

ECS-14 Series

Straight motor mounting, built-in mounting

● Servo motor capacity: 200 W/400 W

How to order

ECS - 14 - 05 040 - E M 2 N N N N P

A Body size
14 Body width 135 mm

B Screw lead
05 5 mm
10 10 mm
16 16 mm
20 20 mm

C Stroke length
005 50 mm
to (In 50 mm increments)
105 1050 mm

D Motor mounting direction *1
E Straight mounting
B Built-in mounting

E Mounted motor specification
M Select the mounted motor specification from the table below.
Y
P
F

F Motor capacity
2 200 W
4 400 W

G Brake *1
N None
B Yes

H Origin sensor (1 pc) *2 *3 *4
N None
A Inside motor side
B Inside motor opposite side
C Outside motor side
D Outside motor opposite side

I Limit sensor (2 pcs) *2 *3 *4
N None
A Inside
B Outside

J Grease nipple *4 *5
N None (Body mounting direction: Standard)
R Right
L Left

K Positioning pin hole
N None
P Yes

Manufacturer	200 W	400 W
Mitsubishi Electric Corporation	M	M
Delta Electronics Co., Ltd.	M	M
Sanyo Denki Co., Ltd.	M	M
YASKAWA Electric Corporation	Y	Y
Keyence Corporation	Y	Y
Panasonic Corporation	P	P
OMRON Corporation	P	P
Fuji Electric Co., Ltd.	M	M
FANUC CORPORATION	F	F
Bosch Rexroth AG	P	P
Rockwell Automation, Inc.	M	M
SIEMENS AG	M	M

*1: "Yes" to the Brake can be selected only when the motor mounting method is built-in mounting.

*2: Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.

*3: For sensor inside mounting, the user cannot adjust the position. (Assembled at shipment)
For sensor outside mounting, the user can adjust the position. (Included at shipment)

*4: Contact CKD to use the origin sensor, limit sensor and grease nipple in the same direction.

*5: "Body mounting direction: Standard" here refers to mounting from the bottom side.

* Refer to page 275 for the motor model No.

Specifications

Applicable motor capacity		200 W/400 W servo motor				
Drive method		Ball screw ø16				
Ball screw accuracy grade		C7				
Stroke length		50 to 1050				
Screw lead		mm				
Max. load capacity *1	Horizontal	200 W kg	95	10	16	20
		400 W kg	110	88	48	40
	Vertical	200 W kg	27	18	7	6
		400 W kg	33	22	10	8
Max. speed		mm/s				
Rated thrust *1	200 W	N	683	341	213	174
	400 W	N	1388	694	433	347
Repeatability		mm				
Lost motion		mm				
Dynamic allowable load		N				
Static allowable moment		N·m				
Dynamic allowable moment		N·m				
Operating ambient temperature, humidity		0 to 40°C (no freezing) 35 to 80% RH (no condensation)				
Storage ambient temperature, humidity		-10 to 50°C (no freezing) 35 to 80% RH (no condensation)				
Atmosphere		No corrosive gas, explosive gas, or dust				

*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

Stroke and max. speed

		(mm/s)					
Screw lead	Stroke length	100 to 750	800	850	900	950	1050
5		250	225	200	175	150	125
10		500	450	400	350	300	250
16		800	720	640	560	480	400
20		1000	900	800	700	600	500

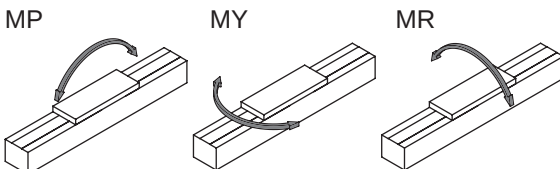
*The max. speed is the speed when the motor mounted by the customer can output a rotation speed of 3000 rpm.

The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

Allowable overhang length

*Refer to page 330 for details.

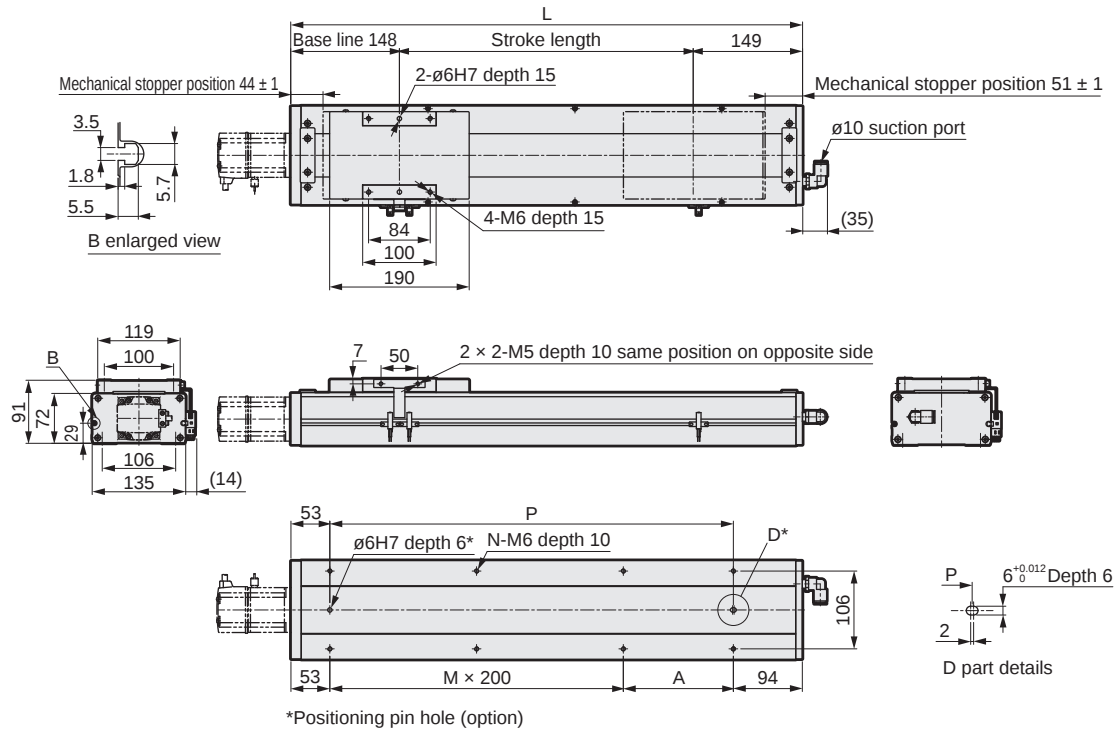
Moment direction



Dimensions Straight motor mounting

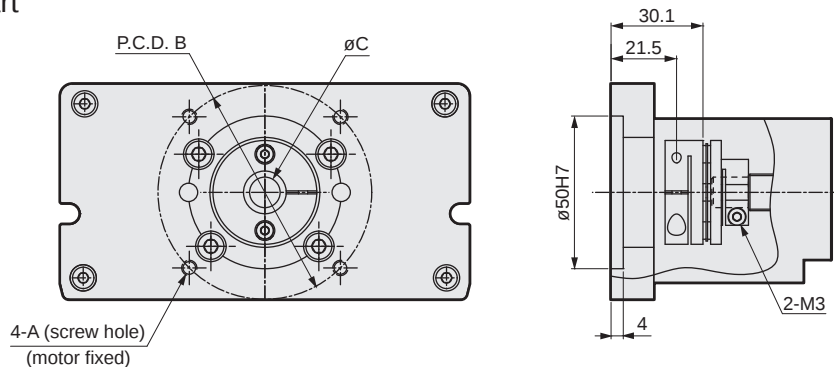
● ECS-14-*****-E

· Refer to page 336 for grease nipple dimensions.



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	347	397	447	497	547	597	647	697	747	797	847	897	947	997	1047	1097	1147	1197	1247	1297	1347
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
P	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Weight (kg)	10.5	11.1	11.7	12.3	12.9	13.5	14.1	14.7	15.3	15.9	16.5	17.1	17.7	18.3	18.9	19.5	20.1	20.7	21.3	21.9	22.5

Motor mounting part



Mounted motor specification		A	B	C	Motor mounting bolt
M	200 W/400 W	M5	ø70	ø14	4-M5 × L18
Y	200 W/400 W	M5	ø70	ø14	4-M5 × L18
P	200 W/400 W	M4	ø70	ø11/ø14	4-M4 × L18
F	200 W/400 W	M5	ø70	ø9/ø14	4-M5 × L16/4-M5 × L18

List of attachments

[Motor mounting parts]

Mounted motor specification	Coupling	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Assembled at shipment	Included at shipment	200 W/400 W	M5 4
Y				M5 4
P				M4 4
F				M5 4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

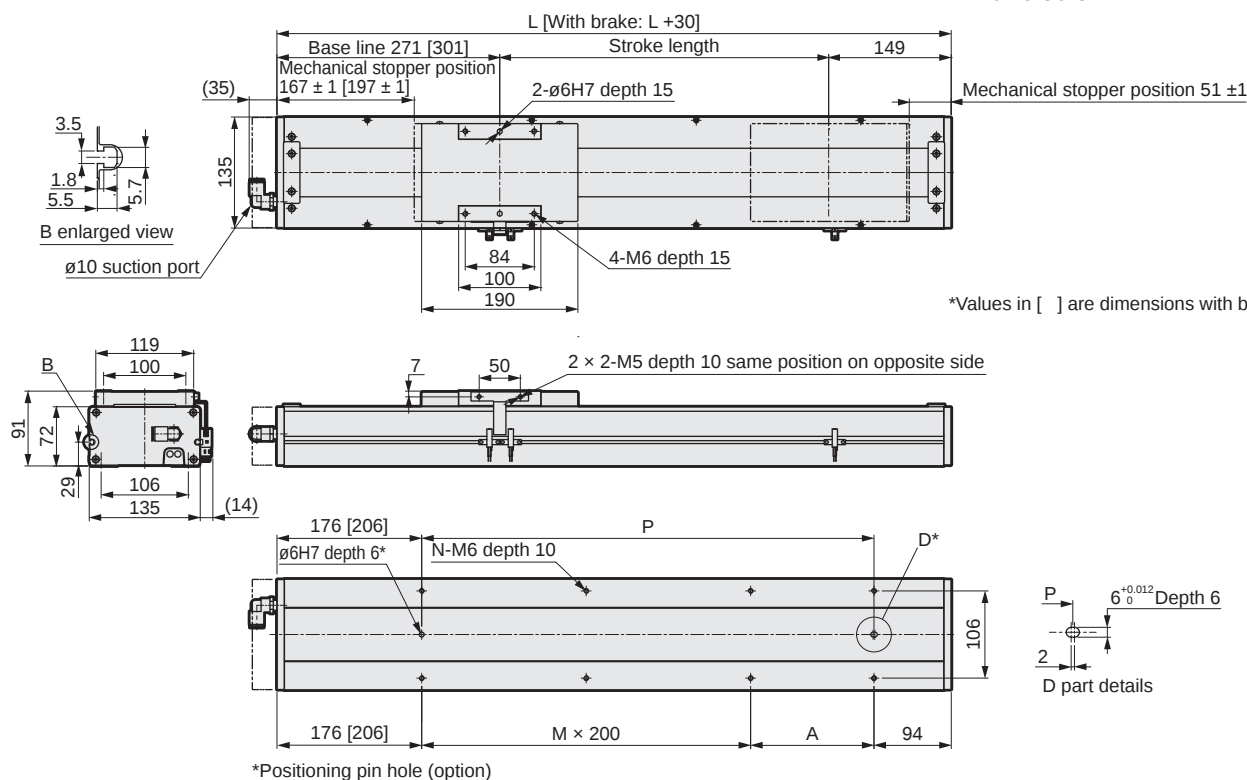
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

Dimensions Motor built-in mounting

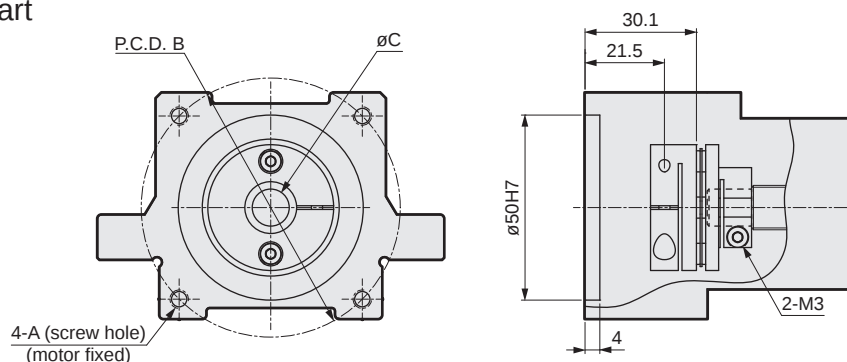
● ECS-14-*****-B

Refer to page 336 for grease nipple dimensions.



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
P	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Weight (kg)	11.5	12.1	12.7	13.3	13.9	14.5	15.1	15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	21.1	21.7	22.3	22.9	23.5

Motor mounting part



Mounted motor specification	A	B	C	Motor mounting bolt
M 200 W/400 W	M5	ø70	ø14	4-M5 × L18
Y 200 W/400 W	M5	ø70	ø14	4-M5 × L18
P 200 W/400 W	M4	ø70	ø11/ø14	4-M4 × L18

List of attachments

[Motor mounting parts]

Mounted motor specification	Coupling	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Assembled at shipment	Included at shipment	200 W/400 W	M5 4
Y				M5 4
P				M4 4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

MEMO

Servo motor compatible							Stepper motor compatible				Safety precautions
EBS	EBR	ETS	ETS Multi-Axis	ECS	ETV	ECV	EKS	EBS	EBR	ETS	ECS

- Servo motor capacity: 200 W/400 W



ECS - 14 - 05 050 - R M 2 N N N N P

A Body size	
14	Body width 135 mm

D Motor mounting direction *5	
R	Right mounting
D	Bottom mounting
L	Left mounting

B Screw lead	
05	5 mm
10	10 mm
16	16 mm
20	20 mm

E Mounted motor specification	
M	Select the mounted motor specification from the table below.
Y	
P	
E	

Stroke length	
005	50 mm
to	(In 50 mm increments)
105	1050 mm

F Motor capacity	
2	200 W
4	400 W

G Brake	
N	None

H	Origin sensor (1 pc)	*1 *2 *3
N	None	
A	Inside motor side	
B	Inside motor opposite side	
C	Outside motor side	
D	Outside motor opposite side	

① Limit sensor (2 pcs) *1 *2 *3	
N	None
A	Inside
B	Outside

K Positioning pin hole	
N	None
P	Yes

J Grease nipple		*3 *4 *5
N	None (Body mounting direction: Standard)	
R	Right	
L	Left	

Manufacturer	200 W	400 W
Mitsubishi Electric Corporation	M	M
Delta Electronics Co., Ltd.	M	M
Sanyo Denki Co., Ltd.	M	M
YASKAWA Electric Corporation	Y	Y
Keyence Corporation	Y	Y
Panasonic Corporation	P	P
OMRON Corporation	P	P
Fuji Electric Co., Ltd.	M	M
FANUC CORPORATION	F	F
Bosch Rexroth AG	P	P
Rockwell Automation, Inc.	M	M
SIEMENS AG	M	M

* Refer to page 275 for the motor model No.

Applicable motor capacity			200 W/400 W servo motor			
Drive method			Ball screw ø16			
Ball screw accuracy grade			C7			
Stroke length mm			50 to 1050			
Screw lead mm			5	10	16	20
Max. load capacity *1	Horizontal Vertical	200 W kg	95	75	44	35
		400 W kg	110	88	48	40
		200 W kg	27	18	7	6
		400 W kg	33	22	10	8
Max. speed mm/s			250	500	800	1000
Rated thrust *1	200 W	N	683	341	213	174
	400 W	N	1388	694	433	347
Repeatability mm			±0.01			
Lost motion mm			0.1 or less			
Dynamic allowable load N			6567			
Static allowable moment N·m			MP: 552, MY: 551, MR: 485			
Dynamic allowable moment N·m			MP: 262.7, MY: 262.7, MR: 261.0			
Operating ambient temperature, humidity			0 to 40°C (no freezing) 35 to 80% RH (no condensation)			
Storage ambient temperature, humidity			-10 to 50°C (no freezing) 35 to 80% RH (no condensation)			
Atmosphere			No corrosive gas, explosive gas, or dust			

*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

(mm/s)						
Stroke length Screw lead	100 to 750	800	850	900	950	1050
5	250	225	200	175	150	125
10	500	450	400	350	300	250
16	800	720	640	560	480	400
20	1000	900	800	700	600	500

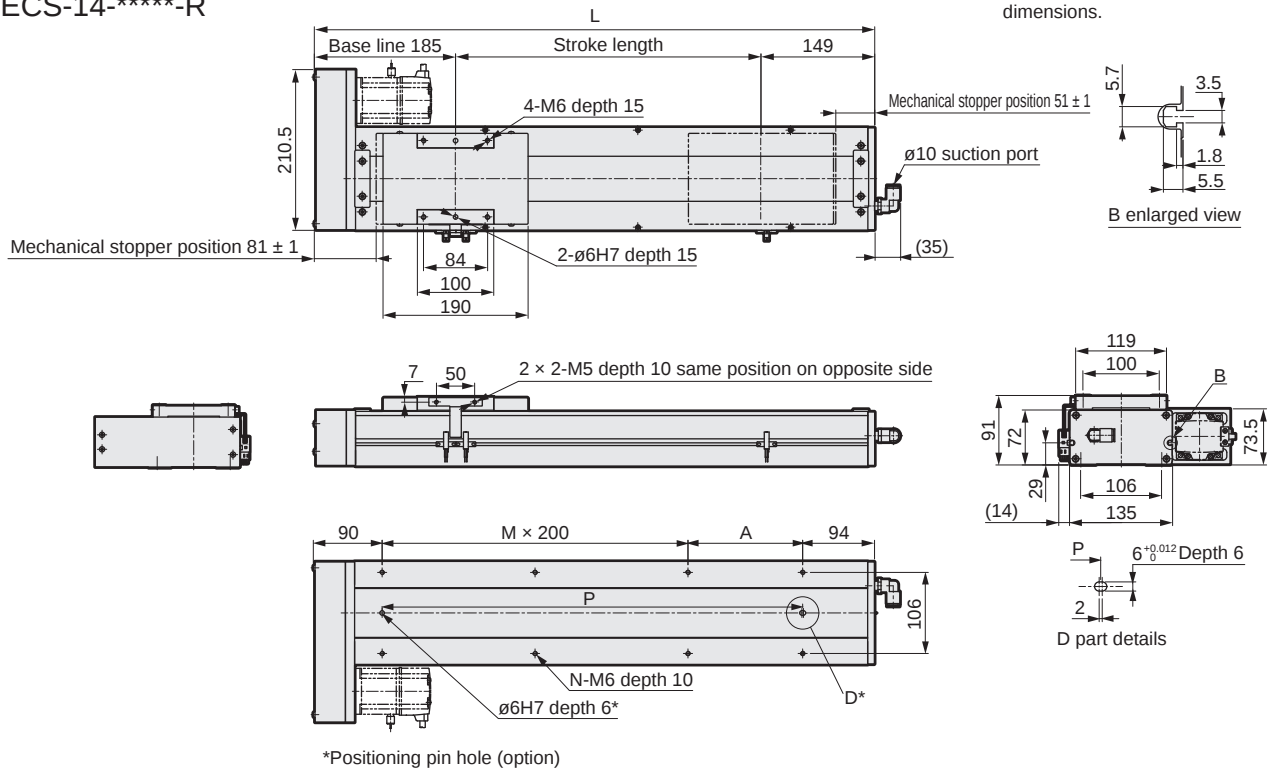
*The max. speed is the speed when the motor mounted by the customer can output a rotation speed of 3000 rpm.
The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

*Refer to page 330 for details.

Dimensions Motor right-side mounting

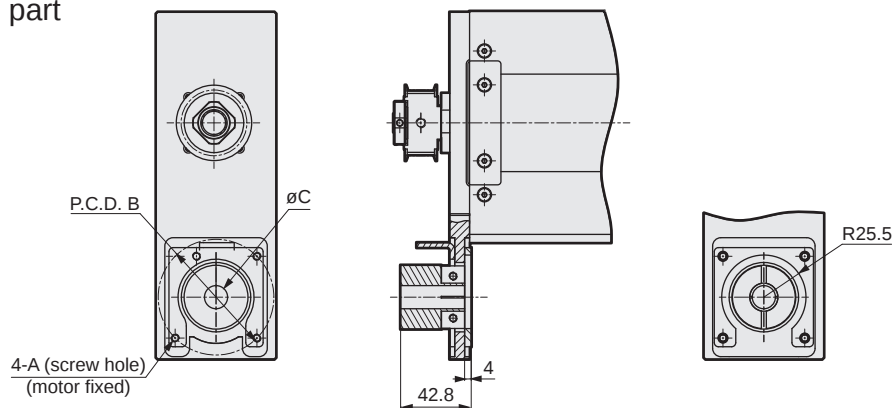
● ECS-14-*****-R

Refer to page 336 for grease nipple dimensions.



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134	1184	1234	1284	1334	1384
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
P	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Weight (kg)	11.0	11.6	12.2	12.8	13.4	14.0	14.7	15.3	15.9	16.5	17.1	17.8	18.4	19.0	19.6	20.2	20.9	21.5	22.1	22.7	23.3

Motor mounting part



Mounted motor specification		A	B	C	Motor mounting bolt
M	200 W/400 W	M5	ø70	ø14	4-M5 × L18
Y	200 W/400 W	M5	ø70	ø14	4-M5 × L18
P	200 W/400 W	M4	ø70	ø11/ø14	4-M4 × L18
F	200 W/400 W	M5	ø70	ø9/ø14	4-M5 × L18

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt, pulley	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Included at shipment	Included at shipment	200 W/400 W	M5 4
Y				M5 4
P				M4 4
F				M5 4

*Refer to page 338 for fitting details.

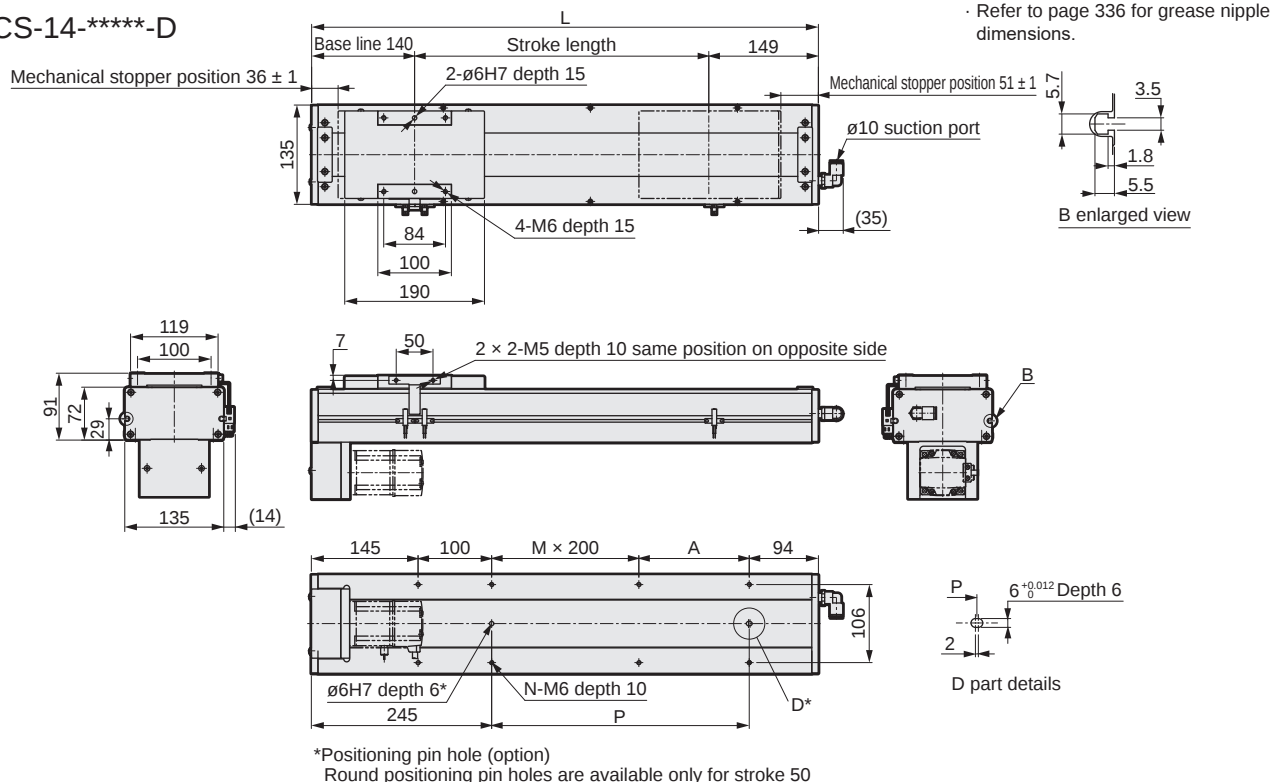
[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

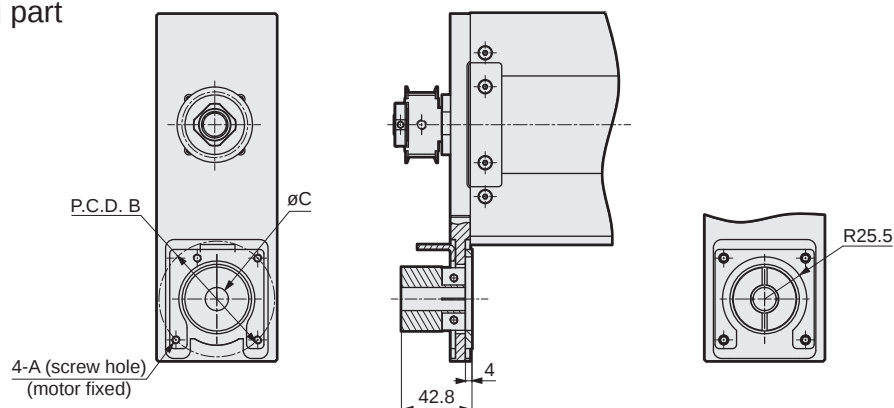
Dimensions Motor bottom mounting

● ECS-14-*****-D



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	339	389	439	489	539	589	639	689	739	789	839	889	939	989	1039	1089	1139	1189	1239	1289	1339
A	0	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
P	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Weight (kg)	11.0	11.6	12.2	12.8	13.4	14.0	14.7	15.3	15.9	16.5	17.1	17.8	18.4	19.0	19.6	20.2	20.9	21.5	22.1	22.7	23.3

Motor mounting part



Mounted motor specification		A	B	C	Motor mounting bolt
M	200 W/400 W	M5	ø70	ø14	4-M5 × L18
Y	200 W/400 W	M5	ø70	ø14	4-M5 × L18
P	200 W/400 W	M4	ø70	ø11/ø14	4-M4 × L18
F	200 W/400 W	M5	ø70	ø9/ø14	4-M5 × L18

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt, pulley	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M				M5 4
Y	Included at shipment	Included at shipment	200 W/400 W	M5 4
P				M4 4
F				M5 4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

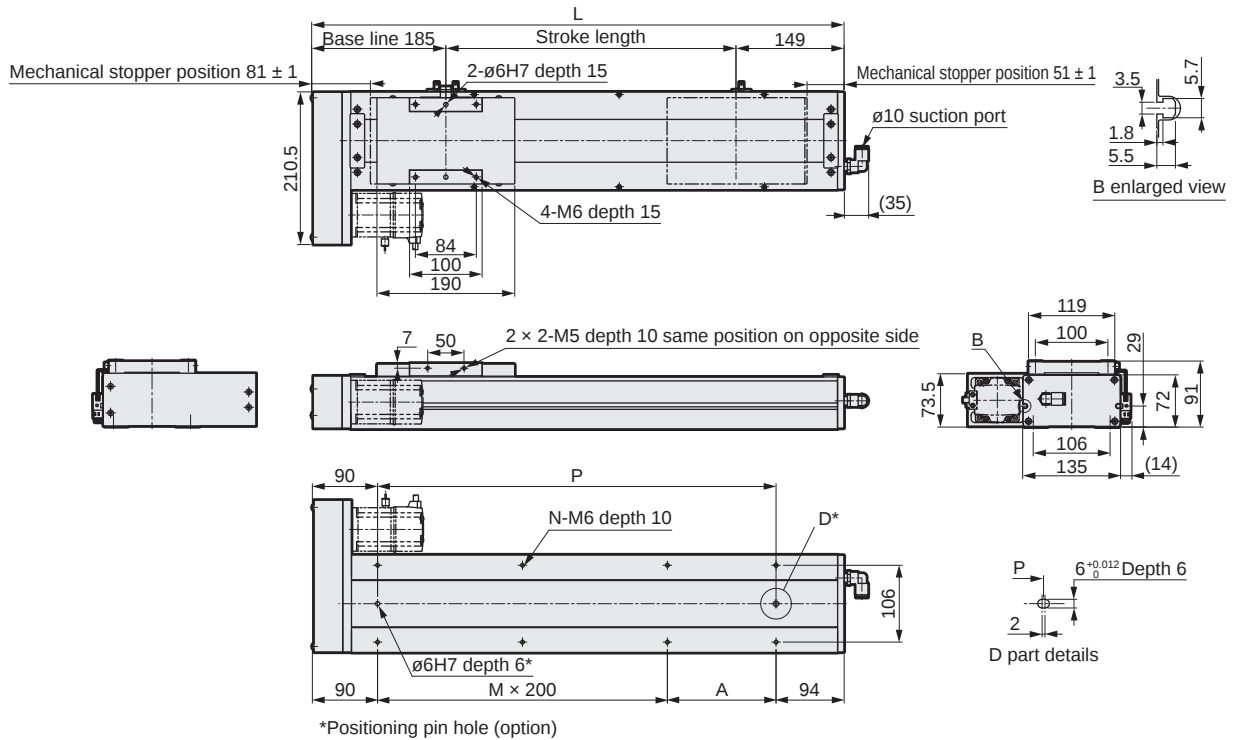
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

Dimensions Motor left-side mounting

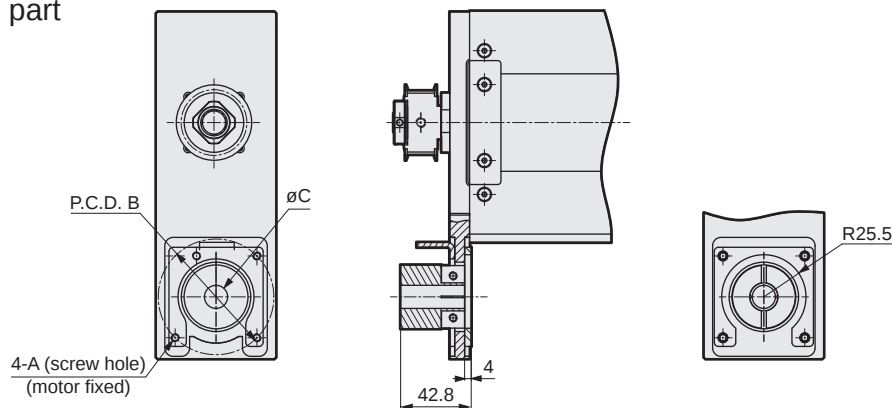
● ECS-14-*****-L

· Refer to page 336 for grease nipple dimensions.



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134	1184	1234	1284	1334	1384
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
P	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Weight (kg)	11.0	11.6	12.2	12.8	13.4	14.0	14.7	15.3	15.9	16.5	17.1	17.8	18.4	19.0	19.6	20.2	20.9	21.5	22.1	22.7	23.3

Motor mounting part



Mounted motor specification		A	B	C	Motor mounting bolt
M	200 W/400 W	M5	ø70	ø14	4-M5 × L18
Y	200 W/400 W	M5	ø70	ø14	4-M5 × L18
P	200 W/400 W	M4	ø70	ø11/ø14	4-M4 × L18
F	200 W/400 W	M5	ø70	ø9/ø14	4-M5 × L18

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt, pulley	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Included at shipment	Included at shipment	200 W/400 W	M5 4
Y				M5 4
P				M4 4
F				M5 4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

ECS-17 Series

Straight motor mounting, built-in mounting

● Servo motor capacity: 400 W/750 W

How to order

ECS - 17 - 05 040 - E M 4 N N N N P

A Body size
17 Body width 170 mm

B Screw lead
05 5 mm
10 10 mm
20 20 mm
40 40 mm

C Stroke length
005 to 125 50 mm to (In 50 mm increments) 125 1250 mm

D Motor mounting direction *1 *2
E Straight mounting
B Built-in mounting

E Mounted motor specification
M Select the mounted motor specification from the table below.
Y
P
F

F Motor capacity *1
4 400 W
8 750 W

G Brake *2
N None
B Yes

H Origin sensor (1 pc) *3 *4 *5
N None
A Inside motor side
B Inside motor opposite side
C Outside motor side
D Outside motor opposite side

I Limit sensor (2 pcs) *3 *4 *5
N None
A Inside
B Outside

J Grease nipple *5 *6
N None (Body mounting direction: Standard)
R Right
L Left

K Positioning pin hole
N None
P Yes

Manufacturer	400 W	750 W
Mitsubishi Electric Corporation	M	M
Delta Electronics Co., Ltd.	M	M
Sanyo Denki Co., Ltd.	M	-
YASKAWA Electric Corporation	Y	Y
Keyence Corporation	Y	Y
Panasonic Corporation	P	P
OMRON Corporation	P	P
Fuji Electric Co., Ltd.	M	M
FANUC CORPORATION	F	F
Bosch Rexroth AG	P	P
Rockwell Automation, Inc.	M	M
SIEMENS AG	M	M

*1: The built-in mounting motor mounting method cannot be selected for the 750 W motor capacity.

*2: "Yes" to the Brake can be selected only when the motor mounting method is built-in mounting.

*3: Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.

*4: For sensor inside mounting, the user cannot adjust the position. (Assembled at shipment)

For sensor outside mounting, the user can adjust the position. (Included at shipment)

*5: Contact CKD to use the origin sensor, limit sensor and grease nipple in the same direction.

*6: "Body mounting direction: Standard" here refers to mounting from the bottom side.

* Refer to page 275 for the motor model No.

Specifications

Applicable motor capacity			400 W/750 W servo motor			
Drive method			Ball screw ø20			
Ball screw accuracy grade			C7			
Stroke length			50 to 1250			
Screw lead			5	10	20	40
Max. load capacity *1	Horizontal	400 W kg	120	110	75	35
		750 W kg	120	120	83	50
	Vertical	400 W kg	40	30	14	7
		750 W kg	50	40	25	10
Max. speed			250	500	1000	2000
Rated thrust *1	400 W	N	1388	694	347	174
	750 W	N	2100	1050	525	260
Repeatability			±0.01			
Lost motion			0.1 or less			
Dynamic allowable load			10102			
Static allowable moment			MP: 1034, MY: 1032, MR: 908			
Dynamic allowable moment			MP: 424.3, MY: 424.3, MR: 520.3			
Operating ambient temperature, humidity			0 to 40°C (no freezing) 35 to 80% RH (no condensation)			
Storage ambient temperature, humidity			-10 to 50°C (no freezing) 35 to 80% RH (no condensation)			
Atmosphere			No corrosive gas, explosive gas, or dust			

*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

Stroke and max. speed

		(mm/s)				
Stroke length	Screw lead	100 to 850	950	1050	1150	1250
5	5	250	225	200	175	150
	10	500	450	400	350	300
	20	1000	900	800	700	600
	40	2000	1800	1600	1400	1200

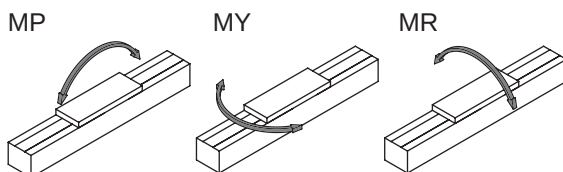
*The max. speed is the speed when the motor mounted by the customer can output a rotation speed of 3000 rpm.

The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

Allowable overhang length

*Refer to page 330 for details.

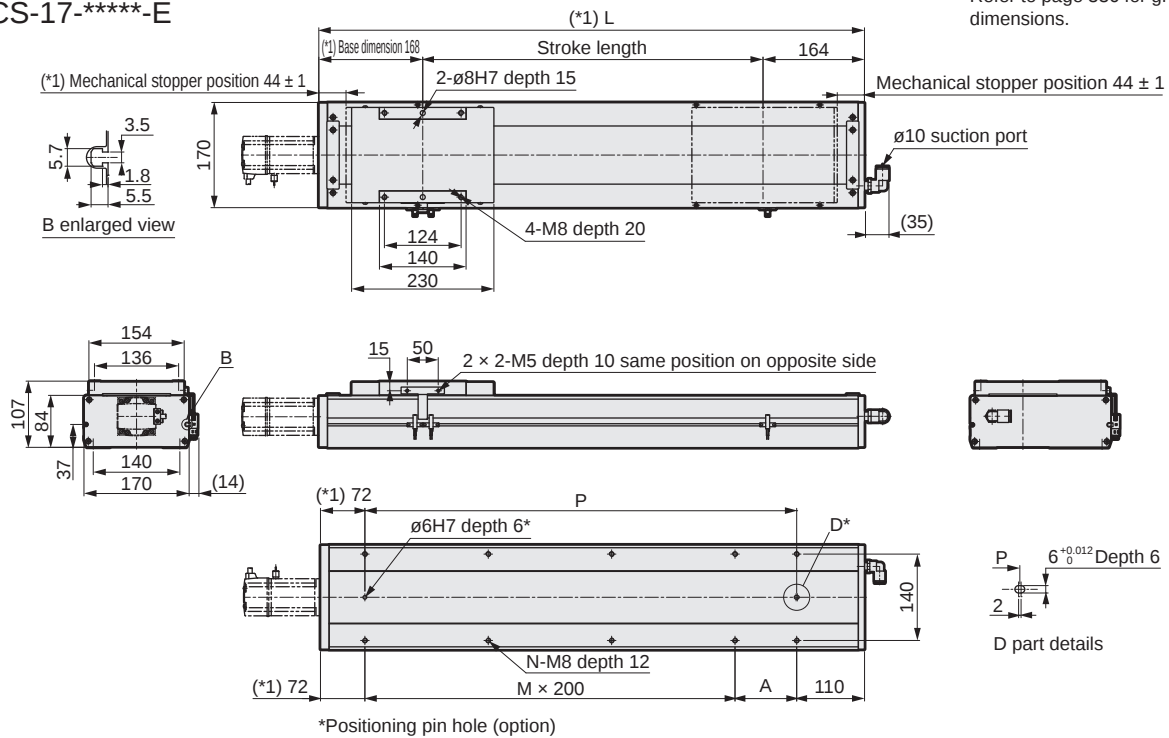
Moment direction



Dimensions Straight motor mounting

● ECS-17-****-E

Refer to page 336 for grease nipple dimensions.



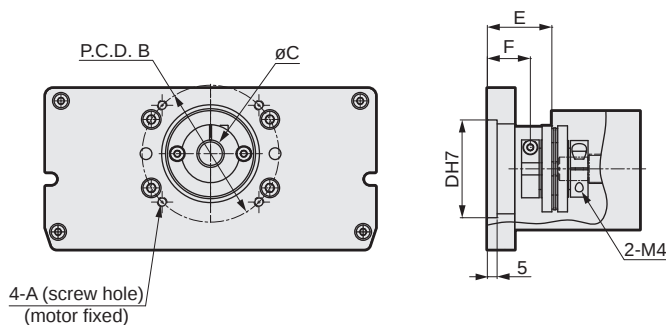
*Positioning pin hole (option)

Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L (*1)	382	432	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	1332	1382	1432	1482	1532	1582
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
P	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Weight (kg)	12.0	12.7	13.4	14.2	15.0	15.8	16.6	17.3	18.1	18.9	19.7	20.5	21.2	22.0	22.8	23.6	24.4	25.1	25.9	26.7	27.5	28.3	29.0	29.8	30.6

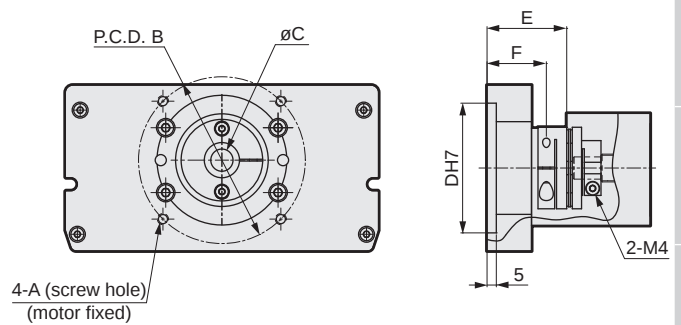
(*1) The 750 W motor capacity is +10 mm.

Motor mounting part

● ECS-17-400W-E



● ECS-17-750W-E



Mounted motor specification	A	B	C	D	E	F	Motor mounting bolt
M 400 W/750 W	M5/M6	ø70/ø90	ø14/ø19	ø50/ø70	33/43	22/32	4-M5 × L18/4-M6 × L20
Y 400 W/750 W	M5/M6	ø70/ø90	ø14/ø19	ø50/ø70	33/43	22/32	4-M5 × L18/4-M6 × L20
P 400 W/750 W	M4/M5	ø70/ø90	ø14/ø19	ø50/ø70	33/43	22/32	4-M4 × L18/4-M5 × L20
F 400 W/750 W	M5/M6	ø70/ø100	ø14/ø14	ø50/ø80	33/29	22/18	4-M5 × L18/4-M6 × L20

List of attachments

[Motor mounting parts]

Mounted motor specification	Coupling	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Assembled at shipment	Included at shipment	400 W/750 W	M5/M6 4
Y				M5/M6 4
P				M4/M5 4
F				M5/M6 4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

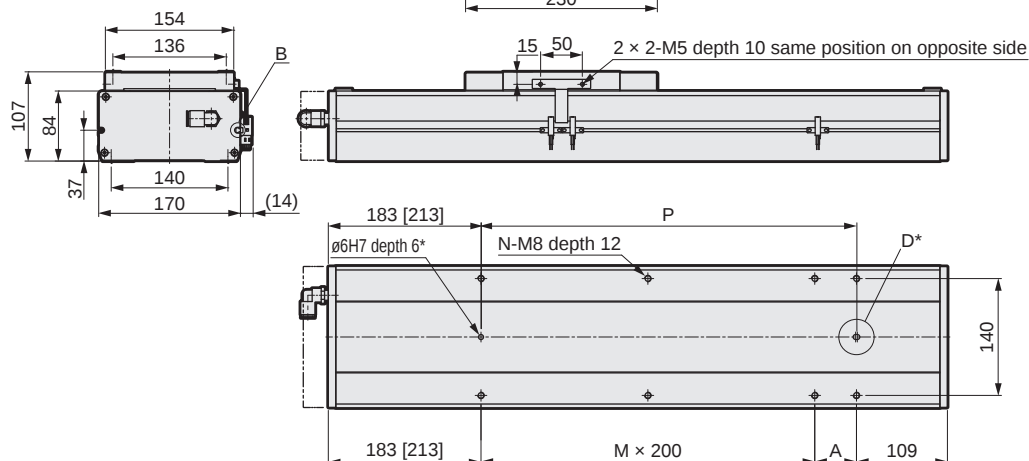
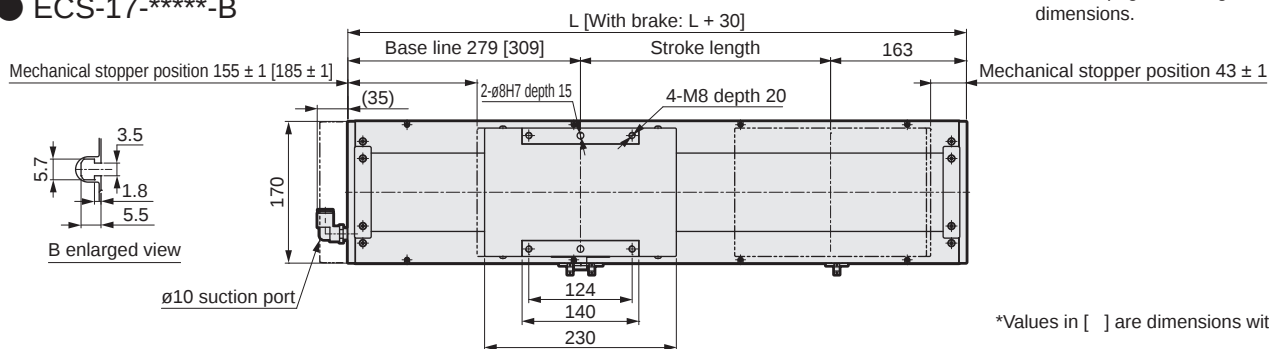
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

Dimensions Motor built-in mounting

● ECS-17-*****-B

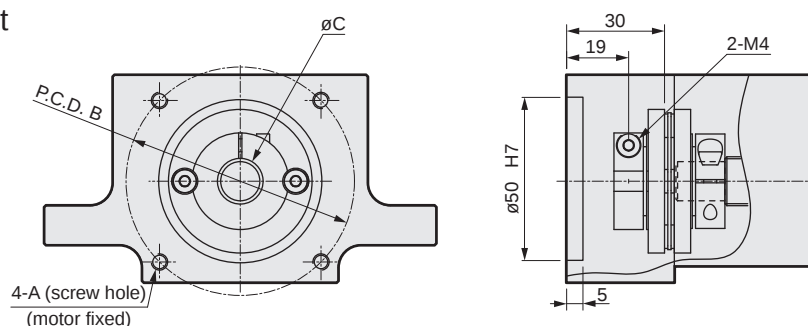
· Refer to page 336 for grease nipple dimensions.



*Positioning pin hole (option)

Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	492	542	592	642	692	742	792	842	892	942	992	1042	1092	1142	1192	1242	1292	1342	1392	1442	1492	1542	1592	1642	1692
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
P	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Weight (kg)	12.5	13.3	14.1	14.9	15.7	16.5	17.3	18.1	18.9	19.7	20.5	21.3	22.1	22.9	23.7	24.5	25.3	26.1	26.9	27.7	28.6	29.4	30.2	31.0	31.8

Motor mounting part



Mounted motor specification		A	B	C	Motor mounting bolt
M	400 W	M5	ϕ 70	ϕ 14	4-M5 x L18
Y	400 W	M5	ϕ 70	ϕ 14	4-M5 x L18
P	400 W	M4	ϕ 70	ϕ 14	4-M4 x L18

List of attachments

[Motor mounting parts]

Mounted motor specification	Coupling	Fitting	Motor capacity	Motor mounting bolt	
				Size	Quantity
M	Assembled at shipment	Included at shipment	400 W	M5	4
Y				M5	4
P				M4	4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

MEMO

Servo motor compatible							Stepper motor compatible				Safety precautions
EBS	EBR	ETS	ETS Multi-Axis	ECS	ETV	ECV	EKS	EBS	EBR	ETS	ECS

ECS-17 Series

Motor side mounting (left, right, bottom)

● Servo motor capacity: 400 W/750 W



How to order

ECS - 17 - 05 040 - R M 4 N N N N P

A Body size
17 Body width 170 mm

B Screw lead
05 5 mm
10 10 mm
20 20 mm
40 40 mm

C Stroke length
005 to 125 (In 50 mm increments)
50 mm to 1250 mm

D Motor mounting direction
R Right mounting
D Bottom mounting
L Left mounting

E Mounted motor specification
M Select the mounted motor specification from the table below.
Y
P
F

F Motor capacity
4 400 W
8 750 W

G Brake
N None

H Origin sensor (1 pc) *1 *2 *3
N None
A Inside motor side
B Inside motor opposite side
C Outside motor side
D Outside motor opposite side

I Limit sensor (2 pcs) *1 *2 *3
N None
A Inside
B Outside

J Grease nipple *3 *4 *5
N None (Body mounting direction: Standard)
R Right
L Left

K Positioning pin hole
N None
P Yes

Manufacturer	400 W	750 W
Mitsubishi Electric Corporation	M	M
Delta Electronics Co., Ltd.	M	M
Sanyo Denki Co., Ltd.	M	-
YASKAWA Electric Corporation	Y	Y
Keyence Corporation	Y	Y
Panasonic Corporation	P	P
OMRON Corporation	P	P
Fuji Electric Co., Ltd.	M	M
FANUC CORPORATION	F	F
Bosch Rexroth AG	P	P
Rockwell Automation, Inc.	M	M
SIEMENS AG	M	M

- *1: Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.
 *2: For sensor inside mounting, the user cannot adjust the position. (Assembled at shipment)
 For sensor outside mounting, the user can adjust the position. (Included at shipment)
 *3: Contact CKD to use the origin sensor, limit sensor and grease nipple in the same direction.
 *4: "Body mounting direction: Standard" here refers to mounting from the bottom side.
 *5: When selecting motor mounting direction R, grease nipple R cannot be selected.
 When selecting L, grease nipple L cannot be selected.

* Refer to page 275 for the motor model No.

Specifications

Applicable motor capacity			400 W/750 W servo motor				
Drive method			Ball screw ø20				
Ball screw accuracy grade			C7				
Stroke length			50 to 1250				
Screw lead			mm	5	10	20	40
Max. load capacity *1	Vertical	400 W kg	120	110	75	35	
		750 W kg	120	120	83	50	
		400 W kg	40	30	14	7	
		750 W kg	50	40	25	10	
Max. speed			mm/s	250	500	1000	2000
Rated thrust *1	400 W	N	1388	694	347	174	
	750 W	N	2100	1050	525	260	
Repeatability			mm	±0.01			
Lost motion			mm	0.1 or less			
Dynamic allowable load			N	10102			
Static allowable moment			N·m	MP: 1034, MY: 1032, MR: 908			
Dynamic allowable moment			N·m	MP: 424.3, MY: 424.3, MR: 520.3			
Operating ambient temperature, humidity			0 to 40°C (no freezing)				
			35 to 80% RH (no condensation)				
Storage ambient temperature, humidity			-10 to 50°C (no freezing)				
			35 to 80% RH (no condensation)				
Atmosphere			No corrosive gas, explosive gas, or dust				

*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

Stroke and max. speed

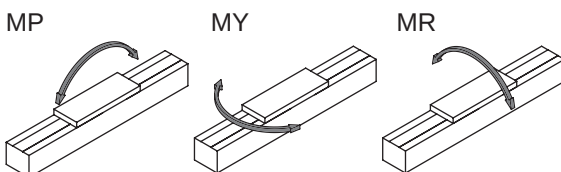
		(mm/s)				
Screw lead	Stroke length	100 to 850	950	1050	1150	1250
5		250	225	200	175	150
10		500	450	400	350	300
20		1000	900	800	700	600
40		2000	1800	1600	1400	1200

*The max. speed is the speed when the motor mounted by the customer can output a rotation speed of 3000 rpm.
 The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

Allowable overhang length

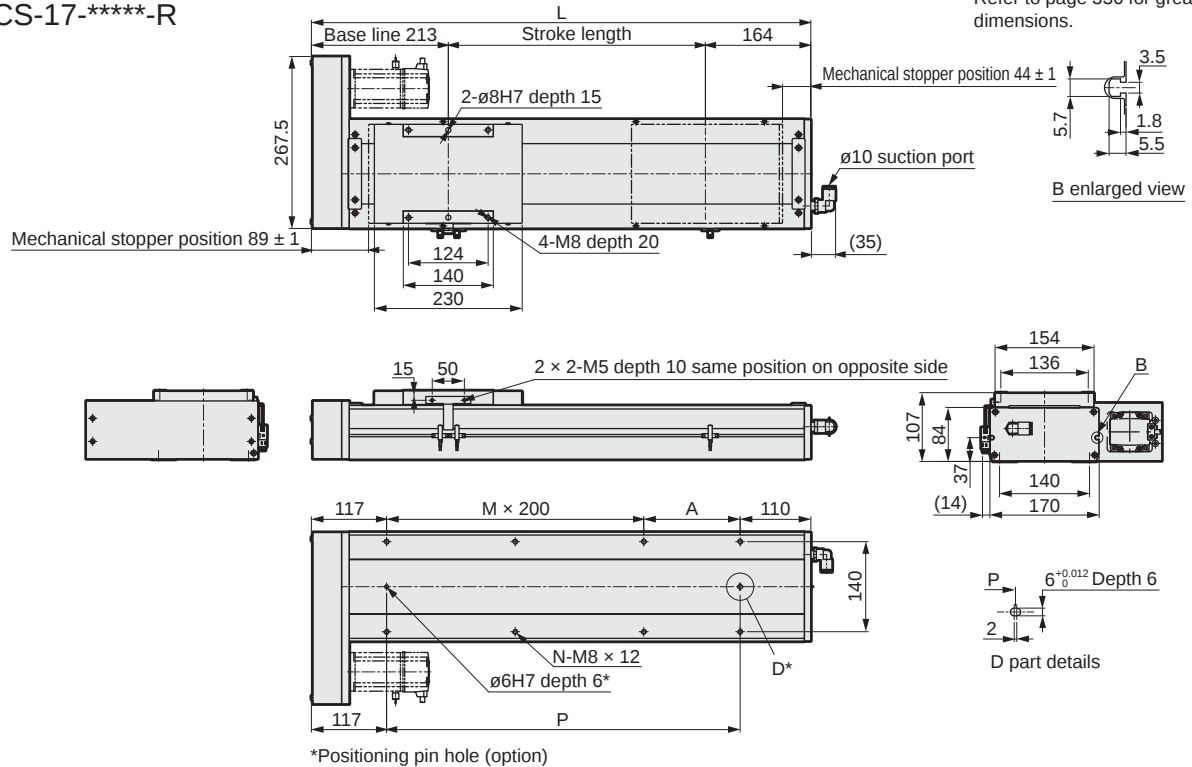
*Refer to page 330 for details.

Moment direction



Dimensions Motor right-side mounting

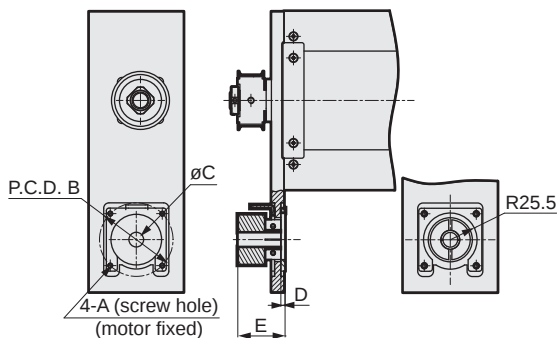
● ECS-17-****-R



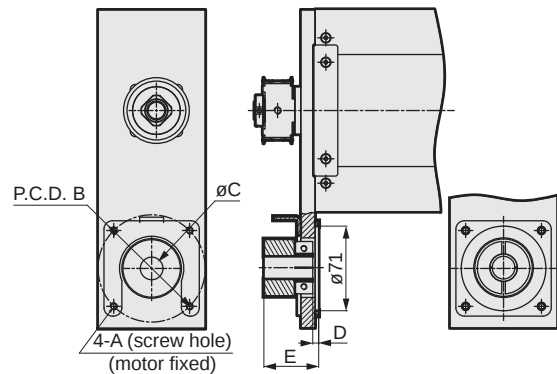
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	427	477	527	577	627	677	727	777	827	877	927	977	1027	1077	1127	1177	1227	1277	1327	1377	1427	1477	1527	1577	1627
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
P	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Weight (kg)	12.6	13.4	14.2	15.0	15.8	16.6	17.4	18.1	18.9	19.7	20.5	21.3	22.1	22.9	23.6	24.4	25.2	26.0	26.8	27.6	28.4	29.1	29.9	30.7	31.5

Motor mounting part

● ECS-17-400W-R



● ECS-17-750W-R



Mounted motor specification		A	B	C	D	E	Motor mounting bolt
M	400 W/750 W	M5/M6	ø70/ø90	ø14/ø19	4/5	45/46	4-M5 × L18/4-M6 × L24
Y	400 W/750 W	M5/M6	ø70/ø90	ø14/ø19	4/5	45/46	4-M5 × L18/4-M6 × L24
P	400 W/750 W	M4/M5	ø70/ø90	ø14/ø19	4/5	45/46	4-M4 × L18/4-M5 × L24
F	400 W/750 W	M5/M6	ø70/ø100	ø14/ø14	4/7	45/48	4-M5 × L18/4-M6 × L25

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt, pulley	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Included at shipment	Included at shipment	400 W/750 W	M5/M6 4
Y				M5/M6 4
P				M4/M5 4
F				M5/M6 4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

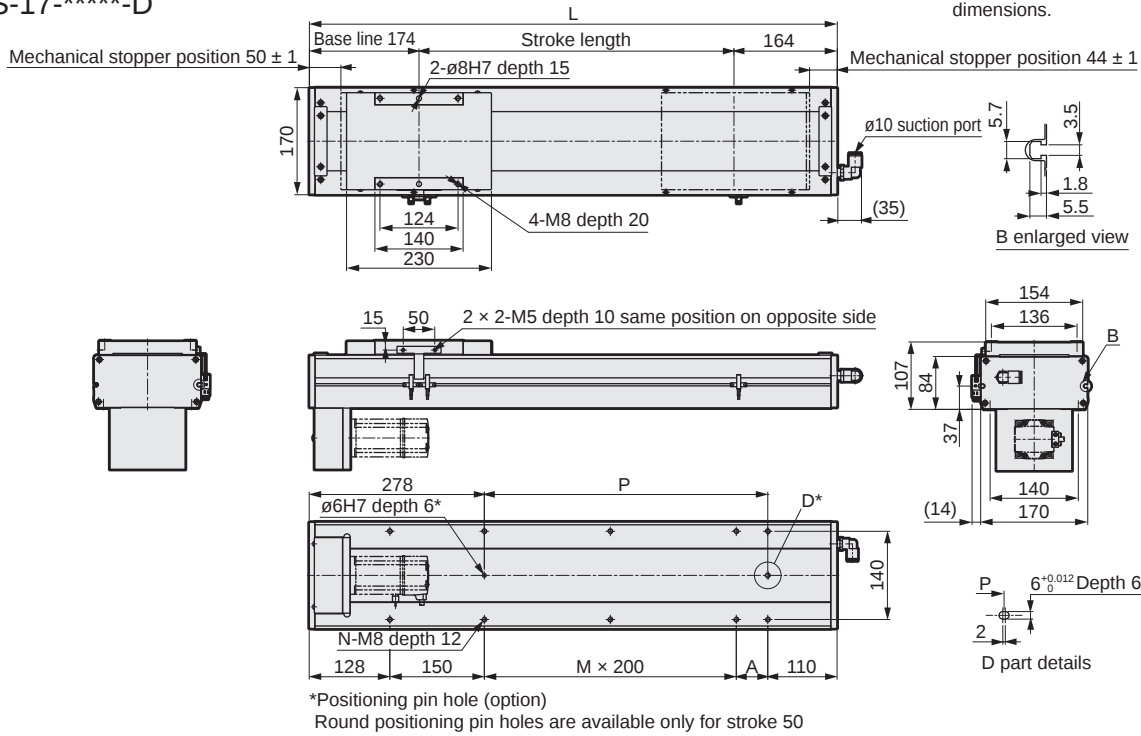
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

Dimensions Motor bottom mounting

● ECS-17-*****-D

· Refer to page 336 for grease nipple dimensions.

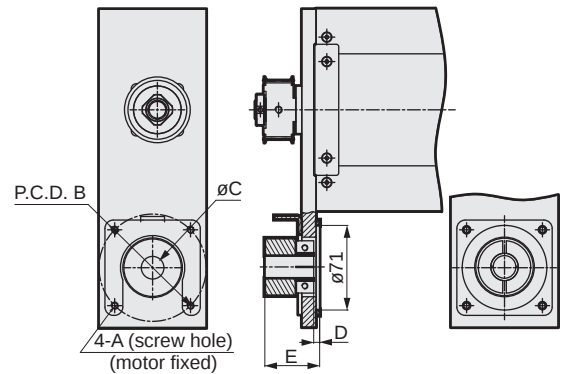
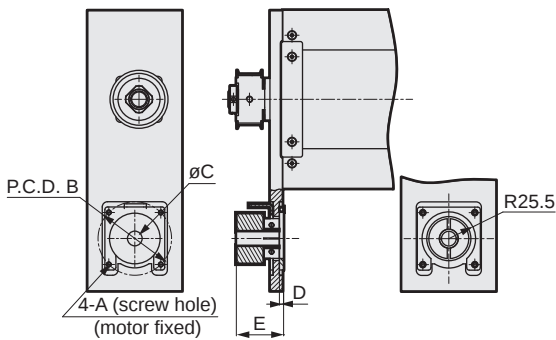


Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538	1588
A	0	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
P	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Weight (kg)	12.6	13.4	14.2	15.0	15.8	16.6	17.4	18.1	18.9	19.7	20.5	21.3	22.1	22.9	23.6	24.4	25.2	26.0	26.8	27.6	28.4	29.1	29.9	30.7	31.5

Motor mounting part

● ECS-17-400W-D

● ECS-17-750W-D



Mounted motor specification		A	B	C	D	E	Motor mounting bolt
M	400 W/750 W	M5/M6	$\phi 70/\phi 90$	$\phi 14/\phi 19$	4/5	45/46	4-M5 x L18/4-M6 x L24
Y	400 W/750 W	M5/M6	$\phi 70/\phi 90$	$\phi 14/\phi 19$	4/5	45/46	4-M5 x L18/4-M6 x L24
P	400 W/750 W	M4/M5	$\phi 70/\phi 90$	$\phi 14/\phi 19$	4/5	45/46	4-M4 x L18/4-M5 x L24
F	400 W/750 W	M5/M6	$\phi 70/\phi 100$	$\phi 14/\phi 14$	4/7	45/48	4-M5 x L18/4-M6 x L25

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt, pulley	Fitting	Motor capacity	Motor mounting bolt	
				Size	Quantity
M	Included at shipment	Included at shipment	400 W/750 W	M5/M6	4
Y				M5/M6	4
P				M4/M5	4
F				M5/M6	4

*Refer to page 338 for fitting details.

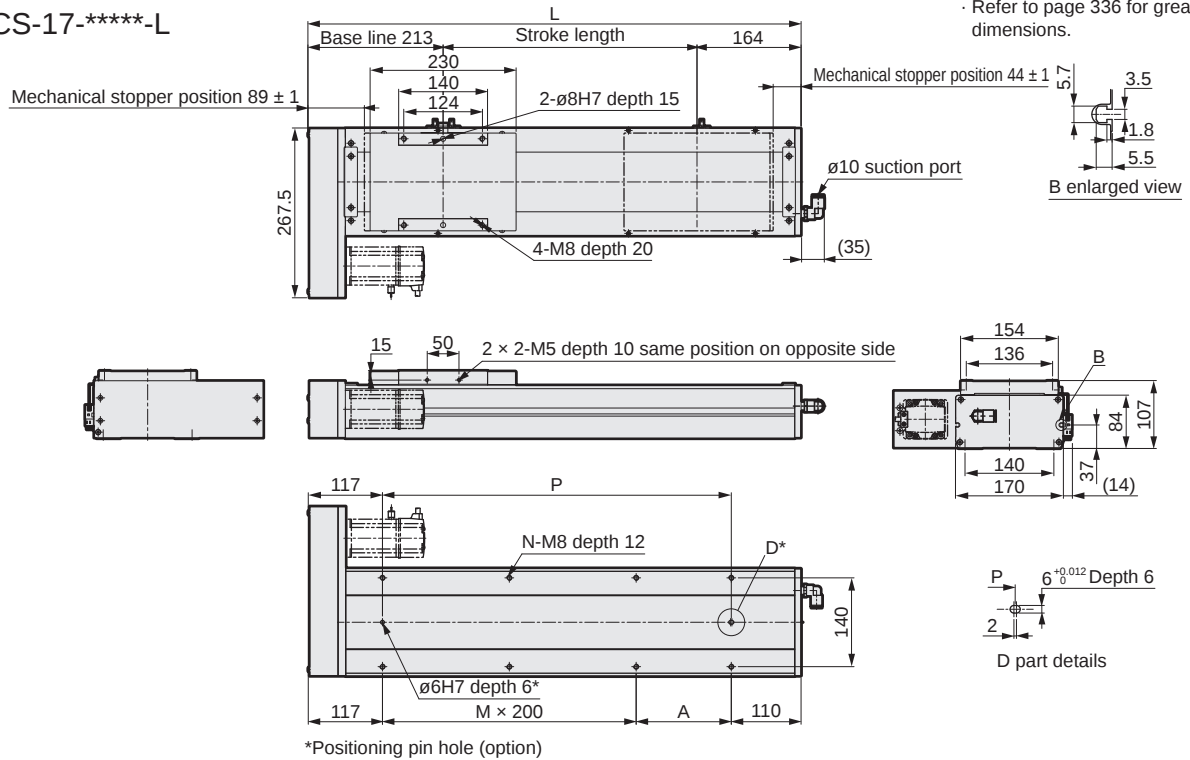
[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

Dimensions Motor left-side mounting

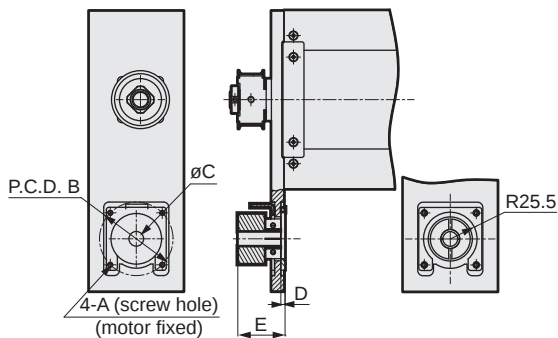
● ECS-17-****-L



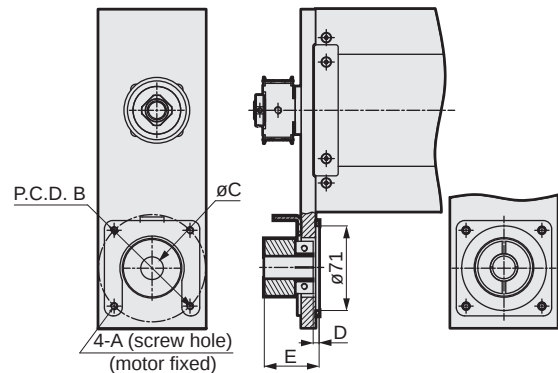
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	427	477	527	577	627	677	727	777	827	877	927	977	1027	1077	1127	1177	1227	1277	1327	1377	1427	1477	1527	1577	1627
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
P	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Weight (kg)	12.6	13.4	14.2	15.0	15.8	16.6	17.4	18.1	18.9	19.7	20.5	21.3	22.1	22.9	23.6	24.4	25.2	26.0	26.8	27.6	28.4	29.1	29.9	30.7	31.5

Motor mounting part

● ECS-17-400W-L



● ECS-17-750W-L



Mounted motor specification	A	B	C	D	E	Motor mounting bolt
M 400 W/750 W	M5/M6	ø70/ø90	ø14/ø19	4/5	45/46	4-M5 × L18/4-M6 × L24
Y 400 W/750 W	M5/M6	ø70/ø90	ø14/ø19	4/5	45/46	4-M5 × L18/4-M6 × L24
P 400 W/750 W	M4/M5	ø70/ø90	ø14/ø19	4/5	45/46	4-M4 × L18/4-M5 × L24
F 400 W/750 W	M5/M6	ø70/ø100	ø14/ø14	4/7	45/48	4-M5 × L18/4-M6 × L25

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt, pulley	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Included at shipment	Included at shipment	400 W/750 W	M5/M6 4
Y				M5/M6 4
P				M4/M5 4
F				M5/M6 4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

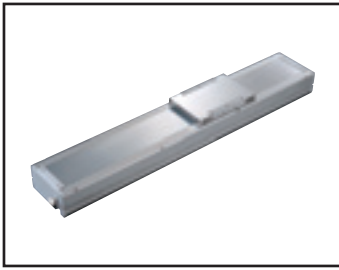
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

ECS-22 Series

Straight motor mounting, built-in mounting

● Servo motor capacity: 750 W



How to order

ECS - 22 - 05 050 - E M 8 N N N N P

A Body size	
22	Body width 220 mm

B Screw lead	
05	5 mm
10	10 mm
25	25 mm
40	40 mm

C Stroke length	
005 to 150	100 mm (In 50 mm increments) 1500 mm

D Motor mounting direction *1	
E	Straight mounting
B	Built-in mounting

E Mounted motor specification	
M	Select the mounted motor specification from the table below.
Y	
P	
F	

F Motor capacity	
8	750 W

G Brake	*1
N	None
B	Yes

H Origin sensor (1 pc)	*2 *3 *4
N	None
A	Inside motor side
B	Inside motor opposite side
C	Outside motor side
D	Outside motor opposite side

I Limit sensor (2 pcs)	*2 *3 *4
N	None
A	Inside
B	Outside

K Positioning pin hole	
N	None
P	Yes

J Grease nipple	*4 *5
N	None (Body mounting direction: Standard)
R	Right
L	Left

Manufacturer	750 W
Mitsubishi Electric Corporation	M
Delta Electronics Co., Ltd.	M
Sanyo Denki Co., Ltd.	-
YASKAWA Electric Corporation	Y
Keyence Corporation	Y
Panasonic Corporation	P
OMRON Corporation	P
Fuji Electric Co., Ltd.	M
FANUC CORPORATION	F
Bosch Rexroth AG	P
Rockwell Automation, Inc.	M
SIEMENS AG	M

*Refer to page 275 for the motor model No.

- *1: "Yes" to the Brake can be selected only when the motor mounting method is built-in mounting.
 *2: Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.
 *3: For sensor inside mounting, the user cannot adjust the position. (Assembled at shipment)
 For sensor outside mounting, the user can adjust the position. (Included at shipment)
 *4: Contact CKD to use the origin sensor, limit sensor and grease nipple in the same direction.
 *5: "Body mounting direction: Standard" here refers to mounting from the bottom side.

Specifications

Applicable motor capacity	750 W servo motor
Drive method	Ball screw $\phi 25$ $\phi 20$
Ball screw accuracy grade	C7
Stroke length	mm 50 to 1500
Screw lead	mm 5 10 25 40
Max. load capacity	Horizontal kg 150 150 120 60
*1	Vertical kg 55 45 20 10
Max. speed	mm/s 250 500 1250 2000
Rated thrust *1	N 2100 1050 420 260
Repeatability	mm ± 0.01
Lost motion	mm 0.1 or less
Dynamic allowable load	N 14174
Static allowable moment	N·m MP: 2052, MY: 2052, MR: 1810
Dynamic allowable moment	N·m MP: 1098.5, MY: 1098.5, MR: 999.3
Operating ambient temperature, humidity	0 to 40°C (no freezing) 35 to 80% RH (no condensation)
Storage ambient temperature, humidity	-10 to 50°C (no freezing) 35 to 80% RH (no condensation)
Atmosphere	No corrosive gas, explosive gas, or dust

*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

Stroke and max. speed

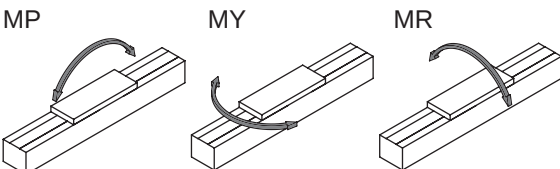
</

*The max. speed is the speed when the motor mounted by the customer can output a rotation speed of 3000 rpm.
 The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

Allowable overhang length

*Refer to page 330 for details.

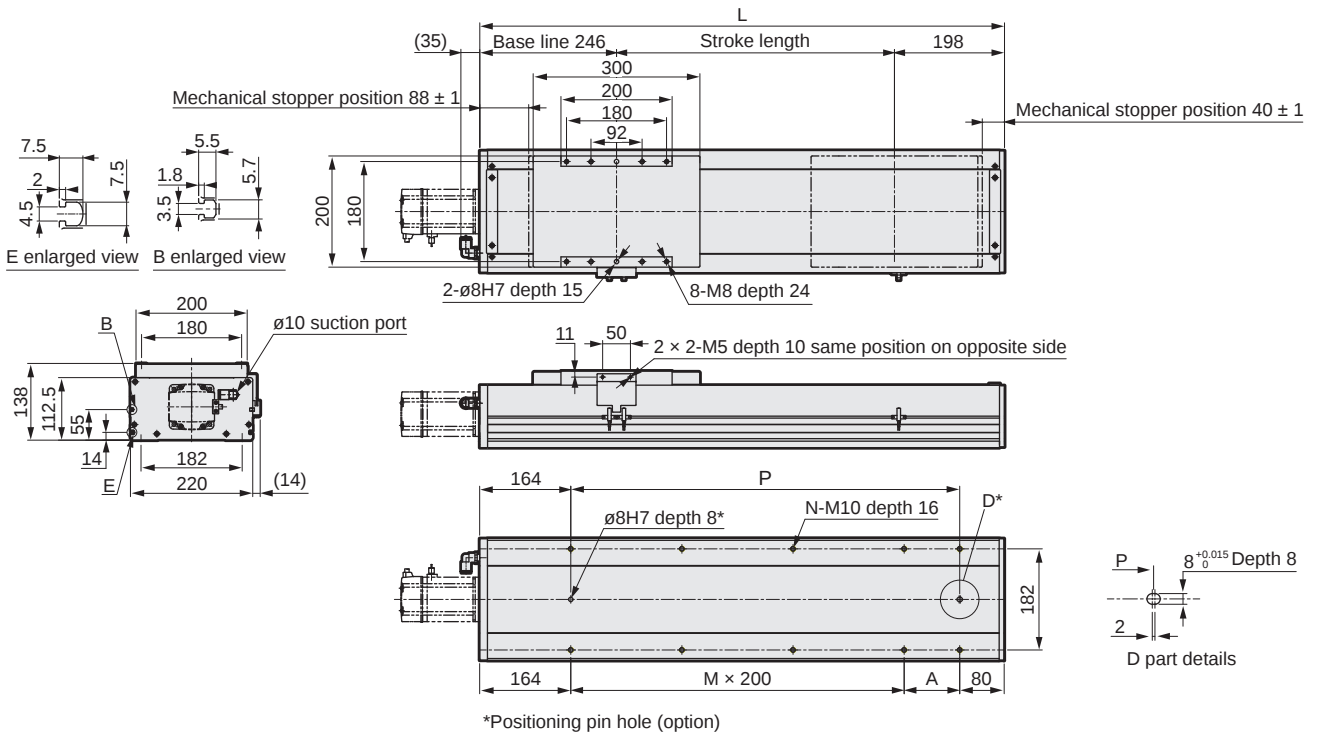
Moment direction



Dimensions Straight motor mounting

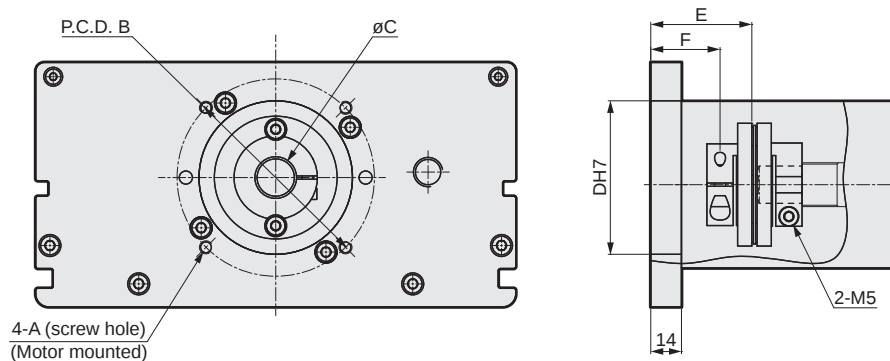
● ECS-22-*****-E

· Refer to page 336 for grease nipple dimensions.



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	494	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344	1394	1444	1494	1544	1594	1644	1694	1744	1794	1844	1894	1944
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
Weight (kg)	27.5	28.9	30.5	31.9	33.4	34.9	36.3	37.8	39.2	40.7	42.1	43.6	45.1	46.5	48.0	49.4	50.9	52.4	53.8	55.3	56.7	58.2	59.7	61.1	62.6	64.0	65.5	67.0	68.4	69.9

Motor mounting part



Mounted motor specification		A	B	C	D	E	F	Motor mounting bolt
M	750 W	M6	ø90	ø19	ø70	46.1	31.6	4-M6 × L16
Y	750 W	M6	ø90	ø19	ø70	46.1	31.6	4-M6 × L16
P	750 W	M5	ø90	ø19	ø70	46.1	31.6	4-M5 × L16
F	750 W	M6	ø100	ø14	ø80	29.7	15.2	4-M6 × L16

List of attachments

[Motor mounting parts]

Mounted motor specification	Coupling	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Assembled at shipment	Included at shipment	750 W	M6 4
Y				M6 4
P				M5 4
F				M6 4

*Refer to page 338 for fitting details.

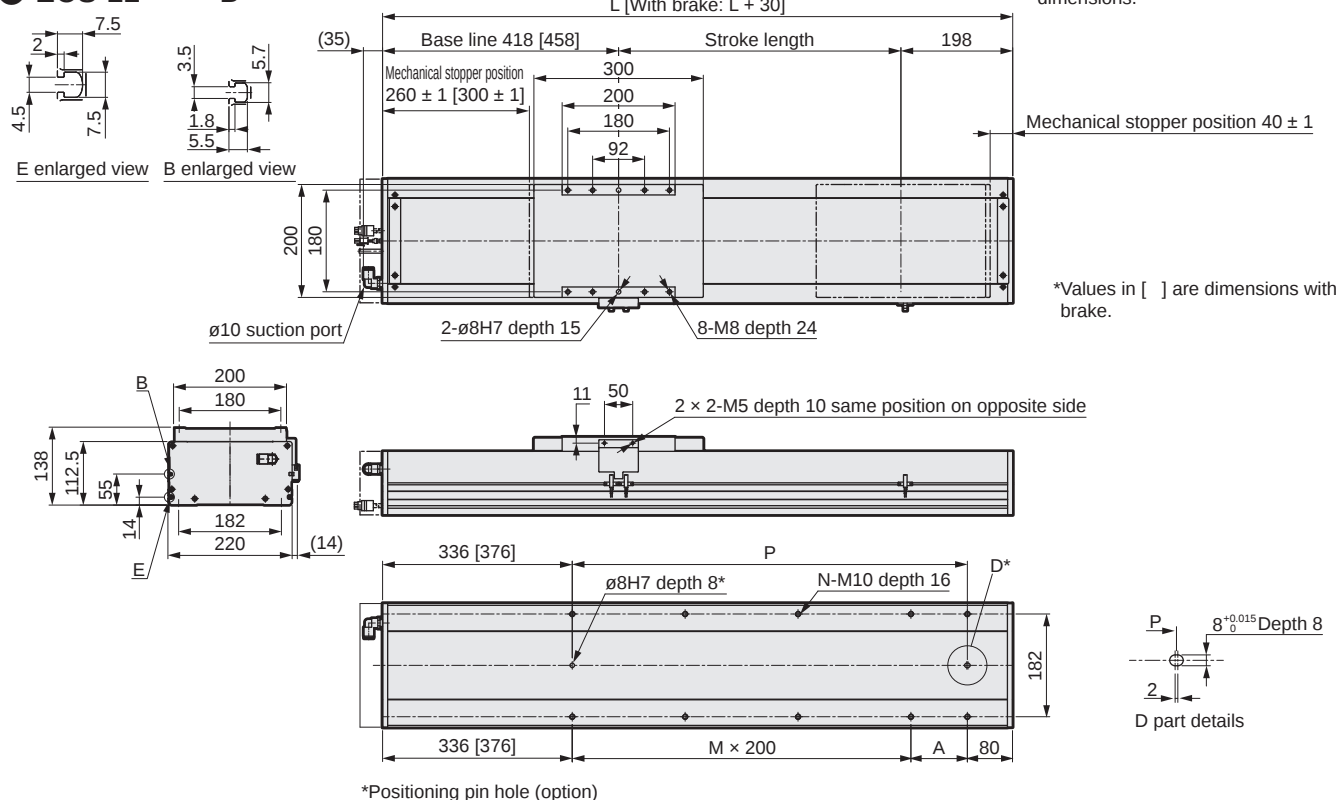
[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

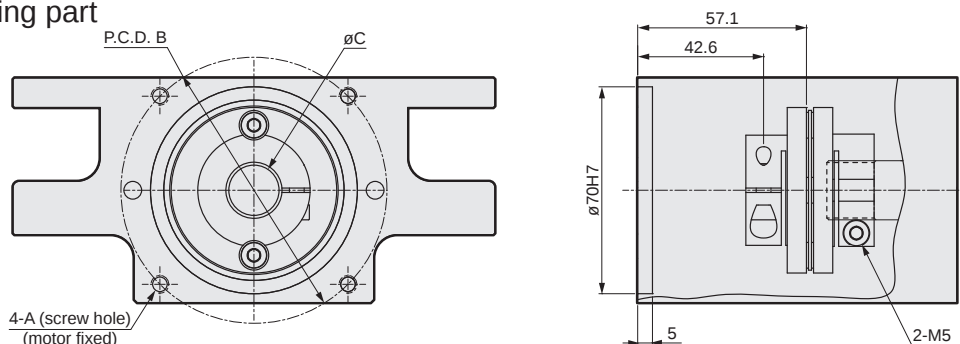
● ECS-22-*****-B

- Refer to page 336 for grease nipple dimensions.



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716	1766	1816	1866	1916	1966	2016	2066	2116
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	12	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
Weight (kg)	26.0	31.3	32.7	34.2	35.7	37.1	38.6	40.1	41.6	43.0	44.5	46.0	47.4	48.9	50.4	51.8	53.3	54.8	56.3	57.7	59.2	60.7	62.1	63.6	65.1	66.5	68.0	69.5	71.0	72.4

Motor mounting part



Mounted motor specification		A	B	C	Motor mounting bolt
M	750 W	M6	ø90	ø19	4-M6 × L16
Y	750 W	M6	ø90	ø19	4-M6 × L16
P	750 W	M5	ø90	ø19	4-M5 × L16

List of attachments

[Motor mounting parts]

Mounted motor specification	Coupling	Fitting	Motor capacity	Motor mounting bolt	
				Size	Quantity
M	Assembled at shipment	Included at shipment	750 W	M6	4
Y				M6	4
P				M5	4

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

*Refer to page 338 for fitting details.

MEMO

Servo motor compatible							Stepper motor compatible				Safety precautions
EBS	EBR	ETS	ETS Multi-Axis	ECS	ETV	ECV	EKS	EBS	EBR	ETS	ECS



ECS-22 Series

Motor side mounting (left, right, bottom)

- Servo motor capacity: 750 W

How to order

The diagram illustrates the selection process for a motor based on 11 options (A-K). Each option is represented by a box with a letter and a description. Arrows indicate the flow from the options to the final motor specification.

Options:

- A Body size**: 22 Body width 220 mm
- B Screw lead**: 05 5 mm, 10 10 mm, 25 25 mm, 40 40 mm
- C Stroke length**: 005 100 mm (In 50 mm increments), 150 150 mm
- D Motor mounting direction**: R Right mounting, D Bottom mounting, L Left mounting
- E Mounted motor specification**: M Select the mounted motor specification from the table below, Y, P, F
- F Motor capacity**: 8 750 W
- G Brake**: N None
- H Origin sensor (1 pc)**: *1 *2 *3, N None, A Inside motor side, B Inside motor opposite side, C Outside motor side, D Outside motor opposite side
- I Limit sensor (2 pcs)**: *1 *2 *3, N None, A Inside, B Outside
- J Grease nipple**: *3 *4 *5, N None (Body mounting direction: Standard), R Right, L Left
- K Positioning pin hole**: N None, P Yes

The final motor specification is determined by the combination of these options.

*1: Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.

*2: For sensor inside mounting, the user cannot adjust the position. (Assembled at shipment)

For sensor outside mounting, the user can adjust the position. (Included at shipment)

*3: Contact CKD to use the origin sensor, limit sensor and grease nipple in the same direction.

*4: "Body mounting direction: Standard" here refers to mounting from the bottom side.

*5: When selecting motor mounting direction R, grease nipple R cannot be selected.

When selecting L, grease nipple L cannot be selected.

Manufacturer	750 W
Mitsubishi Electric Corporation	M
Delta Electronics Co., Ltd.	M
Sanyo Denki Co., Ltd.	-
YASKAWA Electric Corporation	Y
Keyence Corporation	Y
Panasonic Corporation	P
OMRON Corporation	P
Fuji Electric Co., Ltd.	M
FANUC CORPORATION	F
Bosch Rexroth AG	P
Rockwell Automation, Inc.	M
SIEMENS AG	M

*Refer to page 275 for the motor model No.

Specifications

Applicable motor capacity		750 W servo motor			
Drive method		Ball screw ø25			ø20
Ball screw accuracy grade		C7			
Stroke length mm		50 to 1500			
Screw lead mm		5	10	25	40
Max. load capacity *1	Horizontal kg	150	150	120	60
	Vertical kg	55	45	20	10
Max. speed mm/s		250	500	1250	2000
Rated thrust *1 N		2100	1050	420	260
Repeatability mm		±0.01			
Lost motion mm		0.1 or less			
Dynamic allowable load N		14174			
Static allowable moment N·m		MP: 2052, MY: 2052, MR: 1810			
Dynamic allowable moment N·m		MP: 1098.5, MY: 1098.5, MR: 999.3			
Operating ambient temperature, humidity		0 to 40°C (no freezing) 35 to 80% RH (no condensation)			
Storage ambient temperature, humidity		-10 to 50°C (no freezing) 35 to 80% RH (no condensation)			
Atmosphere		No corrosive gas, explosive gas, or dust			

*1 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

Stroke and max. speed

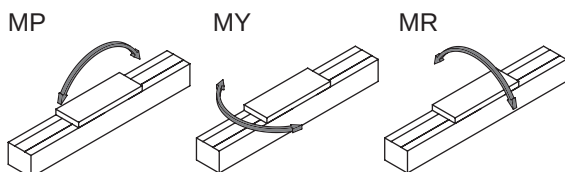
								(mm/s)
Stroke length Screw lead	100 to 900	1000	1100	1200	1300	1400	1500	
5	250	225	200	175	150	125	100	
10	500	450	400	350	300	250	200	
25	1250	1125	1000	875	750	625	500	
Stroke length Screw lead	100 to 850	950	1050	1150	1250	1350	1450	1500
40	2000	1800	1600	1400	1200	1000	800	600

*The max. speed is the speed when the motor mounted by the customer can output a rotation speed of 3000 rpm.
The max. speed is restricted by the stroke. Do not move at speeds beyond the limit.

Allowable overhang length

*Refer to page 330 for details.

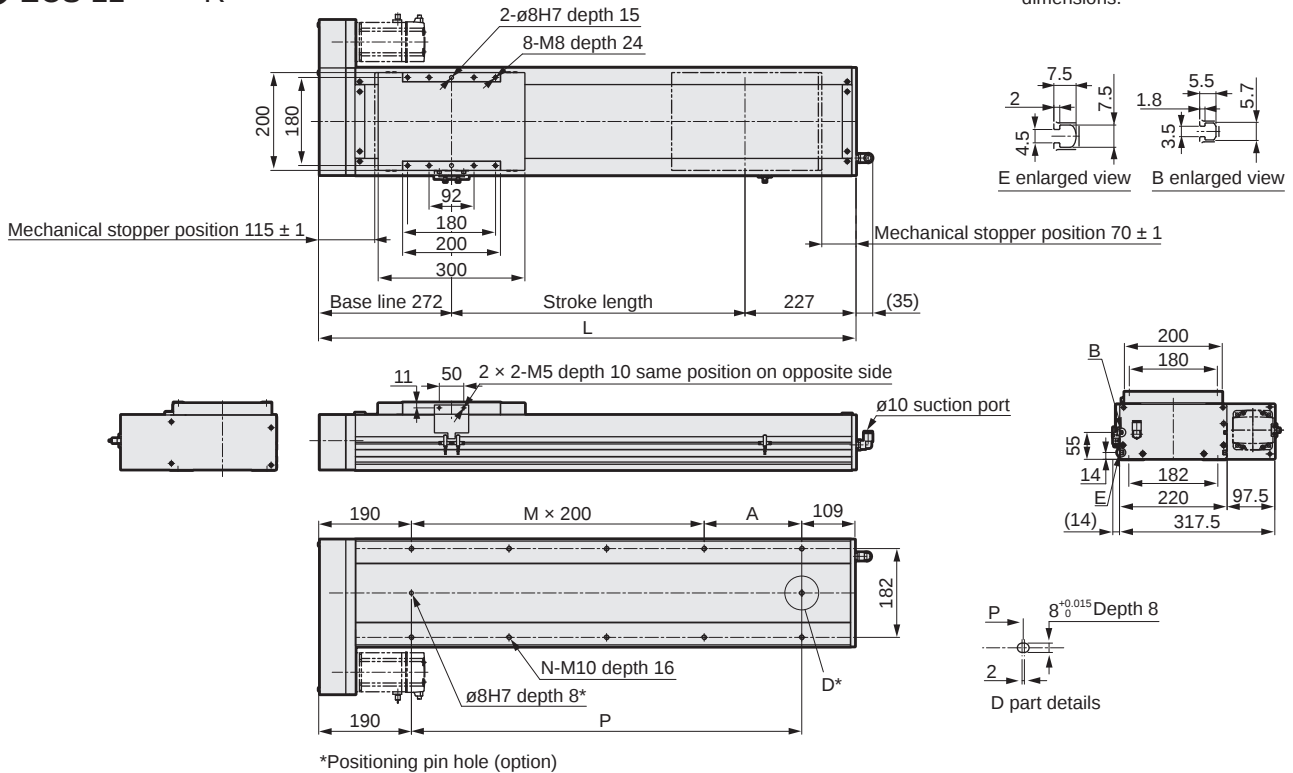
Moment direction



Dimensions Motor right-side mounting

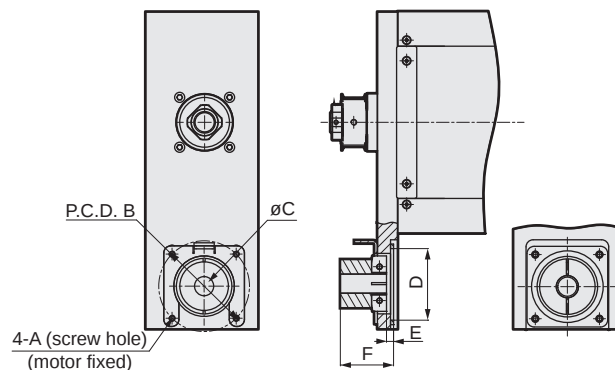
● ECS-22-*****-R

· Refer to page 336 for grease nipple dimensions.



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	549	599	649	699	749	799	849	899	949	999	1049	1099	1149	1199	1249	1299	1349	1399	1449	1499	1549	1599	1649	1699	1749	1799	1849	1899	1949	1999
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
Weight (kg)	26.0	30.1	31.6	33.0	34.5	35.9	37.4	38.9	40.3	41.8	43.2	44.7	46.2	47.6	49.1	50.5	52.0	53.5	54.9	56.4	57.8	59.3	60.8	62.2	63.7	65.1	66.6	68.1	69.5	71.0

Motor mounting part



Mounted motor specification		A	B	C	D	E	F	Motor mounting bolt
M	750 W	M6	ø90	ø19	ø71	7	52.8	4-M6 × L24
Y	750 W	M6	ø90	ø19	ø71	7	52.8	4-M6 × L24
P	750 W	M5	ø90	ø19	ø71	7	52.8	4-M5 × L24
F	750 W	M6	ø100	ø14	ø81	8	53.8	4-M6 × L25

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt/pulley	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Included at shipment	Included at shipment	750 W	M6 4
Y				M6 4
P				M5 4
F				M6 4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

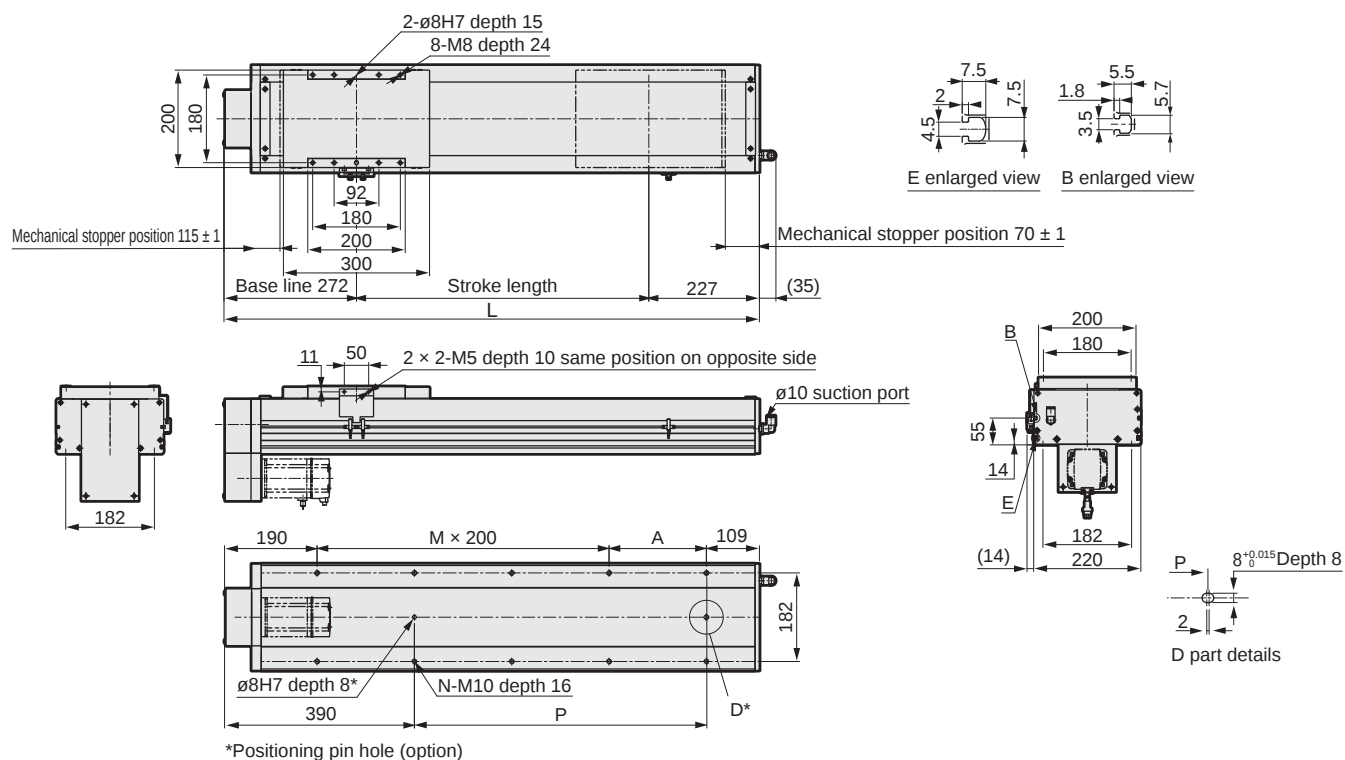
*Refer to page 334 for sensor specifications.

ECS-22 Series

Dimensions Motor bottom mounting

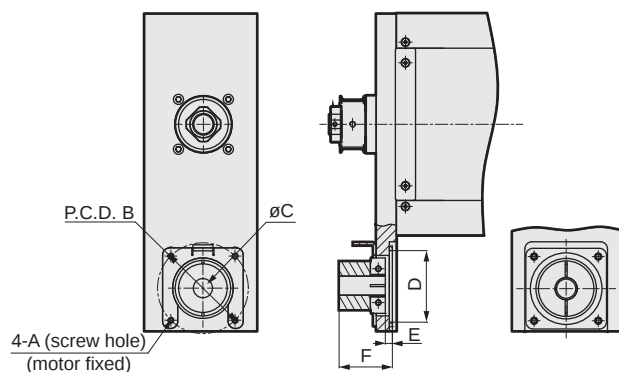
● ECS-22-*****-D

· Refer to page 336 for grease nipple dimensions.



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	549	599	649	699	749	799	849	899	949	999	1049	1099	1149	1199	1249	1299	1349	1399	1449	1499	1549	1599	1649	1699	1749	1799	1849	1899	1948	1999
A	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
Weight (kg)	27.5	30.1	31.6	33.0	34.5	35.9	37.4	38.9	40.3	41.8	43.2	44.7	46.2	47.6	49.1	50.5	52.0	53.5	54.9	56.4	57.8	59.3	60.8	62.2	63.7	65.1	66.6	68.1	69.5	71.0

Motor mounting part



Mounted motor specification		A	B	C	D	E	F	Motor mounting bolt
M	750 W	M6	ø90	ø19	ø71	7	52.8	4-M6 × L24
Y	750 W	M6	ø90	ø19	ø71	7	52.8	4-M6 × L24
P	750 W	M5	ø90	ø19	ø71	7	52.8	4-M5 × L24
F	750 W	M6	ø100	ø14	ø81	8	53.8	4-M6 × L25

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt/pulley	Fitting	Motor capacity	Motor mounting bolt	
				Size	Quantity
M	Included at shipment	Included at shipment	750 W	M6	4
Y				M6	4
P				M5	4
F				M6	4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

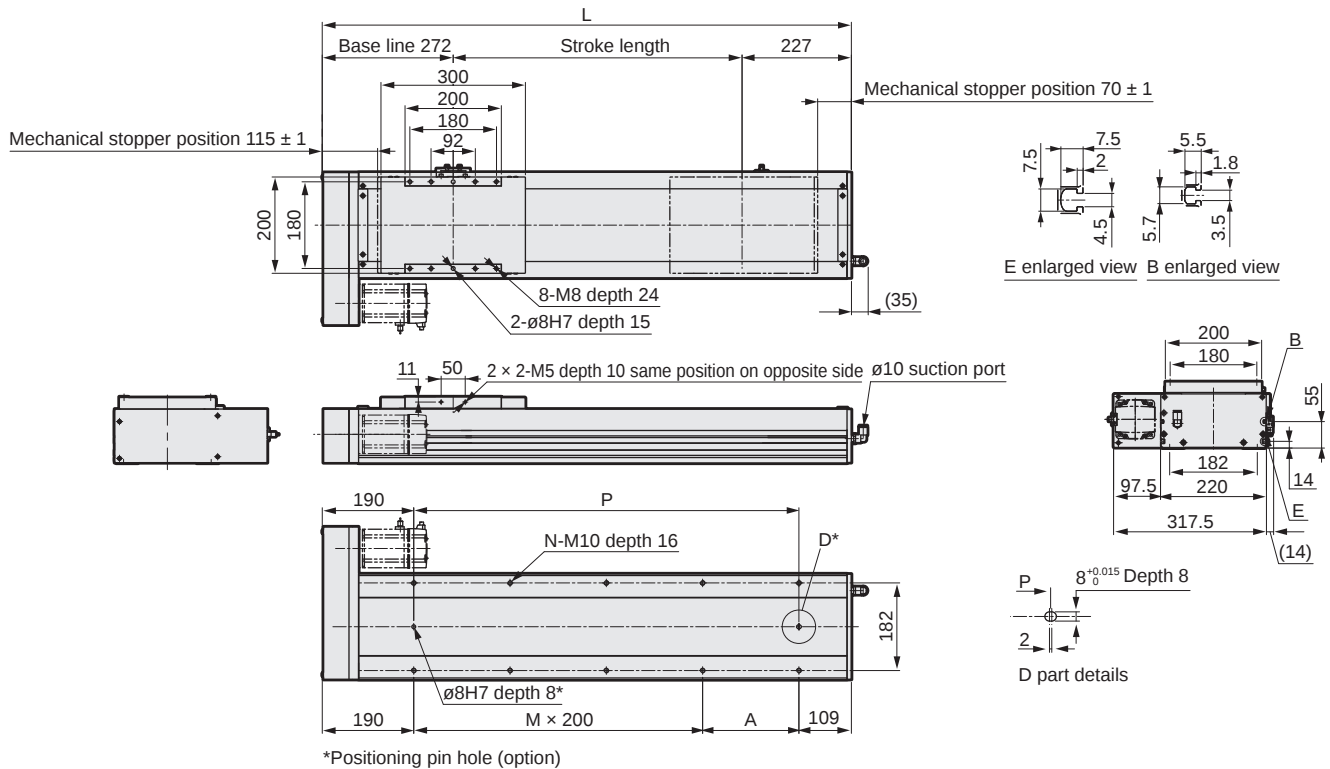
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.

Dimensions Motor left-side mounting

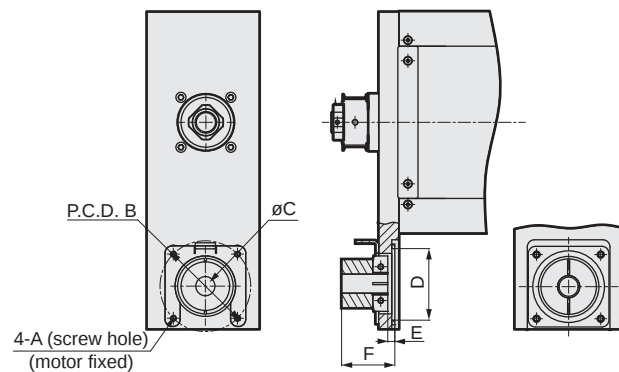
● ECS-22-*****-L

· Refer to page 336 for grease nipple dimensions.



Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	549	599	649	699	749	799	849	899	949	999	1049	1099	1149	1199	1249	1299	1349	1399	1449	1499	1549	1599	1649	1699	1749	1799	1849	1899	1949	1999
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	8	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
Weight (kg)	26.0	30.1	31.6	33.0	34.5	35.9	37.4	38.9	40.3	41.8	43.2	44.7	46.2	47.6	49.1	50.5	52.0	53.5	54.9	56.4	57.8	59.3	60.8	62.2	63.7	65.1	66.6	68.1	69.5	71.0

Motor mounting part



Mounted motor specification	A	B	C	D	E	F	Motor mounting bolt
M 750 W	M6	ø90	ø19	ø71	7	52.8	4-M6 × L24
Y 750 W	M6	ø90	ø19	ø71	7	52.8	4-M6 × L24
P 750 W	M5	ø90	ø19	ø71	7	52.8	4-M5 × L24
F 750 W	M6	ø100	ø14	ø81	8	53.8	4-M6 × L25

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt/pulley	Fitting	Motor capacity	Motor mounting bolt
				Size Quantity
M	Included at shipment	Included at shipment	750 W	M6 4
Y				M6 4
P				M5 4
F				M6 4

*Refer to page 338 for fitting details.

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 334 for sensor specifications.