 Mail. info@endo-india.co.in
<http://www.endo-india.co.in>

Type- **MS-A** Hoisting "WITH" DOWN STOP

AIR BALANCER is handling equipment powered by compressed air.

- **Adjustment of lifting and lowering speed**

Both speeds are adjustable by turning the knob on control module.

- **Floating capability**

By adding or reducing force directly onto the hung load, the load will move down or up respectively. The range of floating is about 35cm up and down from stable position.



Grip for operation

Pendant for operation

Grip for operation

EHB-85+MS-AG

Control module MS-A

Pendant for operation

EHB-85+MS-A

Control module	Model	Hose	Operation	Weight
Hoisting	MS-A	Straight hose×3	Pendant	3.5kg
Hoisting	MS-AG	Coil hose×3	Grip	5kg

Specification

Model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	Weight (kg) (*)	Cable dia (mm)	Air inlet
EHB-50S	0.7	55	0.7	21	φ4.76	Rc 3/8
	0.6	48				
	0.5	40				
	0.4	32				
EHB-50	0.7	55	1.9	28		
	0.6	48				
	0.5	40				
	0.4	32				
EHB-85	0.7	90	1.9	29		
	0.6	75				
	0.5	62				
	0.4	50				
EHB-130	0.7	140	1.9	36		
	0.6	120				
	0.5	100				
	0.4	80				
EHB-270	0.7	270	1.8	43	φ6	
	0.6	230				
	0.5	190				
	0.4	150				

(*) Weight: Without module



- **Grip type controller**

Grip type controller allows a more sensitive control of height of lift.

- **DOWN STOP**

Added safety measure. Hung load will not fall even if the air supply is cut off or when hoses are broken.

- **Energy-saving design**

Air consumption of AIR BALANCER is only 1/7 of that of AIR HOIST. (comparing our existing model)

- **Clean design**

No lubrication is needed and produces no oil mist.

- **Quiet design**

With no air motor, AIR BALANCER produces very little noise in operation.

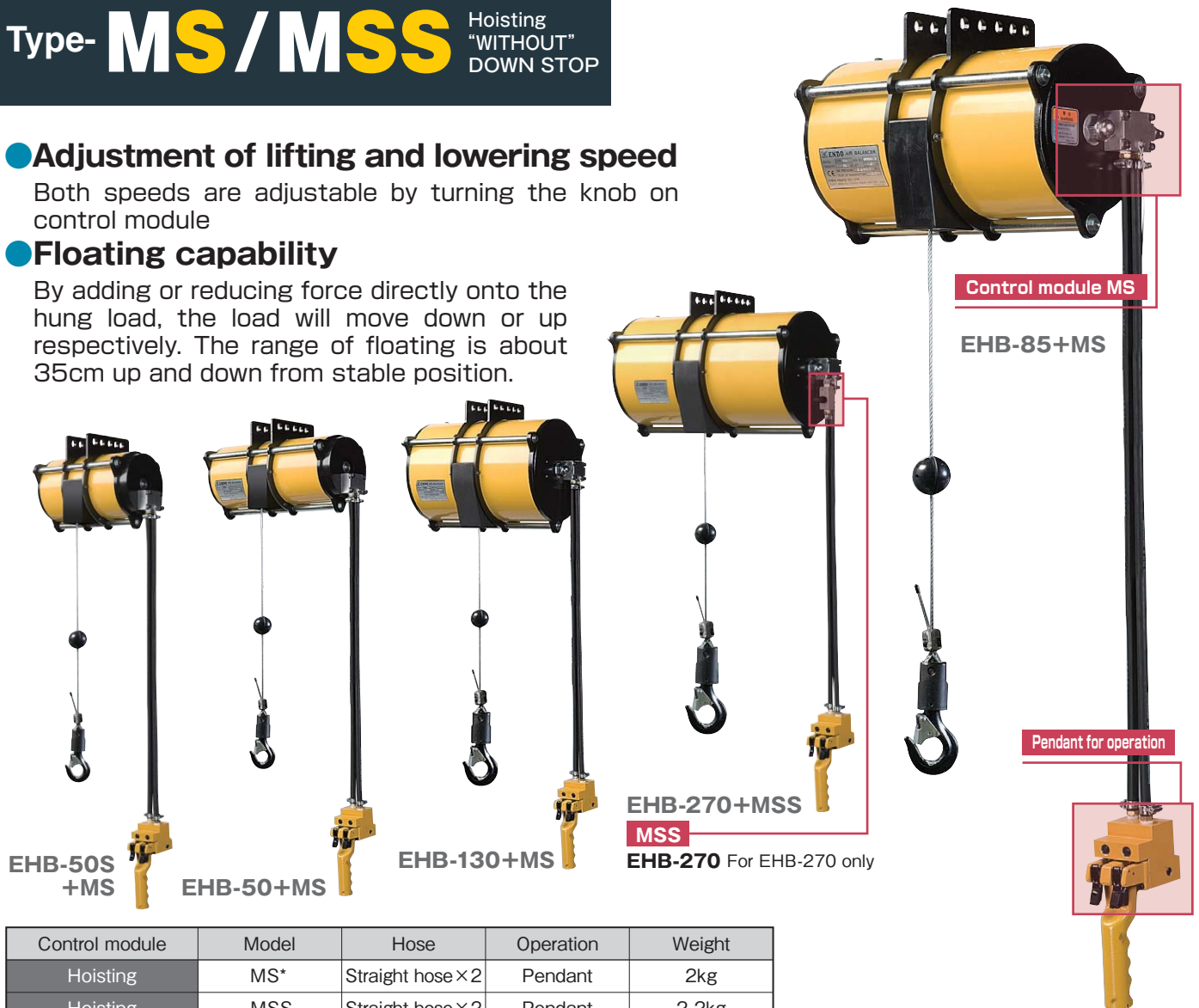
Type- **MS/MSS** Hoisting "WITHOUT" DOWN STOP

● Adjustment of lifting and lowering speed

Both speeds are adjustable by turning the knob on control module

● Floating capability

By adding or reducing force directly onto the hung load, the load will move down or up respectively. The range of floating is about 35cm up and down from stable position.



Control module	Model	Hose	Operation	Weight
Hoisting	MS*	Straight hose×2	Pendant	2kg
Hoisting	MSS	Straight hose×2	Pendant	2.2kg

*MS module is not adopted to EHB-270.

Specification

Model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	Weight (kg) (*)	Cable dia (mm)	Air inlet
EHB-50S	0.7	55	0.7	21	φ4.76	Rc 3/8
	0.6	48				
	0.5	40				
	0.4	32				
EHB-50	0.7	55	1.9	28		
	0.6	48				
	0.5	40				
	0.4	32				
EHB-85	0.7	90	1.9	29		
	0.6	75				
	0.5	62				
	0.4	50				
EHB-130	0.7	140	1.9	36		
	0.6	120				
	0.5	100				
	0.4	80				
EHB-270	0.7	270	1.8	43	φ6	
	0.6	230				
	0.5	190				
	0.4	150				

(*) Weight: Without module

POINT

● Economical model

● energy-saving design

Air consumption of AIR BALANCER is only 1/7 of that of AIR HOIST. (comparing our existing model)

● Clean design

No lubrication is needed and produces no oil mist.

● Quiet design

With no air motor, AIR BALANCER produces very little noise in operation.

NOTICE

DOWN STOP is available when the air supply is stopped but it is "NOT" available when hose for lowering control is cut.

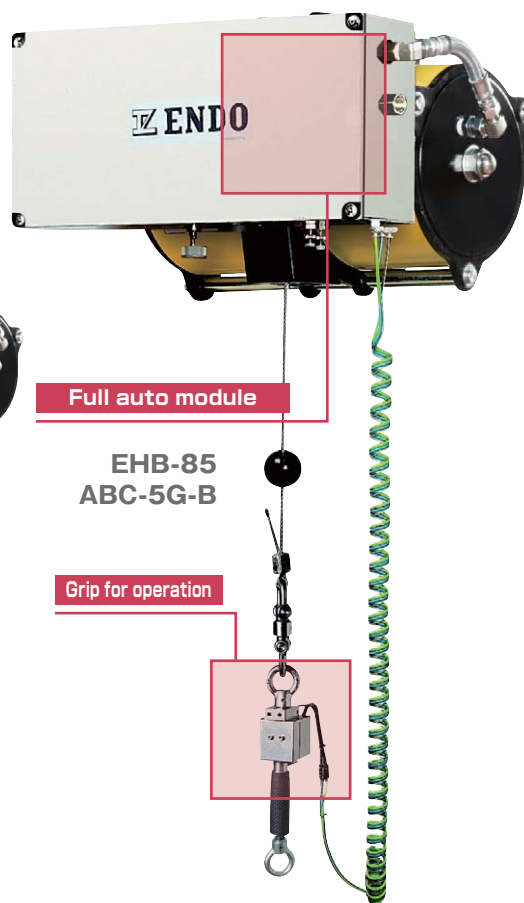
Type- ABC Full auto module

● Auto Balance

With Full auto module, the AIR BALANCER can automatically adjust itself to the weight of the hung load. The load can then be lifted and lowered by hand without using the controller.

● Adjustment of lifting and lowering speed

Both speeds are adjustable by turning the knob on control module.



Control module	Model	Hose	Operation	Weight
Full auto module	ABC-5P-B	Coil hose×3	Pendant	11kg
Full auto module	ABC-5G-B	Coil hose×3	Grip	11kg

Specification

Model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	Weight (kg) (*)	Cable dia (mm)	Air inlet
EHB-50	0.5	40	1.9	28	φ 4.76	Rc 3/8
	0.4	30				
	0.3	20				
EHB-85	0.5	60	1.9	29		
	0.4	45				
	0.3	30				
EHB-130	0.5	85	1.9	36		
	0.4	62.5				
	0.3	40				

(*) Weight: Without module



- Auto Balance**
 Full auto module can recognize the weight of hung device from 0kg to Max lifting capacity so that the balancing can be controlled.
- DOWN STOP**
 Added safety measure. Hung load will not fall even if the air supply is cut off or when hoses are broken.
- Energy-saving design**
 Air consumption of AIR BALANCER is only 1/7 of that of AIR HOIST. (comparing our existing model)
- Clean design**
 No lubrication is needed and produces no oil mist.
- Quiet design**
 With no air motor, AIR BALANCER produces very little noise in operation.

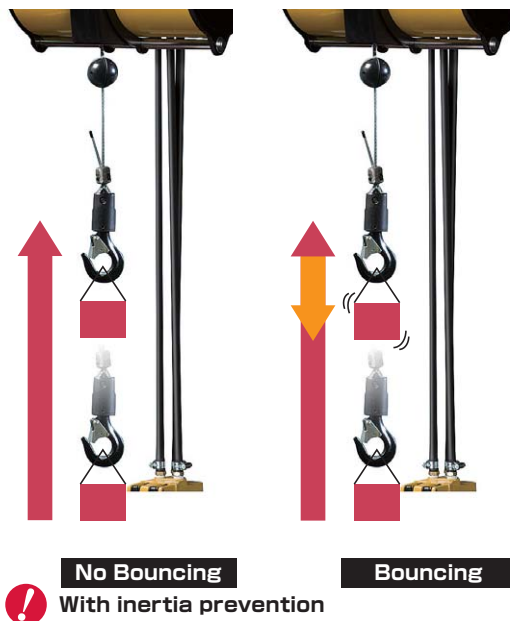
Type-MSD Hoisting with inertia prevention unit

Adjustment of lifting and lowering speed

Both speeds are adjustable by turning the knob on control module.



Inertia prevention unit



Control module	Model	Hose	Operation	Weight
Hoisting	MSD	Straight hose×3	Pendant	6kg

Specification

Model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	Weight (kg) (*)	Cable dia (mm)	Air inlet
EHB-85D	0.7	90	1.9	34	φ4.76	Rc 3/8
	0.6	75				
	0.5	62				
	0.4	50				

(*) Weight: Without module

POINT

Inertia prevention unit

Accurate positioning by pendant control is made possible. (Brake eliminates the bouncing effect)

DOWN STOP

Added safety measure. Hung load will not fall even if the air supply is cut off or when hoses are broken.

Energy-saving design

Air consumption of AIR BALANCER is only 1/7 of that of AIR HOIST. (comparing our existing model)

Clean design

No lubrication is needed and produces no oil mist.

Quiet design

With no air motor, AIR BALANCER produces very little noise in operation.

Type- **BC2** Dual Balance module

● Dual Balancing

The Dual Balance Module with its 2 regulators allows the balancing of 2 different weights, which provides easier transfer or mounting of load.

- Full stroke balancing by hand.
- 2 different weights can be balanced.
- 2 different kinds of balanced weight set in advance can be changed by pushing button on pendant.

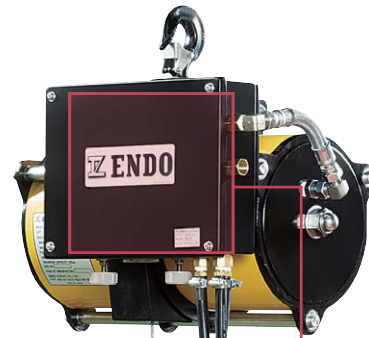
Weight switching button



Optional design



Control module	Model	Hose	Weight
Dual Balance module	BC2	Straight hose×3	4kg
Dual Balance module	BC2-H	Straight hose×3	4kg



EHB-85+BC2

Dual Balance module

Switching button



Specification

Model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	Weight (kg) (*)	Cable dia (mm)	Air inlet
EHB-50S	0.7	55	0.7	21	φ 4.76	Rc 3/8
	0.6	48				
	0.5	40				
	0.4	32				
EHB-50	0.7	55	1.9	28		
	0.6	48				
	0.5	40				
	0.4	32				
EHB-85	0.7	90	1.9	29		
	0.6	75				
	0.5	62				
	0.4	50				
EHB-130	0.7	140	1.9	36		
	0.6	120				
	0.5	100				
	0.4	80				

(*) Weight: Without module



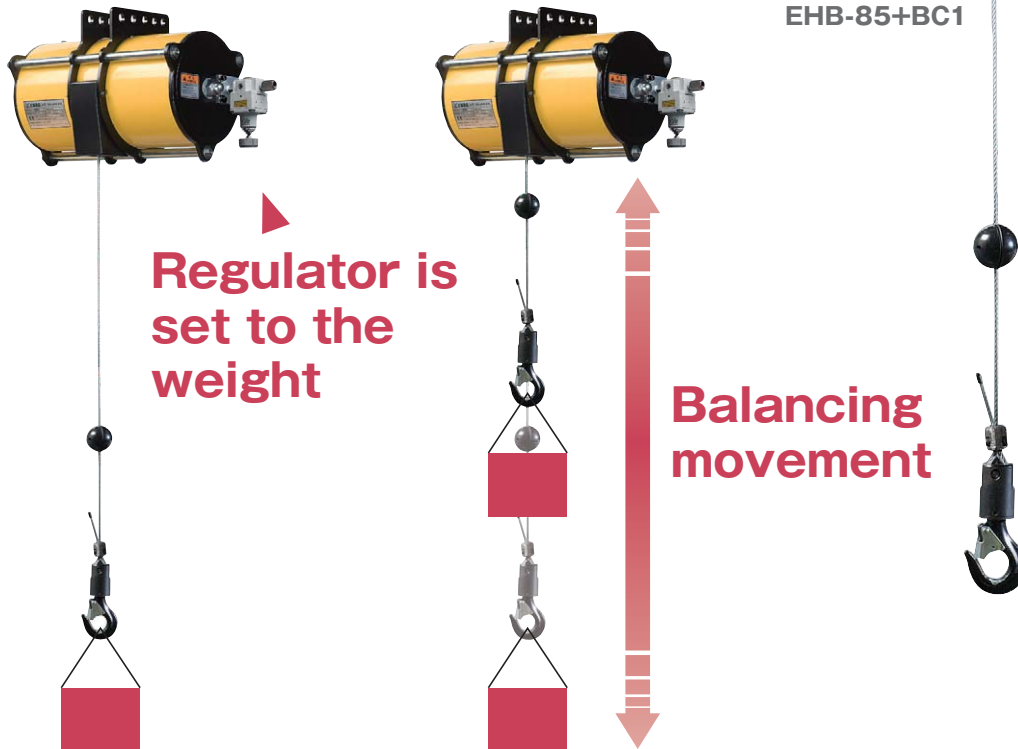
- **Dual Balance**
2 weights whose range is from 0kg to Max lifting capacity can be set to regulator. The loads with this 2 different weights can be balanced.
- **DOWN STOP**
Hung load will go down slowly when the air supply is cut off or silver hose is broken.
- **Energy-saving design**
Air consumption of AIR BALANCER is only 1/7 of that of AIR HOIST. (comparing our existing model)
- **Clean design**
No lubrication is needed and produces no oil mist.
- **Quiet design**
With no air motor, AIR BALANCER produces very little noise in operation.

Type-BC1 Single Balance module

● Single Balancing

The hung load will be balanced after the regulator is set to the weight.

This module makes it easy for an operator to lift and lower a load.



EHB-85+BC1

Balance module

Control module	Model	Weight
Single Balance module	BC1	1kg

Specification

Model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	Weight (kg) (*)	Cable dia (mm)	Air inlet
EHB-50S	0.7	55	0.7	21	φ4.76	Rc 1/4
	0.6	48				
	0.5	40				
	0.4	32				
EHB-50	0.7	55	1.9	28		
	0.6	48				
	0.5	40				
	0.4	32				
EHB-85	0.7	90	1.9	29		
	0.6	75				
	0.5	62				
	0.4	50				
EHB-130	0.7	140	1.9	36		
	0.6	120				
	0.5	100				
	0.4	80				

(*) Weight: Without module

POINT

● Single Balance

Range of 0kg to Max lifting capacity can be balanced.

● DOWN STOP

Hung load will go down slowly when the air supply is cut off.

● Energy-saving design

Air consumption of AIR BALANCER is only 1/7 of that of AIR HOIST. (comparing our existing model)

● Clean design

No lubrication is needed and produces no oil mist.

● Quiet design

With no air motor, AIR BALANCER produces very little noise in operation.

NOTICE

Suspending load will go down slowly with time if the air supply is stopped.

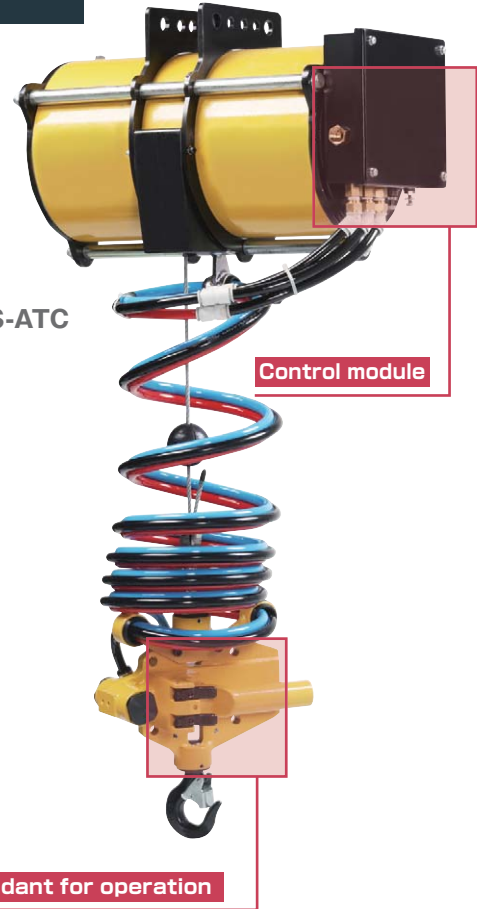
Type- **MS-ATC** Hoisting for at-hand operation

● Much smoother operation

UP and Down button and handle are equipped on lower hook. Comparing with independent pendant control, load lifts and lowers smoother and stably.



Hook built-in pendant for operation



EHB-85+MS-ATC

Control module	Model	Hose	Operation	Weight
Hoisting	MS-ATC	Coil hose×3	Pendant	6kg

Specification

Model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	Weight (kg) (*)	Cable dia (mm)	Air inlet
EHB-50S	0.7	55	0.7	21	φ4.76	Rc 3/8
	0.6	48				
	0.5	40				
	0.4	32				
EHB-50	0.7	55	1.9	28		
	0.6	48				
	0.5	40				
	0.4	32				
EHB-85	0.7	90	1.9	29		
	0.6	75				
	0.5	62				
	0.4	50				
EHB-130	0.7	140	1.9	36		
	0.6	120				
	0.5	100				
	0.4	80				

(*) Weight: Without module



● at-hand operation

This module is pendant type which can be operated at-hand and enables you to control hoisting and lowering with stable condition of the load.

● DOWN STOP

Added safety measure. Hung load will not fall even if the air supply is cut off or when hoses are broken.

● Energy-saving design

Air consumption of AIR BALANCER is only 1/7 of that of AIR HOIST. (comparing our existing model)

● Clean design

No lubrication is needed and produces no oil mist.

● Quiet design

With no air motor, AIR BALANCER produces very little noise in operation.

Type- C Load chain

● **AIR BALANCER with alloy steel load chain. Tougher and more durable.**

EHB-85C

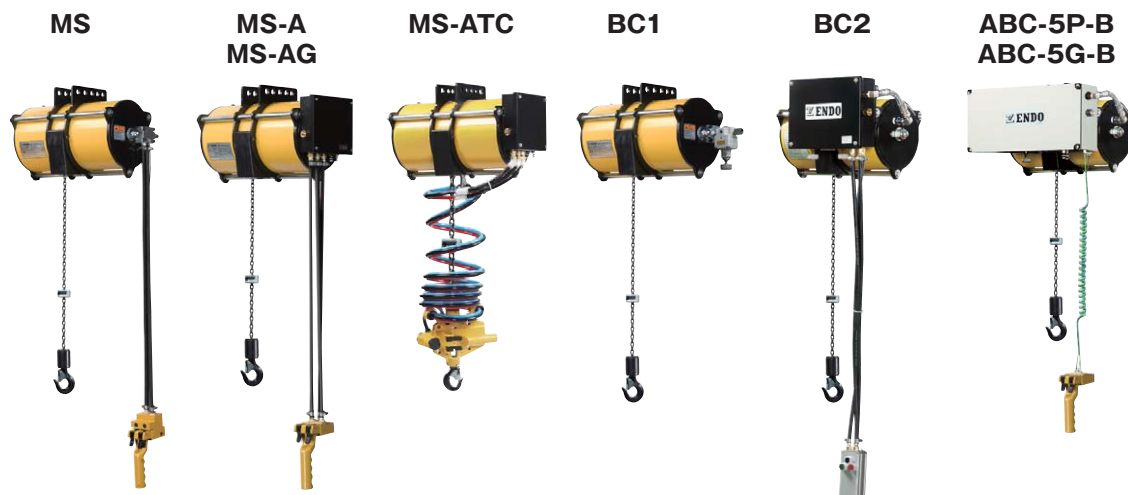


Specification

Model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	Weight (kg) (*)	Size×Fall
EHB-50SC	0.7	55	0.65	20	4.0×1
	0.6	48			
	0.5	40			
	0.4	32			
EHB-50C	0.7	55	1.8	29	4.0×1
	0.6	48			
	0.5	40			
	0.4	32			
EHB-85C	0.7	90	1.8	30	4.0×1
	0.6	75			
	0.5	62			
	0.4	50			
EHB-130C	0.7	140	1.8	37	4.0×1
	0.6	120			
	0.5	100			
	0.4	80			
EHB-270C	0.7	270	1.7	44	4.0×1
	0.6	230			
	0.5	190			
	0.4	150			

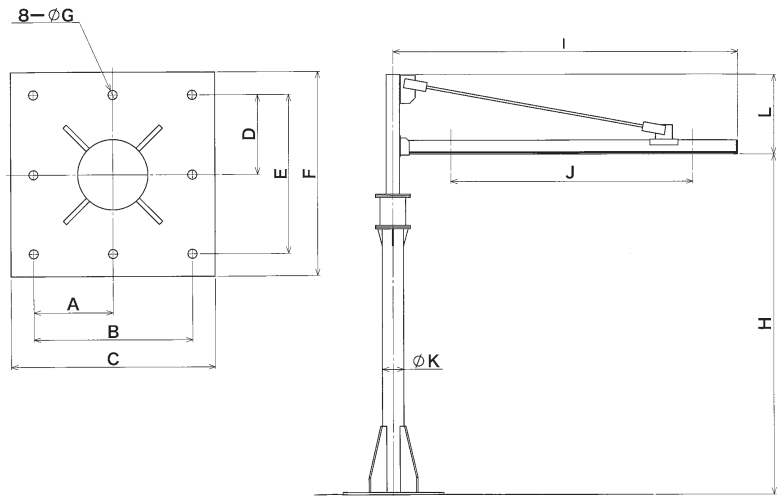
(*) Weight: Without module

Applicable modules



JIB CRANE

● Rail system for less space



Dimensions

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)	Weight (kg)
EJS-2-20-300	230	460	500	230	460	500	$\phi 20$	2,000	2,095	1,140	$\phi 216.8$	700	300
EJS-2-30-265	230	460	500	230	460	500	$\phi 20$	3,000	2,095	1,315	$\phi 216.8$	700	265
EJS-3-20-170	230	460	500	230	460	500	$\phi 20$	2,000	3,095	2,235	$\phi 216.8$	900	170
EJS-3-30-150	230	460	500	230	460	500	$\phi 20$	3,000	3,095	2,235	$\phi 216.8$	900	150
EJB-2-20-400	280	560	600	280	560	600	$\phi 20$	2,000	2,110	1,140	$\phi 267.4$	700	400
EJB-2-30-400	280	560	600	280	560	600	$\phi 20$	3,000	2,110	1,140	$\phi 267.4$	700	400
EJB-3-30-250	280	560	600	280	560	600	$\phi 20$	3,000	3,110	2,235	$\phi 267.4$	900	250
EJB-4-30-120	280	560	600	280	560	600	$\phi 20$	3,000	4,110	3,235	$\phi 267.4$	900	120

※More models are available. Feel free to ask us.

Attachment

■ Pantograph type



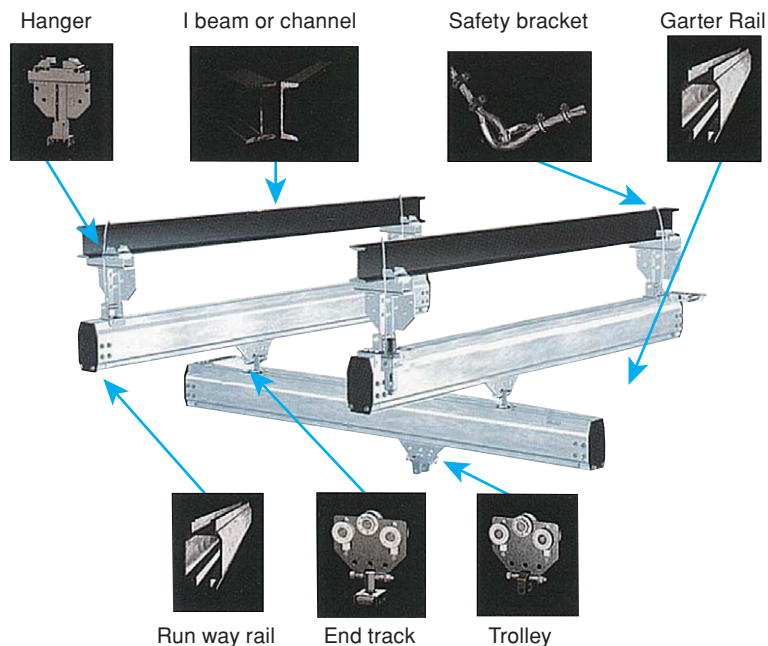
■ 2 points hook type



※We can customize for your request.

An excellent transfer system employing the benefits of aluminum and rail system

- ① Great movability. Enables load transfer with the shortest distance travel and thus faster working time.
- ② Standardization for parts makes it easy for relocation and expansion.
- ③ The parts come with kits and are joint using bolts; easy to assemble and repair.
- ④ Compared to steel rail, aluminum is lighter and stronger. With anodized treatment, our aluminum rails are more corrosive resistant, more durable, and looks better.
- ⑤ Precision machining on our rails and resin wheels allow smooth travel with little friction.



Aluminum alloy rail

Model	Measurement (mm)	Unit weight	Rail length
TR2000		3.6kg/m	2inch
RAD4110		6.44kg/m	4inch
RAD7510		12.26kg/m	8inch

There are various trolley suited to your needs. Special trolleys are available for 2, 4 and 8 inch rails. Maximum loadings are;
 2 inch ... 180kg
 4 inch ... 250kg
 8 inch ... 490kg

Relation between lifting span and lifting load Unit:Kgf

Rail length	TR2000	RAD4110	RAD7510
	Lifting load	Lifting load	Lifting load
1m	200	500	500
2m	100	500	500
3m	45	250	500
4m	25	140	500
5m	16	90	470
6m	11	60	330

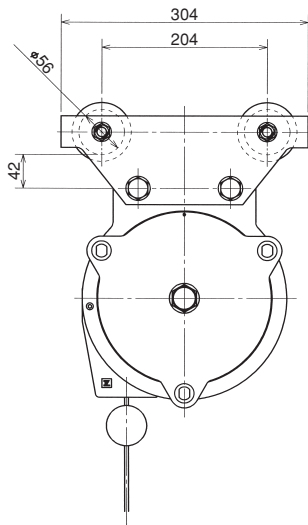
Accessories

EHB Trolley



Part No.	LHP001899
Applicable width of beam	75mm, 100mm

Dimensions

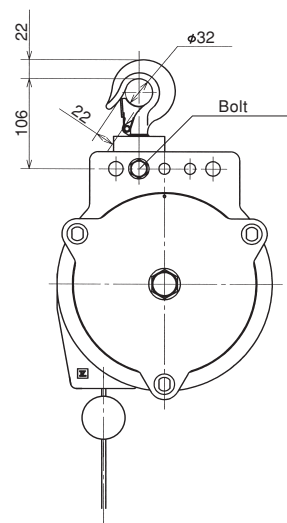


EHB Hook set

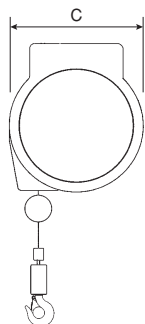
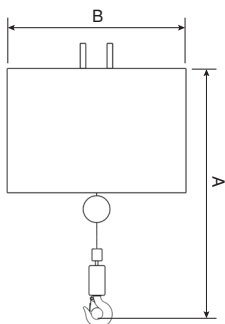


For MS·MS-A·MS-AG·MS-ATC·BC1	Part No.	LHP001900
For MSD	Part No.	LHP001991
For BC2·BC2-H·ABC	Part No.	LHP002146

Dimensions



Dimensions



Model	Module	Dimensions (mm)			
		A		B	C
		MIN.	MAX.		
EHB-50S	MS	526(517)	1226(1167)	337	211
	MS-A	526(517)	1226(1167)	362	211
	MS-AG	921(912)	1621(1562)	362	211
	MS-ATC	704(695)	1404(1345)	362	211
	ABC-5P-B	526(517)	1226(1167)	478	363
	ABC-5G-B	811(802)	1511(1452)	478	363
	BC1	526(517)	1226(1167)	416	211
	BC2	526(517)	1226(1167)	347	319
EHB-50	MS	526(517)	2426(2317)	473	211
	MS-A	526(517)	2426(2317)	498	211
	MS-AG	921(912)	2821(2712)	498	211
	MS-ATC	704(695)	2604(2495)	498	211
	ABC-5P-B	526(517)	2426(2317)	516	363
	ABC-5G-B	811(802)	2711(2602)	516	363
	BC1	526(517)	2426(2317)	552	211
	BC2	526(517)	2426(2317)	495	319
EHB-85	MS	570(560)	2470(2360)	466	252
	MS-A	570(560)	2470(2360)	491	252
	MS-AG	965(955)	2865(2755)	491	252
	MS-ATC	746(736)	2646(2536)	491	252
	ABC-5P-B	570(560)	2470(2360)	516	386
	ABC-5G-B	853(843)	2753(2643)	516	386
	BC1	570(560)	2470(2410)	545	252
	BC2	570(560)	2470(2410)	495	340
EHB-85D	MSD	570	2470	520	326
EHB-130	MS	652(629)	2552(2429)	469	305
	MS-A	652(629)	2552(2429)	494	305
	MS-AG	1020(997)	2920(2797)	494	305
	MS-ATC	803(780)	2703(2580)	494	305
	ABC-5P-B	652(629)	2552(2429)	516	440
	ABC-5G-B	910(887)	2810(2687)	516	440
	BC1	652(629)	2552(2429)	547	305
	BC2	652(629)	2552(2429)	495	393
EHB-270	MSS	652(629)	2452(2329)	591	305
	MS-A	652(629)	2452(2329)	616	305

() means dimensions of chain type.

*Items shown in this catalogue are subject to change without notice. Please note we have no responsibility for missing and fault on this printing.