

AIR BALANCER RAIL SYSTEM



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

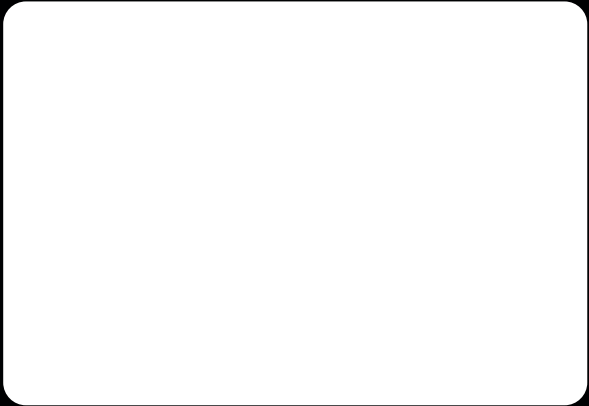


ISO14001 JP10/070952
SCOPE : Head office, Plant



ENDO KOGYO INDIA PVT., LTD

202, Winners Court, Plot No.23,
Sahani Sujan Park, Main Lulla Nagar, Pune-411040
TEL : +91-20-41200624
<http://www.endo-india.co.jp/>



Type- **MS-A** Hoisting with down stop

AIR BALANCER is handling equipment whose power source is 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 hanged 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-50	0.7	55	1.9	28	φ4.76	Rc 3/8
	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				

- **Grip type controller**

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

- **Down stop**

Added safety measure. Hanged 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.



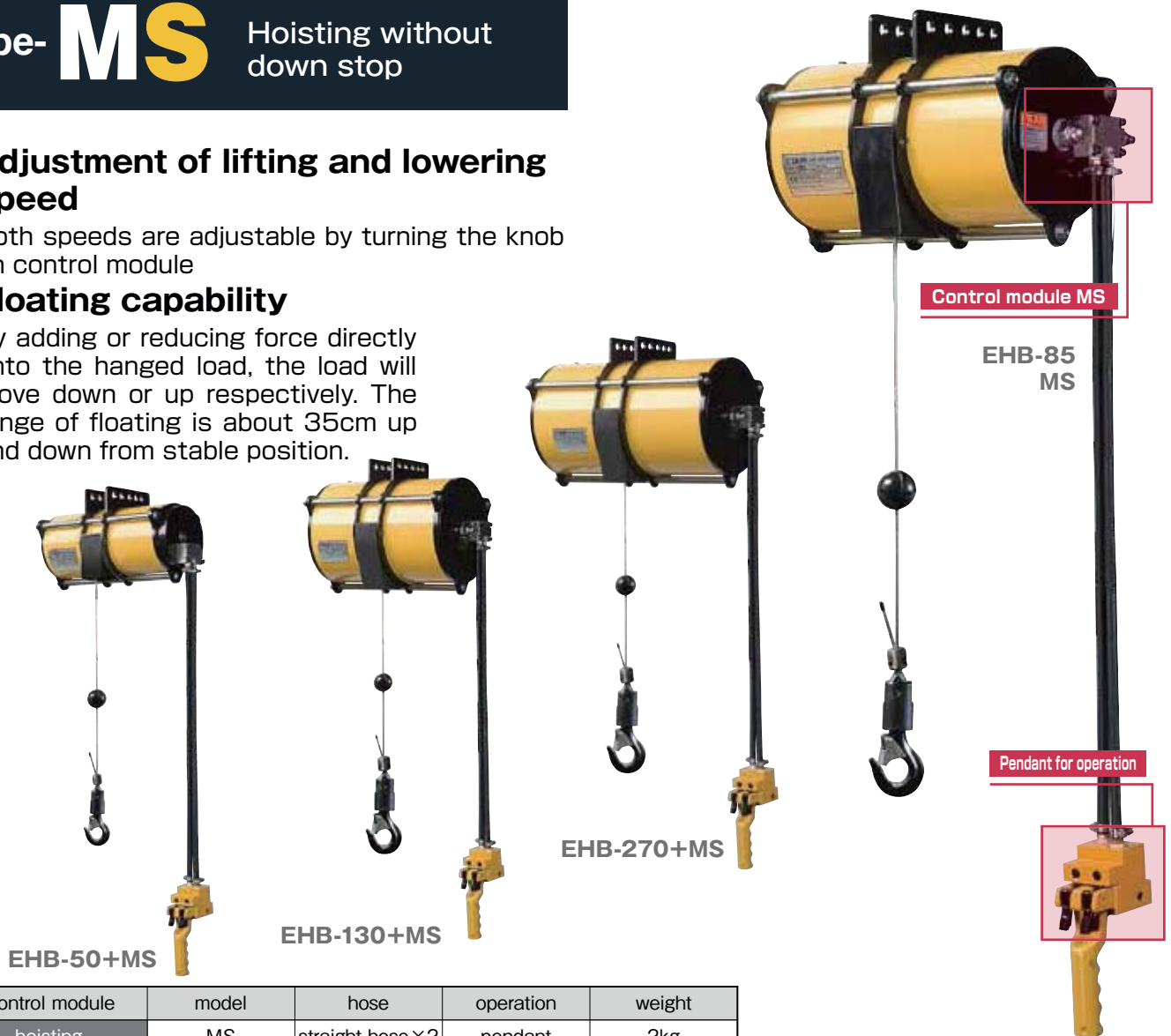
Type-MS Hoisting without down stop

● 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 hanged 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

Specification

model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	weight (kg)	Cable dia (mm)	Air inlet
EHB-50	0.7	55	1.9	28	φ4.76	Rc 3/8
	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				

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.

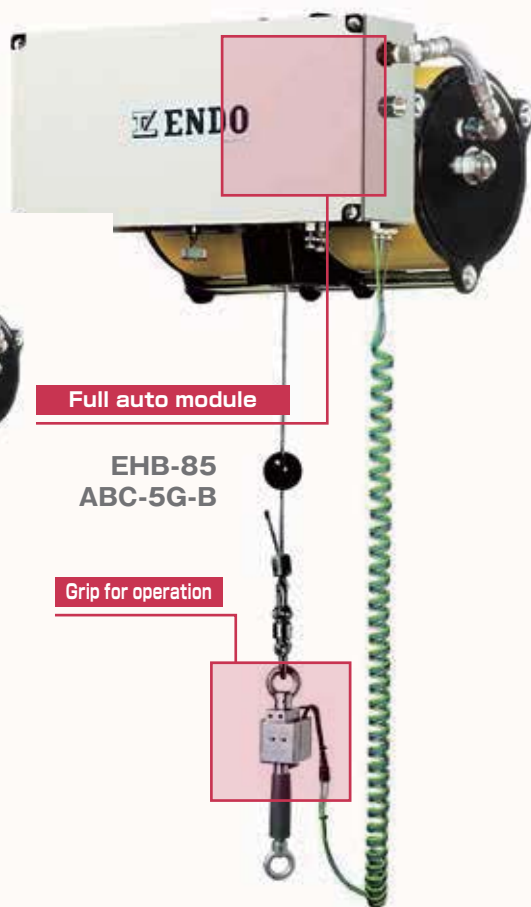
Type- ABC Full auto module

● Auto Balance

With Full auto module, the AIR BALANCER can automatically adjust itself to the weight of the hanged 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				



● Auto balance

Full auto module can recognize the weight of hanged device from 0kg to Max lifting capacity so that the balancing can be controlled.

● Down stop

Hanged device is not falling down even if 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.

Type-MSD Hoisting with inertia prevention unit

● Adjustment of lifting and lowering speed

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

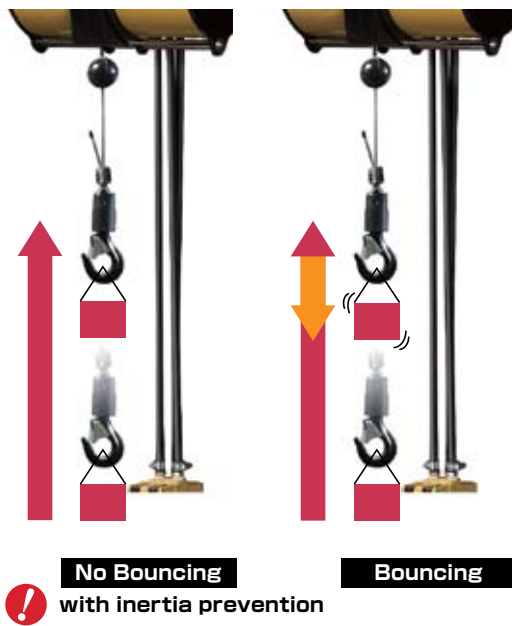


EHB-85D MSD

Control module MSD

Pendant for operation

Inertia prevention unit



No Bouncing with inertia prevention

Bouncing

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	38	φ4.76	Rc 3/8
	0.6	75				
	0.5	62				
	0.4	50				

POINT

● Inertia prevention unit

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

● Down stop

Hanged device is not falling down even if 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

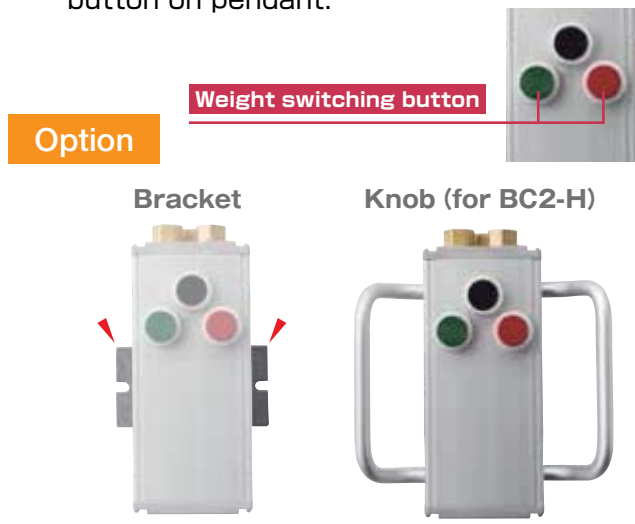
With no air motor, AIR BALANCER produces very little noise in operation.

Type- **BC2** Dual balance module

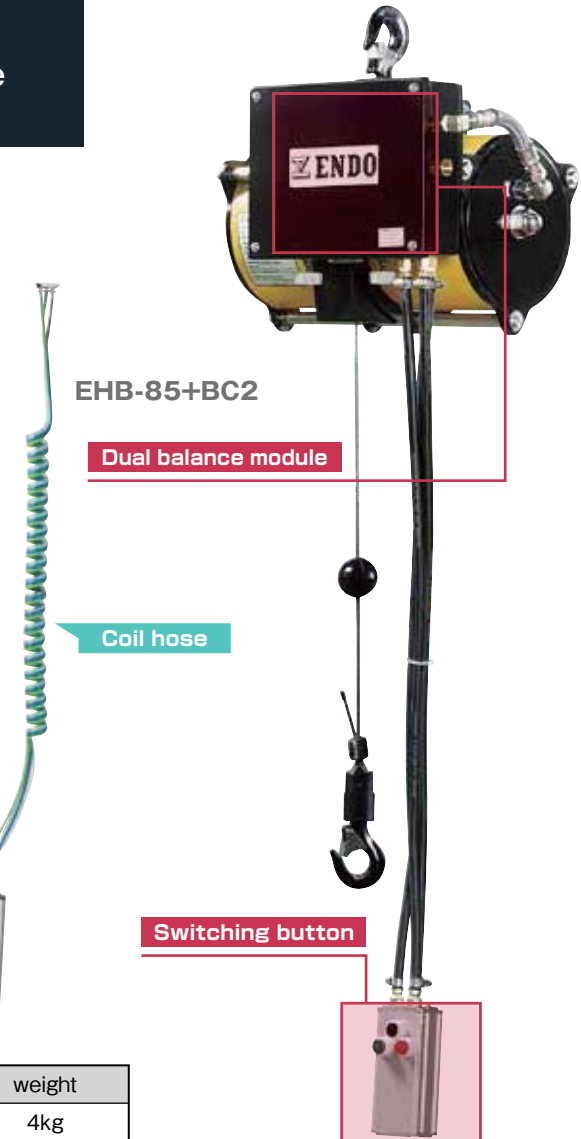
● Dual Balancing

The 2 weight memorized by 2 regulators can provide you much easier transfer or mounting of load than present.

- Operation for Balancing by hand is in full-stroke possible.
- 2 different weights can be balanced.
- Balancing weight can be changed by pushing button on pendant.



Control module	model	hose	weight
Dual balance module	BC2	straight hose × 3 / coil hose × 3	4kg
Dual balance module	BC2-H	straight hose × 3 / coil hose × 3	4kg



Specification

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

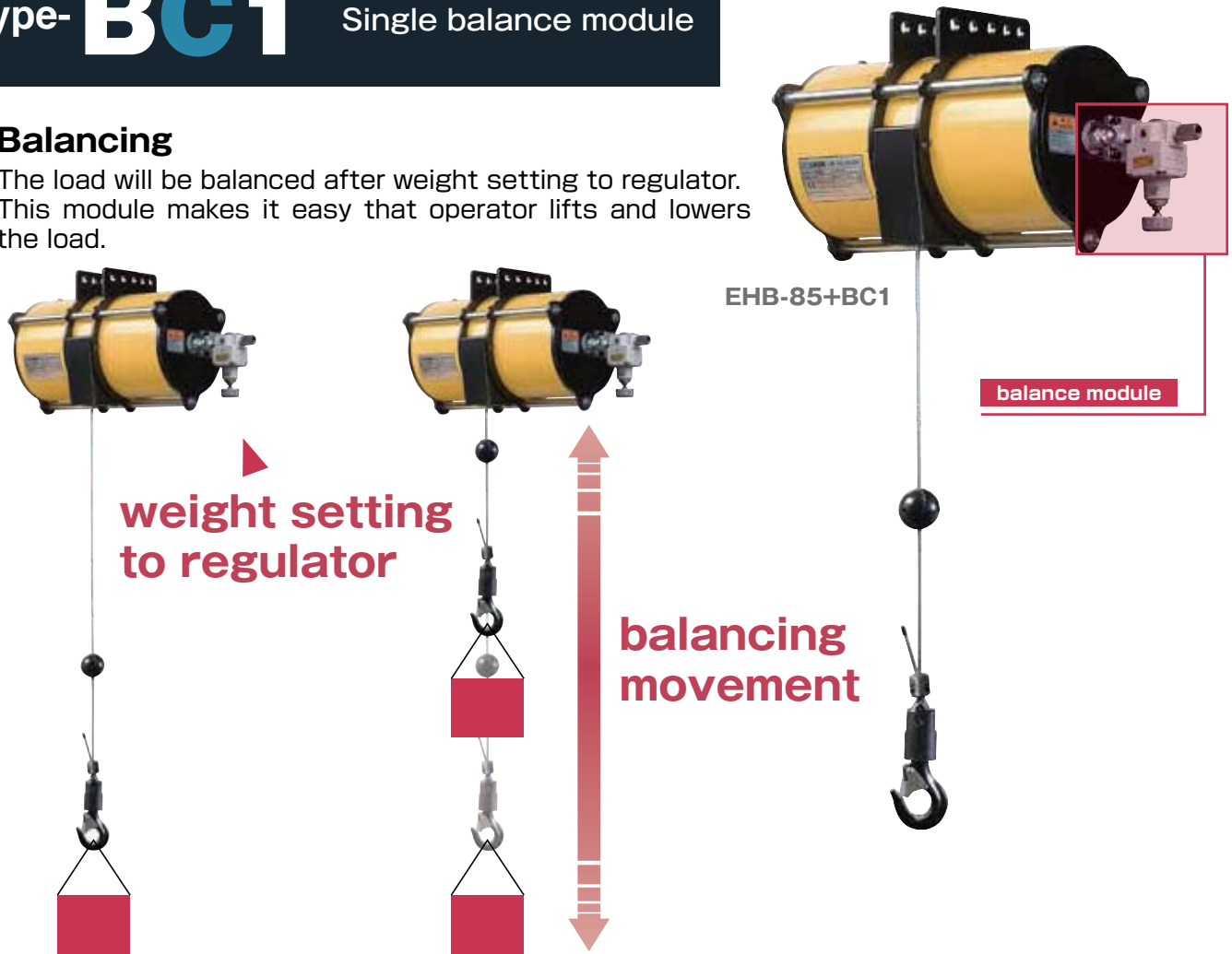


- **Dual balance**
2 weights whose range is from 0kg to Max lifting capacity can be set to regulator. The loads with this 2 different weights can be balanced.
- **Down stop**
Hanged load will not fall even if the air supply is cut off or when hoses are broken. (However, it will slowly go down if the air supply is stopped.)
- **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

Balancing

The load will be balanced after weight setting to regulator. This module makes it easy that operator lifts and lowers the load.



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-50	0.7	55	1.9	28	φ 4.76	Rc 1/4
	0.6	48				
	0.5	40				
	0.4	32				
EHB-85	0.7	90	1.9	29	φ 4.76	Rc 1/4
	0.6	75				
	0.5	62				
	0.4	50				
EHB-130	0.7	140	1.9	36	φ 4.76	Rc 1/4
	0.6	120				
	0.5	100				
	0.4	80				

POINT

Single balance

1 weight set to regulator and whose range is from 0kg to Max lifting capacity can be balanced.

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.

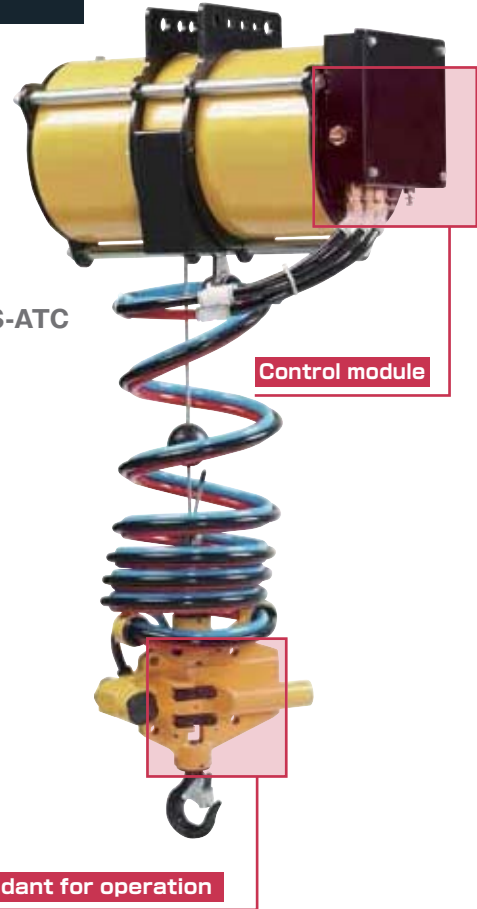
Type- **MS-ATC** Hoisting for at-hand operation

● Much smoother operation

UP and Down button and handle are equipped on upper 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

Pendant for operation

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-50	0.7	55	1.9	28	φ 4.76	Rc 3/8
	0.6	48				
	0.5	40				
	0.4	32				
EHB-85	0.7	90	1.9	29	φ 4.76	Rc 3/8
	0.6	75				
	0.5	62				
	0.4	50				
EHB-130	0.7	140	1.9	36	φ 4.76	Rc 3/8
	0.6	120				
	0.5	100				
	0.4	80				

POINT

● 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. Hanged 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.

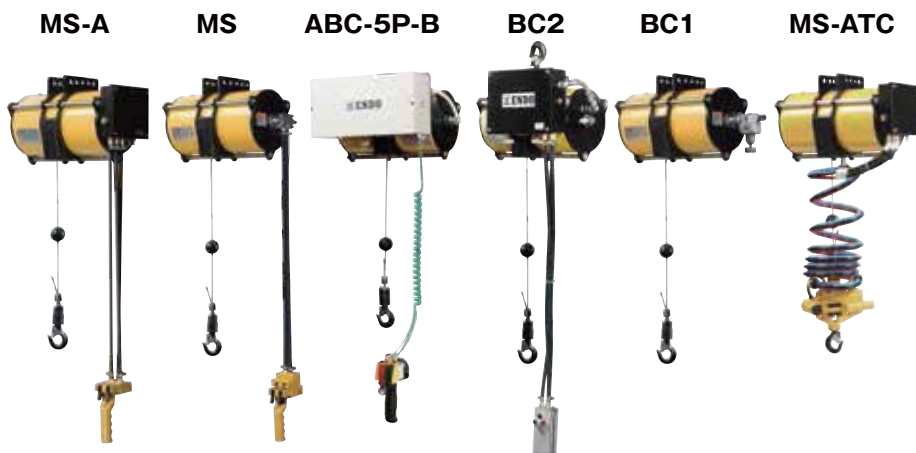
Type-85C Load chain

- Load chain hard-faced by alloy steel which has advantage in toughness and abrasion resistance.

EHB-85C



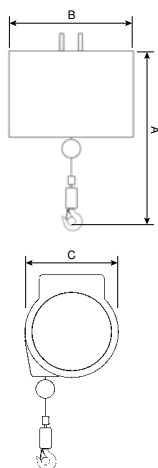
Applicable models



Specification

model	Air pressure (MPa)	Max lifting capacity (kg)	Stroke (m)	weight (kg)	Size×fall
EHB-85C	0.7	90	1.8	30	4.0×1
	0.6	75			
	0.5	62			
	0.4	50			

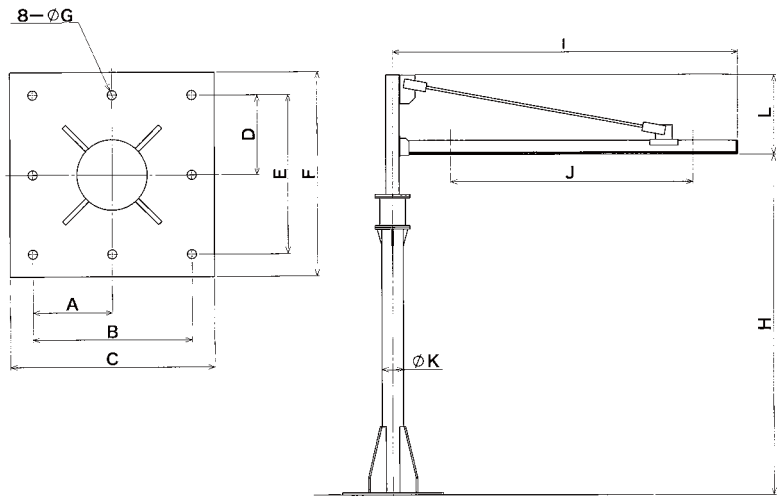
Dimensions



Model	Module	Dimensions (mm)			
		A		B	C
		MIN.	MAX.		
EHB-85C	MS	560	2410	466	252
	MS-A	560	2410	491	252
	MS-ATC	710	2610	491	252
	ABC-5P-B	560	2410	516	385
	BC1	560	2410	545	252
	BC2	560	2410	495	340

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	φ20	2,000	2,095	1,140	φ216.8	700	300
EJS-2-30-265	230	460	500	230	460	500	φ20	3,000	2,095	1,315	φ216.8	700	265
EJS-3-20-170	230	460	500	230	460	500	φ20	2,000	3,095	2,235	φ216.8	900	170
EJS-3-30-150	230	460	500	230	460	500	φ20	3,000	3,095	2,235	φ216.8	900	150
EJB-2-20-400	280	560	600	280	560	600	φ20	2,000	2,110	1,140	φ267.4	700	400
EJB-2-30-400	280	560	600	280	560	600	φ20	3,000	2,110	1,140	φ267.4	700	400
EJB-3-30-250	280	560	600	280	560	600	φ20	3,000	3,110	2,235	φ267.4	900	250
EJB-4-30-120	280	560	600	280	560	600	φ20	3,000	4,110	3,235	φ267.4	900	120

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

Attachment

■ Pantagraph type



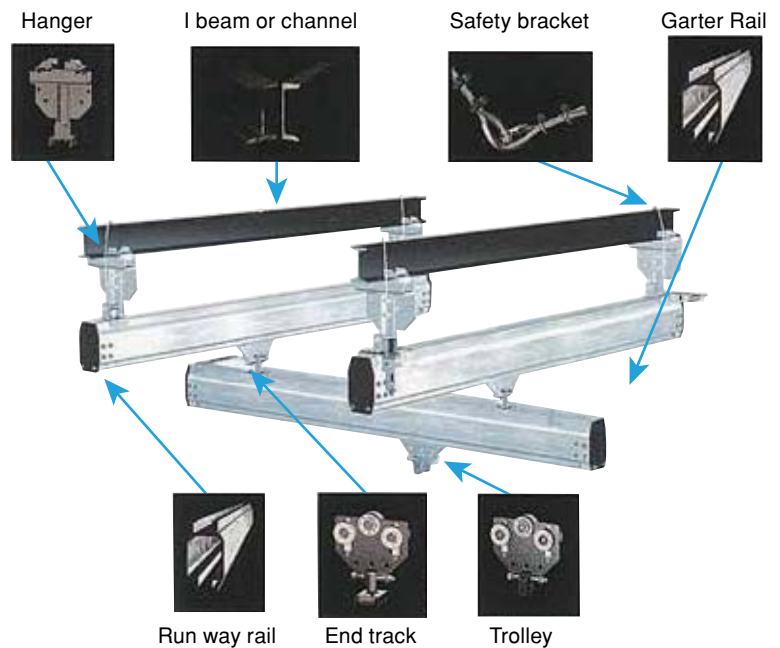
■ 2 point hook type



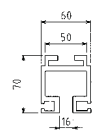
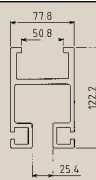
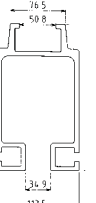
※we can customize for your request.

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 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

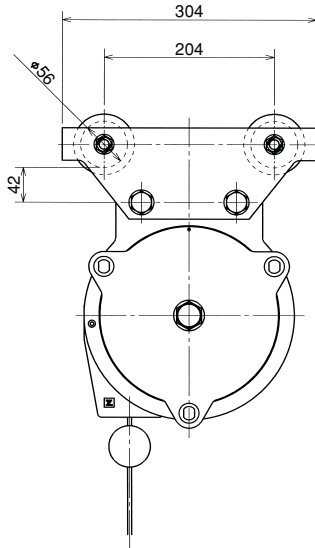
Accessories

EHB Trolley



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

Dimensions

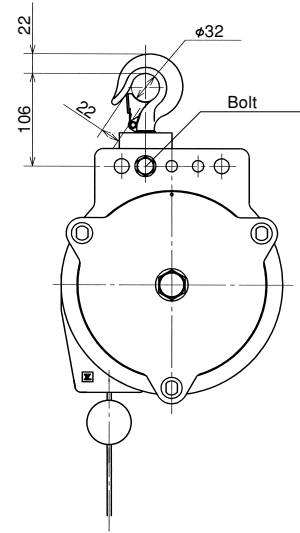


EHB Hook set

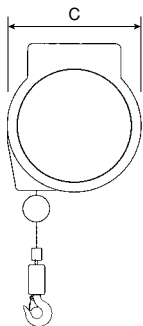
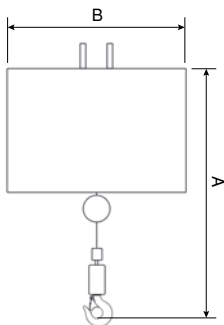


For MS · MS-A · MS-AG · MS-ATC · BC1	Part No.	LHP001900
For MSD	Part No.	LHP001991
For BC2 · BC2-H · ABC	Part No.	LHP002146

Dimensions



Dimensions



Model	Module	Dimensions (mm)			
		A		B	C
		MIN.	MAX.		
EHB-50	MS	526	2426	473	211
	MS-A	526	2426	498	211
	MS-AG	831	2731	498	211
	MS-ATC	702	2602	498	211
	ABC-5P-B	526	2426	516	345
	ABC-5G-B	719	2619	516	345
	BC1	526	2426	552	211
	BC2	526	2426	495	319
EHB-85	MS	570	2470	466	252
	MS-A	570	2470	491	252
	MS-AG	875	2775	491	252
	MS-ATC	747	2647	491	252
	ABC-5P-B	570	2470	516	385
	ABC-5G-B	763	2663	516	385
	BC1	570	2470	545	252
	BC2	570	2470	495	340
EHB-85D	MSD	570	2470	520	326
EHB-130	MS	652	2552	469	305
	MS-A	652	2552	494	305
	MS-AG	957	2857	494	305
	MS-ATC	803	2703	494	305
	ABC-5P-B	652	2552	516	439
	ABC-5G-B	845	2745	516	439
	BC1	652	2552	548	305
	BC2	652	2552	495	393
EHB-270	MS	652	2452	591	305
	MS-A	652	2452	616	305