

Series variation													
Type	Model No.		Applicable motor capacity (W)	Body width (mm)	Screw lead (mm)	Max. load capacity (kg)							
						Horizontal *1	Vertical	50	100	150	200	250	300
Low dust generation type		ECS-05-M	100	51	2	10	7						
					5	10	3						
					10	5	1.5						
		ECS-06-M	100	65	2	30	15						
					5	30	10						
					10	15	5						
		ECS-10	100	102	5	50	12						
					10	30	8						
					16	22	5						
					20	18	3						
		ECS-12	100	102	5	50	12						
					10	30	8						
					16	22	5						
					20	18	3						
		ECS-14	200	135	5	95	27						
					10	75	18						
					16	44	7						
					20	35	6						
			400	135	5	110	33						
					10	88	22						
					16	48	10						
					20	40	8						
		ECS-17	400	170	5	120	40						
					10	110	30						
					20	75	14						
					40	35	5						
			750	170	5	120	50						
					10	120	40						
					20	83	25						
					40	50	10						
		ECS-22	750	220	5	150	55						
					10	150	45						
					25	120	20						
					40	60	10						

Stroke length (mm) and max. speed (mm/s) *2																									Page
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 mm	
100mm/s	90	80	70	60	🕒 13.53 sec.*3																			276	
250	225	200	175	150	🕒 5.53 sec.																				
500	450	400	350	300	🕒 2.87 sec.																				
100	90	80	70	60	🕒 13.53 sec.																			282	
250	225	200	175	150	🕒 5.53 sec.																				
500	450	400	350	300	🕒 2.87 sec.																				
250					225	200	175	150	125	🕒 8.6 sec.															288
500					450	400	350	300	250	🕒 4.4 sec.															
800					720	640	560	480	400	🕒 2.83 sec.															
1000					900	800	700	600	500	🕒 2.3 sec.															
250					225	200	175	150	125	🕒 8.6 sec.															296
500					450	400	350	300	250	🕒 4.4 sec.															
800					720	640	560	480	400	🕒 2.83 sec.															
1000					900	800	700	600	500	🕒 2.3 sec.															
250					225	200	175	150	125	🕒 8.6 sec.															304
500					450	400	350	300	250	🕒 4.4 sec.															
800					720	640	560	480	400	🕒 2.83 sec.															
1000					900	800	700	600	500	🕒 2.3 sec.															
250					225	200	175	150	125	🕒 8.6 sec.															312
500					450	400	350	300	250	🕒 4.4 sec.															
800					720	640	560	480	400	🕒 2.83 sec.															
1000					900	800	700	600	500	🕒 2.3 sec.															
250									225	200	175	150	🕒 8.53 sec.										320		
500									450	400	350	300	🕒 4.37 sec.												
1000									900	800	700	600	🕒 2.28 sec.												
2000									1800	1600	1400	1200	🕒 1.24 sec.												
250									225	200	175	150	🕒 8.53 sec.												
500									450	400	350	300	🕒 4.37 sec.												
1000									900	800	700	600	🕒 2.28 sec.												
2000									1800	1600	1400	1200	🕒 1.24 sec.												
250									225	200	175	150	125	100	🕒 15.2 sec.										
500									450	400	350	300	250	200	🕒 7.7 sec.										
1250									1125	1000	875	750	625	500	🕒 3.2 sec.										
2000									1800	1600	1400	1200	1000	800	600	🕒 2.7 sec.									

*1: The load capacity when wall mounted is the same as for horizontal installation.

*2: 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.

*3: ⌚ shows the positioning time. Maximum stroke when installed horizontally and operated at max. speed and max. acceleration/deceleration.
Note that this is not the value at maximum load capacity.

How to order

How to order

ECS - 06 - 05 040 - E M 1 N C B D P - M

A

B

C

D

E

F

G

H

I

J

K

L

A Body size	
05	Body width 51 mm
06	Body width 65 mm
10	Body width 102 mm
12	Body width 102 mm
14	Body width 135 mm
17	Body width 170 mm
22	Body width 220 mm

B Screw lead	
02	2 mm
05	5 mm
10	10 mm
16	16 mm
20	20 mm
25	25 mm
40	40 mm

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

D Motor mounting direction *1	
E	Straight mounting
B	Built-in mounting
R	Right mounting
D	Bottom mounting
L	Left mounting

E Mounted motor specification	
M	
Y	Refer to the list on the page at right
P	
F	

F Motor capacity	
1	100 W
2	200 W
4	400 W
8	750 W

G Brake *1	
N	None
B	Yes

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

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

L Magnet slider method *3	
	Standard
M	Yes

K Positioning pin hole	
N	None
P	Yes

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

*1: Select "Yes" to the Brake only when the motor mounting direction is built-in mounting.

For other mounting directions, select "None."

*2: The sensor dog is assembled at shipment regardless of sensor presence.

*3: ECS-05/06 uses the magnet slider method. Other sizes use the standard.

Manufacturer	50 W	100 W	200 W	400 W	750 W
Mitsubishi Electric Corporation	M	M	M	M	M
Delta Electronics Co., Ltd.	M	M	M	M	M
Sanyo Denki Co., Ltd.	M	M	M	M	-
YASKAWA Electric Corporation	Y	Y	Y	Y	Y
Keyence Corporation	Y	Y	Y	Y	Y
Panasonic Corporation	P	P	P	P	P
OMRON Corporation	M	M	P	P	P
Fuji Electric Co., Ltd.	M	M	M	M	M
FANUC CORPORATION	F	F	F	F	F
Bosch Rexroth AG	P	P	P	P	P
Rockwell Automation, Inc.	M	M	M	M	M
SIEMENS AG	M	M	M	M	M

Example of model No.

ECS-06-05040-EM1NCBDP-M

A Body size	: 06 Series
B Screw lead	: 5 mm
C Stroke length	: 400 mm
D Motor mounting direction	: Straight
E Mounted motor specification	: M (refer to the table on the page at right)
F Motor capacity	: 100 W
G Brake	: None
H Origin sensor	: External motor side
I Limit sensor	: Outside
J Grease nipple	: None (Body mounting method: Bottom side)
K Positioning pin hole	: Yes
L Magnet slider method	: Yes

*This product is composed of an actuator (and motor mounting parts) only; there is no motor attached.
The user must prepare, mount, and adjust the motor and driver.

List of servo motors recommended for mounting

Code	Manufacturer	Series	100 W *3 (ECS-05/06/10/12 Series)
M	Mitsubishi Electric Corporation	MELSERVO J4	HG-KR13
		MELSERVO J5	HK-KT13W
M	Delta Electronics Co., Ltd.	ECMA-C *2	ECMA-C10401
M	Sanyo Corporation, Ltd.	SANMOTION R	R2□A04010
Y	YASKAWA Electric Corporation	Σ-V	SGMJV-01
		Σ-7 *1	SGM7J-01
Y	Keyence Corporation	SV	SV-□010
		SV2 *1	SV2-□010
P	Panasonic Corporation	MINAS A5	MSMD01
		MINAS A6 *1	MSMF01
M	OMRON Corporation	G5	R88M-K10030
		1S *1	R88M-1M10030
M	Fuji Electric Co., Ltd.	ALPHA7 GYS	GYS101D7-□B2□
		ALPHA7 GYB	-
F	FANUC CORPORATION *1	βiS-B	A06B-0112-B1
P	Bosch Rexroth AG	MSM	MSM019B
M	Rockwell Automation, Inc. *1	TLP	TLP-A046-010-DKA□2
	SIEMENS AG *1	1FK2 *6	1FK2102-1AG0

Code	Manufacturer	Series	200 W *3 *4 (ECS-10/12/14 Series)	400 W (ECS-14/17 Series)	750 W *5 (ECS-17/22 Series)
M	Mitsubishi Electric Corporation	MELSERVO J4	HG-KR23	HG-KR43	HG-KR73
		MELSERVO J5	HK-KT23W	HK-KT43W	HK-KT7M3W
M	Delta Electronics Co., Ltd.	ECMA-C *2	ECMA-C10602	ECMA-C10604	ECMA-C10807
M	Sanyo Corporation, Ltd.	SANMOTION R	R2□A06020	R2□A06040	-
Y	YASKAWA Electric Corporation	Σ-V	SGMJV-02	SGMJV-04	SGMJV-08
		Σ-7 *1	SGM7J-02	SGM7J-04	SGM7J-08
Y	Keyence Corporation	SV	SV-□020	SV-□040	SV-□075
		SV2 *1	SV2-□020	SV2-□040	SV2-□075
P	Panasonic Corporation	MINAS A5	MSMD02	MSMD04	MSMD08
		MINAS A6 *1	MSMF02	MSMF04	MSMF08
P	OMRON Corporation	G5	R88M-K20030	R88M-K40030	R88M-K75030
		1S *1	R88M-1M20030	R88M-1M40030	R88M-1M75030
M	Fuji Electric Co., Ltd.	ALPHA7 GYS	GYS201D7-□B2□	GYS401D7-□B2□	GYS751D7-□B2□
		ALPHA7 GYB	GYB201D7-□B2□	GYB401D7-□B2□	GYB751D7-□B2□
F	FANUC CORPORATION *1	βiS-B	A06B-2115-B1	A06B-2116-B1	A06B-2063-B1
P	Bosch Rexroth AG	MSM	MSM031B	MSM031C	MSM041B
M	Rockwell Automation, Inc. *1	TLP	TLP-A070-020-DKA□2	TLP-A070-040-DKA□2	TLP-A090-075-DKA□2
M	SIEMENS AG *1	1FK2 *6	1FK2203-2AG0	1FK2203-4AG0	1FK2204-5AK0

* Contact CKD for mounting other than the above motors and products of other motor manufacturers.

*1: Cannot be used with built-in mounting.

*2: ECMA series (with brake) cannot be used with built-in mounting.

*3: Contact CKD when using an OMRON motor with ECS-12 built-in mounting.

*4: ECS-10 and 12 200 W cannot be used with built-in mounting.

*5: ECS-17 750 W cannot be used with built-in mounting.

*6: The servo motor is subject to the regulations of Export Trade Control Order Appendix Table 1 Item 7 (8), and is applicable with regard to its specifications. (as of January 2021)

EBS

EBR

ETS

ETS Multi-Axis

ECS

ETV

ECV

EKS

EBS

EBR

ETS

ECS

Safety
precautions