



Electric actuator Ball screw drive Slider

ETS-13 Series

Straight motor mounting, built-in mounting

- Servo motor capacity: 100 W (metal stopper specifications)/200 W/400 W

How to order

ETS - 13 - 05 005 - E M 1 N N N N N X

A Body size
13 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 *3
E Straight mounting
B Built-in mounting

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

F Motor capacity *2
1 100 W
2 200 W
4 400 W

G Brake *3
N None
B Yes

H Origin sensor (1 pc) *4 *5 *6
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) *4 *5 *6
N None
A Inside
B Outside

J Grease nipple *6 *7
N None (Body mounting direction: Standard)
R Right
L Left

K Positioning pin hole
N None
P Yes

L Metal stopper specifications (ETS-X) *1 *2
Standard
X Yes

Manufacturer	100 W	200 W	400 W
Mitsubishi Electric Corporation	M	M	M
Delta Electronics Co., Ltd.	M	M	M
Sanyo Denki Co., Ltd.	M	M	M
YASKAWA Electric Corporation	Y	Y	Y
Keyence Corporation	Y	Y	Y
Panasonic Corporation	P	P	P
OMRON Corporation	M	P	P
Fuji Electric Co., Ltd.	M	M	M
FANUC CORPORATION	F	F	F
DENSO WAVE Incorporated (ETS-X only)	M	M	M
Bosch Rexroth AG	P	P	P
Rockwell Automation, Inc.	M	M	M
SIEMENS AG	M	M	M

*100 W supports only metal stopper specifications.
*Refer to page 89 for the motor model No.

*1: Built-in mounting cannot be selected with metal stopper specifications.
*2: 100 W can be selected only when selecting metal stopper specifications.
*3: "Yes" to the Brake can be selected only when the motor mounting direction is built-in mounting.
*4: Origin sensor and limit sensor are available as a set. As it is both-or-nothing, select "None" for both.
*5: 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)
*6: Contact CKD to use the origin sensor, limit sensor and grease nipple in the same direction.
*7: "Body mounting direction: Standard" here indicates that either top or bottom mounting is possible.

Specifications

Applicable motor capacity *1			100 W/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 *2	Horizontal kg	100 W	50	30	22	18
		200 W	70	47	30	24
		400 W	70	47	30	24
	Vertical kg	100 W	12	8	5	3
		200 W	17	12	6	4
		400 W	17	12	6	4
Max. speed mm/s		250	500	800	1000	
Rated thrust *1 *2	100 W	N	341	170	106	85
	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		4822				
Static allowable moment N·m		MP: 175, MY: 174, MR: 153				
Dynamic allowable moment N·m		MP: 45.1, MY: 45.1, MR: 191.7				
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				

*1 100 W can be selected only with metal stopper (ETS-X) specifications.
*2 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

Stroke and max. speed

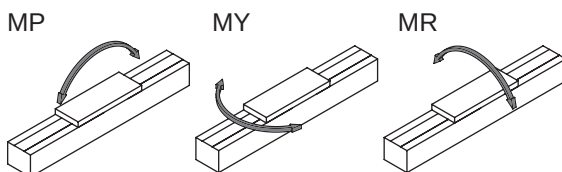
		(mm/s)					
Screw lead	Stroke length	100 to 750	800	850	900	950	1050
5		250	225	200	175	150	125
10		500	450	400	350	300	250
16		800	720	640	560	480	400
20		1000	900	800	700	600	500

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

Allowable overhang length

*Refer to page 152 for details.

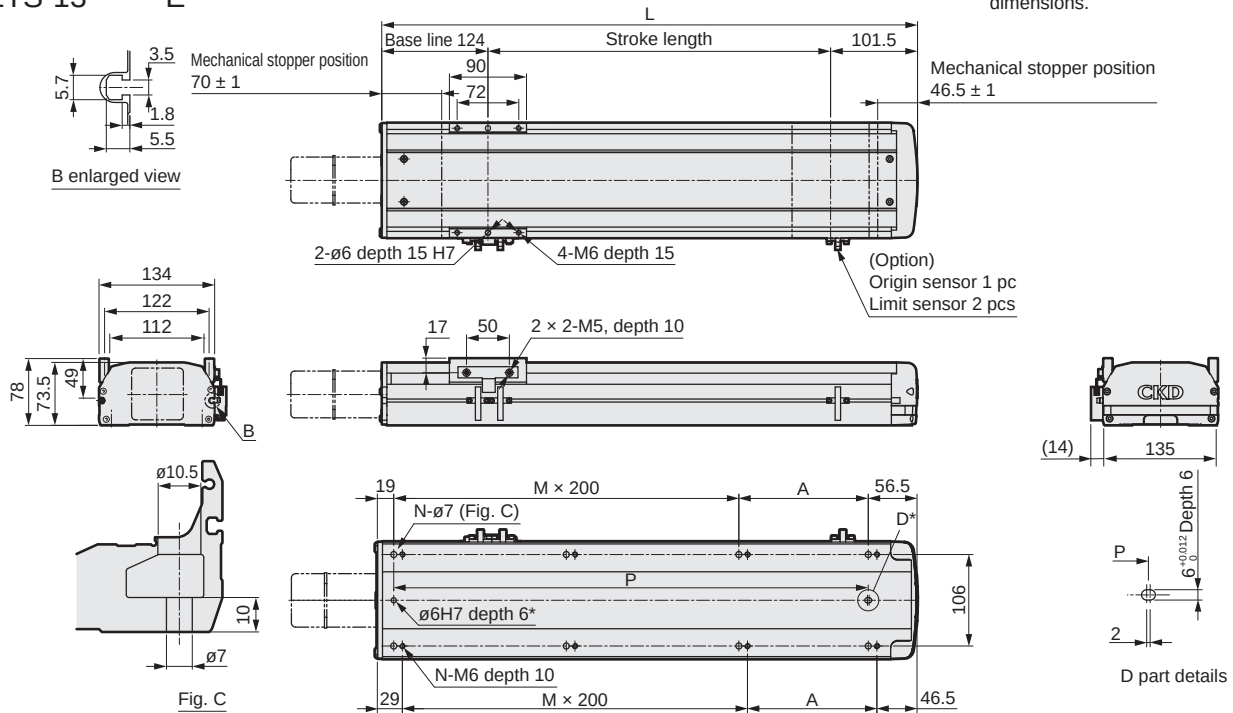
Moment direction



Dimensions Straight motor mounting

● ETS-13-****-E

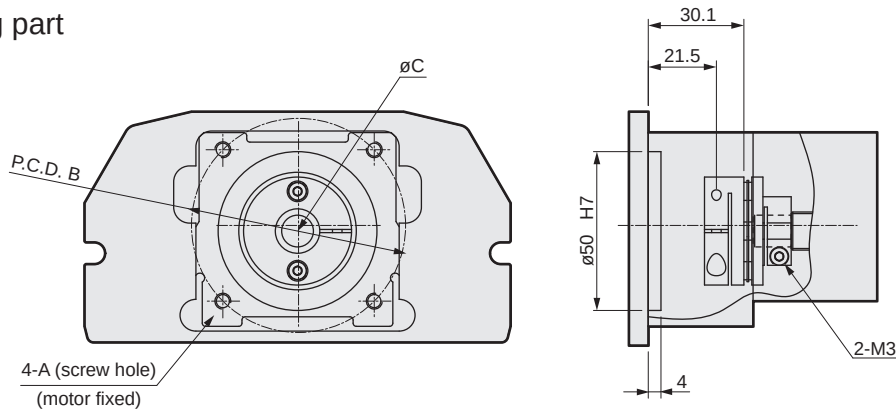
· Refer to page 158 for grease nipple dimensions.



*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
L	275.5	325.5	375.5	425.5	475.5	525.5	575.5	625.5	675.5	725.5	775.5	825.5	875.5	925.5	975.5	1025.5	1075.5	1125.5	1175.5	1225.5	1275.5
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)	5.9	6.5	6.9	7.4	7.9	8.4	8.9	9.3	9.9	10.3	10.9	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.2	15.8

Motor mounting part



Mounted motor specification	A	B	C	Motor mounting bolt
M 100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø14/ø14	4-M5 × L18/4-M5 × L20
Y 100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø14/ø14	4-M5 × L18/4-M5 × L20
P 100 W/200 W/400 W	M3/M4/M4	ø45/ø70/ø70	ø8/ø11/ø14	4-M4 × L18/4-M4 × L20
F 100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø9/ø14	4-M5 × L18/4-M5 × L20 4-M5 × L20

*100 W supports only metal stopper specifications.

List of attachments

[Motor mounting parts]

Mounted motor specification	Coupling	Motor capacity	Motor mounting bolt
			Size Quantity
M	Assembled at shipment	100 W/ 200 W/ 400 W	M4/M5/M5 2/4/4
Y			M4/M5/M5 2/4/4
P			M3/M4/M4 4/4/4
F			M4/M5/M5 2/4/4

*100 W supports only metal stopper specifications.

[Origin sensor/Limit sensor]

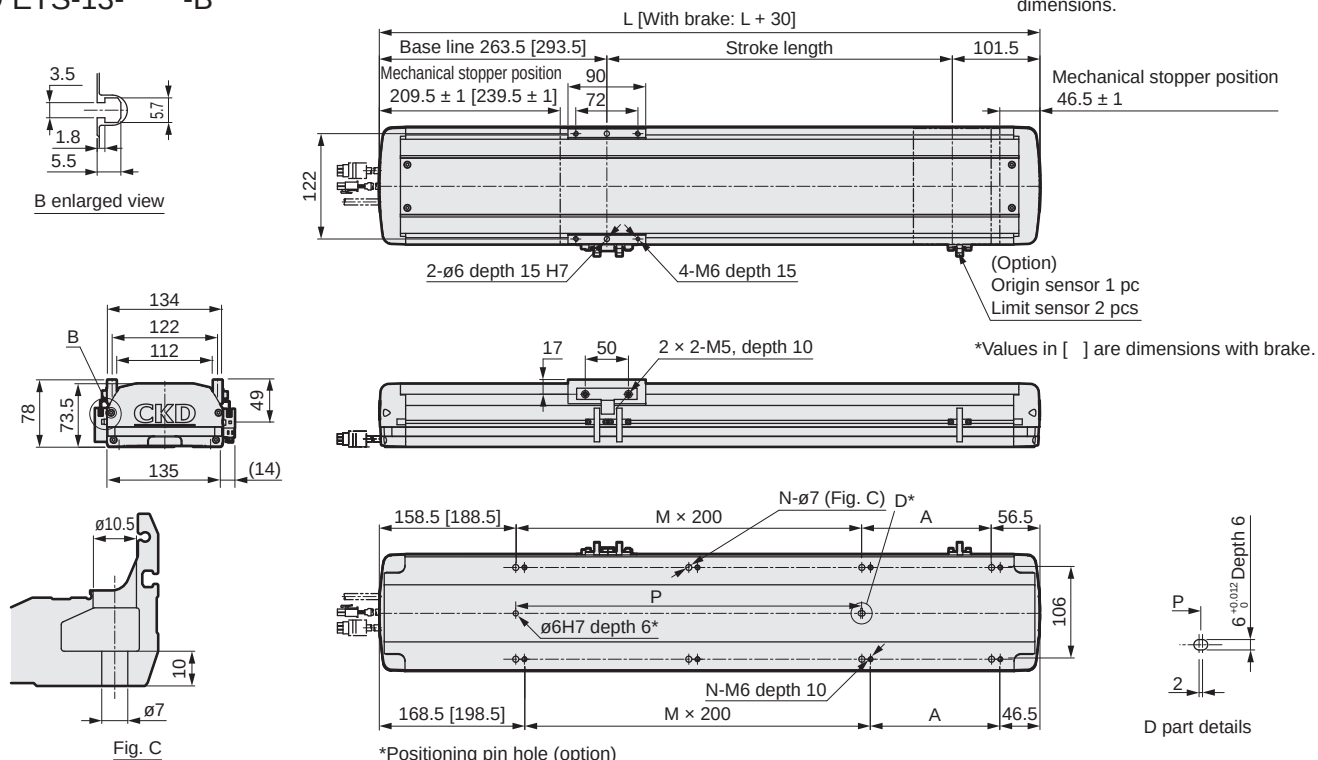
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

Dimensions Motor built-in mounting

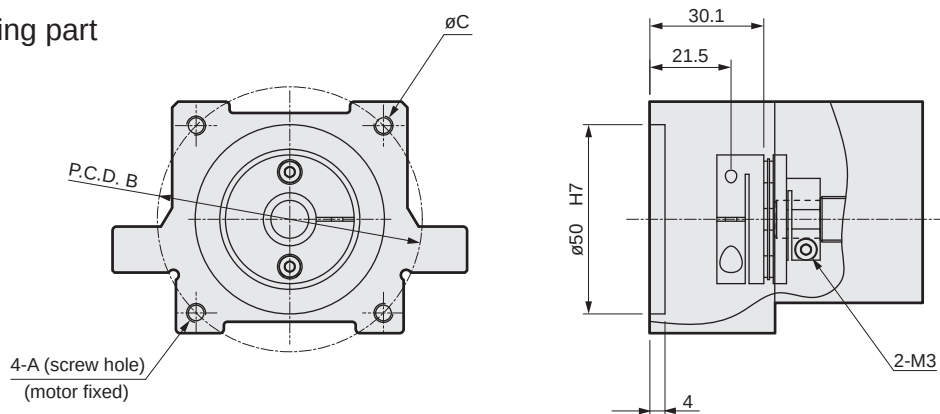
● ETS-13-*****-B

Refer to page 158 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	415	465	515	565	615	665	715	765	815	865	915	965	1015	1065	1115	1165	1215	1265	1315	1365	1415	
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)	Without brake	8.2	9.2	10.2	11.2	12.2	13.2	14.2	15.2	16.2	17.2	18.2	19.2	20.1	21.1	22.1	23.1	24.1	25.1	26.1	27.1	28.1
	With brake	8.8	9.8	10.8	11.8	12.8	13.8	14.8	15.8	16.8	17.8	18.8	19.7	20.7	21.7	22.7	23.7	24.7	25.7	26.7	27.7	28.7

Motor mounting part



Mounted motor specification	A	B	C	Motor mounting bolt
M 100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø14/ø14	4-M5 × L18/4-M5 × L20
Y 100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø14/ø14	4-M5 × L18/4-M5 × L20
P 100 W/200 W/400 W	M3/M4/M4	ø45/ø70/ø70	ø8/ø11/ø14	4-M4 × L18/4-M4 × L20

*100 W supports only metal stopper specifications.

List of attachments

[Motor mounting parts]

Mounted motor specification	Coupling	Motor capacity	Motor mounting bolt
			Size Quantity
M	Assembled at shipment	100 W/200 W/400 W	M4/M5/M5 2/4/4
Y			M4/M5/M5 2/4/4
P			M3/M4/M4 4/4/4

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 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



Electric actuator Ball screw drive Slider

ETS-13 Series

Motor side mounting (left, right, bottom)

● Servo motor capacity: 100 W (metal stopper specifications)/200 W/400 W

How to order

ETS - 13 - 05 005 - R M 1 N N N N N X

A Body size
13 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 105 (In 50 mm increments) 1050 mm

D Motor mounting direction *6
R Right mounting
D Bottom mounting
L Left mounting

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

F Motor capacity *1
1 100 W
2 200 W
4 400 W

G Brake
N None

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 *6
N None (Body mounting direction: Standard)
R Right
L Left

K Positioning pin hole
N None
P Yes

L Metal stopper specifications (ETS-X) *1
Standard
X Yes

Manufacturer	100 W	200 W	400 W
Mitsubishi Electric Corporation	M	M	M
Delta Electronics Co., Ltd.	M	M	M
Sanyo Denki Co., Ltd.	M	M	M
YASKAWA Electric Corporation	Y	Y	Y
Keyence Corporation	Y	Y	Y
Panasonic Corporation	P	P	P
OMRON Corporation	M	P	P
Fuji Electric Co., Ltd.	M	M	M
FANUC CORPORATION	F	F	F
DENSO WAVE Incorporated (ETS-X only)	M	M	M
Bosch Rexroth AG	P	P	P
Rockwell Automation, Inc.	M	M	M
SIEMENS AG	M	M	M

- *1: 100 W can be selected only when selecting metal stopper specifications.
 *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 indicates that either top or bottom mounting is possible.
 *6: When selecting motor mounting direction R, grease nipple R cannot be selected.
 When selecting L, grease nipple L cannot be selected.

Specifications

Applicable motor capacity *1			100 W/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 *2	Horizontal kg	100 W	50	30	22	18
		200 W	70	47	30	24
		400 W	70	47	30	24
	Vertical kg	100 W	12	8	5	3
		200 W	17	12	6	4
		400 W	17	12	6	4
Max. speed mm/s			250	500	800	1000
Rated thrust *1*2	100 W	N	341	170	106	85
	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			4822			
Static allowable moment N·m			MP: 175, MY: 174, MR: 153			
Dynamic allowable moment N·m			MP: 45.1, MY: 45.1, MR: 191.7			
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			

- *1 100 W can be selected only with metal stopper (ETS-X) specifications.
 *2 Rated thrust and max. load capacity are guideline values assuming that the motor mounted will output the rated torque.

Stroke and max. speed

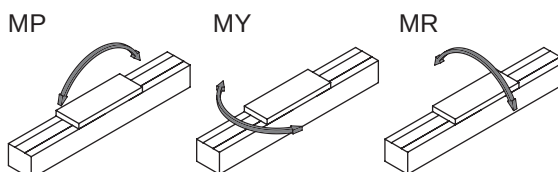
		(mm/s)					
Screw lead	Stroke length	100 to 750	800	850	900	950	1050
5		250	225	200	175	150	125
10		500	450	400	350	300	250
16		800	720	640	560	480	400
20		1000	900	800	700	600	500

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

Allowable overhang length

*Refer to page 152 for details.

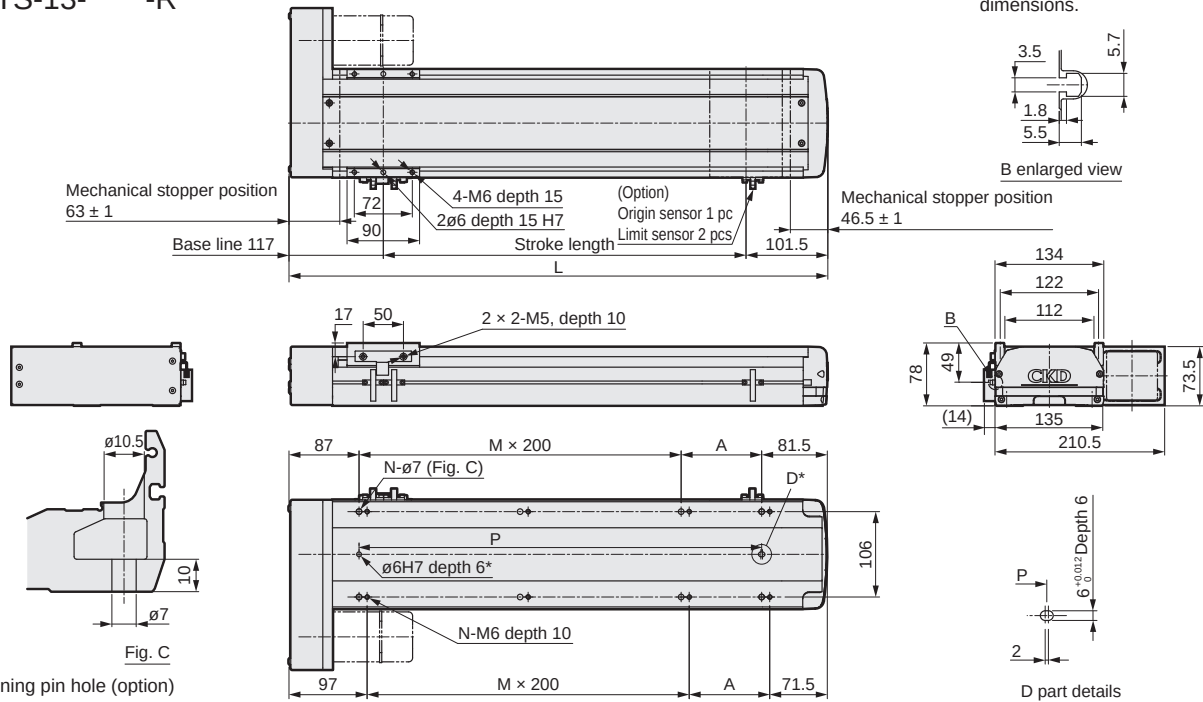
Moment direction



Dimensions Motor right-side mounting

● ETS-13-*****-R

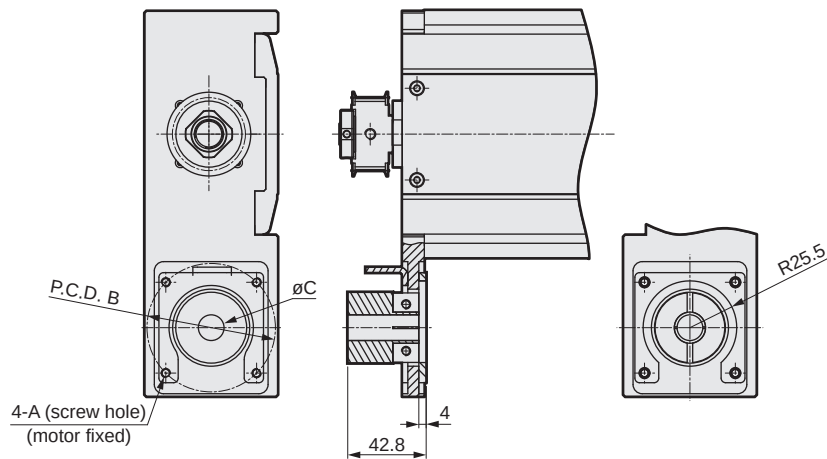
· Refer to page 158 for grease nipple dimensions.



*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
L	268.5	318.5	368.5	418.5	468.5	518.5	568.5	618.5	668.5	718.5	768.5	818.5	868.5	918.5	968.5	1018.5	1068.5	1118.5	1168.5	1218.5	1268.5
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5
N	4	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
Weight (kg)	6.7	7.3	7.7	8.2	8.7	9.2	9.7	10.1	10.7	11.1	11.7	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.0	16.6

Motor mounting part



Mounted motor specification	A	B	C	Motor mounting bolt
M 100 W/200 W/400 W	M4/M5/M5	$\phi 46/\phi 70/\phi 70$	$\phi 8/\phi 14/\phi 14$	4-M5 x L18/4-M5 x L25
Y 100 W/200 W/400 W	M4/M5/M5	$\phi 46/\phi 70/\phi 70$	$\phi 8/\phi 14/\phi 14$	4-M5 x L18/4-M5 x L25
P 100 W/200 W/400 W	M3/M4/M4	$\phi 45/\phi 70/\phi 70$	$\phi 8/\phi 11/\phi 14$	4-M4 x L18/4-M4 x L25
F 100 W/200 W/400 W	M4/M5/M5	$\phi 46/\phi 70/\phi 70$	$\phi 8/\phi 9/\phi 14$	4-M5 x L18/4-M5 x L25 4-M5 x L18

*100 W supports only metal stopper specifications.

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt/pulley	Motor capacity	Motor mounting bolt
			Size Quantity
M	Included at shipment	100 W/ 200 W/ 400 W	M4/M5/M5 2/4/4
Y			M4/M5/M5 2/4/4
P			M3/M4/M4 4/4/4
F			M4/M5/M5 2/4/4

*100 W supports only metal stopper specifications.

[Origin sensor/Limit sensor]

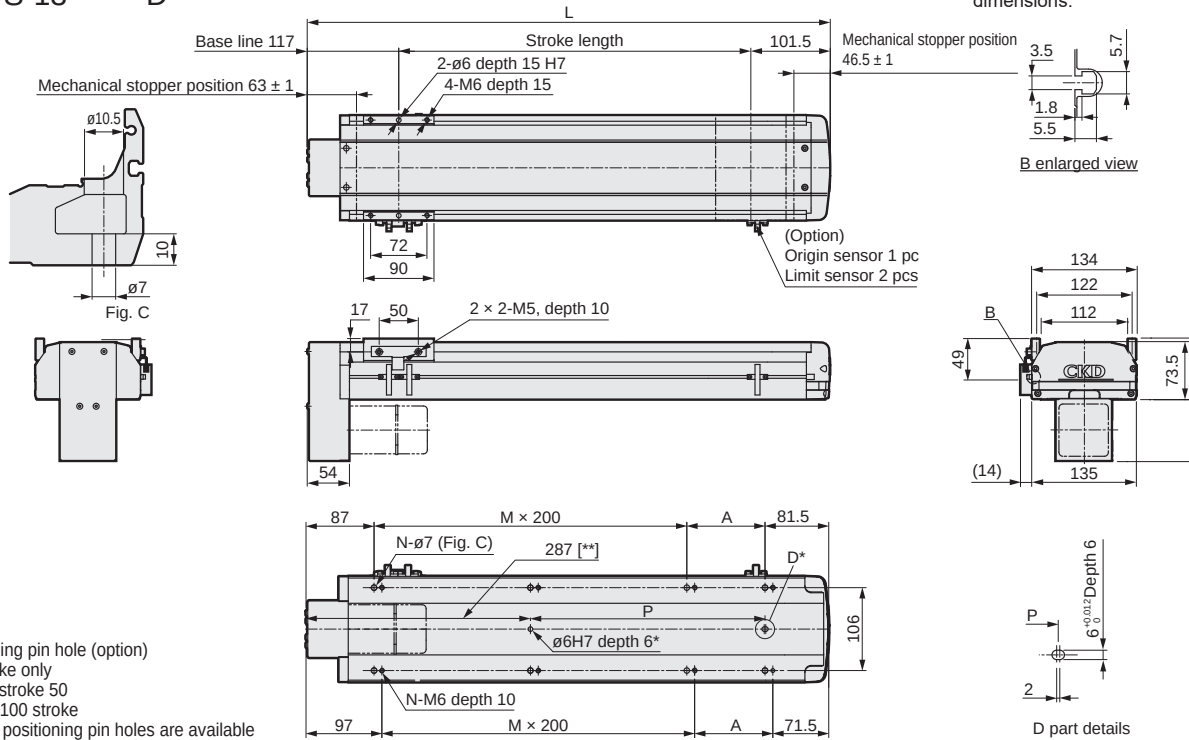
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

Dimensions Motor bottom mounting

● ETS-13-*****-D

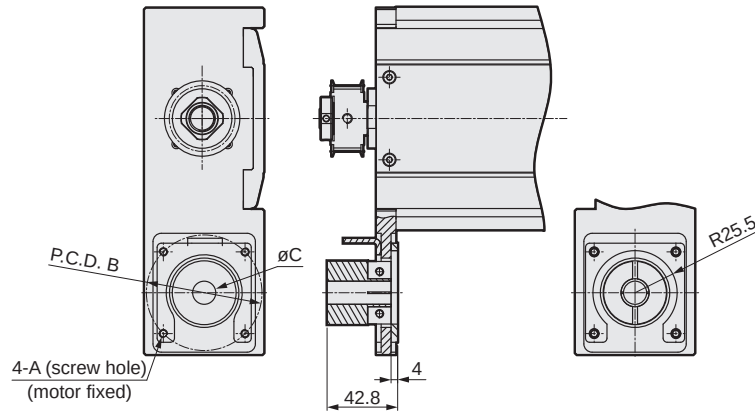
Refer to page 158 for grease nipple dimensions.



* Positioning pin hole (option)
 ** 50 stroke only
 ** 187 at stroke 50
 237 at 100 stroke
 Round positioning pin holes are available only for stroke 50, 100 and 150.

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	268.5	318.5	368.5	418.5	468.5	518.5	568.5	618.5	668.5	718.5	768.5	818.5	868.5	918.5	968.5	1018.5	1068.5	1118.5	1168.5	1218.5	1268.5
A	0	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5
N	4	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14
P	0	0	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
Weight (kg)	6.7	7.3	7.7	8.2	8.7	9.2	9.7	10.1	10.7	11.1	11.7	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.0	16.6

Motor mounting part



Mounted motor specification	A	B	C	Motor mounting bolt
M 100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø14/ø14	4-M5 x L18/4-M5 x L25
Y 100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø14/ø14	4-M5 x L18/4-M5 x L25
P 100 W/200 W/400 W	M3/M4/M4	ø45/ø70/ø70	ø8/ø11/ø14	4-M4 x L18/4-M4 x L25
F 100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø9/ø14	4-M5 x L18/4-M5 x L25 4-M5 x L18

*100 W supports only metal stopper specifications.

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt/pulley	Motor capacity	Motor mounting bolt
			Size Quantity
M	Included at shipment	100 W/ 200 W/ 400 W	M4/M5/M5 2/4/4
Y			M4/M5/M5 2/4/4
P			M3/M4/M4 4/4/4
F			M4/M5/M5 2/4/4

*100 W supports only metal stopper specifications.

[Origin sensor/Limit sensor]

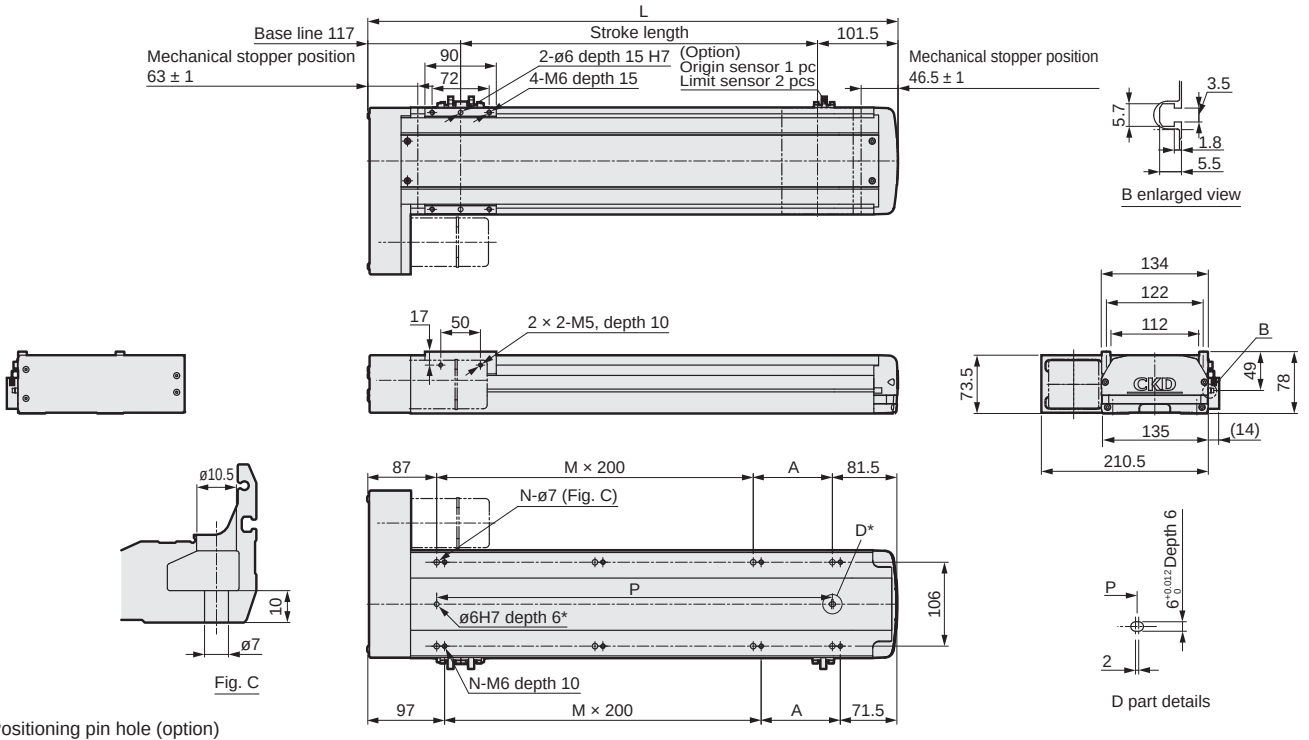
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

Dimensions Motor left-side mounting

● ETS-13-*****-L

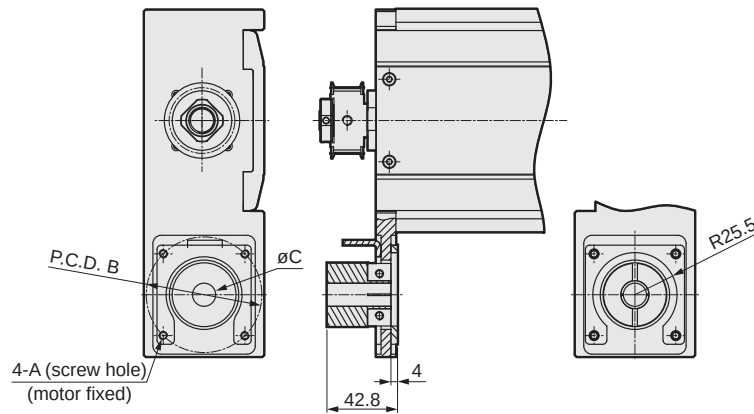
- Refer to page 158 for grease nipple dimensions.



*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
L	268.5	318.5	368.5	418.5	468.5	518.5	568.5	618.5	668.5	718.5	768.5	818.5	868.5	918.5	968.5	1018.5	1068.5	1118.5	1168.5	1218.5	1268.5
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5
N	4	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
Weight (kg)	6.7	7.3	7.7	8.2	8.7	9.2	9.7	10.1	10.7	11.1	11.7	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.0	16.6

Motor mounting part



Mounted motor specification		A	B	C	Motor mounting bolt
M	100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø14/ø14	4-M5 × L18/4-M5 × L25
Y	100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø14/ø14	4-M5 × L18/4-M5 × L25
P	100 W/200 W/400 W	M3/M4/M4	ø45/ø70/ø70	ø8/ø11/ø14	4-M4 × L18/4-M4 × L25
F	100 W/200 W/400 W	M4/M5/M5	ø46/ø70/ø70	ø8/ø9/ø14	4-M5 × L18/4-M5 × L25

*100 W supports only metal stopper specifications.

List of attachments

[Motor mounting parts]

Mounted motor specification	Timing belt/pulley	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Included at shipment	100 W/ 200 W/ 400 W	M4/M5/M5	2/4/4
Y			M4/M5/M5	2/4/4
P			M3/M4/M4	4/4/4
F			M4/M5/M5	2/4/4

*100 W supports only metal stopper specifications.

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.



Electric actuator Ball screw drive Slider

ETS-14 Series

Straight motor mounting, built-in mounting

● Servo motor capacity: 200 W/400 W

How to order

ETS - 14 - 05 005 - E M 2 N N N N N - X

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*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
2 200 W
4 400 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

L Metal stopper specifications (ETS-X) *1
Standard
X 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
DENSO WAVE Incorporated (ETS-X only)	M	M
Bosch Rexroth AG	P	P
Rockwell Automation, Inc.	M	M
SIEMENS AG	M	M

- *1: Built-in mounting cannot be selected with metal stopper specifications.
 *2: "Yes" to the Brake can be selected only when the motor mounting direction 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 indicates that either top or bottom mounting is possible.

*Refer to page 89 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		mm	50 to 1050			
Screw lead		mm	5	10	16	20
Max. load capacity *1	Horizontal	200 W kg	95	75	44	35
		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	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: 552.0, MY: 551.0, MR: 485.0			
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.

Stroke and max. speed

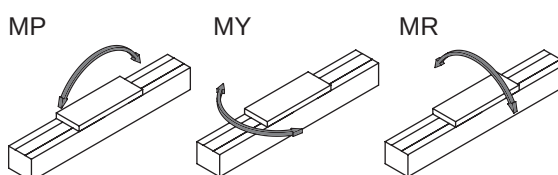
		(mm/s)					
Screw lead	Stroke length	100 to 750	800	850	900	950	1050
5		250	225	200	175	150	125
10		500	450	400	350	300	250
16		800	720	640	560	480	400
20		1000	900	800	700	600	500

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

Allowable overhang length

*Refer to page 152 for details.

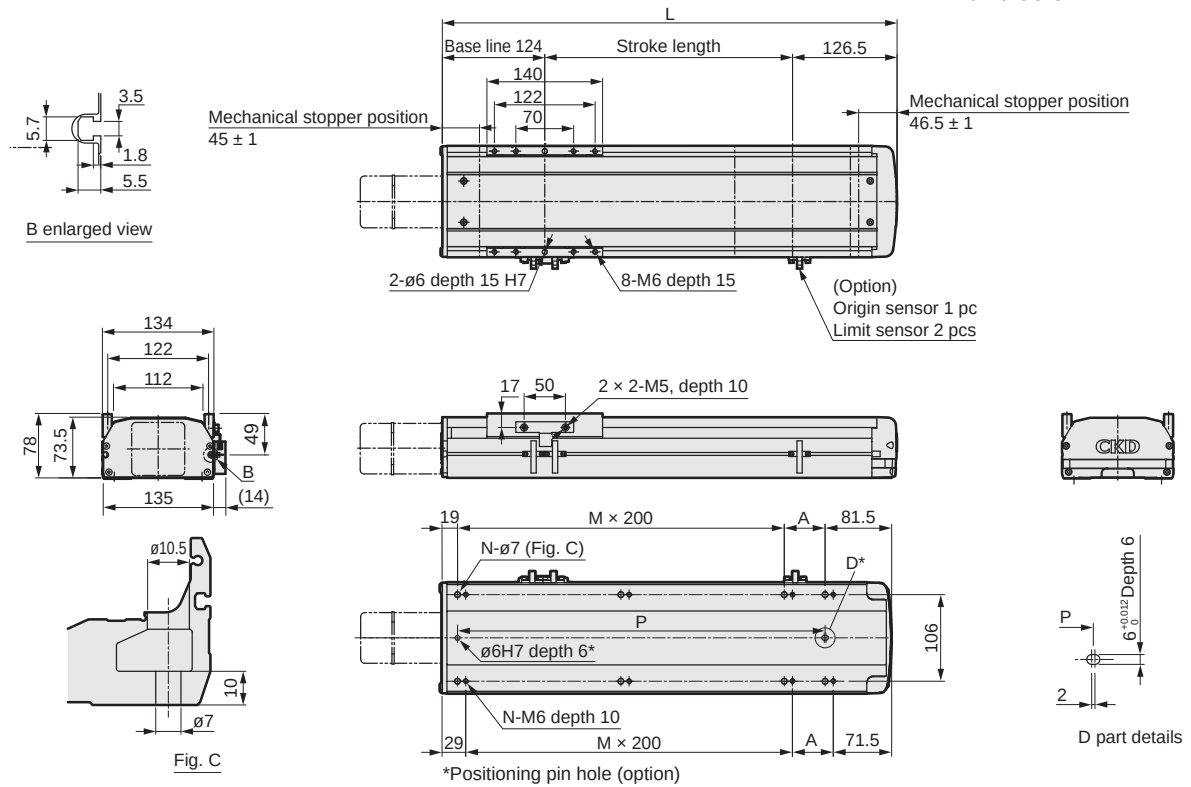
Moment direction



Dimensions Straight motor mounting

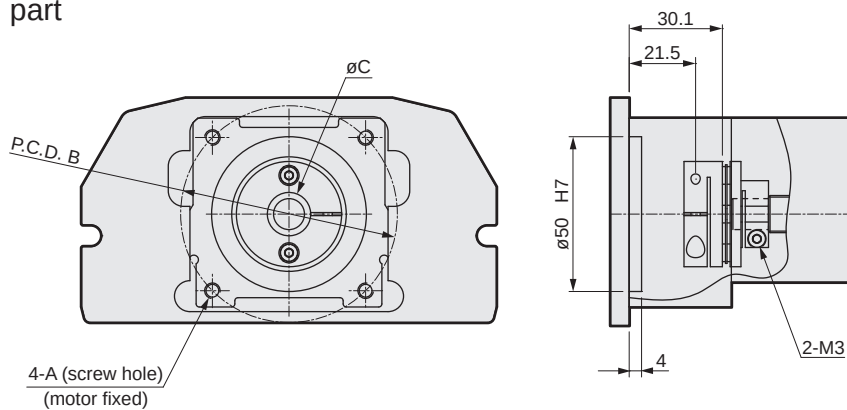
● ETS-14-****-E

· Refer to page 158 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	300.5	350.5	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5	1050.5	1100.5	1150.5	1200.5	1250.5	1300.5
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)	6.1	6.7	7.1	7.6	8.1	8.6	9.1	9.5	10.1	10.5	11.1	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.4	16.0

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	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Assembled at shipment	200 W/400 W	M5	4
Y			M5	4
P			M4	4
F			M5	4

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

● ETS-14-*****-B

- Refer to page 158 for grease nipple dimensions.

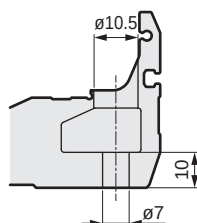
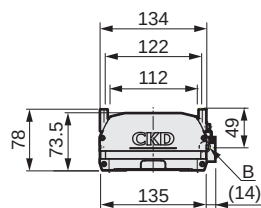
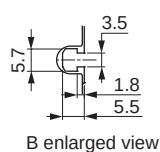
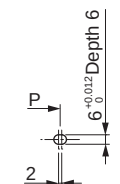
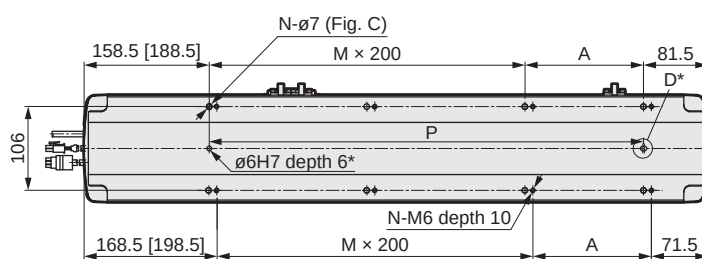
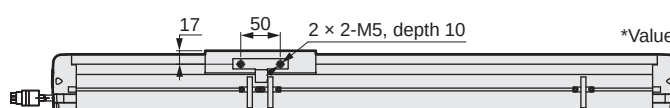
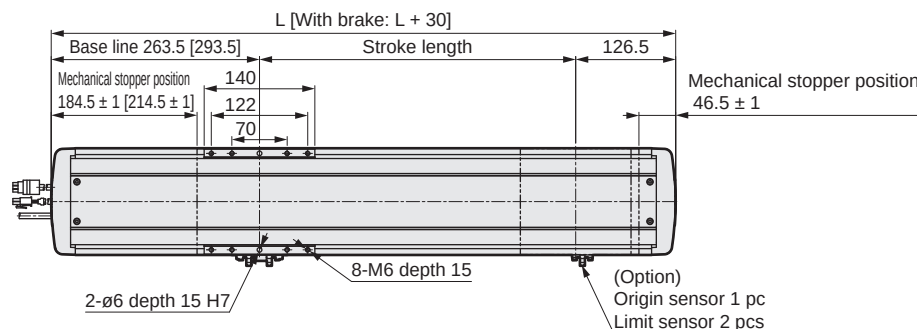


Fig. C

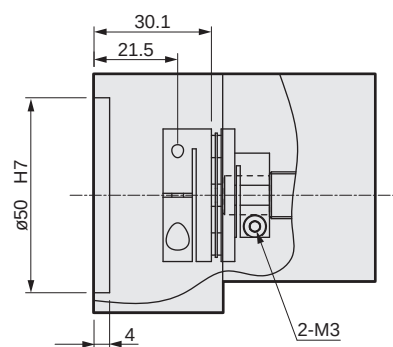
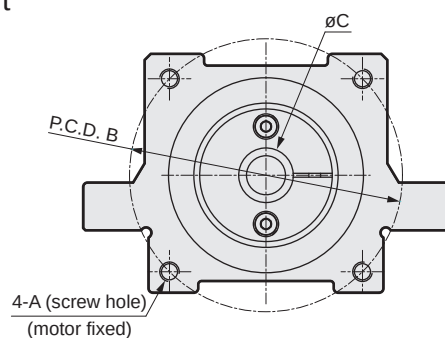


D part details

*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
L		440	490	540	590	640	690	740	790	840	890	940	990	1040	1090	1140	1190	1240	1290	1340	1390	1440
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)	Without brake	8.3	9.3	10.3	11.2	12.2	13.1	14.1	15.0	16.0	16.9	17.9	18.8	19.8	20.7	21.7	22.6	23.6	24.5	25.5	26.4	27.4
	With brake	8.9	9.9	10.8	11.8	12.7	13.7	14.6	15.6	16.5	17.5	18.4	19.4	20.3	21.3	22.2	23.2	24.1	25.1	26.0	27.0	27.9

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	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Assembled at shipment	200 W/400 W	M5	4
Y			M5	4
P			M4	4

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 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



Electric actuator Ball screw drive Slider

ETS-14 Series

Motor side mounting (left, right, bottom)

● Servo motor capacity: 200 W/400 W

How to order

ETS - 14 - 05 005 - R M 2 N N N N N - X

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 *5
R Right mounting
D Bottom mounting
L Left mounting

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

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

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

L Metal stopper specifications (ETS-X)
Standard
X 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
DENSO WAVE Incorporated (ETS-X only)	M	M
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 indicates that either top or bottom mounting is possible.

*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 89 for the motor model No.

Specifications

Applicable motor capacity	200 W/400 W servo motor			
Drive method	Ball screw $\phi 16$			
Ball screw accuracy grade	C7			
Stroke length *1 mm	50 to 1050			
Screw lead mm	5	10	16	20
Max. load capacity *1	Horizontal	200 W kg	95	75
		400 W kg	110	88
	Vertical	200 W kg	27	18
		400 W kg	33	22
Max. speed mm/s	250	500	800	1000
Rated thrust *1	200 W N	683	341	213
	400 W N	1388	694	433
Repeatability mm	± 0.01			
Lost motion mm	0.1 or less			
Dynamic allowable load N	6567			
Static allowable moment N·m	MP: 552.0, MY: 551.0, MR: 485.0			
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.

Stroke and max. speed

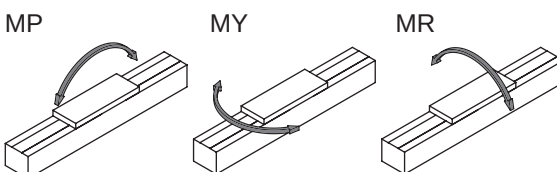
		(mm/s)					
Screw lead	Stroke length	100 to 750	800	850	900	950	1050
5		250	225	200	175	150	125
10		500	450	400	350	300	250
16		800	720	640	560	480	400
20		1000	900	800	700	600	500

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

Allowable overhang length

*Refer to page 152 for details.

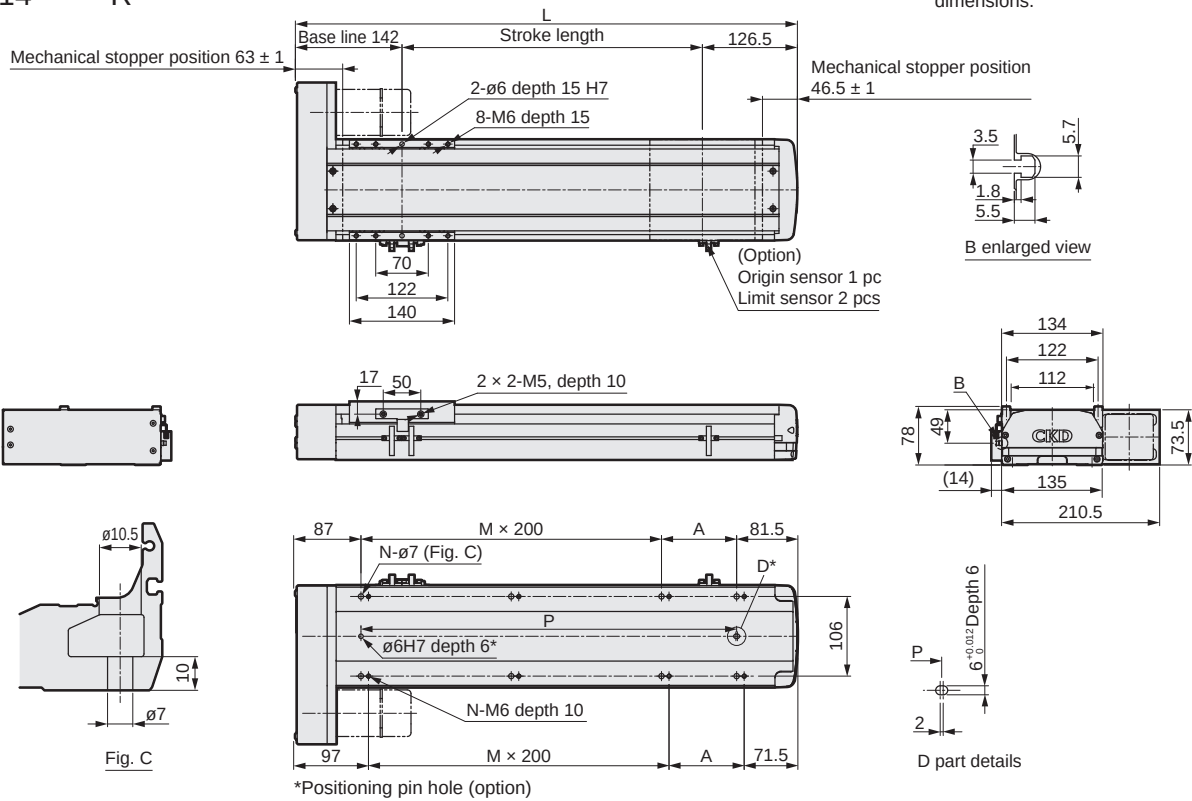
Moment direction



Dimensions Motor right-side mounting

● ETS-14-****-R

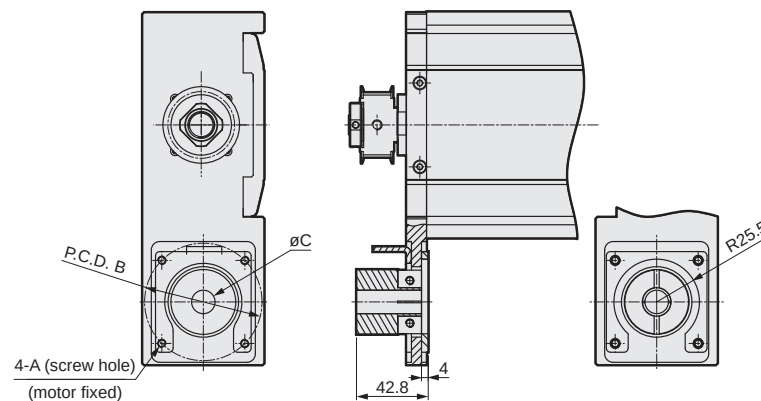
· Refer to page 158 for grease nipple dimensions.



*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
L	318.5	368.5	418.5	468.5	518.5	568.5	618.5	668.5	718.5	768.5	818.5	868.5	918.5	968.5	1018.5	1068.5	1118.5	1168.5	1218.5	1268.5	1318.5
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
P	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150
Weight (kg)	6.9	7.5	7.9	8.4	8.9	9.4	9.9	10.3	10.9	11.3	11.9	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.2	16.8

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	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Included at shipment	200 W/400 W	M5	4
Y			M5	4
P			M4	4
F			M5	4

[Origin sensor/Limit sensor]

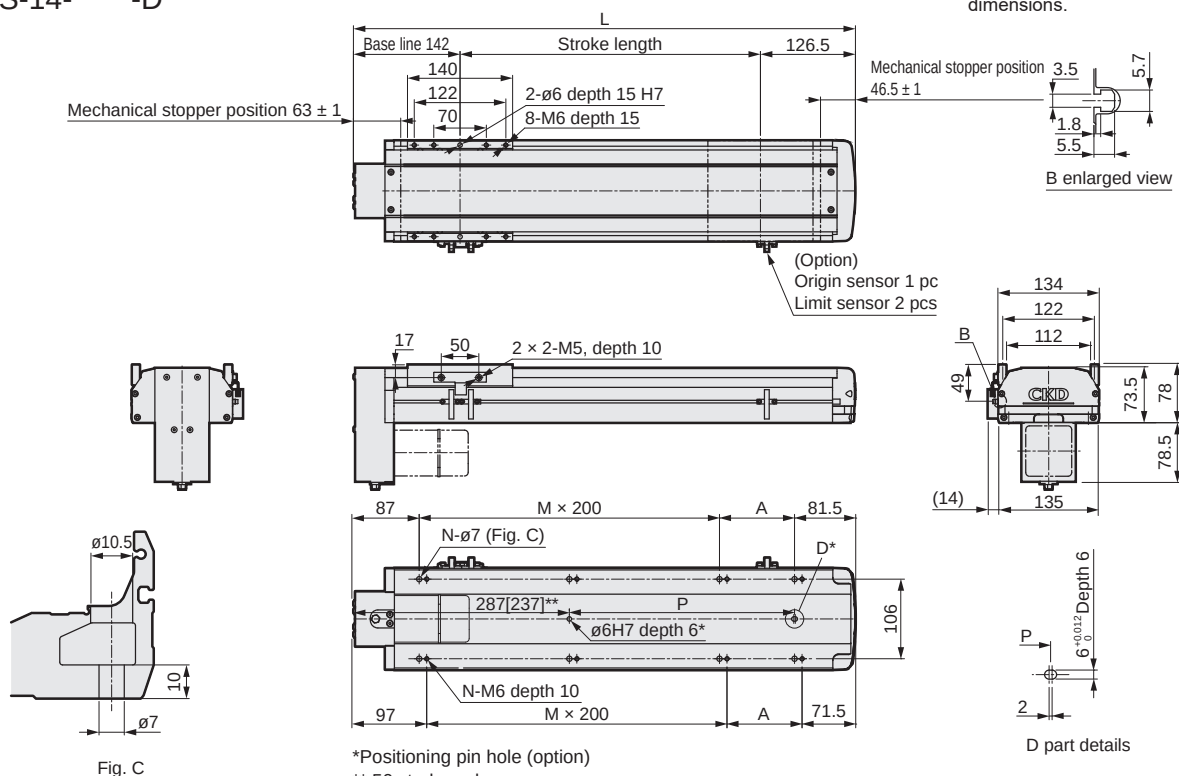
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

Dimensions Motor bottom mounting

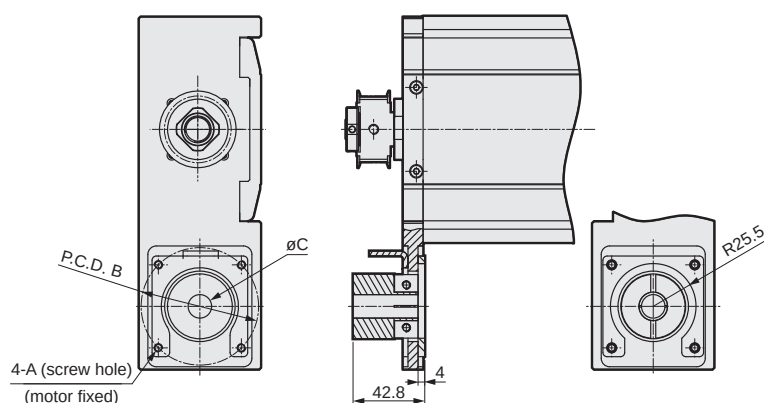
● ETS-14-*****-D

Refer to page 158 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	318.5	368.5	418.5	468.5	518.5	568.5	618.5	668.5	718.5	768.5	818.5	868.5	918.5	968.5	1018.5	1068.5	1118.5	1168.5	1218.5	1268.5	1318.5
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
P	0	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950
Weight (kg)	6.9	7.5	7.9	8.4	8.9	9.4	9.9	10.3	10.9	11.3	11.9	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.2	16.8

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	Motor capacity	Motor mounting bolt
			Size Quantity
M	Included at shipment	200 W/400 W	M5 4
Y			M5 4
P			M4 4
F			M5 4

[Origin sensor/Limit sensor]

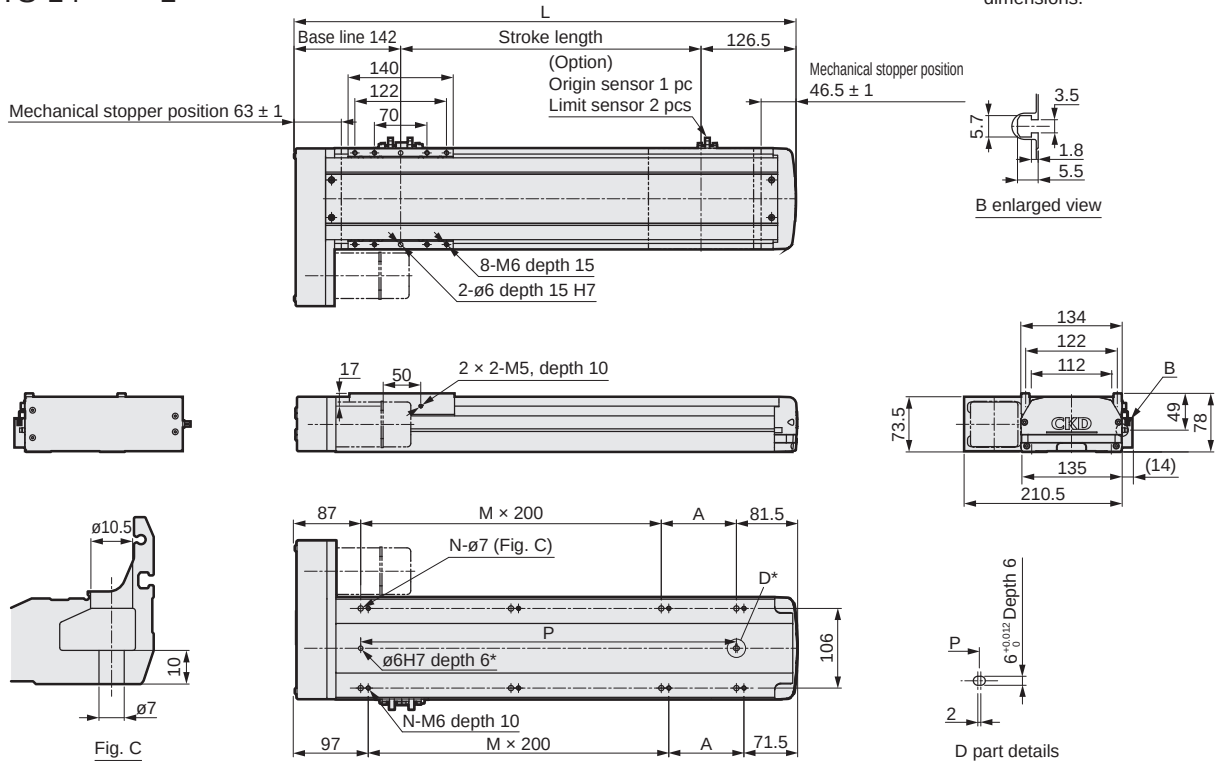
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

Dimensions Motor left-side mounting

● ETS-14-****-L

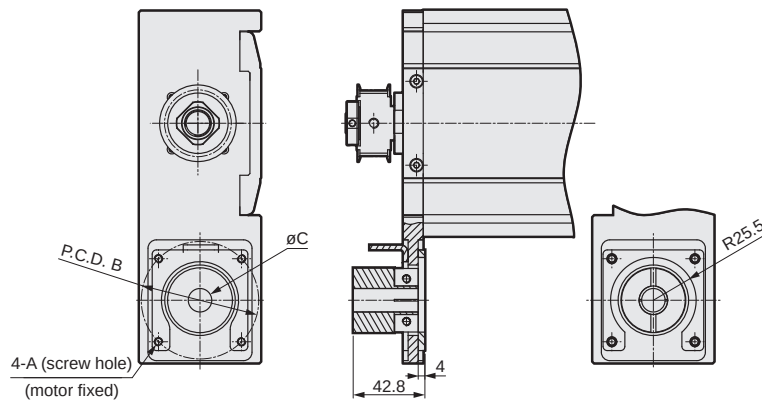
· Refer to page 158 for grease nipple dimensions.



*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
L	318.5	368.5	418.5	468.5	518.5	568.5	618.5	668.5	718.5	768.5	818.5	868.5	918.5	968.5	1018.5	1068.5	1118.5	1168.5	1218.5	1268.5	1318.5
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
P	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150
Weight (kg)	6.9	7.5	7.9	8.4	8.9	9.4	9.9	10.3	10.9	11.3	11.9	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.2	16.8

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	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Included at shipment	200 W/400 W	M5	4
Y			M5	4
P			M4	4
F			M5	4

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.



Electric actuator Ball screw drive Slider

ETS-17 Series

Straight motor mounting, built-in mounting

● Servo motor capacity: 400 W/750 W

How to order

Order code: ETS - 17 - 05 - 005 - E M 4 N N N N N - X

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 *1 *2
005 100 mm (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

L Metal stopper specifications (ETS-X) *1
Standard
X 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
DENSO WAVE Incorporated (ETS-X only)	M	-
Bosch Rexroth AG	P	P
Rockwell Automation, Inc.	M	M
SIEMENS AG	M	M

- *1: The built-in mounting motor mounting direction cannot be selected for the 750 W motor capacity. Built-in mounting cannot be selected with metal stopper specifications either.
- *2: "Yes" to the Brake can be selected only when the motor mounting direction 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 indicates that either top or bottom mounting is possible.

*Refer to page 89 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 mm			50 to 1250			
Screw lead mm			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 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			0.1 or less			
Dynamic allowable load N			10102			
Static allowable moment N·m			MP: 1034.0, MY: 1032.0, MR: 908.0			
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

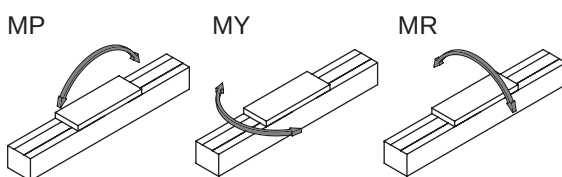
Stroke length Screw lead	(mm/s)				
	100 to 850	950	1050	1150	1250
5	250	225	200	175	150
10	500	450	400	350	300
20	1000	900	800	700	600
40	2000	1800	1600	1400	1200

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

Allowable overhang length

*Refer to page 152 for details.

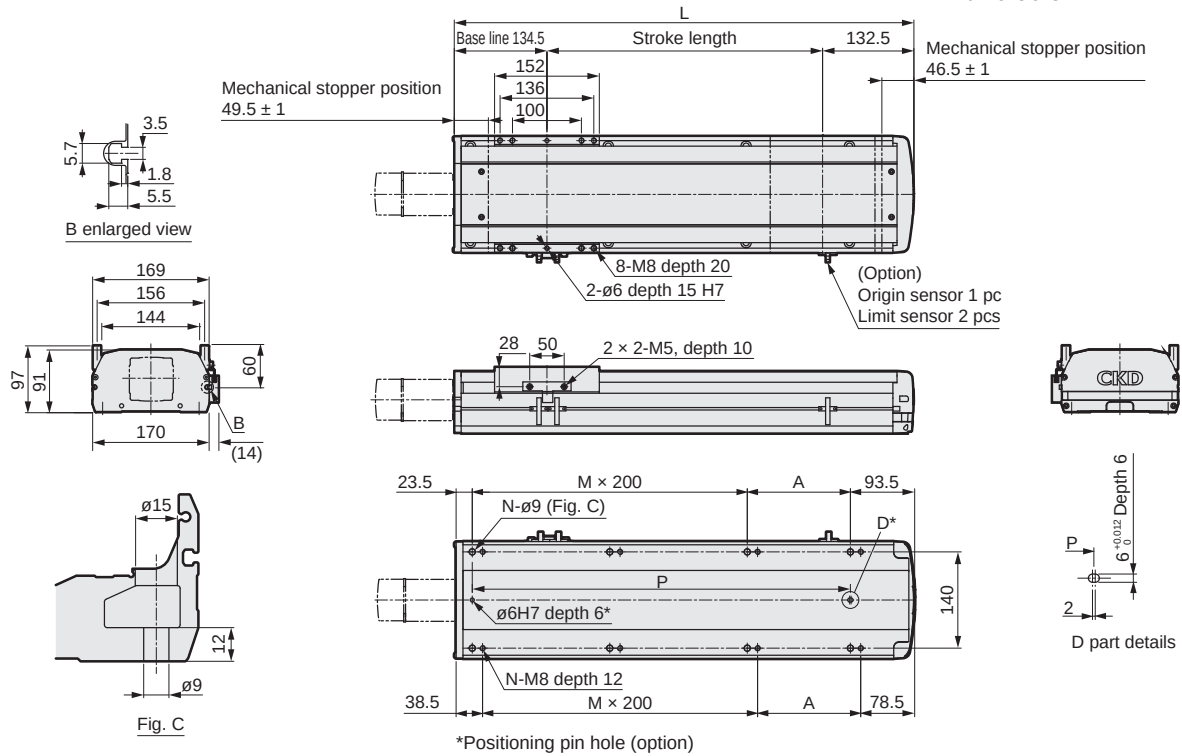
Moment direction



Dimensions Straight motor mounting

● ETS-17-****-E

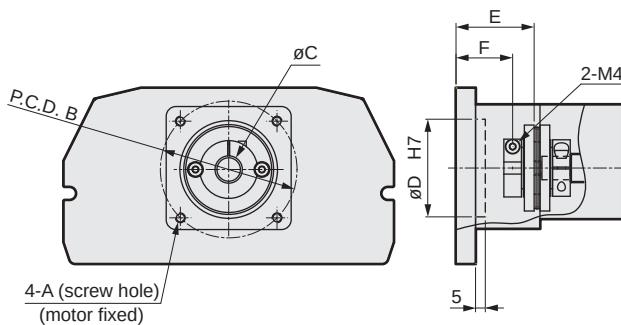
· Refer to page 158 for grease nipple dimensions.



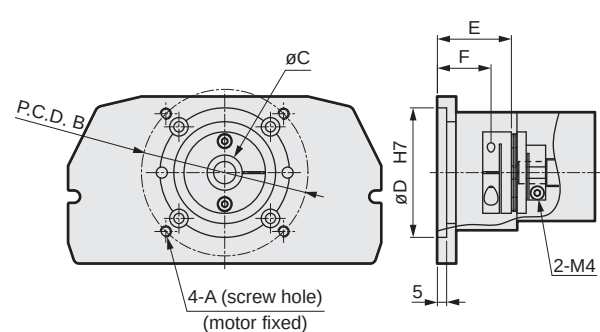
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	317	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467	1517
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	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)	9.5	10.3	11.1	11.9	12.7	13.4	14.2	15.0	15.8	16.5	17.3	18.1	18.9	19.6	20.4	21.2	22.0	22.7	23.5	24.3	25.1	25.9	26.7	27.5	28.3

Motor mounting part

● ETS-17-400W



● ETS-17-750W



Mounted motor specification	A	B	C	D	E	F	Motor mounting bolt
M 400 W/750 W	M5/M6	ø70/ø90	ø14/ø19	50/70	40	29	4-M5 × L18/4-M6 × L16
Y 400 W/750 W	M5/M6	ø70/ø90	ø14/ø19	50/70	40	29	4-M5 × L18/4-M6 × L16
P 400 W/750 W	M4/M5	ø70/ø90	ø14/ø19	50/70	40	29	4-M4 × L18/4-M5 × L16
F 400 W/750 W	M5/M6	ø70/ø100	ø14/ø14	50/80	40/26	29/15	4-M5 × L18/4-M6 × L16

List of attachments

[Motor mounting parts]

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

[Origin sensor/Limit sensor]

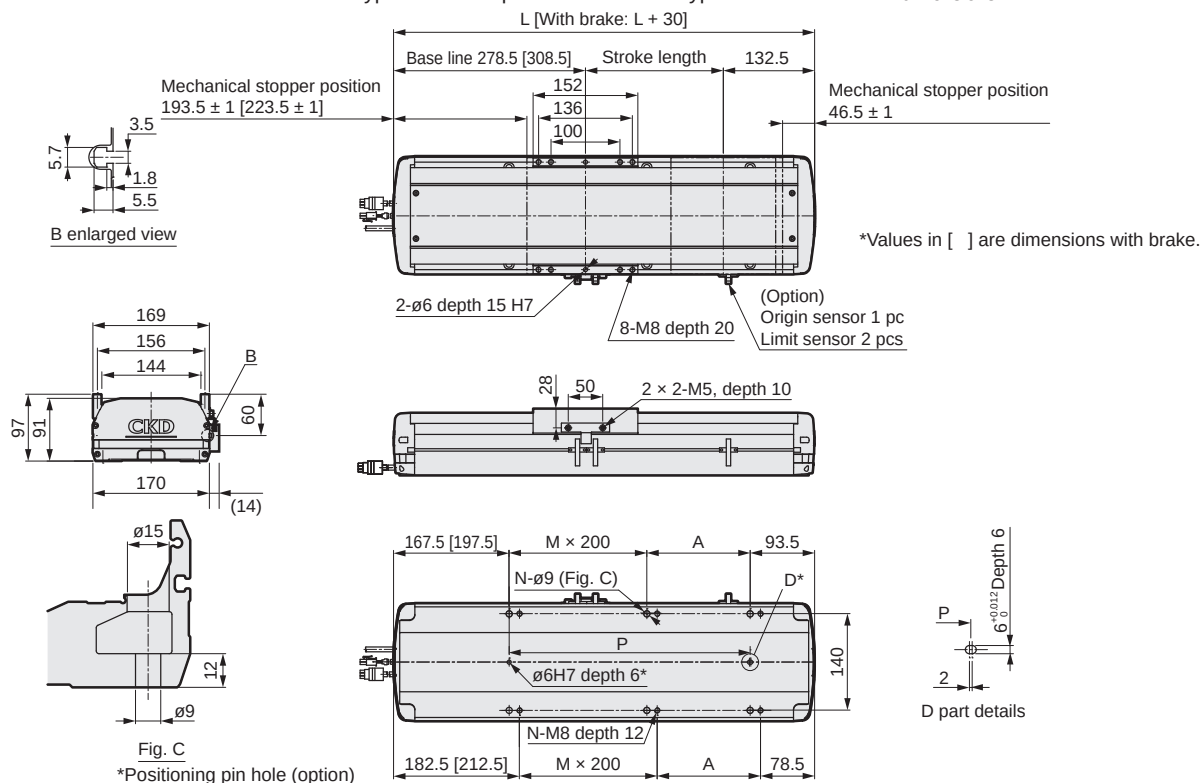
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

● ETS-17-*****-B

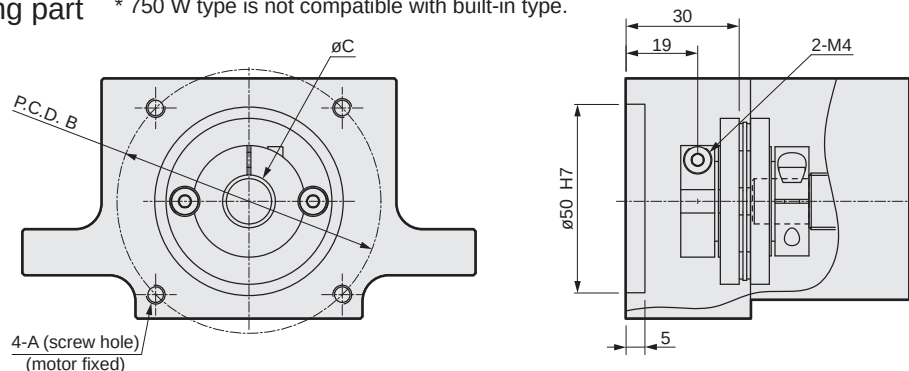
* 750 W type is not compatible with built-in type.

- Refer to page 158 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		461	511	561	611	661	711	761	811	861	911	961	1011	1061	1111	1161	1211	1261	1311	1361	1411	1461	1511	1561	1611	1661
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)	Without brake	12.9	14.3	15.7	17.1	18.6	20.0	21.4	22.8	24.2	25.6	27.0	28.4	29.8	31.2	32.6	34.0	35.4	36.8	38.2	39.6	41.0	42.4	43.8	45.2	46.6
	With brake	13.8	15.2	16.6	18.0	19.4	20.8	22.2	23.6	25.0	26.4	27.8	29.2	30.6	32.0	33.4	34.8	36.2	37.6	39.0	40.4	41.8	43.2	44.7	46.1	47.5

Motor mounting part * 750 W type is not compatible with built-in type.



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

List of attachments

[Motor mounting parts]

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

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 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



Electric actuator Ball screw drive Slider

ETS-17 Series

Motor side mounting (left, right, bottom)

● Servo motor capacity: 400 W/750 W

How to order

ETS - 17 - 05 005 - R M 4 N N N N N - X

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
005 100 mm
to (In 50 mm increments)
125 1250 mm

D Motor mounting direction *5
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

K Positioning pin hole
N None
P Yes

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

L Metal stopper specifications (ETS-X)
Standard
X 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
DENSO WAVE Incorporated (ETS-X only)	M	-
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 indicates that either top or bottom mounting is possible.

*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 89 for the motor model No.

Specifications

Applicable motor capacity	400 W/750 W servo motor				
Drive method	Ball screw ϕ 20				
Ball screw accuracy grade	C7				
Stroke length mm	50 to 1250				
Screw lead mm	5	10	20	40	
Max. load capacity *1	Horizontal	400 W kg	120	110	75
		750 W kg	120	120	83
	Vertical	400 W kg	40	30	14
		750 W kg	50	40	25
Max. speed mm/s		250	500	1000	2000
Rated thrust *1	400 W	N	1388	694	347
	750 W	N	2100	1050	525
Repeatability mm	± 0.01				
Lost motion	0.1 or less				
Dynamic allowable load N	10102				
Static allowable moment N·m	MP: 1034.0, MY: 1032.0, MR: 908.0				
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

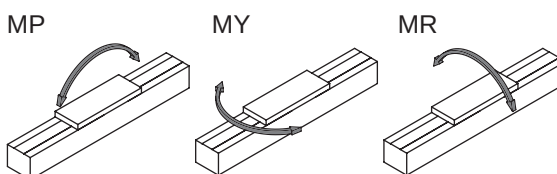
		(mm/s)				
Screw lead	Stroke length	100 to 850	950	1050	1150	1250
5		250	225	200	175	150
10		500	450	400	350	300
20		1000	900	800	700	600
40		2000	1800	1600	1400	1200

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

Allowable overhang length

*Refer to page 152 for details.

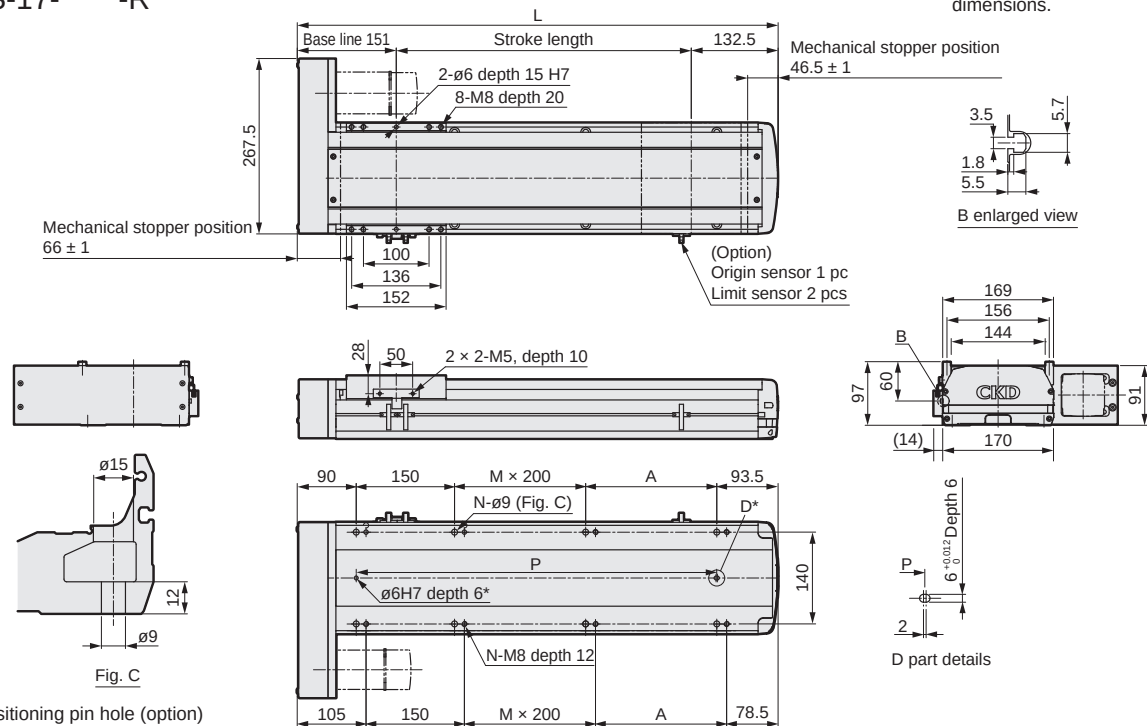
Moment direction



Dimensions Motor right-side mounting

● ETS-17-*****-R

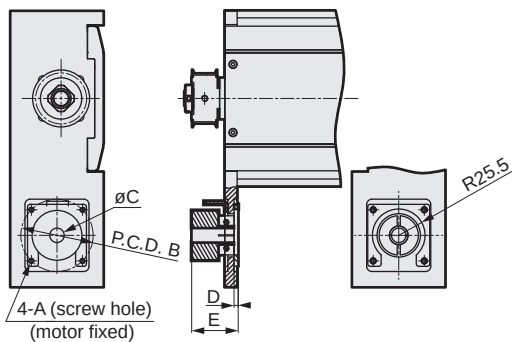
- Refer to page 158 for grease nipple dimensions.



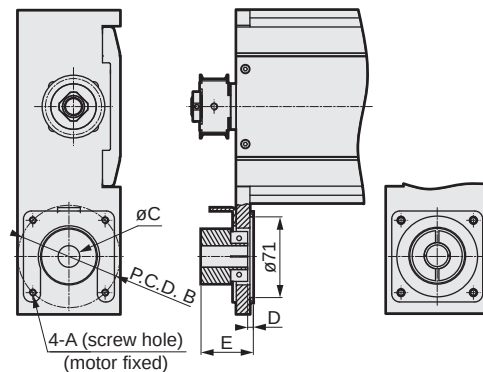
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	333.5	383.5	433.5	483.5	533.5	583.5	633.5	683.5	733.5	783.5	833.5	883.5	933.5	983.5	1033.5	1083.5	1133.5	1183.5	1233.5	1283.5	1333.5	1383.5	1433.5	1483.5	1533.5
A	0	50	100	150	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	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
Weight (kg)	10.8	11.6	12.4	13.2	14.0	14.7	15.5	16.3	17.1	17.8	18.6	19.4	20.2	20.9	21.7	22.5	23.3	24.0	24.8	25.6	26.4	27.2	28.0	28.8	29.6

Motor mounting part

● ETS-17-400W



● ETS-17-750W



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	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Included at shipment	400 W/750 W	M5/M6	4
Y			M5/M6	4
P			M4/M5	4
F			M5/M6	4

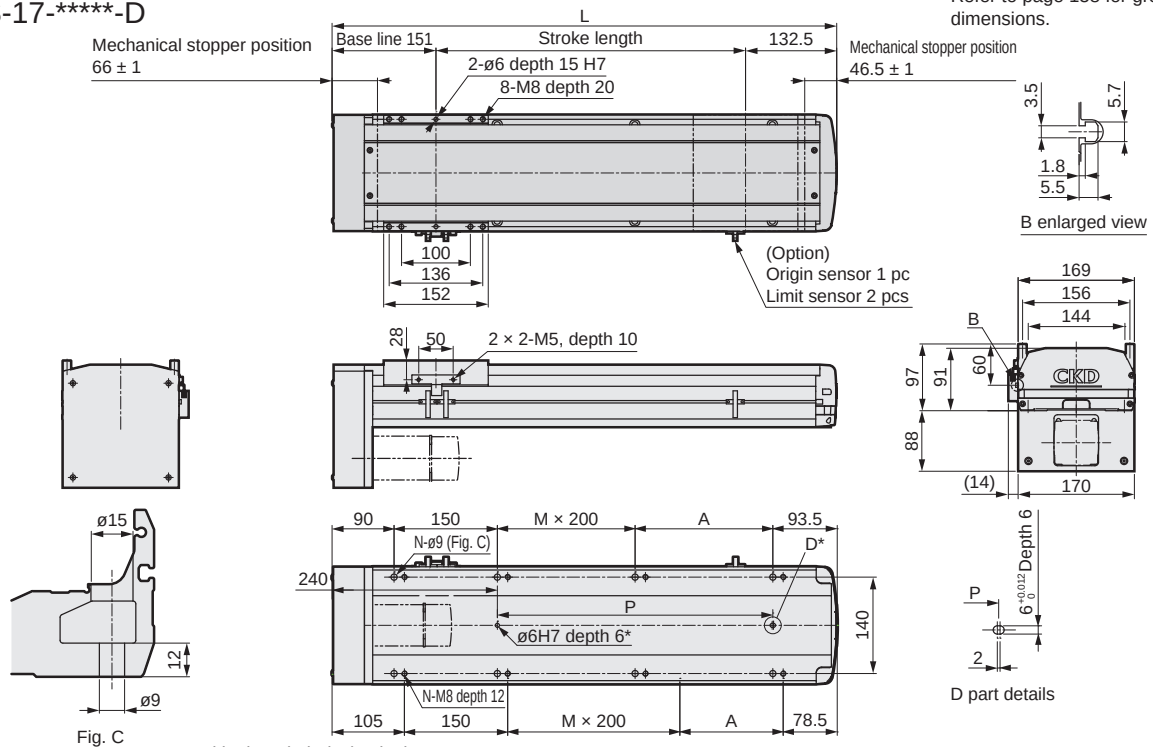
[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

Dimensions Motor bottom mounting

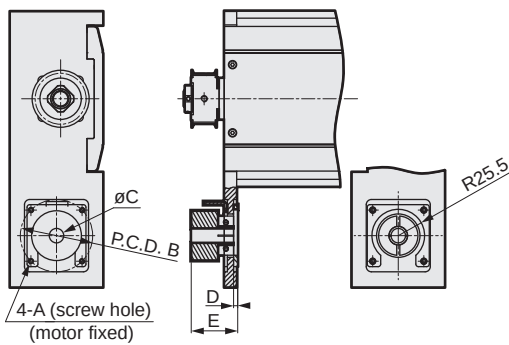
● ETS-17-****-D



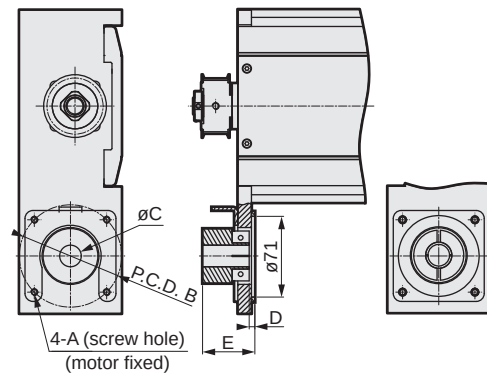
Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	333.5	383.5	433.5	483.5	533.5	583.5	633.5	683.5	733.5	783.5	833.5	883.5	933.5	983.5	1033.5	1083.5	1133.5	1183.5	1233.5	1283.5	1333.5	1383.5	1433.5	1483.5	1533.5
A	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
M	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	4	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	12	12	12	12	14	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)	11.1	11.9	12.7	13.5	14.3	15.0	15.8	16.6	17.4	18.1	18.9	19.7	20.5	21.2	22.0	22.8	23.6	24.3	25.1	25.9	26.7	27.5	28.3	29.1	29.9

Motor mounting part

● ETS-17-400W



● ETS-17-750W



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	Motor capacity	Motor mounting bolt
			Size Quantity
M	Included at shipment	400 W/750 W	M5/M6 4
Y			M5/M6 4
P			M4/M5 4
F			M5/M6 4

[Origin sensor/Limit sensor]

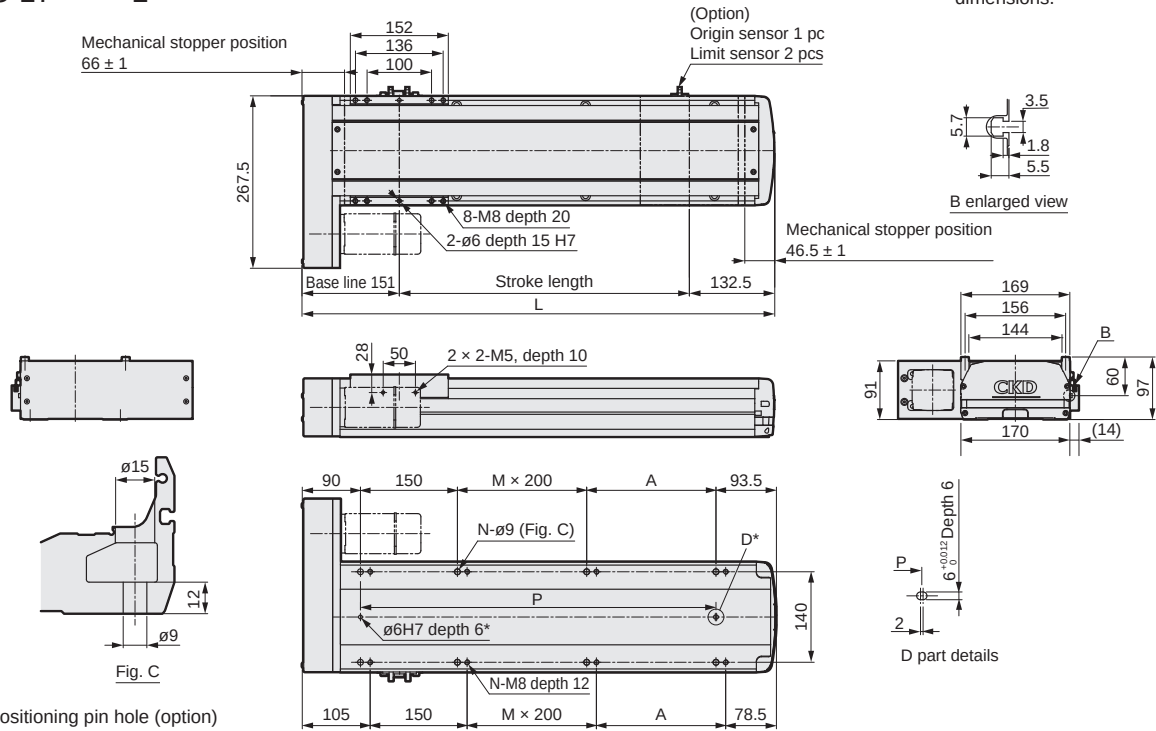
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

Dimensions Motor left-side mounting

● ETS-17-****-L

· Refer to page 158 for grease nipple dimensions.

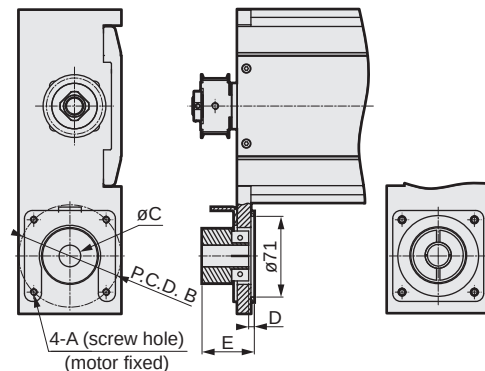
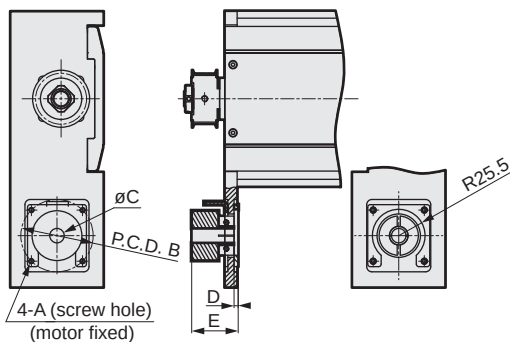


Stroke length (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	333.5	383.5	433.5	483.5	533.5	583.5	633.5	683.5	733.5	783.5	833.5	883.5	933.5	983.5	1033.5	1083.5	1133.5	1183.5	1233.5	1283.5	1333.5	1383.5	1433.5	1483.5	1533.5
A	0	50	100	150	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	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
Weight (kg)	10.8	11.6	12.4	13.2	14.0	14.7	15.5	16.3	17.1	17.8	18.6	19.4	20.2	20.9	21.7	22.5	23.3	24.0	24.8	25.6	26.4	27.2	28.0	28.8	29.6

Motor mounting part

● ETS-17-400W

● ETS-17-750W



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	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Included at shipment	400 W/750 W	M5/M6	4
Y			M5/M6	4
P			M4/M5	4
F			M5/M6	4

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.



Electric actuator Ball screw drive Slider

ETS-22 Series

Straight motor mounting, built-in mounting

● Servo motor capacity: 750 W

How to order

ETS - 22 - 05 005 - E M 8 N N N N N - X

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
to (In 50 mm increments)
150 1500 mm

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

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

F Motor capacity
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

L Metal stopper specifications (ETS-X) *1
Standard
X Yes

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
DENSO WAVE Incorporated (ETS-X only)	-
Bosch Rexroth AG	P
Rockwell Automation, Inc.	M
SIEMENS AG	M

*1: Built-in mounting cannot be selected with metal stopper specifications.

*2: "Yes" to the Brake can be selected only when the motor mounting direction 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 indicates that either top or bottom mounting is possible.

*Refer to page 89 for the motor model No.

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 *1	Horizontal kg	150	150	120
	Vertical kg	55	45	20
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: 2052.0, MY: 2052.0, MR: 1810.0			
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

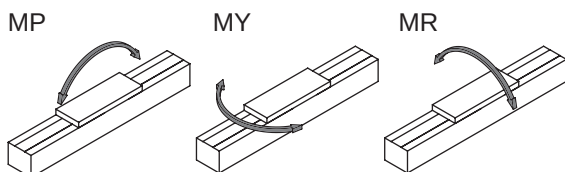
		(mm/s)						
Stroke length	Screw lead	100 to 900	1000	1100	1200	1300	1400	1500
5		250	225	200	175	150	125	100
10		500	450	400	350	300	250	200
25		1250	1125	1000	875	750	625	500
Stroke length	Screw lead	100 to 850	950	1050	1150	1250	1350	1450
40		2000	1800	1600	1400	1200	1000	800
								600

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

Allowable overhang length

*Refer to page 152 for details.

Moment direction

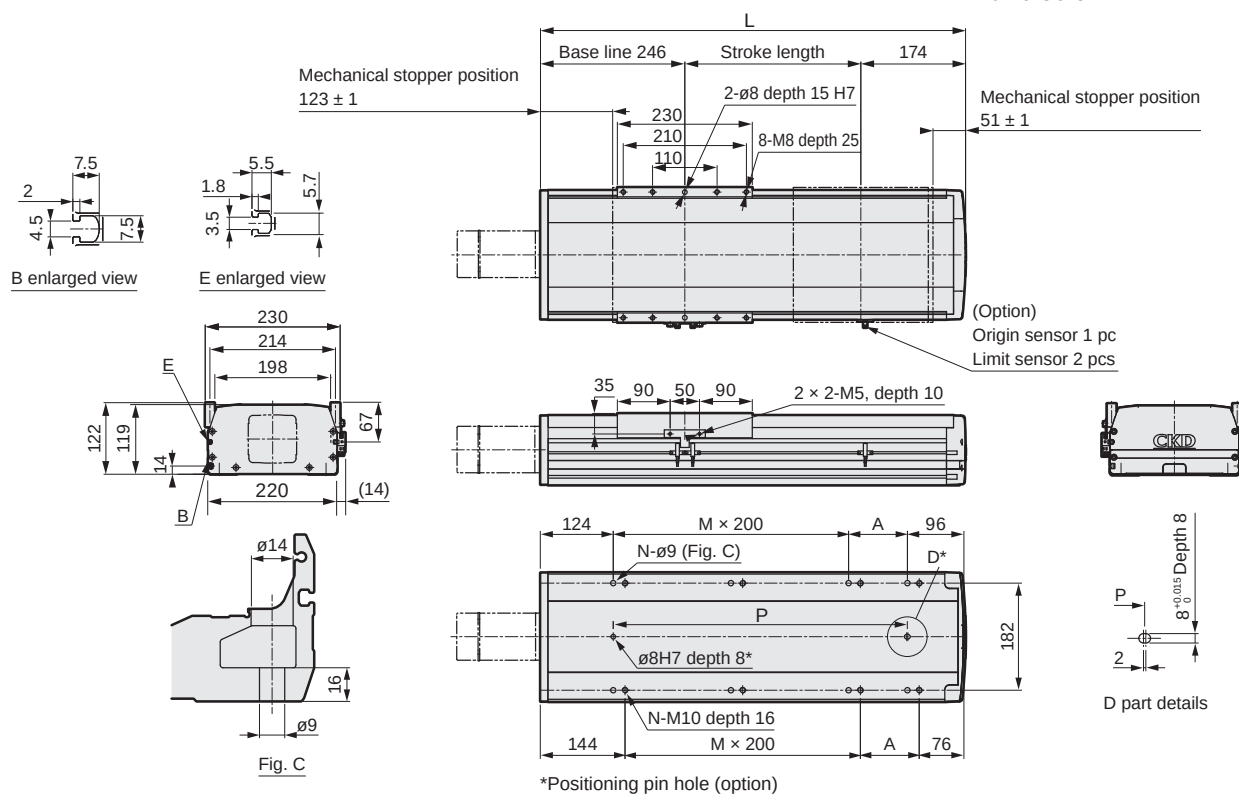


Safety precautions

Dimensions Straight motor mounting

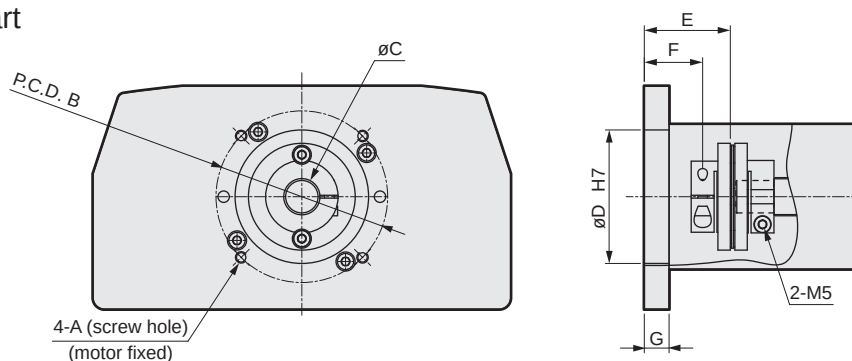
● ETS-22-*****-E

- Refer to page 158 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	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920
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	7	7	7	7	8	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	18	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)	20.0	21.2	22.4	23.7	24.9	26.1	27.3	28.5	29.8	31.0	32.2	33.4	34.6	35.9	37.1	38.3	39.5	40.7	42	43.2	44.4	45.6	46.8	48.1	49.3	50.5	51.7	52.9	54.1	55.3

Motor mounting part



Mounted motor specification		A	B	C	D	E	F	G	Motor mounting bolt
M	750 W	M6	ø90	ø19	70	45.1	30.6	13	4-M6 × L16
Y	750 W	M6	ø90	ø19	70	45.1	30.6	13	4-M6 × L16
P	750 W	M5	ø90	ø19	70	45.1	30.6	13	4-M5 × L16
F	750 W	M6	ø100	ø14	80	28.7	14.2	5	4-M6 × L16

List of attachments

[Motor mounting parts]

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

[Origin sensor/Limit sensor]

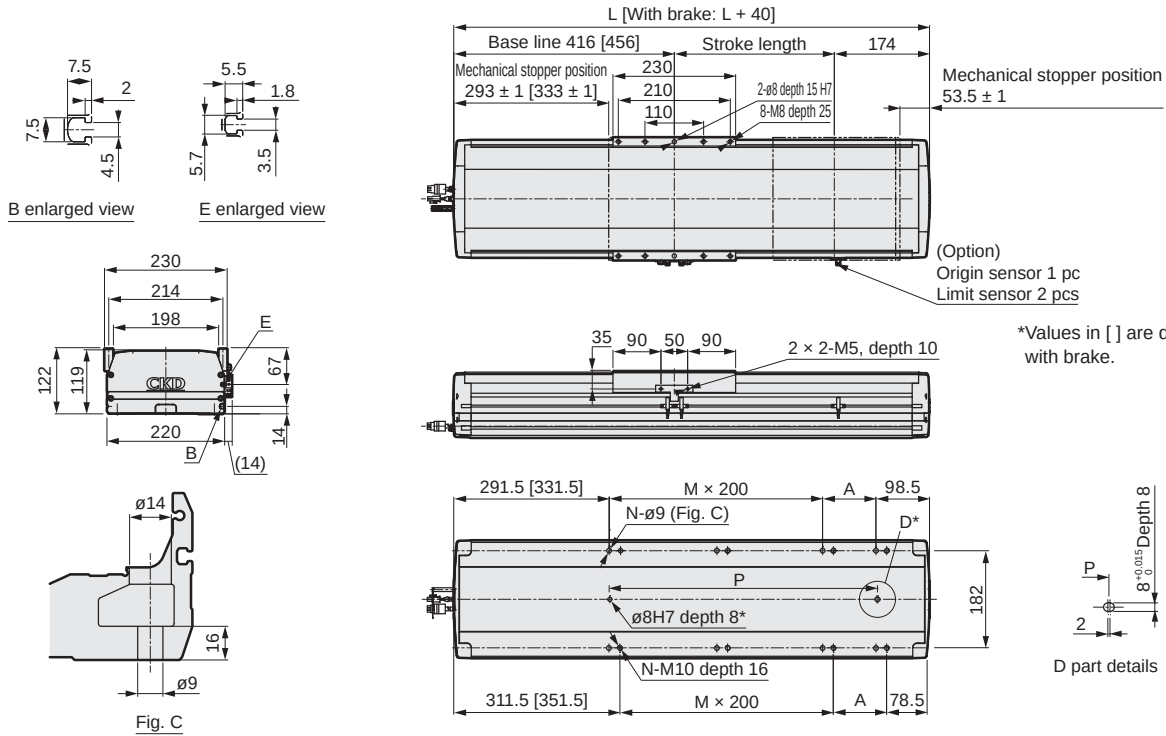
Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

Dimensions Motor built-in mounting

● ETS-22-*****-B

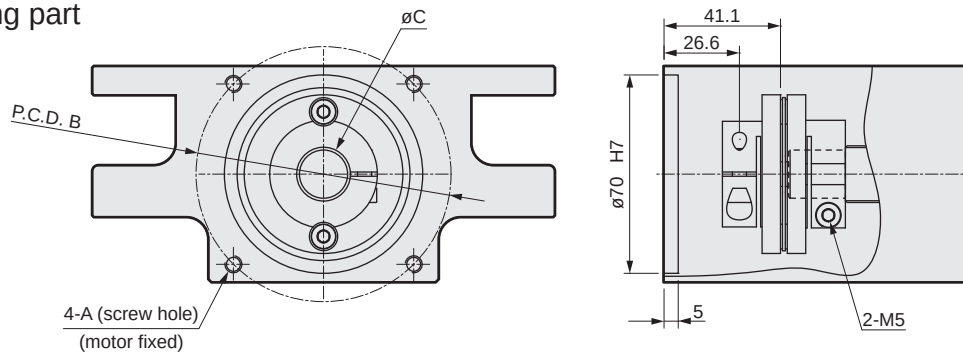
· Refer to page 158 for grease nipple dimensions.



*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	1300	1350	1400	1450	1500	
L	640	690	740	790	840	890	940	990	1040	1090	1140	1190	1240	1290	1340	1390	1440	1490	1540	1590	1640	1690	1740	1790	1840	1890	1940	1990	2040	2090	
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)	Without brake	26.1	28.1	30.2	32.2	34.2	36.3	38.3	40.4	42.4	44.4	46.5	48.5	50.6	52.6	54.6	56.7	58.7	60.7	62.8	64.8	66.9	68.9	70.9	73.0	75.0	77.1	79.1	81.1	83.2	85.2
	With brake	27.4	29.4	31.4	33.4	35.5	37.5	39.5	41.6	43.6	45.7	47.7	49.7	51.8	53.8	55.9	57.9	59.9	62.0	64.0	66.0	68.1	70.1	72.2	74.2	76.2	78.3	80.3	82.4	84.4	86.4

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	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Assembled 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 156 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



Electric actuator Ball screw drive Slider

ETS-22 Series

Motor side mounting (left, right, bottom)

● Servo motor capacity: 750 W

How to order

ETS - 22 - 05 005 - R M 8 N N N N N - X

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
to (In 50 mm increments)
150 1500 mm

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

L Metal stopper specifications (ETS-X)
Standard
X Yes

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

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
DENSO WAVE Incorporated (ETS-X only)	-
Bosch Rexroth AG	P
Rockwell Automation, Inc.	M
SIEMENS AG	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 indicates that either top or bottom mounting is possible.

*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 89 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: 2052.0, MY: 2052.0, MR: 1810.0			
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

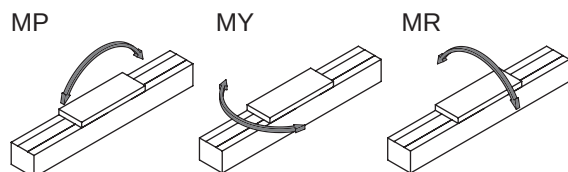
		(mm/s)						
Screw lead	Stroke length	100 to 900	1000	1100	1200	1300	1400	1500
	5	250	225	200	175	150	125	100
	10	500	450	400	350	300	250	200
	25	1250	1125	1000	875	750	625	500
Screw lead	Stroke length	100 to 850	950	1050	1150	1250	1350	1450
	40	2000	1800	1600	1400	1200	1000	800

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

Allowable overhang length

*Refer to page 152 for details.

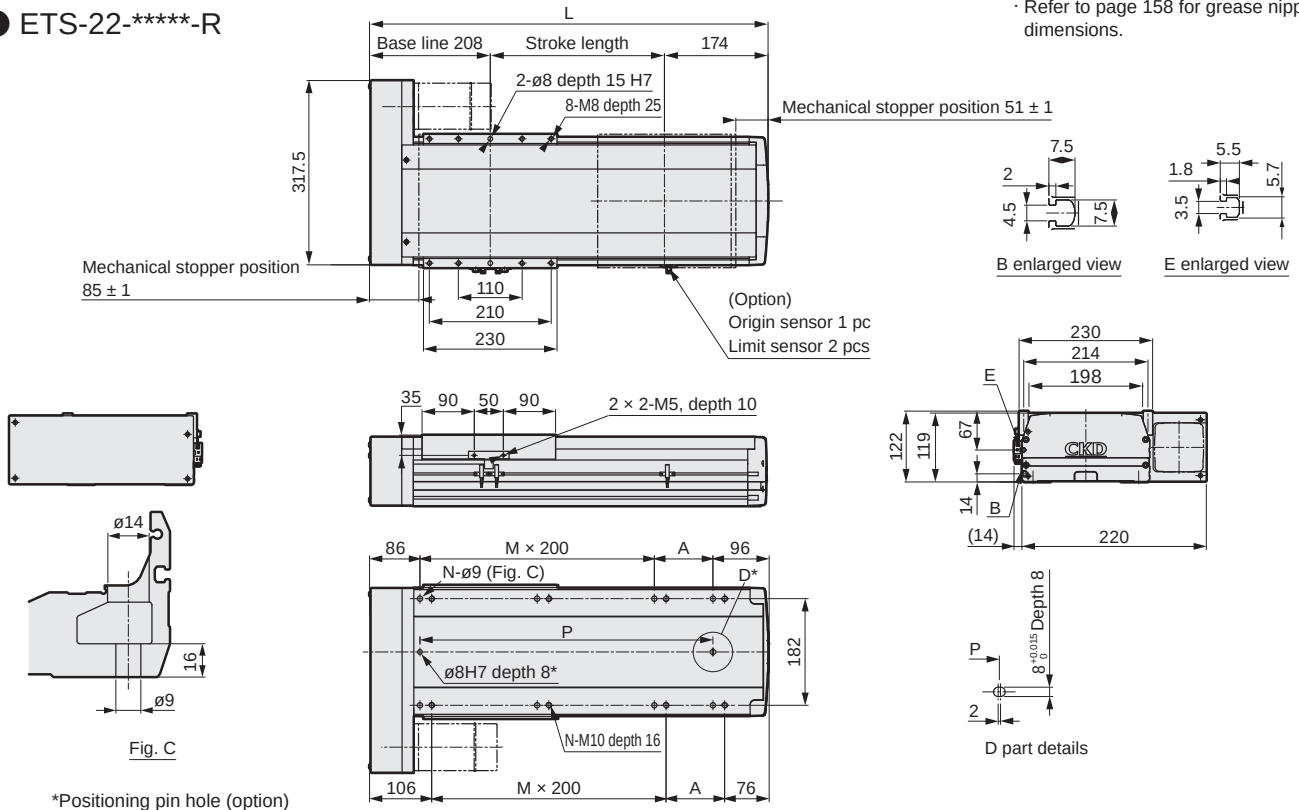
Moment direction



Dimensions Motor right-side mounting

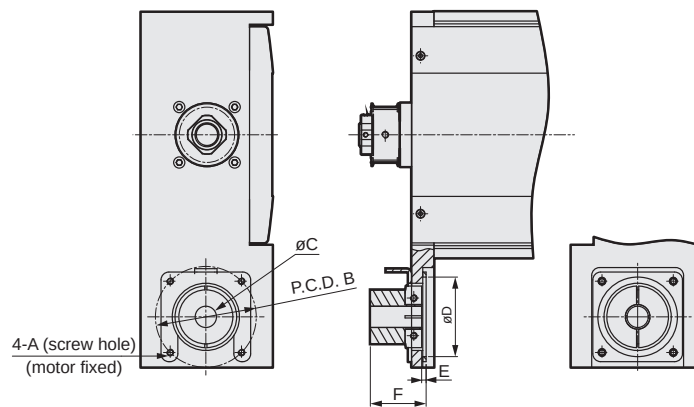
● ETS-22-*****-R

· Refer to page 158 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	432	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	1332	1382	1432	1482	1532	1582	1632	1682	1732	1782	1832	1882
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)	22.5	23.7	24.9	26.2	27.4	28.6	29.8	31.0	32.3	33.5	34.7	35.9	37.1	38.4	39.6	40.8	42.0	43.2	44.5	45.7	46.9	48.1	49.3	50.6	51.8	53.0	54.2	55.4	56.6	57.8

Motor mounting part



Mounted motor specification		A	B	C	D	E	F	Motor mounting bolt
M	750 W	M6	ø90	ø19	ø71	4	49.8	4-M6 × L16
Y	750 W	M6	ø90	ø19	ø71	4	49.8	4-M6 × L16
P	750 W	M5	ø90	ø19	ø71	4	49.8	4-M5 × L16
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	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Included at shipment	750 W	M6	4
Y			M6	4
P			M5	4
F			M6	4

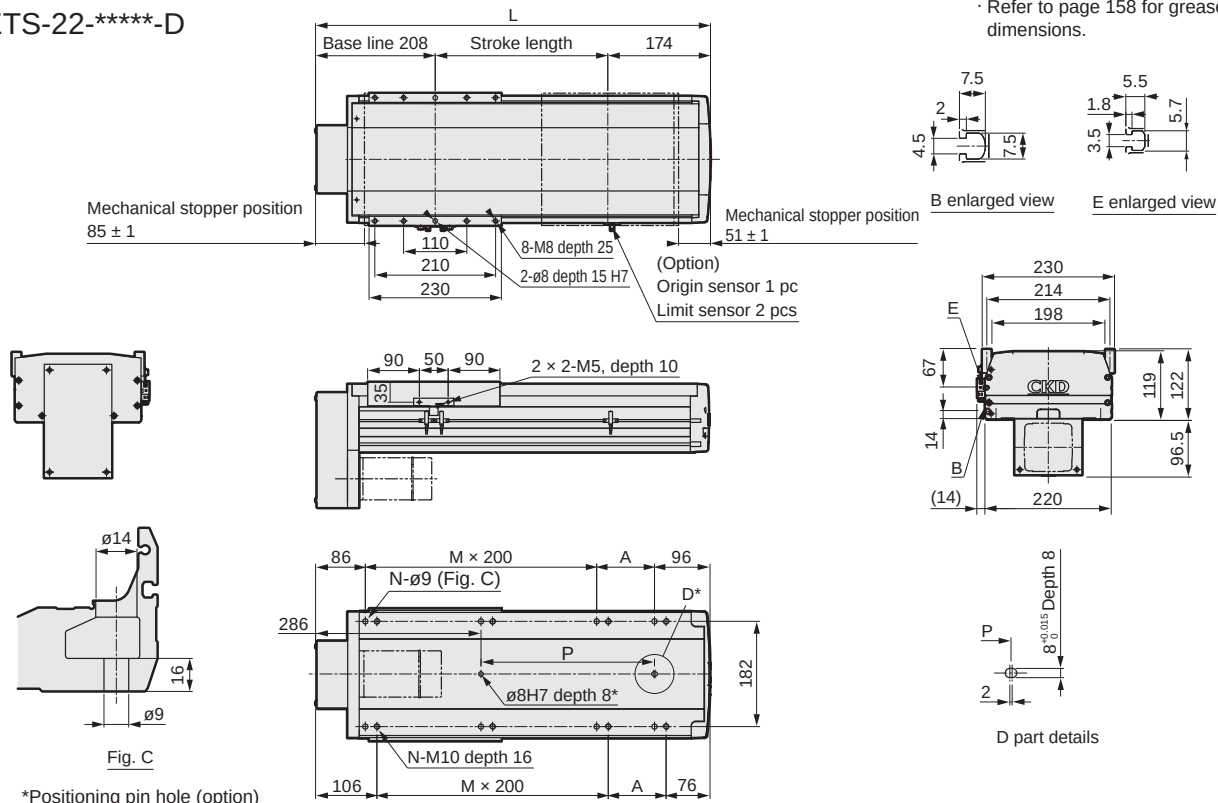
[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

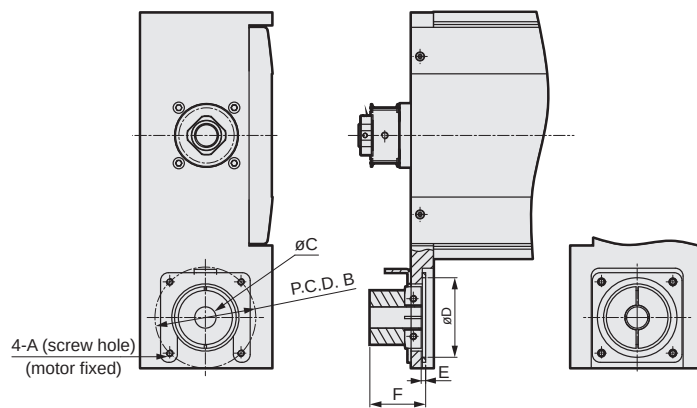
● ETS-22-*****-D

- Refer to page 158 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	432	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	1332	1382	1432	1482	1532	1582	1632	1682	1732	1782	1832	1882
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	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)	22.4	23.6	24.8	26.1	27.3	28.5	29.7	30.9	32.2	33.4	34.6	35.8	37.0	38.3	39.5	40.7	41.9	43.1	44.4	45.6	46.8	48.0	49.2	50.5	51.7	52.9	54.1	55.3	56.5	57.7

Motor mounting part



Mounted motor specification		A	B	C	D	E	F	Motor mounting bolt
M	750 W	M6	ø90	ø19	ø71	4	49.8	4-M6 × L16
Y	750 W	M6	ø90	ø19	ø71	4	49.8	4-M6 × L16
P	750 W	M5	ø90	ø19	ø71	4	49.8	4-M5 × L16
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	Motor capacity	Motor mounting bolt	
			Size	Quantity
M	Included at shipment	750 W	M6	4
Y			M6	4
P			M5	4
F			M6	4

[Origin sensor/Limit sensor]

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

*Refer to page 156 for sensor specifications.

