Optional Parts (sold separately)
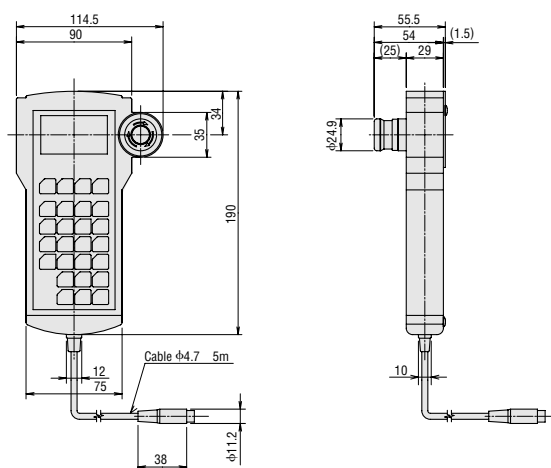
■ Teaching Pendant **EZT1** `Common`

The teaching pendant allows you to set and execute motion profiles, as well as to monitor the set data, current position and I/O status in real time.

●Specifications

Display	LCD with 2-colored back light
Cable Length	5 m
Mass	0.37 kg
Ambient Temperature	0°C to +40°C (nonfreezing)

●Dimensions unit: mm

■ Data Editing Software **EZED1** `EZS` `EZC`
(with PC Interface Cable)

With this software you can set and edit the operation data on a PC. It comes with a PC interface cable for connecting the controller to the PC's RS-232C port. The software also provides various monitoring functions.

* The data editing software can be used with either the **EZMC36I** or **EZMC36A** controller.

●Specifications
Operating Environment

Model	**EZED1**
Operating Systems	Microsoft® Windows® 95 Service Pack1 or later *1 Microsoft® Windows® 98 Microsoft® Windows® 98SE Microsoft® Windows® Me Microsoft® Windows NT® 4.0 Service Pack6 or later Microsoft® Windows® 2000 Microsoft® Windows® XP
Computer	A personal computer that can install any of the above Windows® operating systems
Display Resolution	SVGA (800 x 600) or more [XGA (1024 x 768) or more is recommended.]
Hard Disk Capacity	Available disk space of 1.5 MB or more
Disk Drive	CD-ROM drive

*1 Internet Explorer 4.01 Service Pack 1 or later is also required.
 • Service Pack signifies a service pack provided by Microsoft Corporation.
 • Microsoft, Windows and Windows NT are registered trademarks of Microsoft Corporation in the United States and other countries.

PC Interface Cable

Cable Length	5 m
PC Connector Type	D-sub 9-pin
Communication Port	One RS-232C communication port

●Teaching Pendant (**EZT1**)/Data Editing Software (**EZED1**) Function Comparison Table

Item	Teaching pendant	Data editing software
Model	**EZT1**	**EZED1**
Cable length	5 m	5 m *1
Display	LCD 17 charactersx4 lines	PC screen
Emergency stop switch	●	×
Motion Profile setting	●	●
Parameter setting	●	●
Teaching function (direct/remote)	●	×
Motion Profile execution	●	×
Data copy	×	●
Display function	●	●
Operation data monitoring	●	×

●=Available   ×=Not available

*1 PC interface cable (supplied) is used.

■ Cable Set   (Common)

A set of dedicated cables is used to connect the **EZ limo** slider/cylinder with the controller.

The cable set consists of a motor cable and an encoder cable. The cable length can be selected from 2 m, 5 m and 10 m. Each of the cables can be purchased individually.

The same cable can be used for both the electromagnetic brake type and non-electromagnetic brake type.

Model	Length (L)	Applicable Products
CC02EZ1	2m	**EZS** Series **EZC** Series
CC05EZ1	5m	
CC10EZ1	10m	
CC02EZ2	2m	**EZHS** Series **EZHC** Series **EZHP** Series
CC05EZ2	5m	
CC10EZ2	10m	

●Individual Motor Cable

Model	Length (L)	Applicable Products
CC02EZ1-M	2m	**EZS** Series **EZC** Series
CC05EZ1-M	5m	
CC10EZ1-M	10m	
CC02EZ2-M	2m	**EZHS** Series **EZHC** Series **EZHP** Series
CC05EZ2-M	5m	
CC10EZ2-M	10m	

●Individual Encoder Cable, Actuator Communication Cable

Type of Cable	Model	Length (L)	Applicable Products
Encoder Cable	**CC02EZ1-E**	2m	**EZS** Series **EZC** Series
	CC05EZ1-E	5m	
	CC10EZ1-E	10m	
Actuator Communication Cable	**CC02EZ1-T**	2m	**EZHS** Series **EZHC** Series **EZHP** Series
	CC05EZ1-T	5m	
	CC10EZ1-T	10m	

●Dimensions   unit: mm

Motor Cable

CC□□EZ1-M

Motor Side   Controller Side
32.5 16.2   56   φ7.2   L   38   21.5 9.4

CC□□EZ2-M

Motor Side   Controller Side
37.2 19.6   59   φ8.5   L   36   22.2 11.6

Encoder Cable

CC□□EZ1-E

Encoder Side   Controller Side
32.5 162   57   φ7.7   L   40   25.4 5.6

Actuator Communication Cable

CC□□EZ1-T

Encoder Side   Controller Side
18.8 12   43   φ7.7   L   31.5   18.8 10
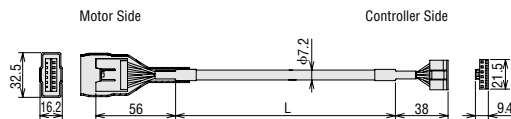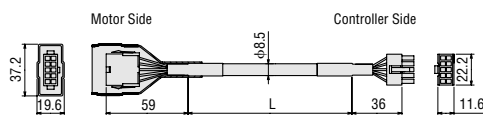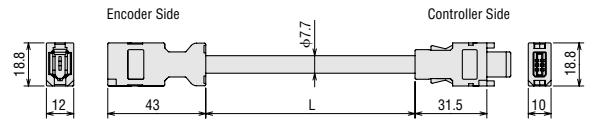
■Flexible Cable Set   (Common)

Use flexible cables in applications where the cables will flex repeatedly.

As with the cable set, flexible cables are available in three lengths of 2 m, 5 m and 10 m. The cables may be purchased individually or as a set.

The same cable can be used for both the electromagnetic brake type and non-electromagnetic brake type.

Model	Length (L)	Applicable Products
CC02EZ1R	2m	**EZS** Series **EZC** Series
CC05EZ1R	5m	
CC10EZ1R	10m	
CC02EZ2R	2m	**EZHS** Series **EZHC** Series **EZHP** Series
CC05EZ2R	5m	
CC10EZ2R	10m	

●Individual Flexible Motor Cable

Model	Length (L)	Applicable Products
CC02EZ1R-M	2m	**EZS** Series **EZC** Series
CC05EZ1R-M	5m	
CC10EZ1R-M	10m	
CC02EZ2R-M	2m	**EZHS** Series **EZHC** Series **EZHP** Series
CC05EZ2R-M	5m	
CC10EZ2R-M	10m	

●Individual Flexible Encoder Cable, Flexible Actuator Communication Cable

Type of Cable	Model	Length (L)	Applicable Products
Flexible Encoder Cable	**CC02EZ1R-E**	2m	**EZS** Series **EZC** Series
	CC05EZ1R-E	5m	
	CC10EZ1R-E	10m	
Flexible Actuator Communication Cable	**CC02EZ1R-T**	2m	**EZHS** Series
	CC05EZ1R-T	5m	**EZHC** Series
	CC10EZ1R-T	10m	**EZHP** Series

●Dimensions unit: mm

Flexible Motor Cable

CC□□EZ1R-M
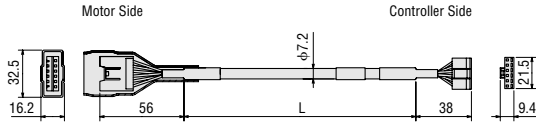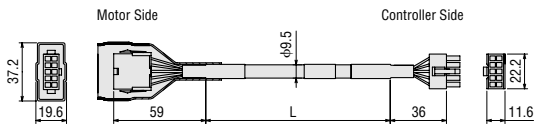
Motor Side   Controller Side

32.5 16.2 56 L 38 φ7.2 21.5 9.4

CC□□EZ2R-M

Motor Side   Controller Side

37.2 19.6 59 L 36 φ9.5 22.2 11.6

Flexible Encoder Cable

CC□□EZ1R-E

Encoder Side   Controller Side

32.5 16.2 57 L 40 φ7.7 25.4 5.6

Flexible Actuator Communication Cable

CC□□EZ1R-T

Encoder Side   Controller Side

18.8 12 43 L 31.5 φ7.7 18.8 10
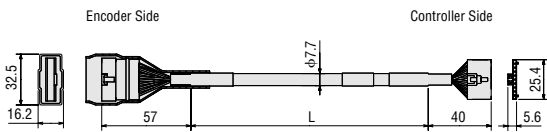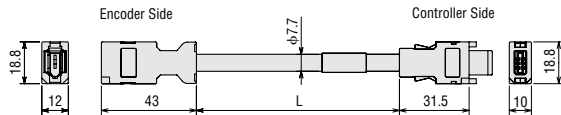
■ **Controller Link Cable** Common

Use these dedicated cables to link the **EZ limo** controllers.

Model	Length (L)	Applicable Products
CC002EZ1-L	0.2m	**EZS** Series **EZC** Series
CC002EZ2-L	0.2m	**EZHS** Series **EZHC** Series **EZHP** Series

●Dimensions unit: mm

CC002EZ1-L

φ12 38 200±20 13.3 φ4.4 6.6 7.62

CC002EZ2-L

φ12 38 200±20 38 φ4.7 φ12
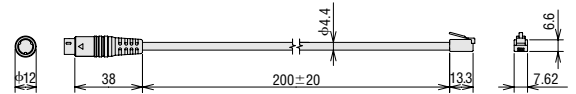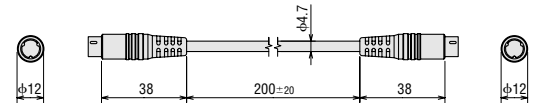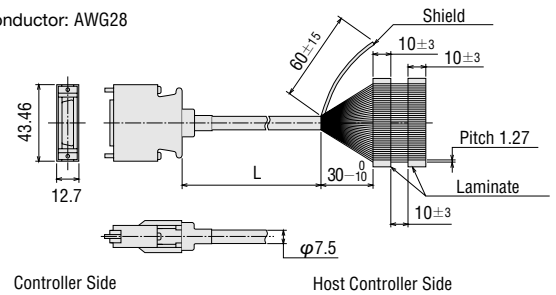
■ **I/O Cable** Common

These cables are used exclusively for connection between the **EZ limo** controller and the host controller.
A half-pitch connector allowing one-touch connection to the controller is attached at one end of the flat cable.

Model	Length (L)
CC36D1-1	1m
CC36D2-1	2m

●Dimensions unit: mm

Conductor: AWG28

Shield
43.46 12.7 L 60±15 10±3 10±3 30 0−10 Pitch 1.27 Laminate 10±3
φ7.5

Controller Side   Host Controller Side

■ **Sensor Cable** Common

Use these cables to connect the sensors used in the controller mode to the controller.

CC02EZ1-S   **CC20D□-1**
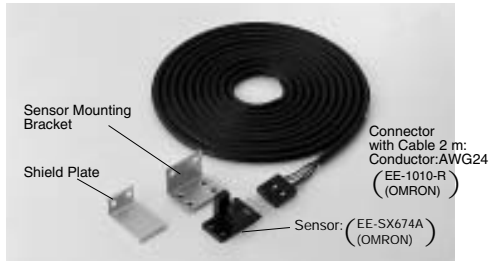
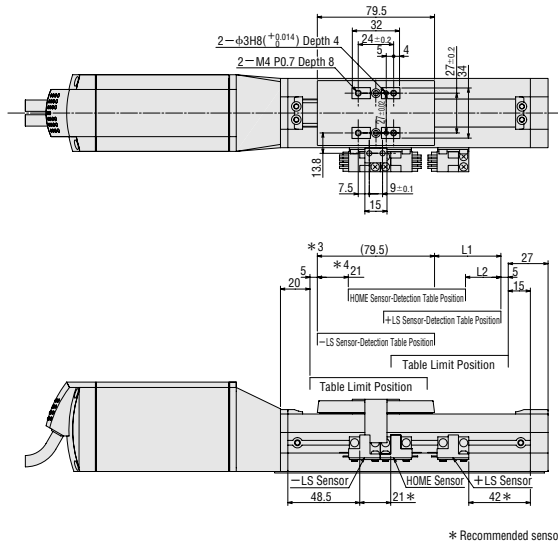| Model	Length (L)	Applicable Products
CC02EZ1-S	2m	**EZS** Series **EZC** Series
CC20D1-1	1m	**EZHS** Series **EZHC** Series **EZHP** Series
CC20D2-1	2m	

■ Sensor Set **PAEZ-S** 〔Common〕

These sensors can be used in the controller mode or driver mode. The sensor set consists of three sets of a sensor, a sensor mounting bracket and a cable with connector. The fittings, screws and other parts needed for installation are also provided.

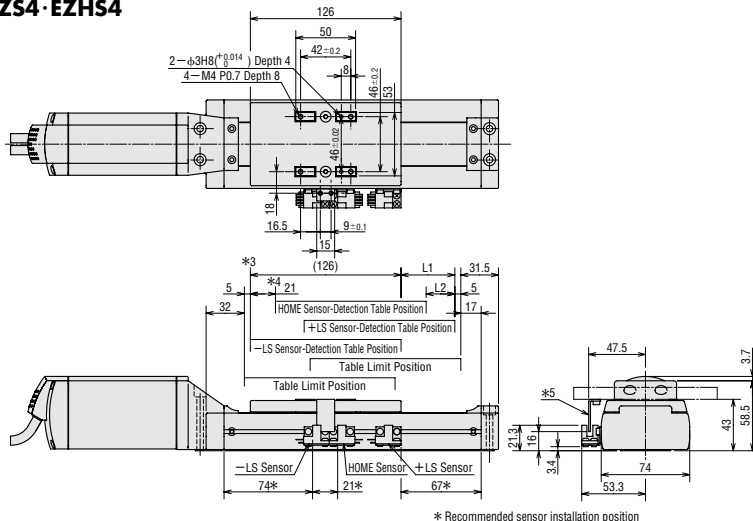* In the driver mode, connect the sensors to the controller you have provided.

Sensor Mounting Bracket

Shield Plate

Connector with Cable 2 m: Conductor:AWG24 (EE-1010-R (OMRON))

Sensor: (EE-SX674A (OMRON))

● Specifications

Model	EE-SX674A (Omron)
Power Supply	5 to 24 VDC ± 10%, ripple (P-P) 10% or less
Current Consumption	35 mA or less
Control Output	NPN open-collector output, 5 to 24 VDC, 100 mA or less Residual voltage 0.8 V or less (at load current of 100 mA)
Indicator Lamp	Detection display (red)
Sensor Logic	Normal open/Normal closed (switchable, depending on connection)

● Connection Example (controller mode)

Controller

A connection is needed.

Slider

Sensor Set

Sensor Cable (1 m or 2 m)

Cable with Connector (2 m)

● Example of Sensor Installation (for the slider only)

EZS3・EZHS3

2－φ3H8(+0.014/0) Depth 4
2－M4 P0.7 Depth 8

79.5
32
24±0.2
5 4
27±0.2
34
13.8
7.5 9±0.1
15

*3 (79.5) L1 27
*4 21 L2 5
5 15
20
HOME Sensor-Detection Table Position
+LS Sensor-Detection Table Position
－LS Sensor-Detection Table Position
Table Limit Position
Table Limit Position

－LS Sensor HOME Sensor +LS Sensor
48.5 21＊ 42＊

* Recommended sensor installation position

33.8 3.7
*5
25.8 20.5 50 58
8.1
47
52
39.8

		*1	*2
\multicolumn{2}{c	}{Slider Model}	L1	L2
EZS3-05	EZHS3A-05	45	—
EZS3-05M	EZHS3A-05M		
EZS3-10	EZHS3A-10	95	74
EZS3-10M	EZHS3A-10M		
EZS3-15	EZHS3A-15	145	124
EZS3-15M	EZHS3A-15M		
EZS3-20	EZHS3A-20	195	174
EZS3-20M	EZHS3A-20M		
EZS3-25	EZHS3A-25	245	224
EZS3-25M	EZHS3A-25M		
EZS3-30	EZHS3A-30	295	274
EZS3-30M	EZHS3A-30M		
EZS3-40	EZHS3A-40	395	374
EZS3-40M	EZHS3A-40M		
EZS3-50	EZHS3A-50	495	474
EZS3-50M	EZHS3A-50M		

*1 L1 indicates the effective stroke when two sensors are used.
*2 L2 indicates the effective stroke when three sensors are used. The EZS3-05 (M) and EZHS3-05 (M) do not accommodate the use of three sensors.
*3 Home position when two sensors are used.
*4 Home position when three sensors are used.
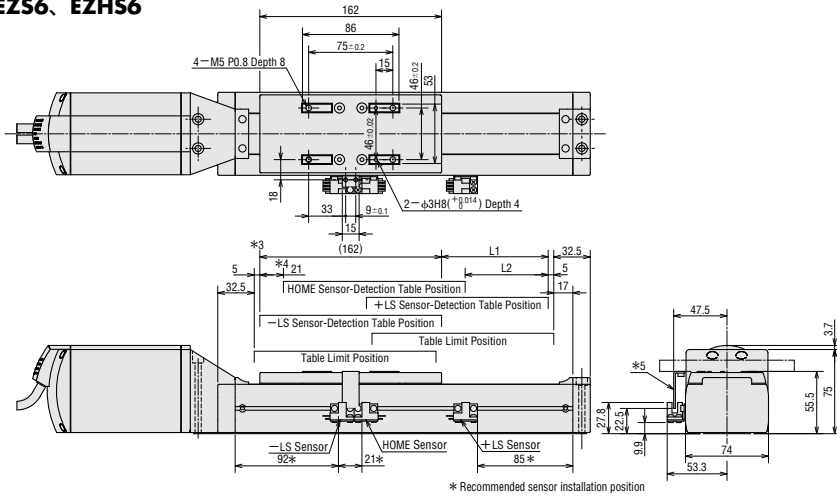*5 Install the shield plate onto the work. (Use the two supplied mounting screws: M3 x 5 mm.)

EZS4・EZHS4

2－φ3H8(+0.014/0) Depth 4
4－M4 P0.7 Depth 8

126
50
42±0.2
8
46±0.2
53
46±0.2
18
16.5 9±0.1
15

*3 (126) L1 31.5
*4 21 L2 5
5 17
32
HOME Sensor-Detection Table Position
+LS Sensor-Detection Table Position
－LS Sensor-Detection Table Position
Table Limit Position
Table Limit Position

－LS Sensor HOME Sensor +LS Sensor
74＊ 21＊ 67＊

* Recommended sensor installation position

47.5 3.7
*5
21.3 16 43 58.5
3.4
53.3
74

		*1	*2
\multicolumn{2}{c	}{Slider Model}	L1	L2
EZS4-05	EZHS4A-05	45	—
EZS4-05M	EZHS4A-05M		
EZS4-10	EZHS4A-10	95	74
EZS4-10M	EZHS4A-10M		
EZS4-15	EZHS4A-15	145	124
EZS4-15M	EZHS4A-15M		
EZS4-20	EZHS4A-20	195	174
EZS4-20M	EZHS4A-20M		
EZS4-25	EZHS4A-25	245	224
EZS4-25M	EZHS4A-25M		
EZS4-30	EZHS4A-30	295	274
EZS4-30M	EZHS4A-30M		
EZS4-40	EZHS4A-40	395	374
EZS4-40M	EZHS4A-40M		
EZS4-50	EZHS4A-50	495	474
EZS4-50M	EZHS4A-50M		

*1 L1 indicates the effective stroke when two sensors are used.
*2 L2 indicates the effective stroke when three sensors are used. The EZS4-05 (M) and EZHS4-05 (M) do not accommodate the use of three sensors.
*3 Home position when two sensors are used.
*4 Home position when three sensors are used.
*5 Install the shield plate onto the work. (Use the two supplied mounting screws: M3 x 5 mm.)

EZS6、EZHS6

4－M5 P0.8 Depth 8

2－φ3H8($^{+0.014}_{0}$) Depth 4

HOME Sensor-Detection Table Position
＋LS Sensor-Detection Table Position
－LS Sensor-Detection Table Position
Table Limit Position
Table Limit Position

－LS Sensor / HOME Sensor ＋LS Sensor
92＊ 21＊ 85＊

＊Recommended sensor installation position

		＊1	＊2
Slider Model		L1	L2
EZS6-10	EZHS6□-10	95	74
EZS6-10M	EZHS6□-10M	95	74
EZS6-15	EZHS6□-15	145	124
EZS6-15M	EZHS6□-15M	145	124
EZS6-20	EZHS6□-20	195	174
EZS6-20M	EZHS6□-20M	195	174
EZS6-25	EZHS6□-25	245	224
EZS6-25M	EZHS6□-25M	245	224
EZS6-30	EZHS6□-30	295	274
EZS6-30M	EZHS6□-30M	295	274
EZS6-40	EZHS6□-40	395	374
EZS6-40M	EZHS6□-40M	395	374
EZS6-50	EZHS6□-50	495	474
EZS6-50M	EZHS6□-50M	495	474

＊1 L1 indicates the effective stroke when two sensors are used.
＊2 L2 indicates the effective stroke when three sensors are used.
＊3 Home position when two sensors are used.
＊4 Home position when three sensors are used.
＊5 Install the shield plate onto the work.
(Use the two supplied mounting screws: M3 x 5 mm.)

■ Dual Axis Mounting Bracket   EZS EZHS

This dual axis mounting bracket allows easy installation of a pair of sliders. Various types of brackets are available to support combinations of X-Y and X-Z axes.

● Installation Example

Use **EZS6** or **EZHS6** for the X-axis and **EZS4** or **EZHS4** (stroke: 50 to 300 mm) for the Y- or Z-axis.
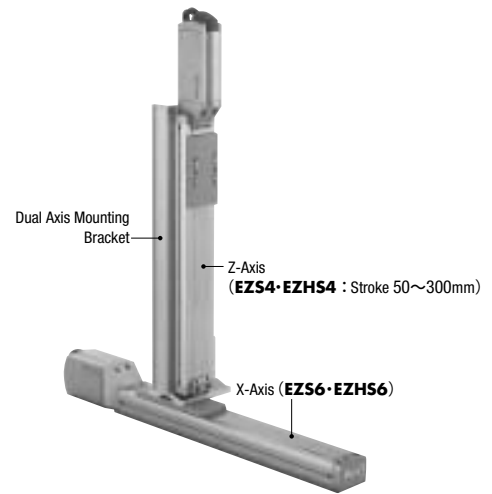
◇ X-Y Configuration

Dual Axis Mounting Bracket

X-Axis (**EZS6・EZHS6**)

Y-Axis (**EZS4・EZHS4**：Stroke 50～300mm)
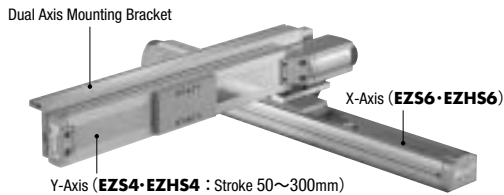
● X-Y Bracket

Y–Axis Stroke	Model
50mm	**PAB-EZ64Y05**
100mm	**PAB-EZ64Y10**
150mm	**PAB-EZ64Y15**
200mm	**PAB-EZ64Y20**
250mm	**PAB-EZ64Y25**
300mm	**PAB-EZ64Y30**

◇ X-Z Configuration

Dual Axis Mounting Bracket

Z-Axis (**EZS4・EZHS4**：Stroke 50～300mm)

X-Axis (**EZS6・EZHS6**)

● X-Z Bracket

Z–Axis Stroke	Model
50mm	**PAB-EZ64Z05**
100mm	**PAB-EZ64Z10**
150mm	**PAB-EZ64Z15**
200mm	**PAB-EZ64Z20**
250mm	**PAB-EZ64Z25**
300mm	**PAB-EZ64Z30**

◇Maximum Transportable Mass in Dual Axis Configuration
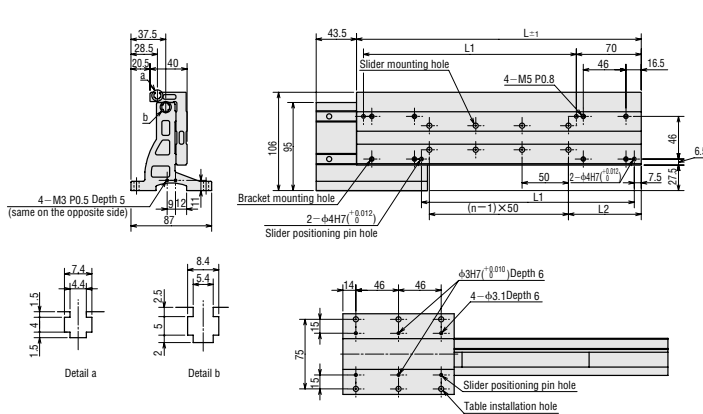
●Maximum Transportable Mass in X-Y Configuration

Unit: kg

Applicable Products	Speed Range		Y–Axis Stroke					
	X–Axis	Y–Axis	50mm	100mm	150mm	200mm	250mm	300mm
EZS	300mm/s	300mm/s	4.3	4.0	3.6	3.3	3.0	2.6
	200mm/s	300mm/s	5.0					
		200mm/s	10.0		9.2	7.8	6.6	5.6
		100mm/s	13.5	11.1				
EZHS	800mm/s	800mm/s	13.5	11.1	9.2	7.8	6.6	5.6

●Maximum Transportable Mass in X-Z Configuration

Unit: kg

Applicable Products	Speed Range		Z–Axis Stroke					
	X–Axis	Z–Axis	50mm	100mm	150mm	200mm	250mm	300mm
EZS	300mm/s	300mm/s	2.0					
		200mm/s	4.0		3.8	3.4	3.1	2.7
		100mm/s	4.4	4.1				
	200mm/s	300mm/s	2.0					
		200mm/s	4.0					
		100mm/s	4.5					
EZHS	800mm/s	800mm/s	3.5					
		600mm/s	4.5					
		400mm/s	7.5					

◇Dimensions   unit: mm

X-Y Configuration 1
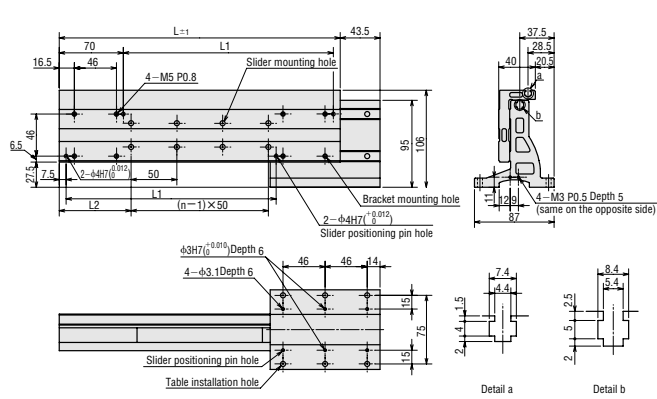
X-Z Configuration 1
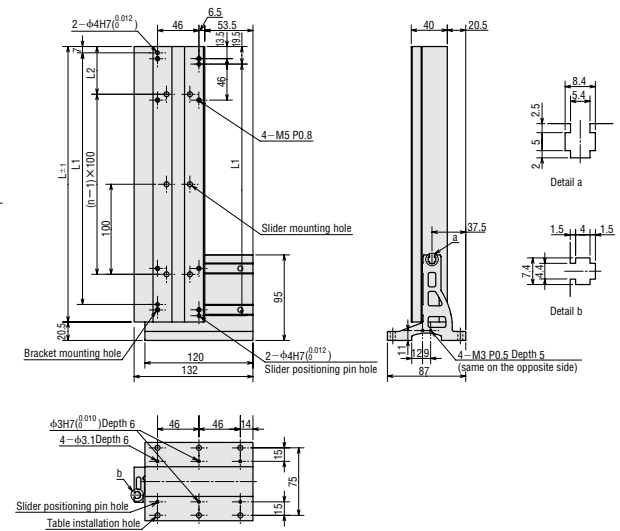
X-Y Configuration 2

X-Z Configuration 2

Model	L	L1	L2	n	Mass (kg)
PAB-EZ64Y05	307	229.5	78.5	4	1.62
PAB-EZ64Y10	357	279.5	53.5	6	1.75
PAB-EZ64Y15	407	329.5	78.5	6	1.88
PAB-EZ64Y20	457	379.5	53.5	8	2.01
PAB-EZ64Y25	507	429.5	78.5	8	2.14
PAB-EZ64Y30	557	479.5	53.5	10	2.27
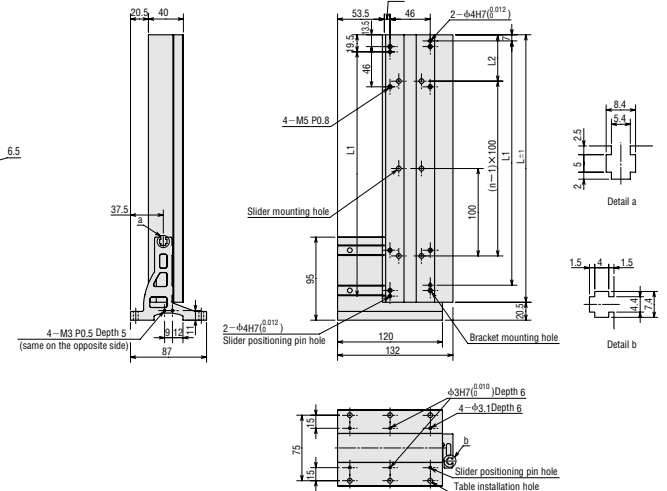
Model	L	L1	L2	n	Mass (kg)
PAB-EZ64Z05	256	229.5	78	2	1.51
PAB-EZ64Z10	306	279.5	53	3	1.64
PAB-EZ64Z15	356	329.5	78	3	1.78
PAB-EZ64Z20	406	379.5	53	4	1.91
PAB-EZ64Z25	456	429.5	78	4	2.05
PAB-EZ64Z30	506	479.5	53	5	2.18

◇Operating Range   unit: mm

X-Y Configuration Pattern 1

*The Y-axis can be installed symmetrically to the X-axis either on its right or left. The moving range is the same on both sides.

Full length of EZ(H)S6-□

100 max.

75

74

83

Table center following return-to-home operation of EZ(H)S4-□

Effective Stroke of EZ(H)S4-□

Full length of EZ(H)S4-□

Movable area

97.5

Effective Stroke of EZ(H)S6-□   56.5

87.5   75.5

23   60

161.5

155.5

112.5

190.5

70

115.5   Effective Stroke of EZ(H)S6-□   116.5

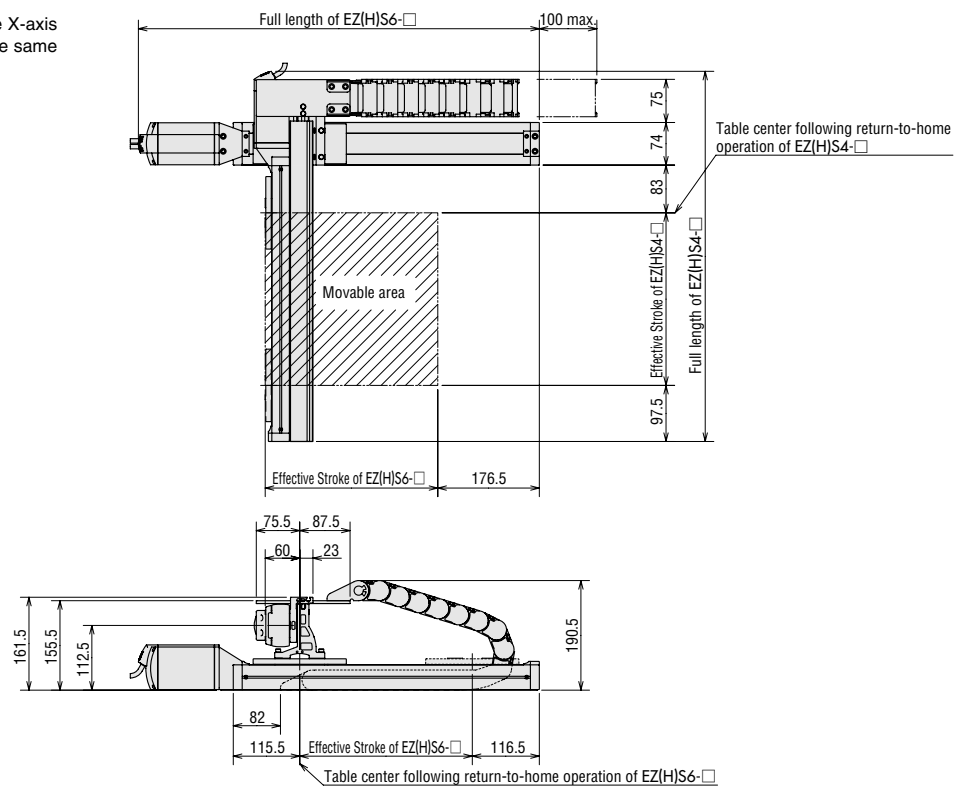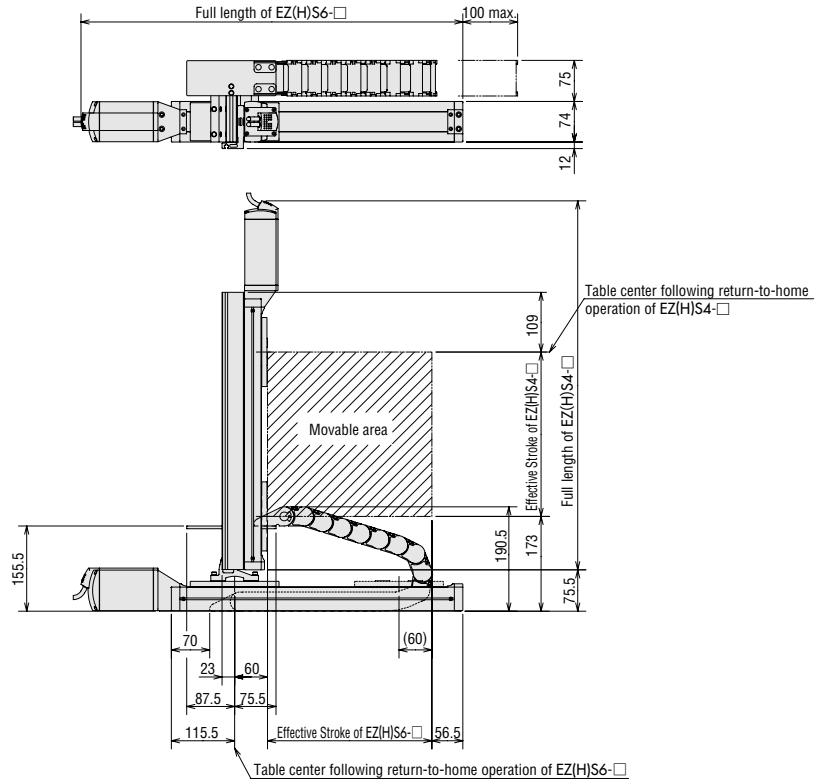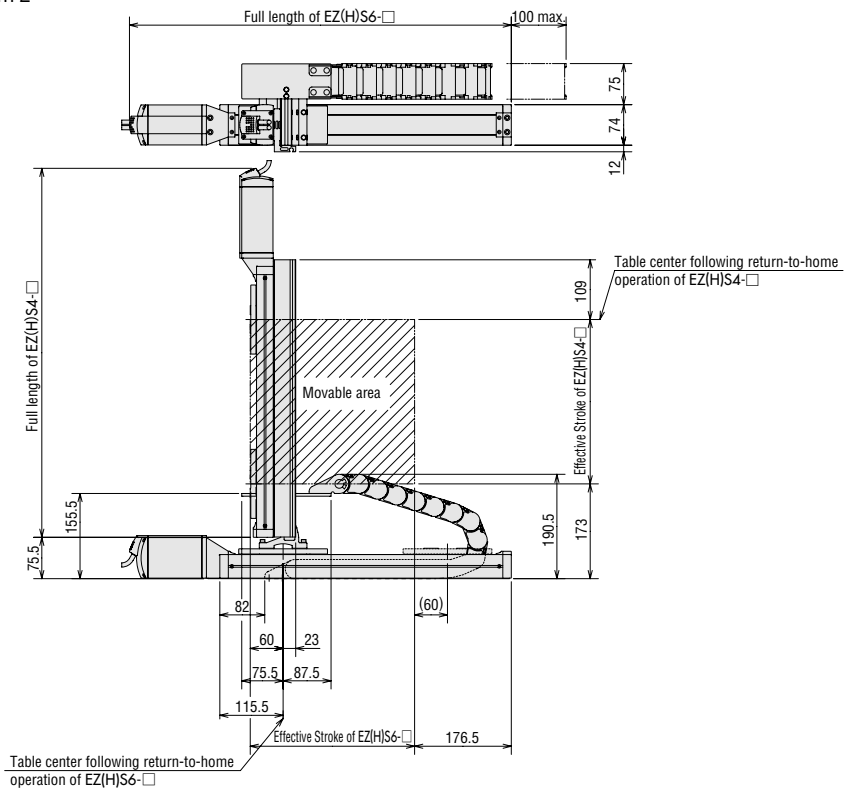Table center following return-to-home operation of EZ(H)S6-□
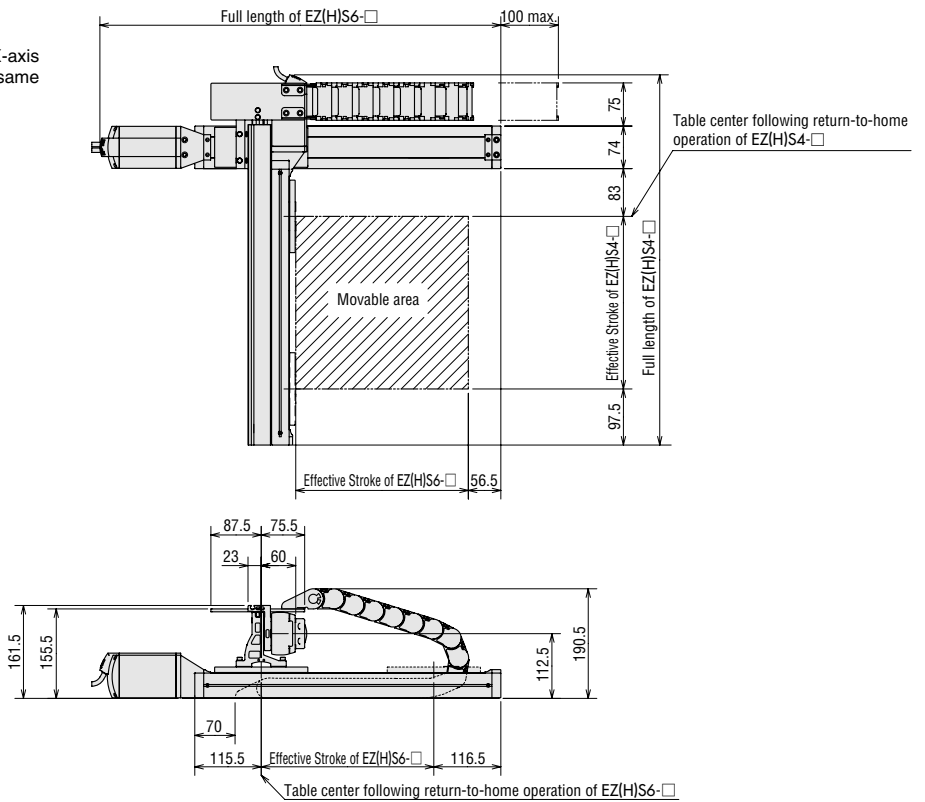
X-Y Configuration Pattern 2

*The Y-axis can be installed symmetrically to the X-axis either on its right or left. The moving range is the same on both sides.

Full length of EZ(H)S6-□

100 max.

75

74

83

Table center following return-to-home operation of EZ(H)S4-□

Effective Stroke of EZ(H)S4-□

Full length of EZ(H)S4-□

Movable area

97.5

Effective Stroke of EZ(H)S6-□   176.5

75.5   87.5

60   23

161.5

155.5

112.5

190.5

82

115.5   Effective Stroke of EZ(H)S6-□   116.5

Table center following return-to-home operation of EZ(H)S6-□

X-Z Configuration Pattern 1

Full length of EZ(H)S6-□   100 max.

75
74
12

Table center following return-to-home operation of EZ(H)S4-□

109

Effective Stroke of EZ(H)S4-□

Full length of EZ(H)S4-□

Movable area

190.5

173

155.5

75.5

70

23   60

(60)

87.5   75.5

115.5   Effective Stroke of EZ(H)S6-□   56.5

Table center following return-to-home operation of EZ(H)S6-□

X-Z Configuration Pattern 2

Full length of EZ(H)S6-□   100 max.

75
74
12

Table center following return-to-home operation of EZ(H)S4-□

109

Full length of EZ(H)S4-□

Effective Stroke of EZ(H)S4-□

Movable area

190.5

173

155.5

75.5

82

60   23

(60)

75.5   87.5

115.5

Effective Stroke of EZ(H)S6-□   176.5

Table center following return-to-home operation of EZ(H)S6-□

■ Cable Holder   EZS EZHS

This low-noise cable holder protects and guides cables in multi-axis configurations. It can be easily installed on a dual axis mounting bracket using the supplied brackets.

Stroke	Model
100mm	**PACH65-13**
150mm	**PACH65-14**
200mm	**PACH65-15**
250mm	**PACH65-17**
300mm	**PACH65-18**
400mm	**PACH65-21**
500mm	**PACH65-24**

●Specifications

Model		PACH65-□						
		13	**14**	**15**	**17**	**18**	**21**	**24**
Minimum Bending Radius	mm	50						
Maximum Cable Hose Diameter	mm	20						
Maximum Cable Hose Mass	kg/m	6.5						
Mass※	kg	0.70	0.74	0.77	0.83	0.86	0.96	1.06
Ambient Temperature Range		−10℃～＋80℃						
Ambient Environment		Avoid use in an acid or alkaline ambience or in hot water.						

*The figures include the weight of brackets used for installation on the dual axis mounting bracket.

●Dimensions unit: mm

Cross Section AA'
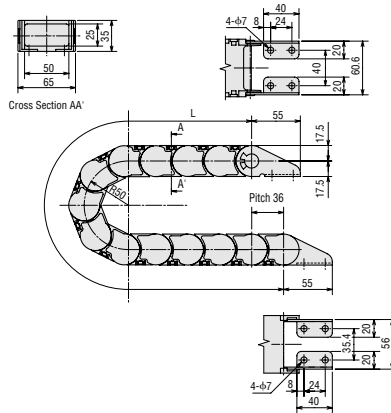
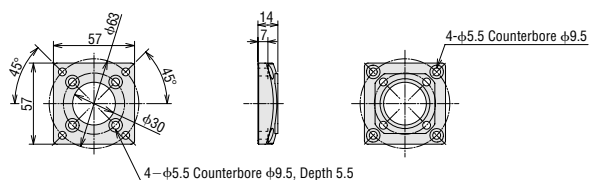| Model	L
PACH65-13	468
PACH65-14	504
PACH65-15	540
PACH65-17	612
PACH65-18	648
PACH65-21	756
PACH65-24	864

■ Cylinder Flange   EZC EZHC EZHP

This special mounting bracket is used to install the cylinder from the body side. The flange comes with the mounting screws for affixing the cylinder to the flange.

(The mounting screws must be provided for affixing the flange to the equipment.)
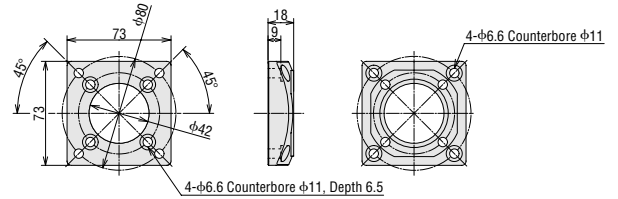
Model	Applicable Products
PAEZ4-F	**EZC4**, **EZHC4**, **EZHP4**
PAEZ6-F	**EZC6**, **EZHC6**, **EZHP6**

●Dimensions unit: mm

PAEZ4-F

4−φ5.5 Counterbore φ9.5, Depth 5.5

PAEZ6-F

4-φ6.6 Counterbore φ11, Depth 6.5
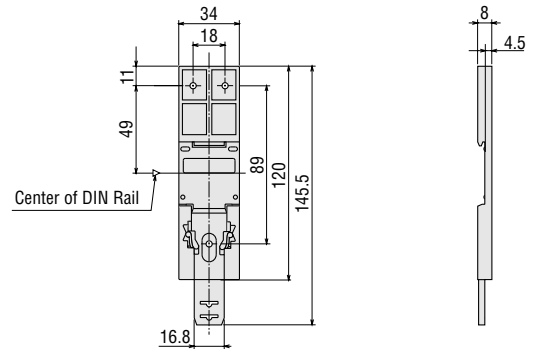
4-φ6.6 Counterbore φ11

■ DIN Rail Mounting Plate **PADP01**   EZS EZC

This plate is used to install the **EZ limo** controller to a DIN rail. The plate comes with the mounting screws.

●Dimensions unit: mm

Center of DIN Rail

The following spare parts are also available:

●Stainless Sheet for Slider   EZS EZHS

Model	Stroke (mm)	Model	Stroke (mm)	Applicable Products
PAEZ3-05W	50	**PAEZ3-25W**	250	
PAEZ3-10W	100	**PAEZ3-30W**	300	**EZS3**
PAEZ3-15W	150	**PAEZ3-40W**	400	**EZHS3**
PAEZ3-20W	200	**PAEZ3-50W**	500	
PAEZ4-05W	50	**PAEZ4-25W**	250	
PAEZ4-10W	100	**PAEZ4-30W**	300	**EZS4**
PAEZ4-15W	150	**PAEZ4-40W**	400	**EZHS4**
PAEZ4-20W	200	**PAEZ4-50W**	500	
PAEZ6-10W	100	**PAEZ6-30W**	300	
PAEZ6-15W	150	**PAEZ6-40W**	400	**EZS6**
PAEZ6-20W	200	**PAEZ6-50W**	500	**EZHS6**
PAEZ6-25W	250	—	—	—

●Battery

Model	Applicable Products
PAEZ-BT	**EZS・EZC**Series
PAEZ-BT2	**EZHS・EZHC・EZHP**Series

*The spare battery does not come with a battery holder.

EZ limo absolute type uses Ni-Cd rechargeable batteries. Disposal of the used batteries is subject to each country's regulations on environmental control. Please contact Oriental Motor if you have any questions regarding disposal of the batteries.

Oriental Motor offers a full line of linear-motion products, including the **DRL** series and **LH** series.

We can help you design a more convenient and user-friendly operating environment that meets your various requirements. Please consult us for further details.

Compact Actuator
DRL Series

The **DRL** Series of compact linear motion actuators use a new 5-phase stepping motor which incorporates a ball screw. These are combined with 5-phase 24 VDC microstepping drivers with photocoupler inputs for extremely precise positioning.

● Compact Design
The compact design of the **DRL** actuator allows for the elimination of extra parts such as couplings, belts and pulleys.

DRL28P□1-03

Frame Size
1.10 inch
(**28** mm)

Max. Stroke
1.18 inch
(**30** mm)

2.28 inch (**58** mm)

The **DRL** actuator is a self-contained package consisting of a stepping motor with a hollow shaft rotor connected to a ball screw nut. Rotation of the nut initiates movement of the actual ball screw.

To enable linear motion of the screw on an actuator without a guide, provide an external anti-rotation mechanism.

DRL

Few Components, Simple Mechanism
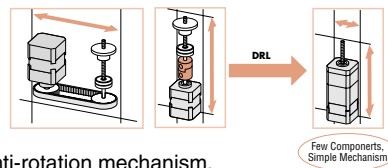
Standard Type   Guide Type
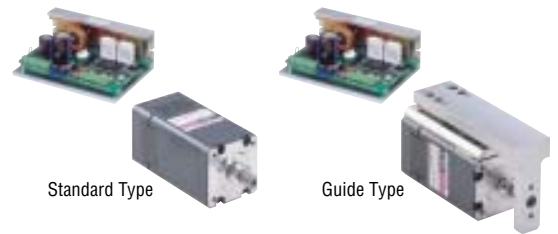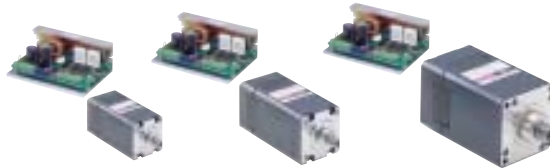
● Microstepping Drivers
The driver features a microstepping mechanism that electronically divides the basic step angle of the motor, thus enabling high resolution and low-vibration operation at low speeds.

● Reliable Design and Structure
The drive mechanism employs a 5-phase stepping motor with ball screw. The hollow rotor shaft incorporates large bore bearings for the direct handling of thrust loads. Minimizing the number of parts involved in linear conversion results in higher reliability.

■ Product Line

Rolled Ball Screw Repetitive Positioning Accuracy ±0.00079 inch (±0.02 mm)	DRL28PA1-03D	DRL42PA2-04D	DRL60PA4-05D	DRL28PA1G-03D	DRL42PA2G-04D	DRL60PA4G-05D
Ground Ball Screw Repetitive Positioning Accuracy ±0.00039 inch (±0.01 mm)	DRL28PB1-03D	DRL42PB2-04D	—	DRL28PB1G-03D	DRL42PB2G-04D	—
Motor Frame Size	28 mm sq.	42 mm sq.	60 mm sq.	28 mm sq.	42 mm sq.	60 mm sq.
Maximum Thrust Force	30 N	100 N	300 N	30 N	100 N	300 N
Type	Standard Type			Guide Type		

<div style="text-align:right">

Linear Heads
LH Series

</div>

The **LH** Series of linear heads with a rack-and-pinion mechanism are coupled with standard AC compact motors. They easily produce linear motion for applications pressing and reversing.
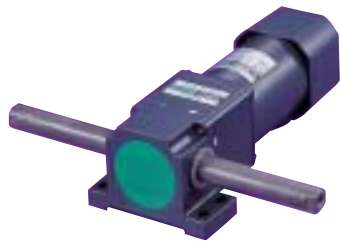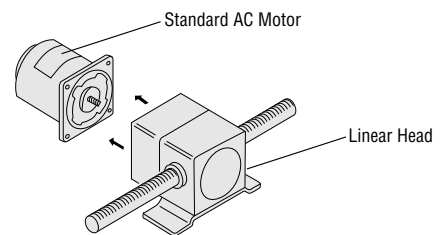
B Type
Reversible Motors (horizontal)
(The motor shown in the photograph is sold separately.)

F Type
Electromagnetic
Brake Motors
(vertical)

● **Wide Variety**

A wide variety of linear heads are available, depending on basic speed, length of rack, maximum transportable mass, direction of rack movement in respect to the mounting face etc.

Standard AC Motor

Linear Head

■ **Types of Linear Heads**

Linear Head Type	Basic Speed (mm/s)[*2]				Max. Transportable Mass[*3] kg	Rack Stroke (mm)						
	6	12	24	54		100	200	300	400	500	600	700
0L	●	●	●	—	10	●	●	—	—	—	—	—
2L[*1]	—	●	●	●	20	●	●	●	●	●	—	—
4L	—	●	●	●	70	●	●	●	●	●	●	●
5L-U	—	●	●	●	140	●	●	●	●	●	●	●

*1 The basic speed of **2L** type is 12 mm/s, 30 mm/s, 60 mm/s.
*2 Basic speed is based on the synchronous speed (1800 r/min at 60Hz). The actual speed varies with the load or power supply frequency.
*3 The maximum transportable mass is determined by the strength of the linear head. Just as when connecting a gearhead to a motor, increasing the gear ratio (reducing the speed) generates greater transportable mass, but the motor should always be operated below the maximum permissible transportable mass. The maximum transportable mass is the value when operating the rack in a horizontal direction. When operating in a vertical direction, subtract the mass of the rack from the value. The maximum transportable mass is the value when combined with a reversible motor. The value varies with basic speed.

This product is manufactured at a plant certified with the international standards **ISO 9001** (for quality assurance) and **ISO 14001** (for systems of environmental management).

Specifications are subject to change without notice.
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