



New Products

New Products

Electric Actuator ESA Series



ELECTRIC ACTUATOR ESA SERIES

**SLEEK DESIGN
EXCELLENT COST PERFORMANCE**



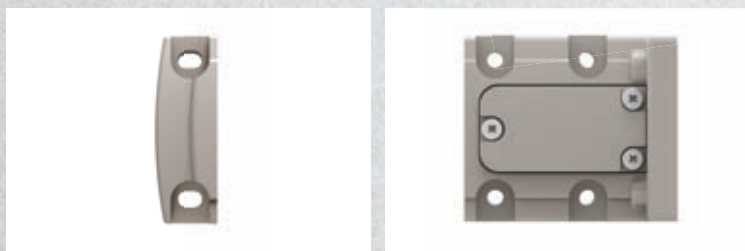
CKD (China) Corporation
C-CC-1416A

ESA Series

Perfect for conveying
small parts!

Can be mounted from the top

Through holes are opened on the upper surface for easy mounting.

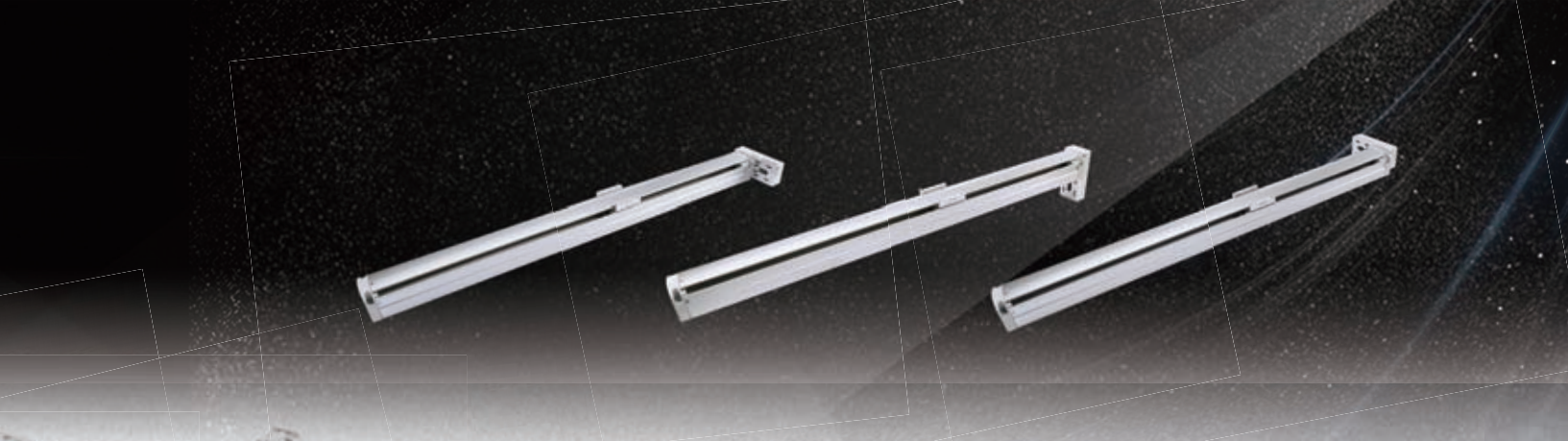


Equipped with linear guide

Highly reliable structure

Screw lead

Compact body



A motor you're familiar with can be mounted

List of motor manufacturers and field network compatibility

	Common	SSCNET	CC-Link	MECHATRO LINK-II	MECHATRO LINK-III	Device Net	Ether CAT
Mitsubishi Electric	○	○	○				
Delta Electric	○						○
Sanyo Electric	○						○
YASKAWA Electric	○			○	○	○	
Keyence	○			○			
Panasonic	○						
OMRON	○			○			○

No motor is included in this product.

The motor and driver should be prepared, installed and adjusted by the customer.



Extensive motor mounting directions

Contribute to space saving



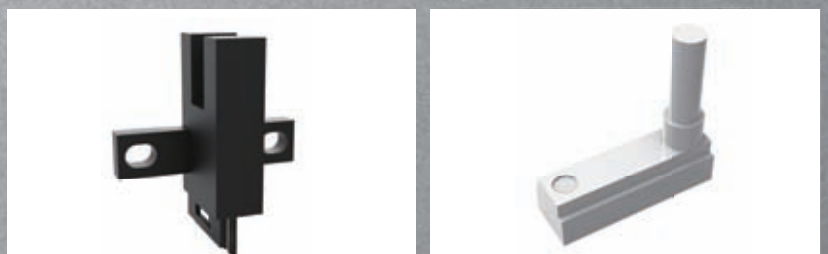
Direct mounting Right return mounting Downward return mounting Left return mounting

Wide range of sensor mounting specifications!

Select mounting direction and sensor jaw for origin sensor and limit sensor.

Load up to 20, high speed

Capacity, MAX 1000 mm/s



								Screw lead (mm)	Maximum transportable weight (kg)		Listed page
350	400	450	500	550	600	700	Horizontal		Vertical		
								5	10	3	P1 to P6
								10	5	1.5	
								20	3	1	
						230	200	5	30	10	P7 to P12
						460	400	10	15	5	
						920	800	20	8	2	

*Maximum transportable weight are values with acceleration/deceleration of 0.3 G.

List of motors used

Code	Manufacturer	Model	
		Series	100 W
M	Mitsubishi Electric Corporation	MELSERVO J3	HF-KP13
		MELSERVO J4	HG-KR13
	OMRON Corporation	OMNUC G5	R88M-K10030H
		1S	R88M-1M10030H
	Sanyo Electric Corporation	SANMOTION R	R2AA04010FX
Delta Electric, Inc.	ECMA-C	ECMA-C10401ES	
Y	YASKAWA Electric Corporation	Σ -V	SGMJV-01ADA21
		Σ -7	SGM7J-01ADA21
	Keyence Corporation	SV	SV-M010□□
SV2		SV2-M010□□	
P	Panasonic Corporation	MINAS A5	MSMD012G1A
		MINAS A6	MSMD012G1A



Electric Actuator Motorless Type ESA-04LE Series

100 W servo motor mountable Motor direct mounting type

How to order

ESA-04L (A) (E) - (B) 05 (C) 0200 (D) (N) (NN) - (M) (1) (MR) (C) (B) (G)

A Motor mounting direction	
E	Direct mounting

B Screw lead	
05	Screw lead 5 mm
10	Screw lead 10 mm
20	Screw lead 20 mm

C Stroke length	
0050	Stroke length 50 mm
~	(Per 50 mm)
0500	Stroke length 500 mm

D Motor type	
M	For mounted motor specification, refer to the Series Variation page at the beginning of the manual.
Y	
P	

E Sensor specification	
NN	None
MR	Sensor rail and magnet. Right side mounting
ML	Sensor rail and magnet. Left side mounting
DR	Sensor rail and jaw. Right side mounting
DL	Sensor rail and jaw. Left side mounting

F Origin sensor	
N	None
C	Yes

G Limit sensor	
N	None
B	Yes

*MR, ML: The sensor is a cylinder switch.
DR, DL: The sensor is a photoelectric sensor.

*Origin sensor and limit sensor are available as a set. Select "None" for both of them if selecting "None" for either.

< Example of model number >

ESA-04LE-050200NNN-M1MRCB

Body size	: Body width 48 mm
Motor mounting direction	: Direct mounting
Screw lead	: 5 mm
Stroke length	: 200 mm
Motor type	: M
Sensor specification	: Sensor rail and magnet. Right side mounting
Origin sensor	: Yes
Limit sensor	: Yes

Specifications

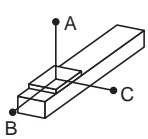
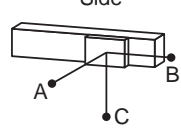
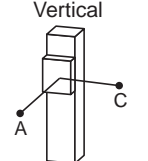
Applicable motor capacity	100 W servo motor			
Driving mode	Ball screw φ12			
Stroke length mm	50 to 500			
Screw lead mm	5	10	20	
Maximum transportable weight	Horizontal kg	10	5	3
	Vertical kg	3	1.5	1
Rated thrust N	339	170	85	
Repetitive accuracy mm	±0.02			
Idling distance mm	0.1 or less			
Operating ambient temperature and humidity	0 to 40°C (with no icing)			
	20% to 80% (with no condensation)			
Storage ambient temperature and humidity	0 to 40°C (with no icing)			
	20% to 80% (with no condensation)			
Environment	Without corrosive gas, explosive gas or dust			

*Maximum transportable weight are values with acceleration/deceleration of 0.3 G.

Stroke length and maximum speed (Unit: mm/s)

Stroke length	50 to 500
Screw lead	
5	250
10	500
20	1000

Allowable overhang length

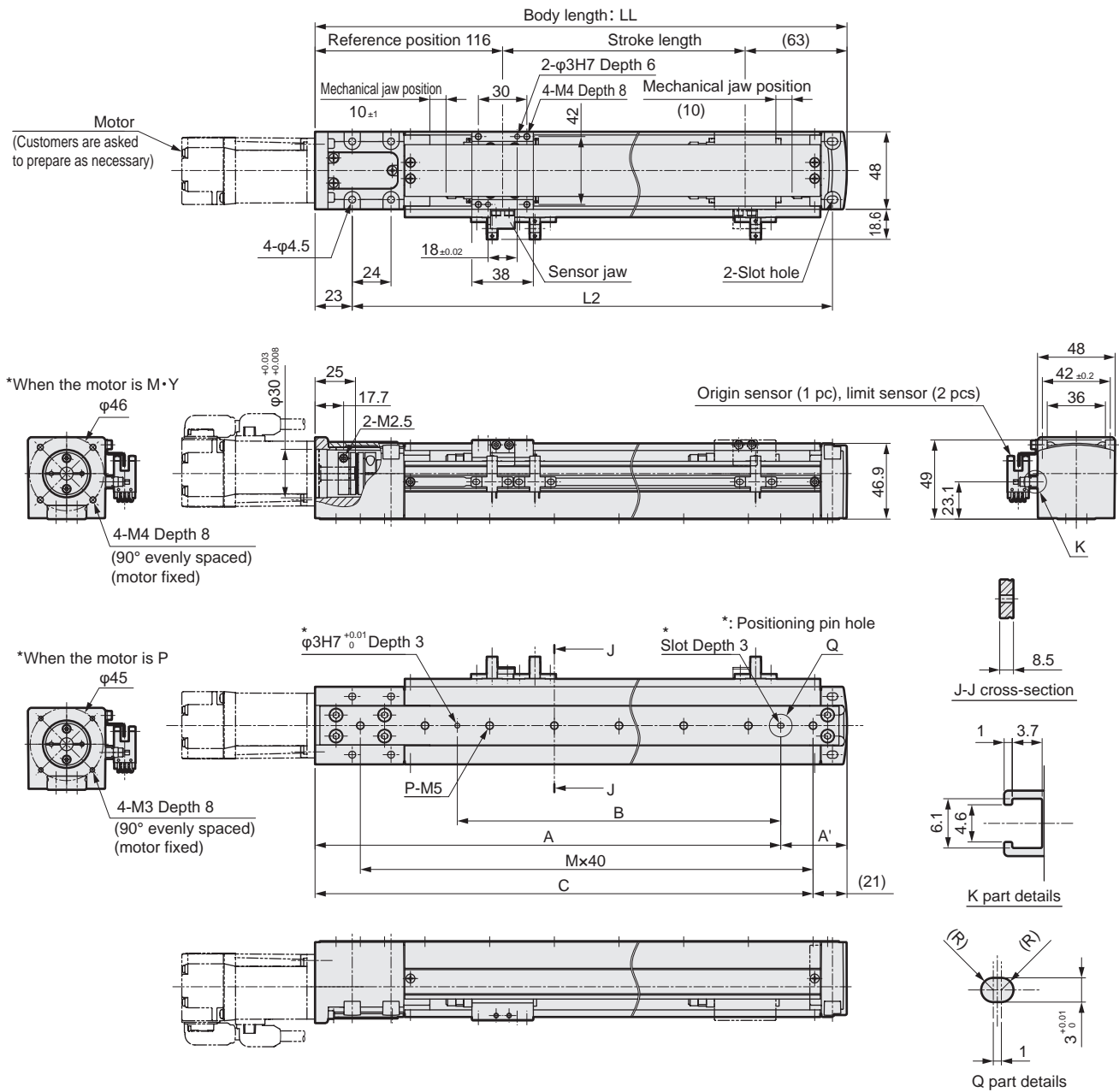
Mounting style	Screw lead	Load kg	Overhang (mm)		
			A	B	C
Horizontal 	5	6	237	24	56
		10	137	13	30
	10	3	286	51	99
		5	164	28	56
	20	2	221	65	92
		3	142	42	59
Side 	5	6	56	24	237
		10	30	13	137
	10	3	99	51	286
		5	56	28	164
	20	2	92	65	221
		3	59	42	142
Vertical 	5	1	188	—	188
		3	62	—	62
	10	1	166	—	166
		1.5	111	—	111
	20	0.5	262	—	262
		1	131	—	131

*Overhang length with travel life of 5000 km.

*Stroke length: 350 mm, Acceleration/deceleration: 0.3 G, Motor speed: 3000 rpm, Direction: Uni-direction

*Refer to page 15 for details.

Dimensions (ESA-04LE)



Stroke length code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500
Body length: LL	229	279	329	379	429	479	529	579	629	679
L2	197	247	297	347	397	447	497	547	597	647
A	178	238	288	338	378	438	488	538	578	638
A'	51	41	41	41	51	41	41	41	51	41
B	100	150	200	250	300	350	400	450	500	550
C	208	258	308	358	408	458	508	558	608	658
M	5	6	7	8	10	11	12	13	15	16
P	6	7	8	9	11	12	13	14	16	17
Weight (kg)	1.8	1.9	2.0	2.1	2.3	2.4	2.5	2.6	2.7	2.8

List of attachments

Mounted motor specification	Coupling	Motor mounting bolt	
		Size	Quantity
M	Assembled shipment	M4	4
Y		M4	4
P		M3	4

[When selecting origin sensor/limit sensor]

Sensor type	Manufacturer	Model	Quantity
Cylinder switch	CKD	SW-T2V	3
Photoelectric sensor	OMRON	EE-SX672	3



Electric Actuator Motorless Type

ESA-04L Series

100 W servo motor mountable Motor return mounting type

How to order

ESA-04L (A) (L) - (B) 05 (C) 0200 (N) (NN) - (D) (M) (1) (MR) (C) (B) (G)

A Motor mounting direction	
R	Right return mounting
D	Downward return mounting
L	Left return mounting

B Screw lead	
05	Screw lead 5 mm
10	Screw lead 10 mm
20	Screw lead 20 mm

C Stroke length	
0050	Stroke length: 50 mm
~	(Per 50 mm)
0500	Stroke length: 500 mm

*150 to 500 mm in case of downward return mounting.

D Motor type	
M	For mounted motor specification, refer to the Series Variation page at the beginning of the manual.
Y	
P	

E Sensor specification	
NN	None
MR	Sensor rail and magnet. Right side mounting
ML	Sensor rail and magnet. Left side mounting
DR	Sensor rail and jaw. Right side mounting
DL	Sensor rail and jaw. Left side mounting

F Origin sensor	
N	None
C	Yes

G Limit sensor	
N	None
B	Yes

*MR, ML: The sensor is a cylinder switch.

DR, DL: The sensor is a photoelectric sensor.

*Origin sensor and limit sensor are available as a set. Select "None" for both of them if selecting "None" for either.

*The motor return direction cannot be the same as the sensor mounting direction.

Example: The sensor rail mounting direction cannot be Right if the motor return direction is R.

< Example of model number >

ESA-04LL-050200NNN-M1MRCB

Body size : Body width 48 mm
 Motor mounting direction : Left return mounting
 Screw lead : 5 mm
 Stroke length : 200 mm
 Motor type : M
 Sensor specification : Sensor rail and magnet. Right side mounting
 Origin sensor : Yes
 Limit sensor : Yes

Specifications

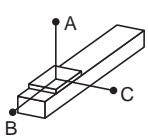
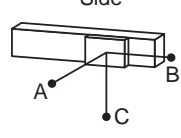
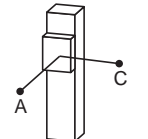
Applicable motor capacity	100 W servo motor			
Driving mode	Ball screw φ12			
Stroke length mm	50 to 500			
Screw lead mm	5	10	20	
Maximum transportable weight	Horizontal kg	10	5	3
	Vertical kg	3	1.5	1
Rated thrust N	339	170	85	
Repetitive accuracy mm	±0.02			
Idling distance mm	0.1 or less			
Operating ambient temperature and humidity	0 to 40°C (with no icing)			
	20% to 80% (with no condensation)			
Storage ambient temperature and humidity	0 to 40°C (with no icing)			
	20% to 80% (with no condensation)			
Environment	Without corrosive gas, explosive gas or dust			

*Maximum transportable weight are values with acceleration/deceleration of 0.3 G.

Stroke length and maximum speed (Unit: mm/s)

Stroke length / Screw lead	50 to 500
5	250
10	500
20	1000

Allowable overhang length

Mounting style	Screw lead	Load kg	Overhang (mm)		
			A	B	C
Horizontal 	5	6	237	24	56
		10	137	13	30
	10	3	286	51	99
		5	164	28	56
	20	2	221	65	92
		3	142	42	59
Side 	5	6	56	24	237
		10	30	13	137
	10	3	99	51	286
		5	56	28	164
	20	2	92	65	221
		3	59	42	142
Vertical 	5	1	188	—	188
		3	62	—	62
	10	1	166	—	166
		1.5	111	—	111
	20	0.5	262	—	262
		1	131	—	131

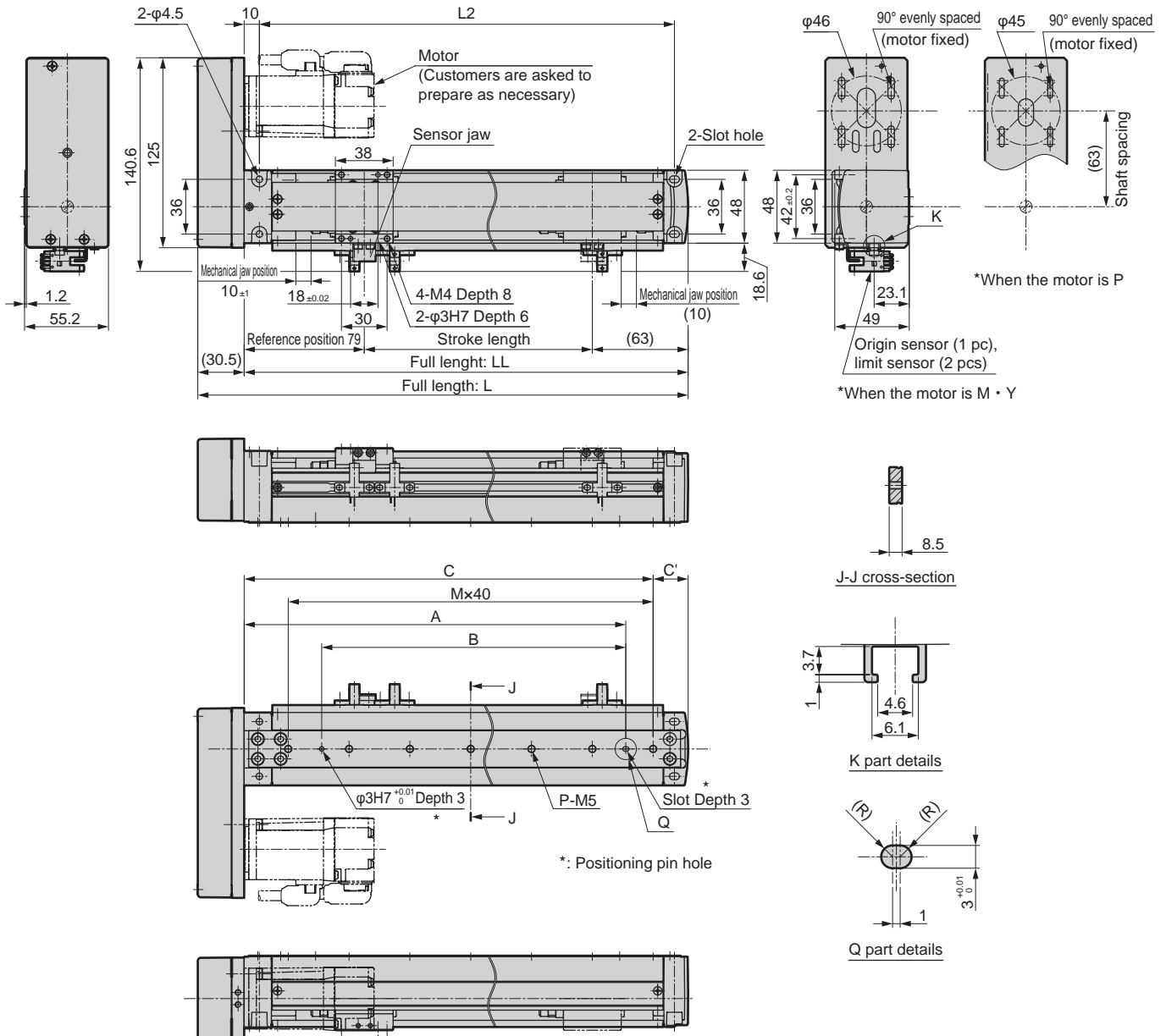
*Overhang length with travel life of 5000 km.

*Stroke length: 350 mm, Acceleration/deceleration: 0.3 G, Motor speed: 3000 rpm, Direction: Uni-direction

*Refer to page 15 for details.

Dimensions (ESA-04L※)

●R: Right return mounting type



Stroke length code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500
Full length: L	222.5	272.5	322.5	372.5	422.5	472.5	522.5	572.5	622.5	672.5
Body length: LL	192	242	292	342	392	442	492	542	592	642
L2	173	223	273	323	373	423	473	523	573	623
A	147	197	247	297	347	397	447	497	547	597
B	100	150	200	250	300	350	400	450	500	550
C	174	219	269	319	374	419	469	519	574	619
C'	18	23	23	23	18	23	23	23	18	23
M	4	5	6	7	9	10	11	12	14	15
P	5	6	7	8	10	11	12	13	15	16
Weight (kg)	2.0	2.1	2.2	2.3	2.5	2.6	2.7	2.8	2.9	3.0

List of attachments

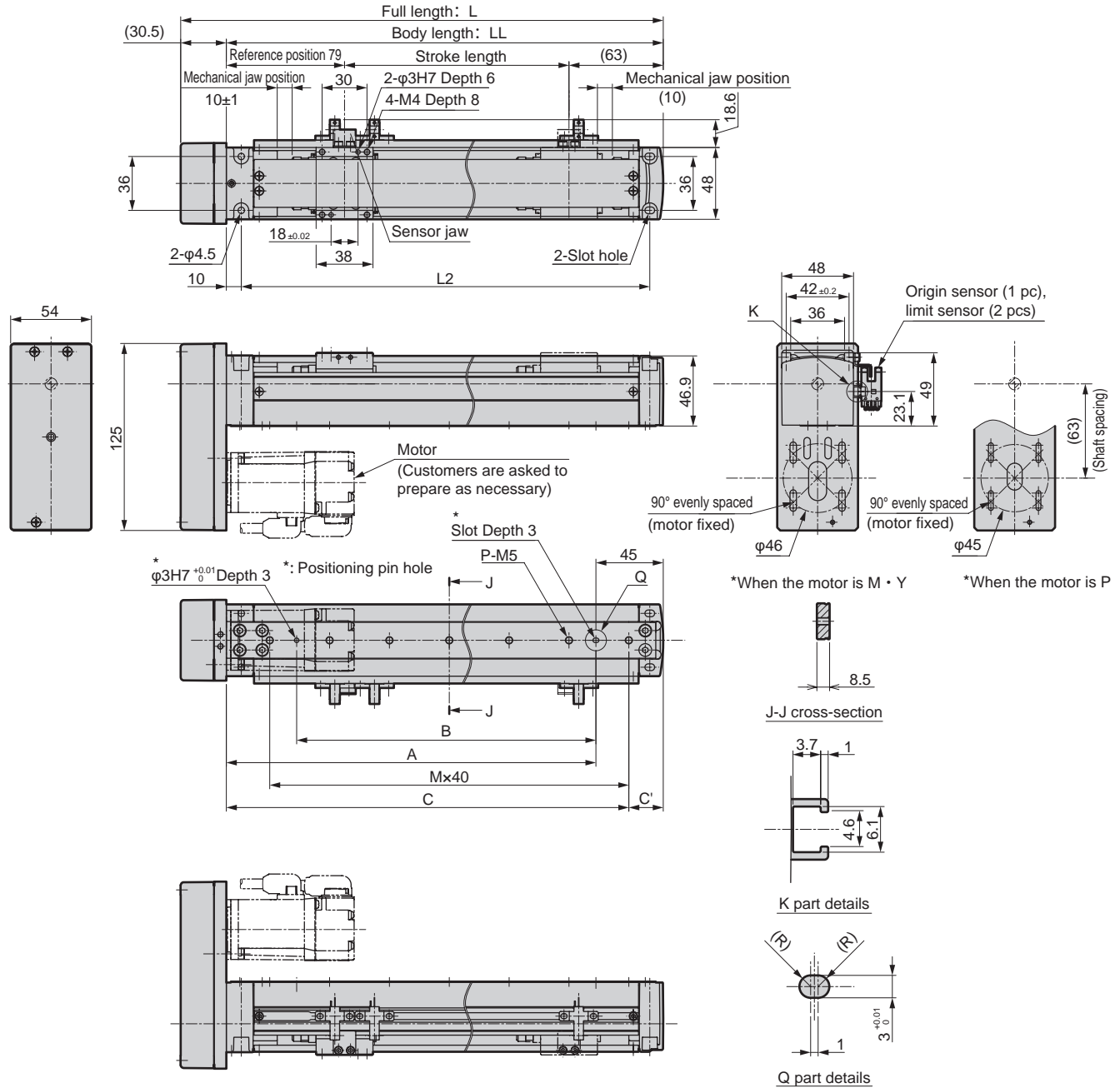
Mounted motor specification	Pulley	Motor mounting bolt	
		Size	Quantity
M	Attached at shipment	M4	4
Y		M4	4
P		M3	4

[When selecting origin sensor/limit sensor]

Sensor type	Manufacturer	Model	Quantity
Cylinder switch	CKD	SW-T2V	3
Photoelectric sensor	OMRON	EE-SX672	3

Dimensions (ESA-04L※)

●D: Downward return mounting type



Stroke length code	0150	0200	0250	0300	0350	0400	0450	0500
Stroke length (mm)	150	200	250	300	350	400	450	500
Full length: L	322.5	372.5	422.5	472.5	522.5	572.5	622.5	672.5
Body length: LL	292	342	392	442	492	542	592	642
L2	273	323	373	423	473	523	573	623
A	247	297	347	397	447	497	547	597
B	200	250	300	350	400	450	500	550
C	269	319	374	419	469	519	574	619
C'	23	23	18	23	23	23	18	23
M	6	7	9	10	11	12	14	15
P	7	8	10	11	12	13	15	16
Weight (kg)	2.2	2.3	2.5	2.6	2.7	2.8	2.9	3.0

List of attachments

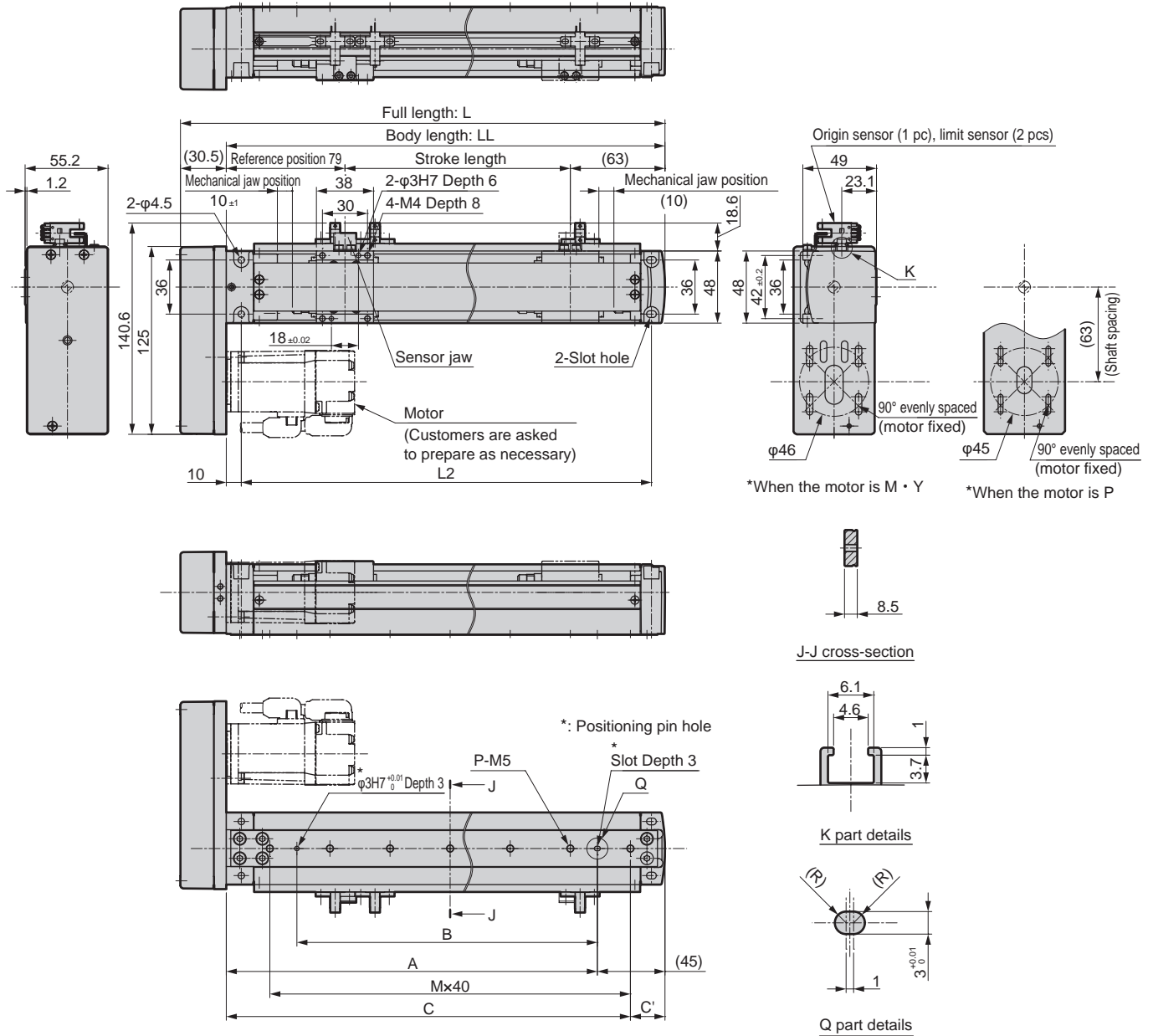
Mounted motor specification	Pulley	Motor mounting bolt	
		Size	Quantity
M	Attached at shipment	M4	4
Y		M4	4
P		M3	4

[When selecting origin sensor/limit sensor]

Sensor type	Manufacturer	Model	Quantity
Cylinder switch	CKD	SW-T2V	3
Photoelectric sensor	OMRON	EE-SX672	3

Dimensions (ESA-04L※)

●L: Left return mounting type



Stroke length code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500
Full length: L	222.5	272.5	322.5	372.5	422.5	472.5	522.5	572.5	622.5	672.5
Body length: LL	192	242	292	342	392	442	492	542	592	642
L2	173	223	273	323	373	423	473	523	573	623
A	147	197	247	297	347	397	447	497	547	597
B	100	150	200	250	300	350	400	450	500	550
C	174	219	269	319	374	419	469	519	574	619
C'	18	23	23	23	18	23	23	23	18	23
M	4	5	6	7	9	10	11	12	14	15
P	5	6	7	8	10	11	12	13	15	16
Weight (kg)	2.0	2.1	2.2	2.3	2.5	2.6	2.7	2.8	2.9	3.0

List of attachments

Mounted motor specification	Pulley	Motor mounting bolt	
		Size	Quantity
M	Attached at shipment	M4	4
Y		M4	4
P		M3	4

(When selecting origin sensor/limit sensor)

Sensor type	Manufacturer	Model	Quantity
Cylinder switch	CKD	SW-T2V	3
Photoelectric sensor	OMRON	EE-SX672	3



Electric Actuator Motorless Type ESA-06LE Series

100 W servo motor mountable Motor direct mounting type

How to order

ESA-06L **E** - **05** **0200** **N** **NN** - **M** **1** **MR** **C** **B**

A Motor mounting direction	
E	Direct mounting

B Screw lead	
05	Screw lead 5 mm
10	Screw lead 10 mm
20	Screw lead 20 mm

C Stroke length	
0050	Stroke length: 50 mm
~	(Per 50 mm)
0600	Stroke length: 600 mm
0700	Stroke length: 700 mm

D Motor type	
M	For mounted motor specification, refer to the Series Variation page at the beginning of the manual.
Y	
P	

E Sensor specification	
NN	None
MR	Sensor rail and magnet. Right side mounting
ML	Sensor rail and magnet. Left side mounting
DR	Sensor rail and jaw. Right side mounting
DL	Sensor rail and jaw. Left side mounting

F Origin sensor	
N	None
C	Yes

G Limit sensor	
N	None
B	Yes

*MR, ML: The sensor is a cylinder switch.

DR, DL: The sensor is a photoelectric sensor.

*Origin sensor and limit sensor are available as a set. Select "None" for both of them if selecting "None" for either.

< Example of model number >

ESA-06LE-050200NNN-M1MRCB

Body size : Body width 70 mm
 Motor mounting direction : Direct mounting
 Screw lead : 5 mm
 Stroke length : 200 mm
 Motor type : M
 Sensor specification : Sensor rail and magnet. Right side mounting
 Origin sensor : Yes
 Limit sensor : Yes

Specifications

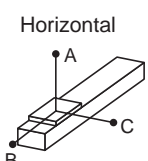
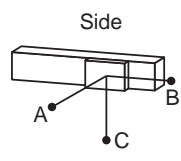
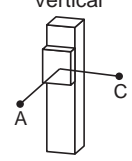
Applicable motor capacity	100 W servo motor			
Driving mode	Ball screw φ12			
Stroke length mm	50 to 700			
Screw lead mm	5	10	20	
Maximum transportable weight	Horizontal kg	30	15	8
	Vertical kg	10	5	2
Rated thrust N	339	170	85	
Repetitive accuracy mm	±0.02			
Idling distance mm	0.1 or less			
Operating ambient temperature and humidity	0 to 40°C (with no icing)			
	20% to 80% (with no condensation)			
Storage ambient temperature and humidity	0 to 40°C (with no icing)			
	20% to 80% (with no condensation)			
Environment	Without corrosive gas, explosive gas or dust			

*Maximum transportable weight are values with acceleration/deceleration of 0.3 G.

Stroke length and maximum speed (Unit: mm/s)

Screw lead	Stroke length		
	50 to 550	600	700
5	250	230	200
10	500	460	400
20	1000	920	800

Allowable overhang length

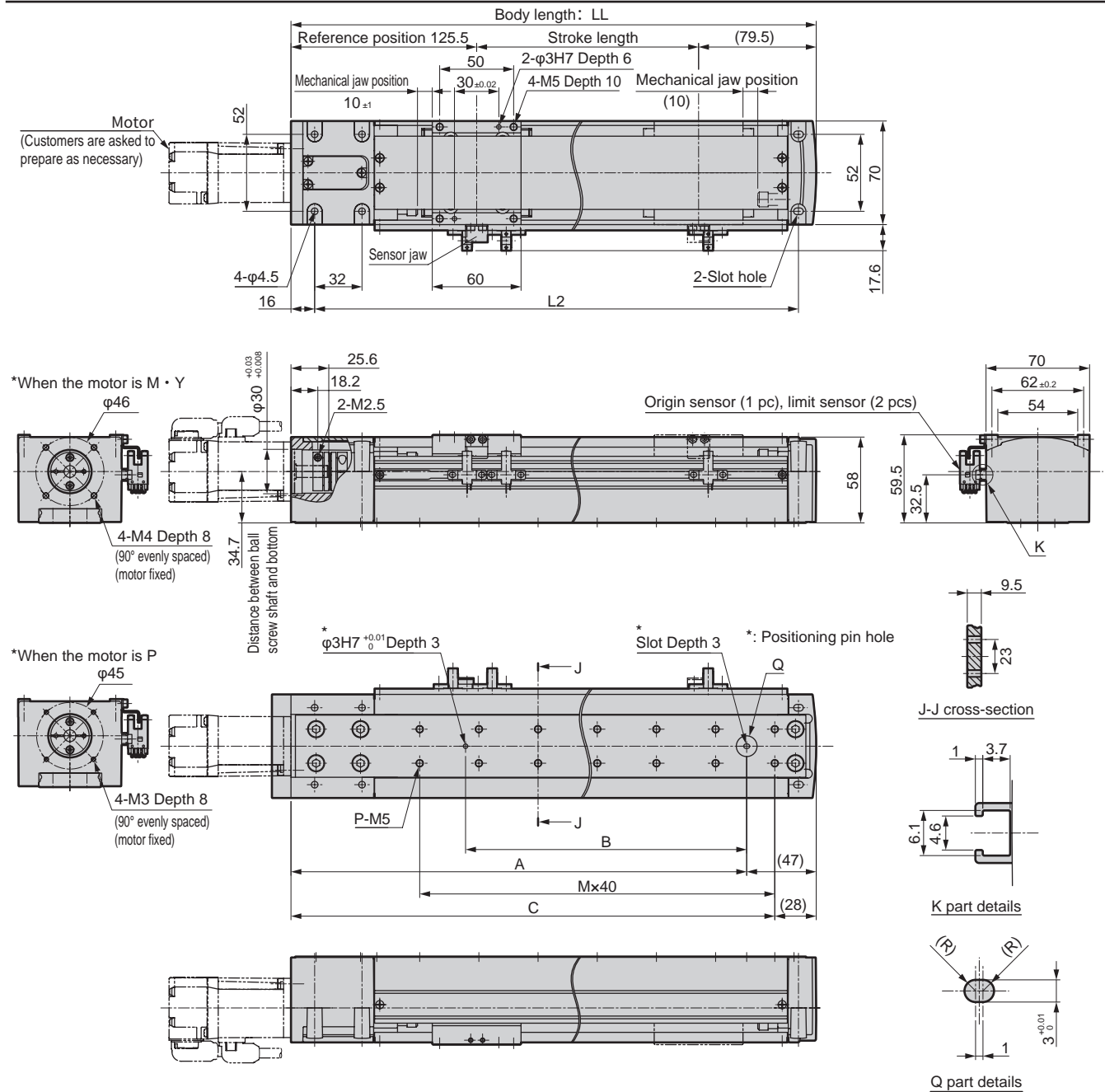
Mounting style	Screw lead	Load kg	Overhang (mm)		
			A	B	C
Horizontal 	5	10	480	50	110
		30	130	10	25
	10	3	800	145	330
		8	280	50	120
	20	15	140	23	55
		3	430	130	170
Side 	5	10	110	50	480
		30	25	10	130
	10	3	300	145	800
		8	120	50	280
	20	15	55	23	140
		3	170	130	430
Vertical 	5	2	300	—	300
		4	150	—	150
	10	10	60	—	60
		1	410	—	410
	20	2	205	—	205
		5	82	—	82

*Overhang length with travel life of 5000 km.

*Stroke length: 350 mm, Acceleration/deceleration: 0.3 G, Motor speed: 3000 rpm, Direction: Uni-direction

*Refer to page 15 for details.

Dimensions (ESA-06LE)



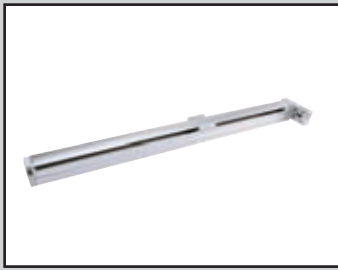
Stroke length code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0700
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	700
Body length: LL	255	305	355	405	455	505	555	605	655	705	755	805	905
L2	227	277	327	377	427	477	527	577	627	677	727	777	877
A	208	258	308	358	408	458	508	558	608	658	708	758	858
B	150	200	250	300	350	400	450	500	550	600	650	700	800
C	227	277	327	377	427	477	527	577	627	677	727	777	877
M	5	6	6	8	10	11	11	13	15	16	16	18	21
P	12	14	14	18	22	24	24	28	32	34	34	38	44
Weight (kg)	3.1	3.3	3.5	3.7	3.8	4.0	4.2	4.4	4.5	4.7	4.9	5.1	5.4

List of attachments

Mounted motor specification	Coupling	Motor mounting bolt	
		Size	Quantity
M	Assembled shipment	M4	4
Y		M4	4
P		M3	4

[When selecting origin sensor/limit sensor]

Sensor type	Manufacturer	Model	Quantity
Cylinder switch	CKD	SW-T2V	3
Photoelectric sensor	OMRON	EE-SX672	3



Electric Actuator Motorless Type ESA-06L Series

100 W servo motor mountable Motor return mounting type

How to order

ESA-06L (A) L (B) - 05 (C) 0200 (D) N (E) NN (F) - M (G) 1 (H) MR (I) C (J) B (K)

A Motor mounting direction	
R	Right return mounting
D	Downward return mounting
L	Left return mounting

B Screw lead	
05	Screw lead 5 mm
10	Screw lead 10 mm
20	Screw lead 20 mm

C Stroke length	
0050	Stroke length 50 mm
~	(Per 50 mm)
0600	Stroke length 600 mm
0700	Stroke length 700 mm

*150 to 500 mm in case of downward return mounting.

D Motor type	
M	For mounted motor specification, refer to the Series Variation page at the beginning of the manual.
Y	
P	

E Sensor specification	
NN	None
MR	Sensor rail and magnet. Right side mounting
ML	Sensor rail and magnet. Left side mounting
DR	Sensor rail and jaw. Right side mounting
DL	Sensor rail and jaw. Left side mounting

F Origin sensor	
N	None
C	Yes

G Limit sensor	
N	None
B	Yes

*MR, ML: The sensor is a cylinder switch.

DR, DL: The sensor is a photoelectric sensor.

*Origin sensor and limit sensor are available as a set. Select "None" for both of them if selecting "None" for either.

*The motor return direction cannot be the same as the sensor mounting direction.

Example: The sensor rail mounting direction cannot be Right if the motor return direction is R.

<Example of model number>

ESA-06LL-050200NNN-M1MRCB

Body size : Body width 70 mm
 Motor mounting direction : Left return mounting
 Screw lead : 5 mm
 Stroke length : 200 mm
 Motor type : M
 Sensor specification : Sensor rail and magnet. Right side mounting
 Origin sensor : Yes
 Limit sensor : Yes

Specifications

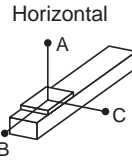
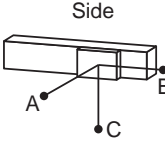
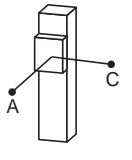
Applicable motor capacity	100 W servo motor			
Driving mode	Ball screw φ12			
Stroke length mm	50 to 700			
Screw lead mm	5	10	20	
Maximum transportable weight	Horizontal kg	30	15	8
	Vertical kg	10	5	2
Rated thrust N	339	170	85	
Repetitive accuracy mm	±0.02			
Idling distance mm	0.1 or less			
Operating ambient temperature and humidity	0 to 40°C (with no icing)			
	20% to 80% (with no condensation)			
Storage ambient temperature and humidity	0 to 40°C (with no icing)			
	20% to 80% (with no condensation)			
Environment	Without corrosive gas, explosive gas or dust			

*Maximum transportable weight are values with acceleration/deceleration of 0.3 G.

Stroke length and maximum speed (Unit: mm/s)

Screw lead	Stroke length		
	50 to 550	600	700
5	250	230	200
10	500	460	400
20	1000	920	800

Allowable overhang length

Mounting style	Screw lead	Load kg	Overhang (mm)		
			A	B	C
Horizontal 	5	10	480	50	110
		30	130	10	25
	10	3	800	145	330
		8	280	50	120
	20	15	140	23	55
		3	430	130	170
Side 	5	10	110	50	480
		30	25	10	130
	10	3	300	145	800
		8	120	50	280
	20	15	55	23	140
		3	170	130	430
Vertical 	5	2	300	—	300
		4	150	—	150
	10	10	60	—	60
		1	410	—	410
	20	2	205	—	205
		5	82	—	82

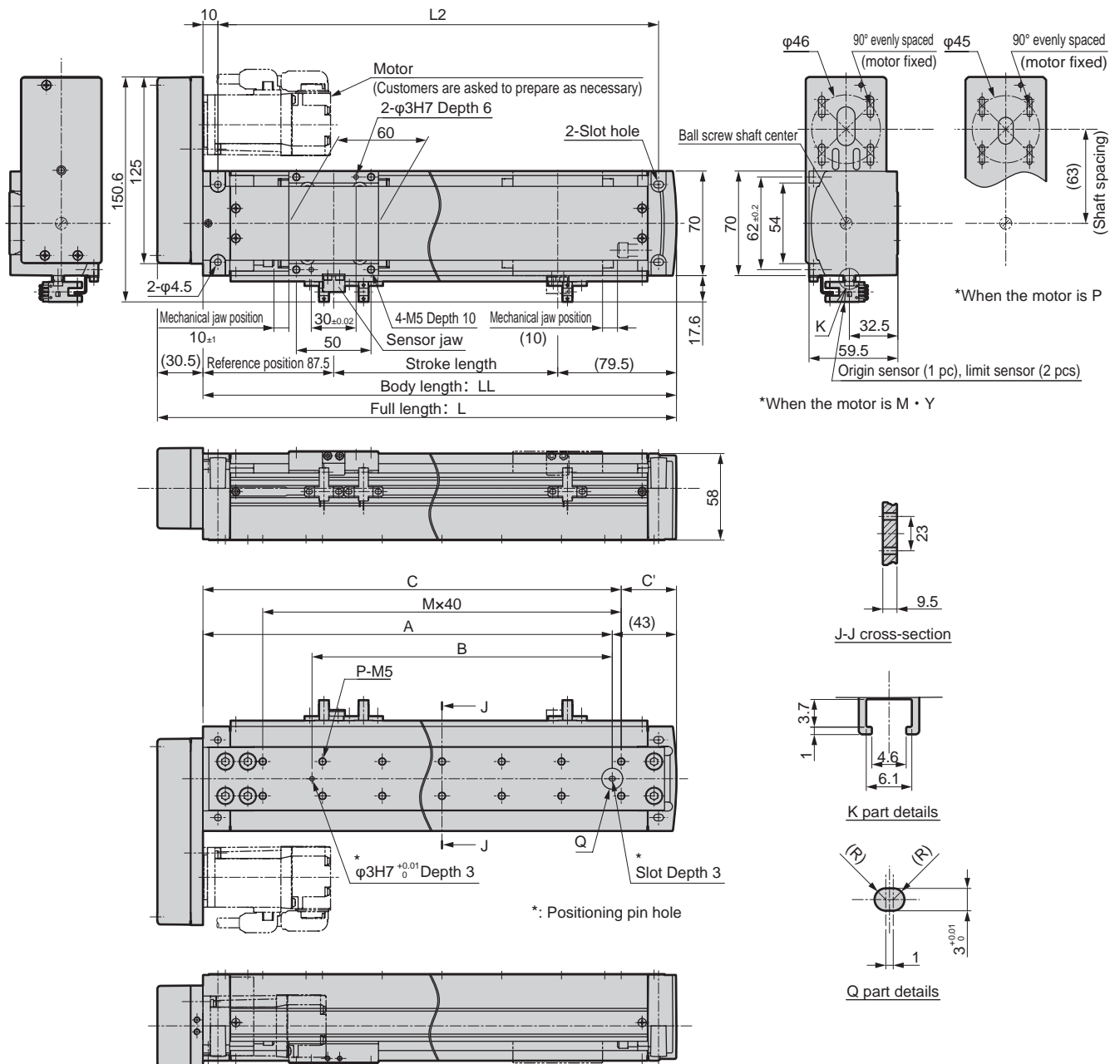
*Overhang length with travel life of 5000 km.

*Stroke length: 350 mm, Acceleration/deceleration: 0.3 G, Motor speed: 3000 rpm, Direction: Uni-direction

*Refer to page 15 for details.

Dimensions (ESA-06L※)

●R: Right return mounting type



Stroke length code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0700
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	700
Full length: L	247.5	297.5	347.5	397.5	447.5	497.5	547.5	597.5	647.5	697.5	747.5	797.5	897.5
Body length: LL	217	267	317	367	417	467	517	567	617	667	717	767	867
L2	195	245	295	345	395	445	495	545	595	645	695	745	845
A	174	224	274	324	374	424	474	524	574	624	674	724	824
B	100	150	200	250	300	350	400	450	500	550	600	650	750
C	190	240	280	335	390	440	480	535	590	640	680	735	840
C'	27	27	37	32	27	27	37	32	27	27	37	32	27
M	3	5	6	7	8	10	11	12	13	15	16	17	20
P	8	12	14	16	18	22	24	26	28	32	34	36	42
Weight (kg)	3.3	3.5	3.7	3.9	4.0	4.2	4.4	4.6	4.7	4.9	5.1	5.3	5.6

List of attachments

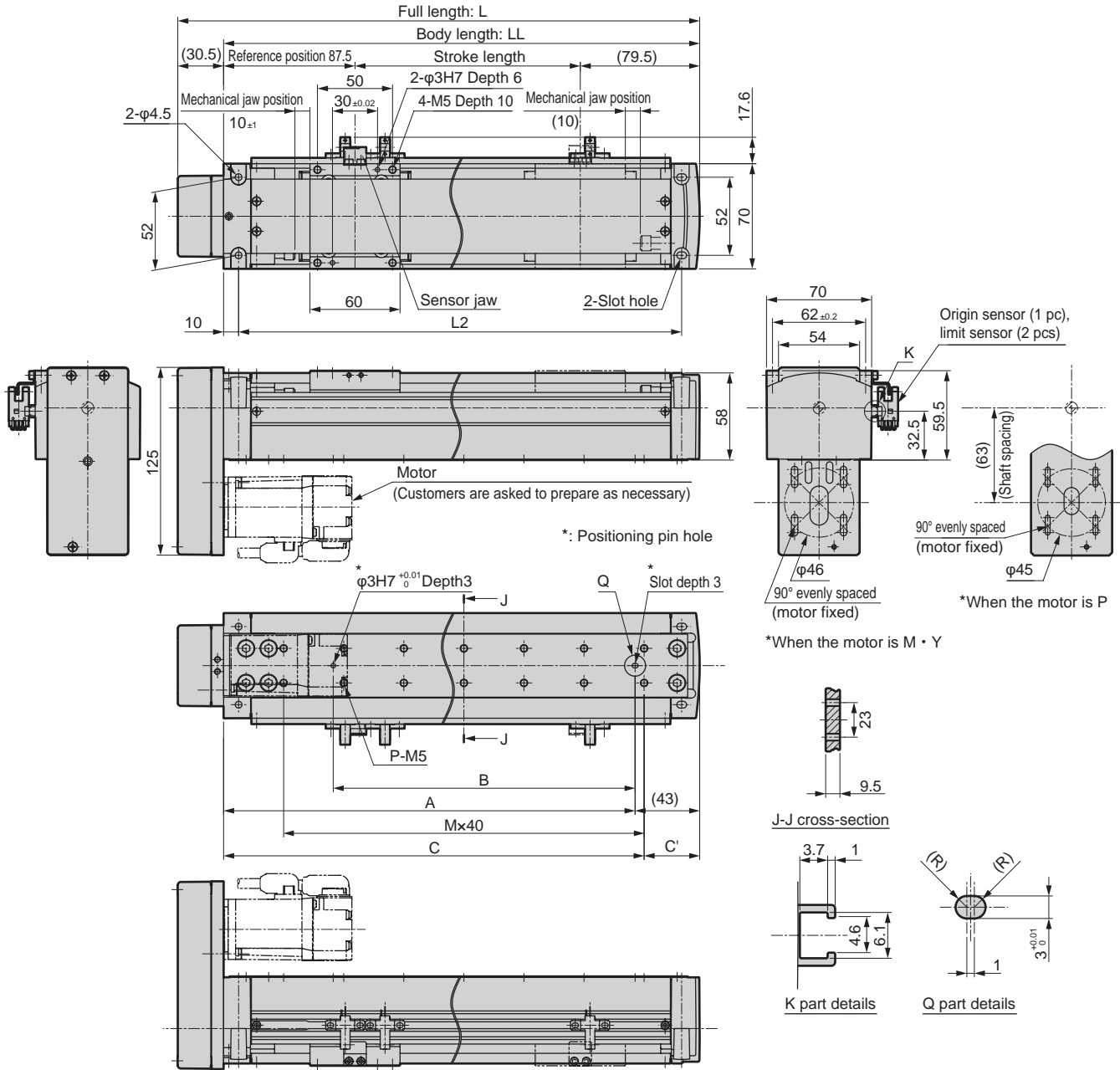
Mounted motor specification	Pulley	Motor mounting bolt	
		Size	Quantity
M	Attached at shipment	M4	4
Y		M4	4
P		M3	4

(When selecting origin sensor/limit sensor)

Sensor type	Manufacturer	Model	Quantity
Cylinder switch	CKD	SW-T2V	3
Photoelectric sensor	OMRON	EE-SX672	3

Dimensions (ESA-06L※)

●D: Downward return mounting type



Stroke length code	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0700
Stroke length (mm)	150	200	250	300	350	400	450	500	550	600	700
Full length: L	347.5	397.5	447.5	497.5	547.5	597.5	647.5	697.5	747.5	797.5	897.5
Body length: LL	317	367	417	467	517	567	617	667	717	767	867
L2	295	345	395	445	495	545	595	645	695	745	845
A	274	324	374	424	474	524	574	624	674	724	824
B	200	250	300	350	400	450	500	550	600	650	750
C	280	335	390	440	480	535	590	640	680	735	840
C'	37	32	27	27	37	32	27	27	37	32	27
M	6	7	8	10	11	12	13	15	16	17	20
P	14	16	18	22	24	26	28	32	34	36	42
Weight (kg)	3.7	3.9	4.0	4.2	4.4	4.6	4.7	4.9	5.1	5.3	5.6

List of attachments

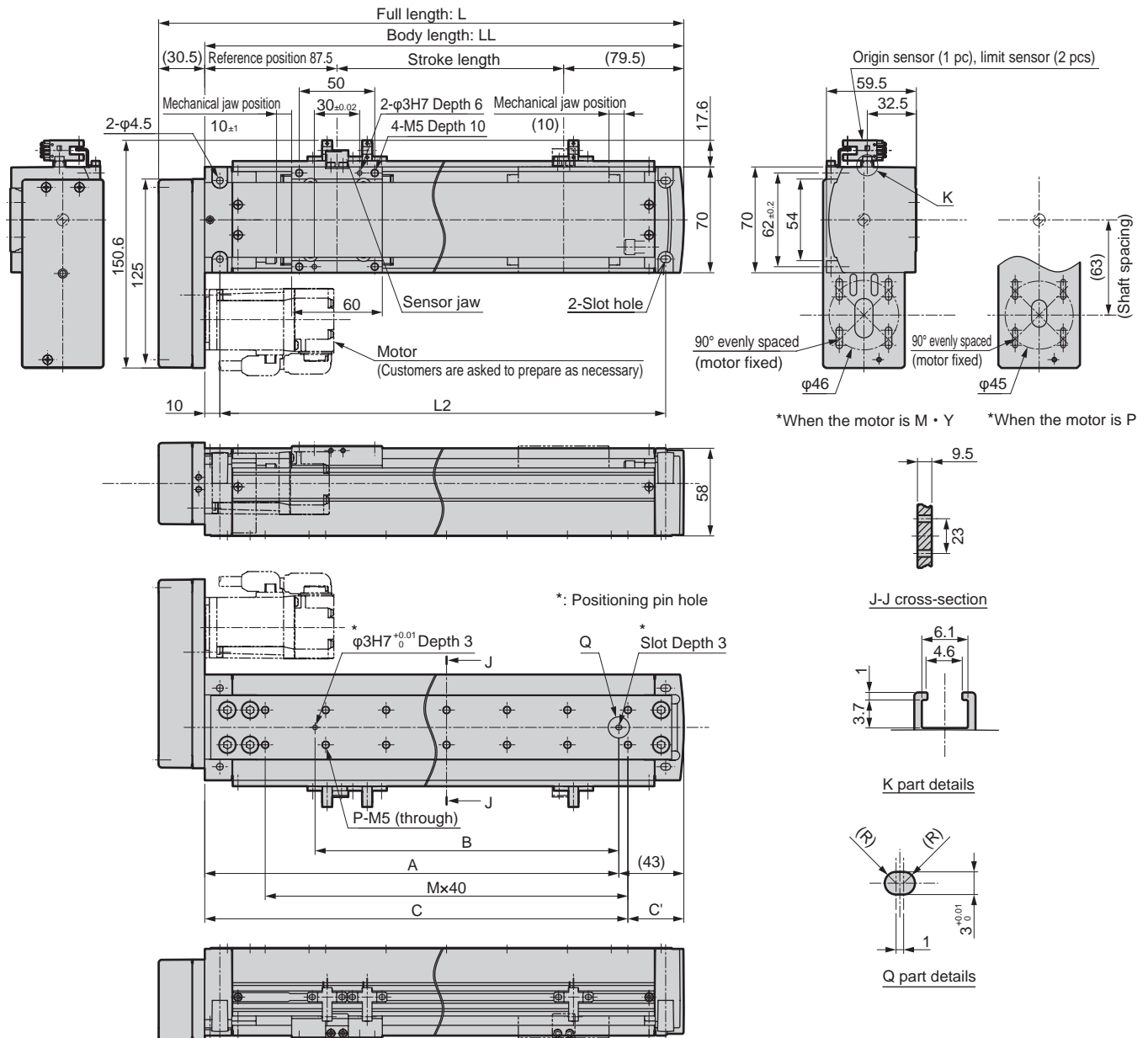
Mounted motor specification	Pulley	Motor mounting bolt	
		Size	Quantity
M	Attached at shipment	M4	4
Y		M4	4
P		M3	4

[When selecting origin sensor/limit sensor]

Sensor type	Manufacturer	Model	Quantity
Cylinder switch	CKD	SW-T2V	3
Photoelectric sensor	OMRON	EE-SX672	3

Dimensions (ESA-06L※)

●L: Left return mounting type



Stroke length code	0050	0100	0150	0200	0250	0300	0350	0400	0450	0500	0550	0600	0700
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	700
Full length: L	247.5	297.5	347.5	397.5	447.5	497.5	547.5	597.5	647.5	697.5	747.5	797.5	897.5
Body length: LL	217	267	317	367	417	467	517	567	617	667	717	767	867
L2	195	245	295	345	395	445	495	545	595	645	695	745	845
A	174	224	274	324	374	424	474	524	574	624	674	724	824
B	100	150	200	250	300	350	400	450	500	550	600	650	750
C	190	240	280	335	390	440	480	535	590	640	680	735	840
C'	27	27	37	32	27	27	37	32	27	27	37	32	27
M	3	5	6	7	8	10	11	12	13	15	16	17	20
P	8	12	14	16	18	22	24	26	28	32	34	36	42
Weight (kg)	3.3	3.5	3.7	3.9	4.0	4.2	4.4	4.6	4.7	4.9	5.1	5.3	5.6

List of attachments

Mounted motor specification	Pulley	Motor mounting bolt	
		Size	Quantity
M	Attached at shipment	M4	4
Y		M4	4
P		M3	4

[When selecting origin sensor/limit sensor]

Sensor type	Manufacturer	Model	Quantity
Cylinder switch	CKD	SW-T2V	3
Photoelectric sensor	OMRON	EE-SX672	3

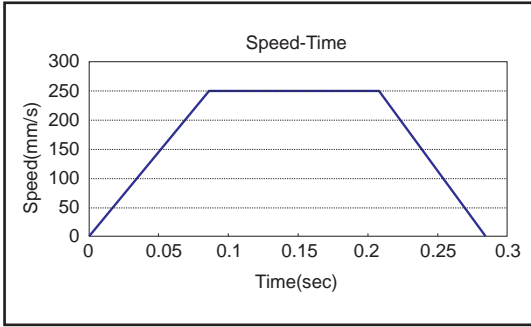
STEP-1 Checking transportable weight

The transportable weight differs depending on the mounting style, the transport speed and the acceleration/deceleration. Select each size and screw lead referring to the specifications page for each model and page 15 of the technical data.

STEP-2 Checking tact time

Select the compatible model, size and screw lead for the specification with motor according to the "Speed and transportable weight" table and for the motorless specification according to the "Maximum speed".

Check whether the selected model complies with your requirements on tact time referring to the example of tact time calculation on page 14 of the technical data.



*For an electric actuator, acceleration/deceleration needs to be considered, as shown on the left.

Depending on the stroke length and acceleration/deceleration, it may not reach the set speed in some cases.

*Do not use at a speed that exceeds the specifications.

*Acceleration/deceleration should not be more than 0.3 G.

$$[\text{Set time (s)}] \div [\text{Acceleration (mm/s}^2\text{)}] = [\text{Acceleration time (s)}]$$

$$0.3 \text{ G} = 2940 \text{ mm/s}^2 = 2.94 \text{ m/s}^2$$

STEP-3 Checking static allowable load and moment

Calculate the load and moment arising when the slider stops.

According to the calculation formula below, check that the resultant moment (M_T) meets the following equation.

According to the mounting style specified on page 15, check that the amount of overhang and allowable moment meet the following equation.

$$M_T = \frac{W}{W_{\max}} + \frac{MP}{MP_{\max}} + \frac{MR}{MR_{\max}} + \frac{MY}{MY_{\max}} < 1$$

W_{\max} : Allowable load

Ensure that the "L" on page 16 is less than the allowable amount of overhang A, B and C on page 15.

M_T : Resultant moment (must be smaller than 1)

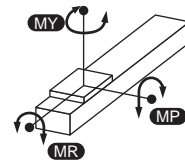
W : Vertical load

MR : Rotation moment

MP : Pitching moment

MY : Yawing moment

*Consider all moments acting according to the situation as the moment load during operation.



Static allowable load and moment

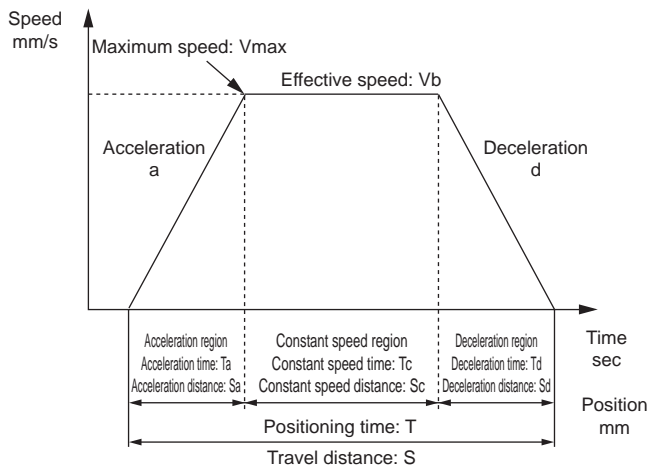
Model	Vertical load W_{\max} (N)	Pitching moment MP_{\max} (N·m)	Yawing moment MY_{\max} (N·m)	Rotation moment MR_{\max} (N·m)
ESA-04	484	10	10	18
ESA-06	781	24.6	24.6	48

STEP-4 Checking allowable overhang length

Check that the overhang length during operation falls in the range of allowable overhang length (page 15).

Example of tact time calculation

Tact setting for a transport operation



	Content	Code	Unit	Remarks
Set value	Set speed	V	mm/s	
	Set acceleration	a	mm/s ²	
	Set deceleration	d	mm/s ²	
	Travel distance	S	mm	
Calculated value	Maximum speed	Vmax	mm/s	$= \{2 \times a \times d \times S / (a + d)\}^{1/2}$
	Effective speed	Vb	mm/s	Smaller of V and Vmax
	Acceleration time	Ta	s	$= Vb/a$
	Deceleration time	Td	s	$= Vb/d$
	Constant speed time	Tc	s	$= Sc/Vb$
	Acceleration distance	Sa	mm	$= (a \times Ta^2)/2$
	Deceleration distance	Sd	mm	$= (d \times Td^2)/2$
	Constant speed distance	Sc	mm	$= S - (Sa + Sd)$
Positioning time	T	s	$= Ta + Tc + Td$	

Example of calculation

Conditions

Model: ESA-06LE-200500NNN-M1NNN

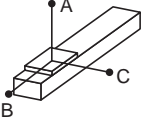
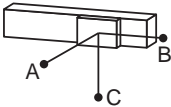
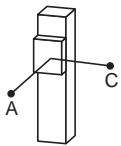
Set speed $V = 1000 \text{ mm/s}$
 Set acceleration $a = 0.3 \text{ G} = 2.94 \text{ m/s}^2 = 2940 \text{ mm/s}^2$
 Set deceleration $d = 0.3 \text{ G} = 2.94 \text{ m/s}^2 = 2940 \text{ mm/s}^2$
 Travel distance $S = 500 \text{ mm}$

Calculation results

Maximum speed $V_{max} = \{2 \times 2940 \times 2940 \times 500 / (2940 + 2940)\}^{1/2} = 1212.436 \text{ mm/s}$
 Effective speed $Vb = 1000 \text{ mm/s}$
 $V: 1000 \leq V_{max}: 1212.436$
 Acceleration time $Ta = 1000/2940 = 0.340 \text{ s}$
 Deceleration time $Td = 1000/2940 = 0.340 \text{ s}$
 Constant speed time $Tc = 160.136/1000 = 0.160136 \text{ s}$
 Acceleration distance $Sa = (2940 \times 0.340^2)/2 = 169.932 \text{ mm}$
 Deceleration distance $Sd = (2940 \times 0.340^2)/2 = 169.932 \text{ mm}$
 Constant speed distance $Sc = 500 - (169.932 + 169.932) = 160.136 \text{ mm}$
 Positioning time $T = 0.340 + 0.160136 + 0.340 = 0.840 \text{ s}$

[Allowable amount of overhang]

ESA-04

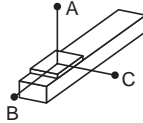
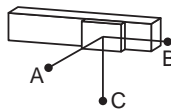
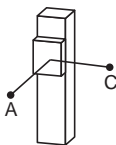
Mounting style	Screw lead	Load kg	Overhang (mm)		
			A	B	C
Horizontal 	5	6	237	24	56
		10	137	13	30
	10	3	286	51	99
		5	164	28	56
	20	2	221	65	92
		3	142	42	59
Side 	5	6	56	24	237
		10	30	13	137
	10	3	99	51	286
		5	56	28	164
	20	2	92	65	221
		3	59	42	142
Vertical 	5	1	188	—	188
		3	62	—	62
	10	1	166	—	166
		1.5	111	—	111
	20	0.5	262	—	262
		1	131	—	131

* 1: The actuator travel life is restricted to 5000 km.

* 2: Only load at uni-direction of overhang.

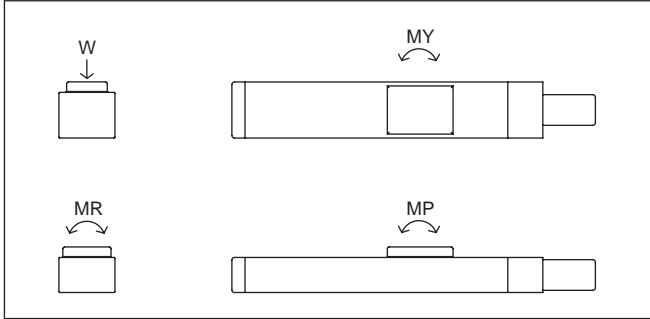
* 3: Values with stroke length of 350 mm and motor speed of 3000 rpm.

ESA-06

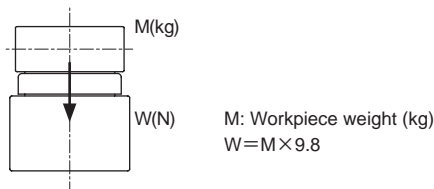
Mounting style	Screw lead	Load kg	Overhang (mm)		
			A	B	C
Horizontal 	5	10	480	50	110
		30	130	10	25
	10	3	800	145	330
		8	280	50	120
		15	140	23	55
	20	3	430	130	170
5		260	70	100	
8		150	40	60	
Side 	5	10	110	50	480
		30	25	10	130
	10	3	300	145	800
		8	120	50	280
		15	55	23	140
	20	3	170	130	430
5		100	170	260	
8		60	40	150	
Vertical 	5	2	300	—	300
		4	150	—	150
		10	60	—	60
	10	1	410	—	410
		2	205	—	205
		5	82	—	82
20	1	300	—	300	
	2	150	—	150	

Calculating the static allowable moment for each mounting style

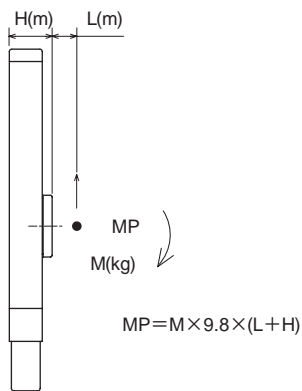
● Checking the allowable moment



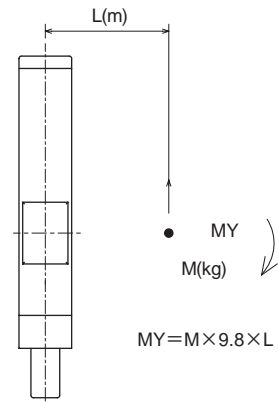
● Vertical load W(N)



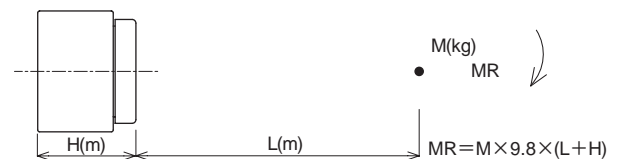
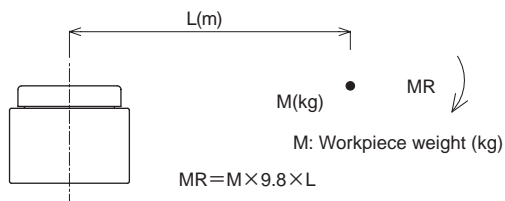
● Pitching moment MP(N·m)



● Yawing moment MY(N·m)



● Rotation moment MR(N·m)



	H (m)
ESA-04	0.049
ESA-06	0.0595

List of attachments

Basic type

Motor mounting screw (common motor mounting direction)

Mounted motor	Motor capacity	Thread size	Quantity
M	100 W	M4	2
Y		M4	2
P		M3	4

Motor mounting direction difference

Model	Attachment name	Quantity
E (Direct mounting)	Coupling (assembled before shipment)	1
R (Right return mounting) L (Left return mounting)	Pulley	1
D (Downward return mounting)	Belt	1

When selecting origin sensor/limit sensor

Shipping format	Quantity
Attached at shipment ^{*1}	3 ^{*2}

*1: Sensor mounting screws are also attached.

*2: If "None" is selected for either origin sensor or limit sensor, the other also needs to be "None". If "None" is selected, the sensor jaw will also be "None".

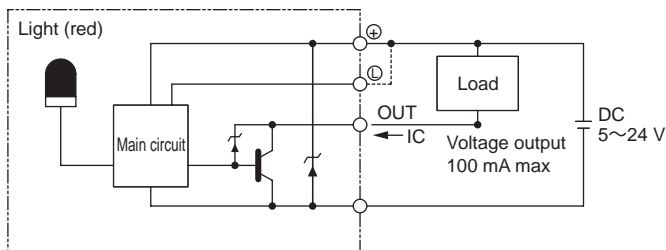
Origin sensor/limit sensor

Manufacturer	Model
OMRON	EE-SX672

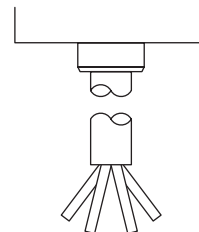
Performance

Description	Specifications
Differential distance	0.025 mm
Light source	Infrared LED with a peak wavelength of 940 nm
Indicator	Light indicator (red)
Supply voltage	5 to 24 VDC \pm 10%, ripple (p-p): 10% max
Current consumption	35 mA max (NPN pre-wired models)
Control output	NPN open collector: 5 to 24 VDC, 100 mA max OFF current (leakage current): 0.5 mA max 100 mA load current with a residual voltage of 0.8 V max 40 mA load current with a residual voltage of 0.4 V max
Ambient illumination	1000 lx max. with fluorescent light on the surface of the receiver
Ambient temperature range	Operating: -25 to +55°C, Storage: -30 to +80°C (with no icing or condensation)
Ambient humidity range	Operating: 5% to 85%, Storage: 5% to 95% (with no icing or condensation)
Degree of protection	IEC60529 IP50
Standard cable length	1 m (Connector with wire [EE-1010 1M])

Output circuit



Wiring diagram



Terminal layout

Brown	5 to 24 VDC
Pink	L
Blue	0 V
Black	OUTPUT

List of attachments

◆Coupling

Model: SFC-020SA2-7B-8B

Quantity: 1

Compatible model: Motor direct mounting type

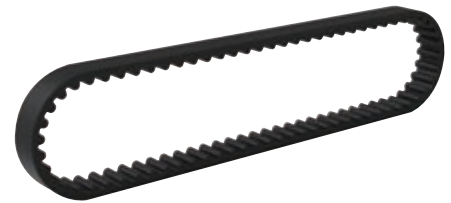


◆Timing belt

Model: 216-3GT-6

Quantity: 1

Compatible model: Motor return mounting type



◆Pulley (Motor side)

Model: D4-43394 (With two M4 fastening screws)

Quantity: 1

Compatible model: Motor return mounting type



◆Photoelectric sensor

Model: OMRON EE-SX672

Quantity: 1

Compatible model: all types



◆Sensor jaw

Model: D4-434701

Quantity: 1

Compatible model: all types





Safety Precautions

Be sure to read this section before use.

When designing equipment using electric actuators, the manufacturer is obligated to ensure that the safety of the mechanism and the system that runs the electrical controls are secured, and manufacture a safe device on this basis. It is important to select, use, handle, and maintain CKD products appropriately to ensure their safe usage.

Observe warnings and cautions to ensure device safety.

Check that device safety is ensured, and manufacture a safe device.

WARNING

1 This product is designed and manufactured as a general industrial machine part. It must be handled by an operator having sufficient knowledge and experience.

2 Use the product within the specifications range.

This product must be used within its stated specifications. In addition, never modify or additionally machine this product. This product is intended for use in general industrial machinery equipment or parts. It is not intended for use outdoors or for use under the following conditions or environments.

(Note that this product can be used when CKD is consulted prior to its usage and the customer consents to CKD product specifications. The customer should provide safety measures to avoid danger in the event of problems.)

- ① Use for applications requiring safety, including nuclear energy, railways, aircraft, marine vessels, vehicles, medical devices, devices or applications in contact with beverages or foodstuffs, amusement devices, emergency operation (turning off/on, etc.) circuits, press machines, brake circuits, safety devices or applications.
- ② Use for applications where life or assets could be significantly affected, and special safety measures are required.

3 Observe organization standards and regulations, etc., related to the safety of the device design.

4 Do not remove devices before confirming safety.

- ① Inspect and service the machine and devices after confirming safety of the entire system related to this product.
- ② Note that there may be hot or charged sections even after operation is stopped.
- ③ Before inspecting or maintaining equipment, be sure to shut off the power supply of the equipment and relevant equipment, using caution to avoid electrical shock.

5 Observe the instructions and cautions of each product to prevent accidents.

- ① Unexpected movement may occur during teaching or test operations, so keep your hands away from the actuator. Also, when operating from a position where the shaft body cannot be seen, before operation ensure that it is safe to move the actuator.

6 Be sure to observe the precautions in order to prevent electrical shock.

- ① Do not touch the controller interior heat sink, cement resistor, or motor.
The high temperatures can cause burns. Inspect after sufficient time has passed.
Even immediately after turning off the power supply, high voltage will be applied until the electric charge stored in the internal capacitor is discharged, so do not touch for about 3 minutes.
- ② Before maintenance and inspection, turn OFF the controller power supply switch.
There is a risk of electrical shock from high voltage.
- ③ Do not attach or detach connectors while the power is ON. This may cause malfunction, failure, or electric shock.

7 Install an overcurrent protector.


The wiring to the controller should comply with the JIS B 9960-1:2008 Safety of Machinery - Electrical Equipment of Machines - Part 1: General Requirements. Install an overcurrent protection device (a wiring circuit breaker or circuit protector) for the drive (power supply connector, power supply terminal block) and the control (input-output connectors) on the primary side of power supply.


(Excerpt from JIS B 9960-1 7.2.1 General)


Overcurrent protection shall be provided where the circuit current in a machine (equipment) may exceed either the ratings of components or the permissible current of conductors, whichever is the smaller. The ratings or set values to be selected shall be provided in 7.2.10.

8 Observe the following cautions to prevent accidents.

■ The safety precautions contained in this manual are classified into three items, i.e. "DANGER", "WARNING" and "CAUTION".

 **DANGER** : In the case where the product operation is mishandled and/or when the urgency of a dangerous situation is high, it may lead to fatalities or serious injuries.

 **WARNING** : A dangerous situation may occur if handling is mistaken, leading to fatalities or serious injuries.

 **CAUTION** : A dangerous situation may occur if handling is mistaken, leading to minor injuries or property damage.

In addition, in some cases, "CAUTION" are also likely to result in serious consequences.
All items contain important information and must be observed.

Disclaimer regarding orders

1 Period of warranty

This warranty is valid for one (1) year after delivery to the customer's designated site.

2 Scope of warranty

In case any defect clearly attributable to CKD is found during the warranty period, CKD shall, at its own discretion, repair the defect in the CKD plant or replace the relevant product in whole or in part and at no cost, according to its own judgment.

Note that the following failures are excluded from the warranty scope:

- ① When used outside the conditions/environments described in product specifications
- ② Failures resulting from erroneous use or management such as careless handling
- ③ Failures resulting from factors other than the delivered product
- ④ Failures caused by improper use of the product
- ⑤ Failures resulting from modifications to the structure, performance, specifications or the like of the delivered product without our involvement or repairs likewise outside our designated range
- ⑥ Failures resulting from incorporating the product into the purchaser's machine/equipment, which could have been avoided provided that the machine/equipment was equipped with the functions, structures and the like conventional in the industry
- ⑦ Failures caused by matters that could not be predicted with the technologies in practice when the product was delivered
- ⑧ Failures caused by fire, earthquake, flood, lightning strike, other natural disaster, landslide, pollution, salt damage, gas damage, abnormal voltage, other external factors

The warranty covers the actual delivered product, as a single unit, and does not cover any damages resulting from losses induced by failure in the delivered product.

3

Warranty for exported products

- (1) CKD will repair products returned to the CKD plant or a company/factory designated by CKD. Compensation of construction and expenses due to return is excluded.
- (2) The repaired product will be delivered to a location designated by the customer within mainland China with domestic packaging specifications.

The warranty terms specify basic items. If the warranty contents described in an individual specification drawing or specification sheet are different from these warranty terms, the specification drawing or specification sheet will take precedence.

4

Compatibility check

The customer is responsible for confirming the compatibility of CKD products with the systems, machines and equipment used.

5

Service range

The service costs for dispatched technicians are not included in the price of delivered items. The following will be charged separately.

- (1) Guidance of mounting adjustment/on-site trial run
- (2) Maintenance inspection, adjustment and repair
- (3) Technical guidance and technical education (operation, programming, wiring method, safety education, etc.)



Safety Precautions

Be sure to read this section before use.

Product-specific cautions: Electric Actuator ESA Series

Design and selection

⚠ DANGER

- **Do not use in places where dangerous goods such as ignitable substances, inflammable substances or explosives are present. Otherwise, there is a possibility of ignition, combustion or explosion.**
- **Ensure that the product is free of water droplets, oil droplets, etc. Failure to do so may lead to fire or malfunction.**
- **When mounting the product, be sure to hold and fix it (including workpieces) securely.**
Otherwise, falling, dropping, abnormal operation, etc. of the product may cause injury.

⚠ WARNING

- **Use the product within the specifications range.**
- **If there is a risk of bodily injury, install a protective cover.**
 - Design a structure that prevents personnel from entering the electric actuator's operating range or coming into contact with those sections directly if there is a risk the electric actuator's movable part may cause harm to personnel.
- **Please design safety circuits or devices to prevent equipment damages or personal accidents caused by machine shutdown due to system abnormalities (such as emergency stop and power failure).**
- **Install indoors with low humidity.**
There is a risk of electric leakage or fire accidents in places exposed to rainwater or where there is high humidity (humidity of 85% or more, condensation). Oil drops and oil mist are also strictly prohibited.
 - Otherwise it may result in product damages or abnormal operations.
- **Use and store in accordance with the working/storage temperatures and where there is no condensation.**
(Storage temperature: -10°C to 50°C, storage humidity: 35% to 80%; ambient temperature: 0°C to 40°C, ambient humidity: 35% to 80%)
Failure to do so may result in abnormal stop or decreased product service life. Ventilate in locations where heat may build up.
- **Install in a location free from direct sunlight, dust, heating elements and corrosive gas/explosive gas/inflammable gas/combustibles, and away from heat sources. Furthermore, chemical resistance has not been reviewed for this product.**
This may lead to damage, explosions, or fire.

- **Use and store in locations free from strong electromagnetic waves, ultraviolet rays, or radiation.**
This may cause malfunction or damage.
- **Consider the possibility of power source failure.**
 - For devices controlled with power sources, take measures to prevent bodily injury or machine damage if the power source is damaged.
- **Consider the operation status when restarting after emergency or abnormal stops.**
 - Please adopt a reasonable design to prevent personal injuries or equipment damages due to restart operation. If there is a need to reset the electric actuator to the starting position, design a safe control device. Consider the possibility of failure of the mounted motor. Take measures to prevent bodily injury or machine damage even in the event of a power failure.
- **Avoid using this product where vibration and impact are present.**
- **Do not apply a load to this product that is greater than or equal to the allowable load listed in the materials for selection.**

⚠ CAUTION

- **Do not use in a range where the moving slider could collide with the stroke end.**
- **Please specify maintenance conditions of the unit in the Instruction Manual.**
 - The product's performance may drop too low to maintain an appropriate safety level depending on usage conditions, working environment, and maintenance status. Proper maintenance will maximize the product functionality.
- **Regarding installing, setting up, and/or adjusting the actuator, read through the Instruction Manual and operate correctly.**
- **Products are manufactured based on compliance with various standards. Do not disassemble or modify the product.**
- **Refer to the instruction manual of the motor and control attached to this product for safe wiring and design.**
- **The customer is responsible for confirming the compatibility of CKD products with the customer's systems, machines and equipment.**

Mounting, installation and adjustment

⚠ DANGER

- Do not enter the operating range of the product while the product is operable. The product may suddenly move and may result in injuries.

⚠ WARNING

- Precision parts are built in, so laying the product on its side or applying vibration or impact during transportation are strictly prohibited. It may cause damage to the parts.
- For preliminary installation, place horizontally.
- Do not step onto the packaging or place objects on it.
- Avoid condensation, freezing, etc., and maintain ambient temperatures of -10 to 50°C and ambient humidity of 35 to 80% when transporting and carrying. Failure to do so may cause damage to the product.
- Mount the product on incombustible materials. Direct mounting on combustibles or mounting near combustibles may cause fire. Failure to do so may cause burns.
- Do not step onto the product or place objects on it. This may result in falling, knocking the product over, injury due to falling, product damage and/or malfunctions due therein, etc.
- Take measures to prevent bodily injury or machine damage even in the event of a power failure. There is a risk of unexpected accidents.
- When malfunctions occur, stop the operation immediately and contact CKD's local sales office.

⚠ CAUTION

- Do not install in places where large vibration or impact is transmitted. This may cause malfunction.

- Do not operate the movable parts of the product with external force or sudden deceleration. This may lead to malfunction or damage due to regenerative current.
- When returning to origin, excluding pressing operation, do not hit the mechanical jaw, etc. The feed screw could be damaged or malfunction.
- Durability varies with transported load and environment. The transport load, etc. should be at a setting well within the margin. Be sure not to apply impact to movable parts when using the product.
- Do not apply excessive moment to the slider. This may cause damage or malfunction of the product.
- Make the flatness of the installation surface 0.05 mm/200 mm or less.
- Install such that no torsion or bending force is applied to the product.
- Ensure that the flatness of the workpiece side attached to the slider is 0.02 mm or less, and do not apply torsion or bending force to the product. This may cause damage or malfunction of the product.
- Tighten the body mounting screws with the appropriate torque shown in the table below.

Thread size	Tightening torque (N•m)
M3	0.7
M4	1.5
M5	3
M6	5.2
M8	12.5
M10	24.5

- Provide a safety device to prevent possible falling of any movable part due to its self weight for vertical use, etc. Falling of movable parts may result in injury or product damage.
- The return type is not available with a safety device against breakage of timing belt. Provide a safety device on the device side for safety. Falling of movable parts may result in injury or product damage.

Use and maintenance

⚠ DANGER

- Do not operate the unit with wet hands. Failure to do so may cause electric shock.

⚠ CAUTION

- Regularly inspect the product at least two or three times a year to check that it operates correctly.
- Routinely resupply the grease at intervals of about 100 km. However, it depends on working conditions, so we recommend determining the lubrication interval by initial inspection. Refer to the Instruction Manual for details.

- When performing maintenance, inspection and repair, stop the power supply to this product. Caution people in the vicinity that a third party should not turn ON the power inadvertently or operate the product.
- When disposing of the product, comply with laws pertaining to waste treatment and cleaning. Consign it to a specialized waste disposal company for processing.

ESA Model Selection Check Sheet → CKD(Rep name)

Fill in the form and send to the nearest CKD Sales Office. We will reply with the selection results.

Customer:

Company		Department	
Name		Email	
TEL		FAX	

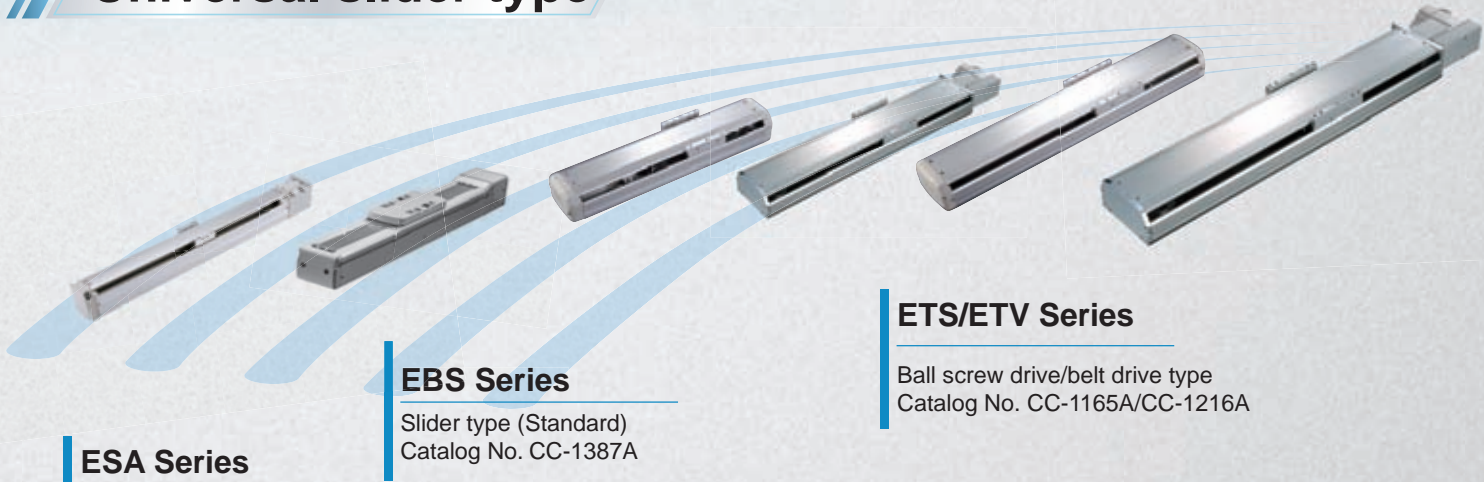
Selection conditions:

Desired model	ESA-
Basic specifications	Maximum stroke length: mm, Screw lead: mm
Operation conditions	Travel stroke: mm, Travel time: sec
	Set speed: mm/s
	Set acceleration/deceleration: mm/s ² (set acceleration/deceleration time: sec)
	Repetitive accuracy: ± mm
Load conditions	Mounting style: Horizontal (upward)/horizontal (side)/other
	Load weight: kg
	Overhang (distance from the slider center to the load center of gravity): Direction A mm, Direction B mm, Direction C mm
	Pressing load: No / Yes (N) Operating / Stopped Direction of the force applied to slider center ()
Usage environment	Ambient temperature: °C, Ambient humidity: %
	Environment:
Motor used	Manufacturer: , Model:
	Motor capacity: W
Remarks	

MEMO

Diverse lineup of motorless products

Universal slider type



ESA Series

EBS Series

Slider type (Standard)
Catalog No. CC-1387A

ETS/ETV Series

Ball screw drive/belt drive type
Catalog No. CC-1165A/CC-1216A

Universal rod type

Universal low dust generation type



EBR Series

Guidance built-in guide rod type
Catalog No. CC-1387A

ECS/ECV Series

Motorless ball screw drive type
Catalog No. CC-1217A/CC-1257A

Fast tact type

Applicable to various industries



EKS Series

Slider type (fast tact/high rigidity)
Catalog No. CC-1387A

ETS/ECS P4 Series

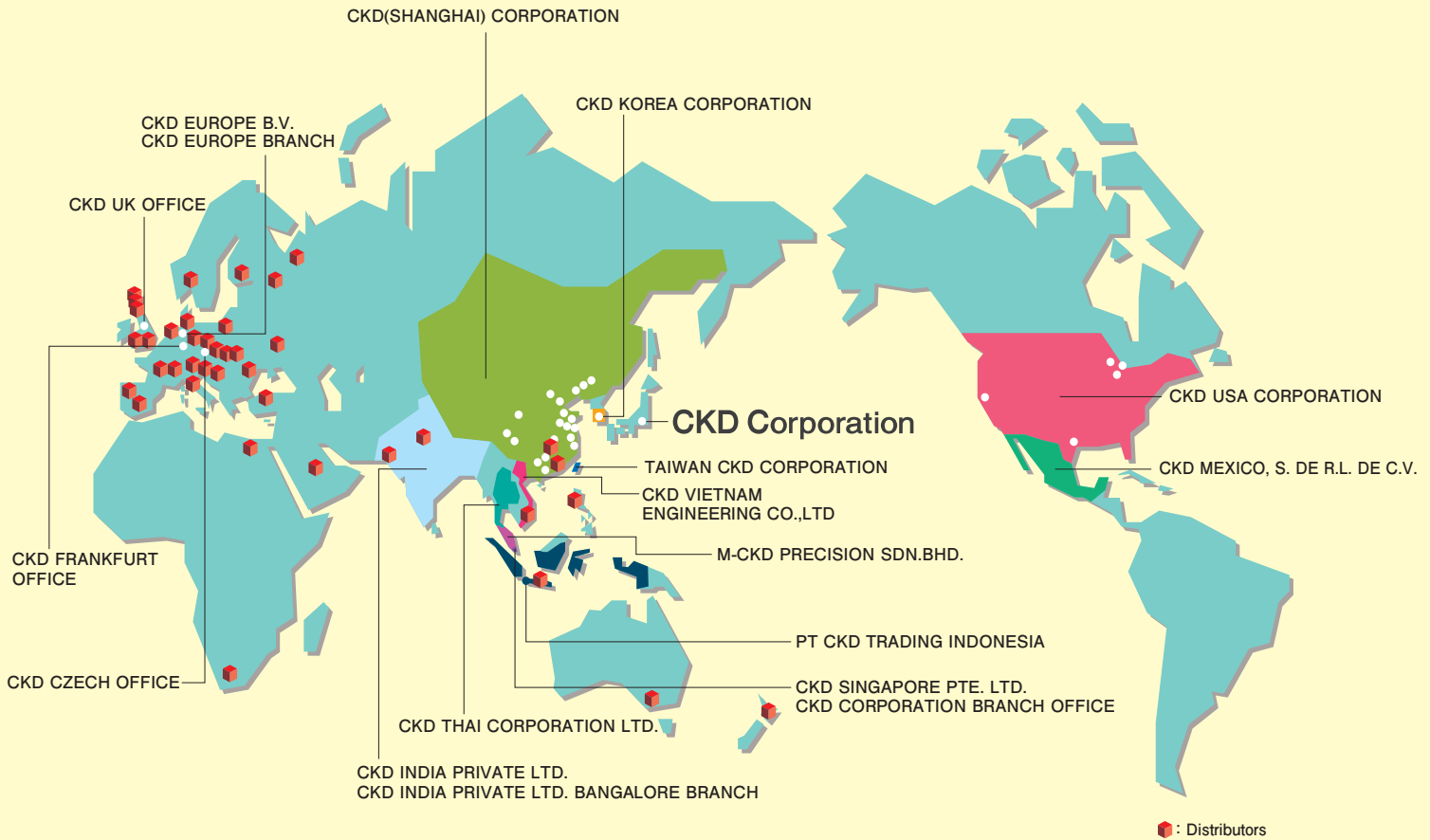
Compatible with the secondary cell
Catalog No. CC-1283A

ETS/ETV/ECS/ECV FP1 Series

FP Series for food manufacturing processes
Catalog No. CC-1320A

P4
(The secondary cell)





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