Mitsubishi General-Purpose AC Servo Sales and Service

No. 13-20AE

Production Discontinuation of General-Purpose AC Servo MR-J2S/MR-J2M Series

Thank you for your continued patronage of the Mitsubishi general-purpose AC servo and FA products.
The MR-J2S/MR-J2M series has been manufactured for 14 years since its release. However, parts such as electronic components have become extremely difficult to obtain.
Therefore, the production of this series will be discontinued according to the schedule below. We ask for your understanding and cooperation of this matter.

1. Target Models

Target Servo Amplifiers

MR-J2S-10A to 37KA, MR-J2S-10A1 to 40A1, MR-J2S-60A4 to 55KA4
MR-J2S-10B to 37KB, MR-J2S-10B1 to 40B1, MR-J2S-60B4 to 55KB4
MR-HP30KA, MR-HP55KA4
MR-J2S-10CP to 700CP, MR-J2S-10CP1 to 40CP1
MR-J2S-10CP-S084 to 700CP-S084, MR-J2S-10CP1-S084 to 40CP1-S084
MR-J2S-10CL to 700CL, MR-J2S-10CL1 to 40CL1
MR-J2M-P8A, MR-J2M-P8B
MR-J2M-10DU to 70DU
MR-J2M-BU4, BU6, BU8

Target Servo Motors

All capacities of HC-KFS, HC-MFS, HC-SFS, HC-LFS, HC-RFS, HC-UFS, HA-LFS

Note 1. Also the dedicated options and peripheral equipment for this series.
2. Refer to Appendix 1 for the details about the target models.

2. Transition to Production-By-Order

The last day of production is August 2014.
After the transition has been made to "Production-By-Order", the products are expected to be delivered in 8 to 10 weeks after the order has been received.

3. Production Discontinuation

August 2015
Production orders are accepted until the last day of August 2015.

4. Repair Acceptance and Parts Order Acceptance

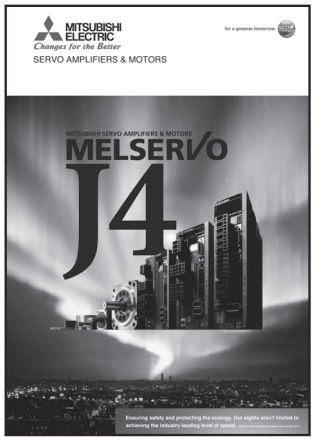
August 2022
Repair and parts orders are accepted until the last day of August 2022.

Date of issue	September 2014	Title	Production Discontinuation of General-Purpose AC Servo MR-J2S/MR-J2M Series	Mitsubishi Electric Corp., Nagoya Works 5-1-14 Yada-minami, Higashi-ku, Nagoya 461-8670 Tel.: +81 (52) 721-2111 Main line

5. Replacement Models

The MR-J4/MR-J3 series are available as an alternative to the MR-J2S/MR-J2M series. Please consider to replace the MR-J2S/MR-J2M series with the MR-J4/MR-J3 series. Refer to Appendix 2, Appendix 3, and the following materials for details.

Catalogs/Transition handbook



■MELSERVO-J4 catalog
L(NA)03058

MR-J4 Series Catalog
Descriptions about servo amplifiers, servo motors, and options are included.

■MELSERVO-J3 catalog
L(NA)03017

MR-J3 Series Catalog
Descriptions about servo amplifiers, servo motors, and options are included.

■Transition from MELSERVO-J2-Super/J2M Series to J4 Series Handbook
L(NA)03093

Transition handbook to upgrade your system which includes the MR-J2S/ J2M series to the MR-J4 series.

6. Renewal Tool

When replacing an existing system with the MR-J4 series, a renewal tool (made by Mitsubishi Electric System & Service Co., Ltd.) is available to allow for continuous usage of the existing wiring.
Features: Faster replacement time by using the existing wiring.
Refer to the Guide for Replacing MR-J2S/J2M Series with J4 Series "L(NA)03093" issued by Mitsubishi Electric, and the "Guide for Replacing MELSERVO-J2S Series using the MR-J2S Renewal Tool (X903120701)" available on the Mitsubishi Electric System & Service web site for replacing the MR-J2S Series with the MR-J4 Series.

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Appendix 1: List of Production Discontinuation Models

1. SERVO AMPLIFIERS

1.1 MR-J2S Series

No.	Model	No.	Model	No.	Model	No.	Model
1	MR-J2S-10A	32	MR-J2S-10B	63	MR-J2S-10CP	89	MR-J2S-10CL
2	MR-J2S-20A	33	MR-J2S-20B	64	MR-J2S-20CP	90	MR-J2S-20CL
3	MR-J2S-40A	34	MR-J2S-40B	65	MR-J2S-40CP	91	MR-J2S-40CL
4	MR-J2S-60A	35	MR-J2S-60B	66	MR-J2S-60CP	92	MR-J2S-60CL
5	MR-J2S-70A	36	MR-J2S-70B	67	MR-J2S-70CP	93	MR-J2S-70CL
6	MR-J2S-100A	37	MR-J2S-100B	68	MR-J2S-100CP	94	MR-J2S-100CL
7	MR-J2S-200A	38	MR-J2S-200B	69	MR-J2S-200CP	95	MR-J2S-200CL
8	MR-J2S-350A	39	MR-J2S-350B	70	MR-J2S-350CP	96	MR-J2S-350CL
9	MR-J2S-500A	40	MR-J2S-500B	71	MR-J2S-500CP	97	MR-J2S-500CL
10	MR-J2S-700A	41	MR-J2S-700B	72	MR-J2S-700CP	98	MR-J2S-700CL
11	MR-J2S-11KA	42	MR-J2S-11KB	73	MR-J2S-10CP1	99	MR-J2S-10CL1
12	MR-J2S-15KA	43	MR-J2S-15KB	74	MR-J2S-20CP1	100	MR-J2S-20CL1
13	MR-J2S-22KA	44	MR-J2S-22KB	75	MR-J2S-40CP1	101	MR-J2S-40CL1
14	MR-J2S-30KA	45	MR-J2S-30KB	76	MR-J2S-10CP-S084	102	MR-HP30KA
15	MR-J2S-37KA	46	MR-J2S-37KB	77	MR-J2S-20CP-S084	103	MR-HP55KA4
16	MR-J2S-60A4	47	MR-J2S-60B4	78	MR-J2S-40CP-S084		
17	MR-J2S-100A4	48	MR-J2S-100B4	79	MR-J2S-60CP-S084		
18	MR-J2S-200A4	49	MR-J2S-200B4	80	MR-J2S-70CP-S084		
19	MR-J2S-350A4	50	MR-J2S-350B4	81	MR-J2S-100CP-S084		
20	MR-J2S-500A4	51	MR-J2S-500B4	82	MR-J2S-200CP-S084		
21	MR-J2S-700A4	52	MR-J2S-700B4	83	MR-J2S-350CP-S084		
22	MR-J2S-11KA4	53	MR-J2S-11KB4	84	MR-J2S-500CP-S084		
23	MR-J2S-15KA4	54	MR-J2S-15KB4	85	MR-J2S-700CP-S084		
24	MR-J2S-22KA4	55	MR-J2S-22KB4	86	MR-J2S-10CP1-S084		
25	MR-J2S-30KA4	56	MR-J2S-30KB4	87	MR-J2S-20CP1-S084		
26	MR-J2S-37KA4	57	MR-J2S-37KB4	88	MR-J2S-40CP1-S084		
27	MR-J2S-45KA4	58	MR-J2S-45KB4				
28	MR-J2S-55KA4	59	MR-J2S-55KB4				
29	MR-J2S-10A1	60	MR-J2S-10B1				
30	MR-J2S-20A1	61	MR-J2S-20B1				
31	MR-J2S-40A1	62	MR-J2S-40B1				

Note. All of the related models of the products described above are included.

1.2 MR-J2M Series

No.	Model	No.	Model	No.	Model
1	MR-J2M-P8A	4	MR-J2M-20DU	7	MR-J2M-BU4
2	MR-J2M-P8B	5	MR-J2M-40DU	8	MR-J2M-BU6
3	MR-J2M-10DU	6	MR-J2M-70DU	9	MR-J2M-BU8

Note. All of the related models of the products described above are included.

2. SERVO MOTORS

2.1 HC-KFS Series

No.	Model	No.	Model	No.	Model	No.	Model
1	HC-KFS053(B)	24	HC-KFS053(B)G2 1/29	47	HC-KFS13(B)G5 1/11	70	HC-KFS053(B)G7 1/45
2	HC-KFS13(B)	25	HC-KFS13(B)G2 1/5	48	HC-KFS13(B)G5 1/21	71	HC-KFS13(B)G7 1/5
3	HC-KFS23(B)	26	HC-KFS13(B)G2 1/9	49	HC-KFS13(B)G5 1/33	72	HC-KFS13(B)G7 1/11
4	HC-KFS43(B)	27	HC-KFS13(B)G2 1/20	50	HC-KFS13(B)G5 1/45	73	HC-KFS13(B)G7 1/21
5	HC-KFS73(B)	28	HC-KFS13(B)G2 1/29	51	HC-KFS23(B)G5 1/5	74	HC-KFS13(B)G7 1/33
6	HC-KFS053(B)G1 1/5	29	HC-KFS23(B)G2 1/5	52	HC-KFS23(B)G5 1/11	75	HC-KFS13(B)G7 1/45
7	HC-KFS053(B)G1 1/12	30	HC-KFS23(B)G2 1/9	53	HC-KFS23(B)G5 1/21	76	HC-KFS23(B)G7 1/5
8	HC-KFS053(B)G1 1/20	31	HC-KFS23(B)G2 1/20	54	HC-KFS23(B)G5 1/33	77	HC-KFS23(B)G7 1/11
9	HC-KFS13(B)G1 1/5	32	HC-KFS23(B)G2 1/29	55	HC-KFS23(B)G5 1/45	78	HC-KFS23(B)G7 1/21
10	HC-KFS13(B)G1 1/12	33	HC-KFS43(B)G2 1/5	56	HC-KFS43(B)G5 1/5	79	HC-KFS23(B)G7 1/33
11	HC-KFS13(B)G1 1/20	34	HC-KFS43(B)G2 1/9	57	HC-KFS43(B)G5 1/11	80	HC-KFS23(B)G7 1/45
12	HC-KFS23(B)G1 1/5	35	HC-KFS43(B)G2 1/20	58	HC-KFS43(B)G5 1/21	81	HC-KFS43(B)G7 1/5
13	HC-KFS23(B)G1 1/12	36	HC-KFS43(B)G2 1/29	59	HC-KFS43(B)G5 1/33	82	HC-KFS43(B)G7 1/11
14	HC-KFS23(B)G1 1/20	37	HC-KFS73(B)G2 1/5	60	HC-KFS43(B)G5 1/45	83	HC-KFS43(B)G7 1/21
15	HC-KFS43(B)G1 1/5	38	HC-KFS73(B)G2 1/9	61	HC-KFS73(B)G5 1/5	84	HC-KFS43(B)G7 1/33
16	HC-KFS43(B)G1 1/12	39	HC-KFS73(B)G2 1/20	62	HC-KFS73(B)G5 1/11	85	HC-KFS43(B)G7 1/45
17	HC-KFS43(B)G1 1/20	40	HC-KFS73(B)G2 1/29	63	HC-KFS73(B)G5 1/21	86	HC-KFS73(B)G7 1/5
18	HC-KFS73(B)G1 1/5	41	HC-KFS053(B)G5 1/5	64	HC-KFS73(B)G5 1/33	87	HC-KFS73(B)G7 1/11
19	HC-KFS73(B)G1 1/12	42	HC-KFS053(B)G5 1/11	65	HC-KFS73(B)G5 1/45	88	HC-KFS73(B)G7 1/21
20	HC-KFS73(B)G1 1/20	43	HC-KFS053(B)G5 1/21	66	HC-KFS053(B)G7 1/5	89	HC-KFS73(B)G7 1/33
21	HC-KFS053(B)G2 1/5	44	HC-KFS053(B)G5 1/33	67	HC-KFS053(B)G7 1/11	90	HC-KFS73(B)G7 1/45
22	HC-KFS053(B)G2 1/9	45	HC-KFS053(B)G5 1/45	68	HC-KFS053(B)G7 1/21	91	HC-KFS46
23	HC-KFS053(B)G2 1/20	46	HC-KFS13(B)G5 1/5	69	HC-KFS053(B)G7 1/33	92	HC-KFS410

Note. All of the related models of the products described above are included. (B): With brake

2.2 HC-MFS Series

No.	Model	No.	Model	No.	Model	No.	Model
1	HC-MFS053(B)	24	HC-MFS053(B)G2 1/29	47	HC-MFS13(B)G5 1/11	70	HC-MFS053(B)G7 1/45
2	HC-MFS13(B)	25	HC-MFS13(B)G2 1/5	48	HC-MFS13(B)G5 1/21	71	HC-MFS13(B)G7 1/5
3	HC-MFS23(B)	26	HC-MFS13(B)G2 1/9	49	HC-MFS13(B)G5 1/33	72	HC-MFS13(B)G7 1/11
4	HC-MFS43(B)	27	HC-MFS13(B)G2 1/20	50	HC-MFS13(B)G5 1/45	73	HC-MFS13(B)G7 1/21
5	HC-MFS73(B)	28	HC-MFS13(B)G2 1/29	51	HC-MFS23(B)G5 1/5	74	HC-MFS13(B)G7 1/33
6	HC-MFS053(B)G1 1/5	29	HC-MFS23(B)G2 1/5	52	HC-MFS23(B)G5 1/11	75	HC-MFS13(B)G7 1/45
7	HC-MFS053(B)G1 1/12	30	HC-MFS23(B)G2 1/9	53	HC-MFS23(B)G5 1/21	76	HC-MFS23(B)G7 1/5
8	HC-MFS053(B)G1 1/20	31	HC-MFS23(B)G2 1/20	54	HC-MFS23(B)G5 1/33	77	HC-MFS23(B)G7 1/11
9	HC-MFS13(B)G1 1/5	32	HC-MFS23(B)G2 1/29	55	HC-MFS23(B)G5 1/45	78	HC-MFS23(B)G7 1/21
10	HC-MFS13(B)G1 1/12	33	HC-MFS43(B)G2 1/5	56	HC-MFS43(B)G5 1/5	79	HC-MFS23(B)G7 1/33
11	HC-MFS13(B)G1 1/20	34	HC-MFS43(B)G2 1/9	57	HC-MFS43(B)G5 1/11	80	HC-MFS23(B)G7 1/45
12	HC-MFS23(B)G1 1/5	35	HC-MFS43(B)G2 1/20	58	HC-MFS43(B)G5 1/21	81	HC-MFS43(B)G7 1/5
13	HC-MFS23(B)G1 1/12	36	HC-MFS43(B)G2 1/29	59	HC-MFS43(B)G5 1/33	82	HC-MFS43(B)G7 1/11
14	HC-MFS23(B)G1 1/20	37	HC-MFS73(B)G2 1/5	60	HC-MFS43(B)G5 1/45	83	HC-MFS43(B)G7 1/21
15	HC-MFS43(B)G1 1/5	38	HC-MFS73(B)G2 1/9	61	HC-MFS73(B)G5 1/5	84	HC-MFS43(B)G7 1/33
16	HC-MFS43(B)G1 1/12	39	HC-MFS73(B)G2 1/20	62	HC-MFS73(B)G5 1/11	85	HC-MFS43(B)G7 1/45
17	HC-MFS43(B)G1 1/20	40	HC-MFS73(B)G2 1/29	63	HC-MFS73(B)G5 1/21	86	HC-MFS73(B)G7 1/5
18	HC-MFS73(B)G1 1/5	41	HC-MFS053(B)G5 1/5	64	HC-MFS73(B)G5 1/33	87	HC-MFS73(B)G7 1/11
19	HC-MFS73(B)G1 1/12	42	HC-MFS053(B)G5 1/11	65	HC-MFS73(B)G5 1/45	88	HC-MFS73(B)G7 1/21
20	HC-MFS73(B)G1 1/20	43	HC-MFS053(B)G5 1/21	66	HC-MFS053(B)G7 1/5	89	HC-MFS73(B)G7 1/33
21	HC-MFS053(B)G2 1/5	44	HC-MFS053(B)G5 1/33	67	HC-MFS053(B)G7 1/11	90	HC-MFS73(B)G7 1/45
22	HC-MFS053(B)G2 1/9	45	HC-MFS053(B)G5 1/45	68	HC-MFS053(B)G7 1/21		
23	HC-MFS053(B)G2 1/20	46	HC-MFS13(B)G5 1/5	69	HC-MFS053(B)G7 1/33		

Note. All of the related models of the products described above are included. (B): With brake

2.3 HC-SFS Series

No.	Model	No.	Model	No.	Model
1	HC-SFS81(B)	49	HC-SFS502(4)(B)G1(H) 1/29	97	HC-SFS152(4)(B)G5 1/45
2	HC-SFS121(B)	50	HC-SFS502(4)(B)G1(H) 1/35	98	HC-SFS202(4)(B)G5 1/5
3	HC-SFS201(B)	51	HC-SFS502(4)(B)G1(H) 1/43	99	HC-SFS202(4)(B)G5 1/11
4	HC-SFS301(B)	52	HC-SFS702(4)(B)G1(H) 1/11	100	HC-SFS202(4)(B)G5 1/21
5	HC-SFS52(4)(B)	53	HC-SFS702(4)(B)G1(H) 1/17	101	HC-SFS202(4)(B)G5 1/33
6	HC-SFS102(4)(B)	54	HC-SFS702(4)(B)G1(H) 1/29	102	HC-SFS202(4)(B)G5 1/45
7	HC-SFS152(4)(B)	55	HC-SFS702(4)(B)G1(H) 1/35	103	HC-SFS352(4)(B)G5 1/5
8	HC-SFS202(4)(B)	56	HC-SFS702(4)(B)G1(H) 1/43	104	HC-SFS352(4)(B)G5 1/11
9	HC-SFS352(4)(B)	57	HC-SFS52(4)(B)G2 1/5	105	HC-SFS352(4)(B)G5 1/21
10	HC-SFS502(4)(B)	58	HC-SFS52(4)(B)G2 1/9	106	HC-SFS502(4)(B)G5 1/5
11	HC-SFS702(4)(B)	59	HC-SFS52(4)(B)G2 1/20	107	HC-SFS502(4)(B)G5 1/11
12	HC-SFS52(4)(B)G1(H) 1/6	60	HC-SFS52(4)(B)G2 1/29	108	HC-SFS702(4)(B)G5 1/5
13	HC-SFS52(4)(B)G1(H) 1/11	61	HC-SFS52(4)(B)G2 1/45	109	HC-SFS52(4)(B)G7 1/5
14	HC-SFS52(4)(B)G1(H) 1/17	62	HC-SFS102(4)(B)G2 1/5	110	HC-SFS52(4)(B)G7 1/11
15	HC-SFS52(4)(B)G1(H) 1/29	63	HC-SFS102(4)(B)G2 1/9	111	HC-SFS52(4)(B)G7 1/21
16	HC-SFS52(4)(B)G1(H) 1/35	64	HC-SFS102(4)(B)G2 1/20	112	HC-SFS52(4)(B)G7 1/33
17	HC-SFS52(4)(B)G1(H) 1/43	65	HC-SFS102(4)(B)G2 1/29	113	HC-SFS52(4)(B)G7 1/45
18	HC-SFS52(4)(B)G1(H) 1/59	66	HC-SFS102(4)(B)G2 1/45	114	HC-SFS102(4)(B)G7 1/5
19	HC-SFS102(4)(B)G1(H) 1/6	67	HC-SFS152(4)(B)G2 1/5	115	HC-SFS102(4)(B)G7 1/11
20	HC-SFS102(4)(B)G1(H) 1/11	68	HC-SFS152(4)(B)G2 1/9	116	HC-SFS102(4)(B)G7 1/21
21	HC-SFS102(4)(B)G1(H) 1/17	69	HC-SFS152(4)(B)G2 1/20	117	HC-SFS102(4)(B)G7 1/33
22	HC-SFS102(4)(B)G1(H) 1/29	70	HC-SFS152(4)(B)G2 1/29	118	HC-SFS102(4)(B)G7 1/45
23	HC-SFS102(4)(B)G1(H) 1/35	71	HC-SFS152(4)(B)G2 1/45	119	HC-SFS152(4)(B)G7 1/5
24	HC-SFS102(4)(B)G1(H) 1/43	72	HC-SFS202(4)(B)G2 1/5	120	HC-SFS152(4)(B)G7 1/11
25	HC-SFS102(4)(B)G1(H) 1/59	73	HC-SFS202(4)(B)G2 1/9	121	HC-SFS152(4)(B)G7 1/21
26	HC-SFS152(4)(B)G1(H) 1/6	74	HC-SFS202(4)(B)G2 1/20	122	HC-SFS152(4)(B)G7 1/33
27	HC-SFS152(4)(B)G1(H) 1/11	75	HC-SFS202(4)(B)G2 1/29	123	HC-SFS152(4)(B)G7 1/45
28	HC-SFS152(4)(B)G1(H) 1/17	76	HC-SFS202(4)(B)G2 1/45	124	HC-SFS202(4)(B)G7 1/5
29	HC-SFS152(4)(B)G1(H) 1/29	77	HC-SFS352(4)(B)G2 1/5	125	HC-SFS202(4)(B)G7 1/11
30	HC-SFS152(4)(B)G1(H) 1/35	78	HC-SFS352(4)(B)G2 1/9	126	HC-SFS202(4)(B)G7 1/21
31	HC-SFS152(4)(B)G1(H) 1/43	79	HC-SFS352(4)(B)G2 1/20	127	HC-SFS202(4)(B)G7 1/33
32	HC-SFS152(4)(B)G1(H) 1/59	80	HC-SFS502(4)(B)G2 1/5	128	HC-SFS202(4)(B)G7 1/45
33	HC-SFS202(4)(B)G1(H) 1/6	81	HC-SFS502(4)(B)G2 1/9	129	HC-SFS352(4)(B)G7 1/5
34	HC-SFS202(4)(B)G1(H) 1/11	82	HC-SFS702(4)(B)G2 1/5	130	HC-SFS352(4)(B)G7 1/11
35	HC-SFS202(4)(B)G1(H) 1/17	83	HC-SFS52(4)(B)G5 1/5	131	HC-SFS352(4)(B)G7 1/21
36	HC-SFS202(4)(B)G1(H) 1/29	84	HC-SFS52(4)(B)G5 1/11	132	HC-SFS502(4)(B)G7 1/5
37	HC-SFS202(4)(B)G1(H) 1/35	85	HC-SFS52(4)(B)G5 1/21	133	HC-SFS502(4)(B)G7 1/11
38	HC-SFS202(4)(B)G1(H) 1/43	86	HC-SFS52(4)(B)G5 1/33	134	HC-SFS702(4)(B)G7 1/5
39	HC-SFS202(4)(B)G1(H) 1/59	87	HC-SFS52(4)(B)G5 1/45	135	HC-SFS53(B)
40	HC-SFS352(4)(B)G1(H) 1/6	88	HC-SFS102(4)(B)G5 1/5	136	HC-SFS103(B)
41	HC-SFS352(4)(B)G1(H) 1/11	89	HC-SFS102(4)(B)G5 1/11	137	HC-SFS153(B)
42	HC-SFS352(4)(B)G1(H) 1/17	90	HC-SFS102(4)(B)G5 1/21	138	HC-SFS203(B)
43	HC-SFS352(4)(B)G1(H) 1/29	91	HC-SFS102(4)(B)G5 1/33	139	HC-SFS353(B)
44	HC-SFS352(4)(B)G1(H) 1/35	92	HC-SFS102(4)(B)G5 1/45		
45	HC-SFS352(4)(B)G1(H) 1/43	93	HC-SFS152(4)(B)G5 1/5		
46	HC-SFS352(4)(B)G1(H) 1/59	94	HC-SFS152(4)(B)G5 1/11		
47	HC-SFS502(4)(B)G1(H) 1/11	95	HC-SFS152(4)(B)G5 1/21		
48	HC-SFS502(4)(B)G1(H) 1/17	96	HC-SFS152(4)(B)G5 1/33		

Note. All of the related models of the products described above are included. (4): 400 V specifications (B): With brake

2.4 HC-LFS Series

No.	Model	No.	Model	No.	Model
1	HC-LFS52(B)	3	HC-LFS152(B)	5	HC-LFS302(B)
2	HC-LFS102(B)	4	HC-LFS202(B)		

Note. All of the related models of the products described above are included. (B): With brake

2.5 HC-RFS Series

No.	Model	No.	Model	No.	Model	No.	Model
1	HC-RFS103(B)	19	HC-RFS203(B)G2 1/29	37	HC-RFS153(B)G5 1/45	55	HC-RFS153(B)G7 1/5
2	HC-RFS153(B)	20	HC-RFS203(B)G2 1/45	38	HC-RFS203(B)G5 1/5	56	HC-RFS153(B)G7 1/11
3	HC-RFS203(B)	21	HC-RFS353(B)G2 1/5	39	HC-RFS203(B)G5 1/11	57	HC-RFS153(B)G7 1/21
4	HC-RFS353(B)	22	HC-RFS353(B)G2 1/9	40	HC-RFS203(B)G5 1/21	58	HC-RFS153(B)G7 1/33
5	HC-RFS503(B)	23	HC-RFS353(B)G2 1/20	41	HC-RFS203(B)G5 1/33	59	HC-RFS153(B)G7 1/45
6	HC-RFS103(B)G2 1/5	24	HC-RFS353(B)G2 1/29	42	HC-RFS203(B)G5 1/45	60	HC-RFS203(B)G7 1/5
7	HC-RFS103(B)G2 1/9	25	HC-RFS503(B)G2 1/5	43	HC-RFS353(B)G5 1/5	61	HC-RFS203(B)G7 1/11
8	HC-RFS103(B)G2 1/20	26	HC-RFS503(B)G2 1/9	44	HC-RFS353(B)G5 1/11	62	HC-RFS203(B)G7 1/21
9	HC-RFS103(B)G2 1/29	27	HC-RFS503(B)G2 1/20	45	HC-RFS353(B)G5 1/21	63	HC-RFS203(B)G7 1/33
10	HC-RFS103(B)G2 1/45	28	HC-RFS103(B)G5 1/5	46	HC-RFS353(B)G5 1/33	64	HC-RFS203(B)G7 1/45
11	HC-RFS153(B)G2 1/5	29	HC-RFS103(B)G5 1/11	47	HC-RFS503(B)G5 1/5	65	HC-RFS353(B)G7 1/5
12	HC-RFS153(B)G2 1/9	30	HC-RFS103(B)G5 1/21	48	HC-RFS503(B)G5 1/11	66	HC-RFS353(B)G7 1/11
13	HC-RFS153(B)G2 1/20	31	HC-RFS103(B)G5 1/33	49	HC-RFS503(B)G5 1/21	67	HC-RFS353(B)G7 1/21
14	HC-RFS153(B)G2 1/29	32	HC-RFS103(B)G5 1/45	50	HC-RFS103(B)G7 1/5	68	HC-RFS353(B)G7 1/33
15	HC-RFS153(B)G2 1/45	33	HC-RFS153(B)G5 1/5	51	HC-RFS103(B)G7 1/11	69	HC-RFS503(B)G7 1/5
16	HC-RFS203(B)G2 1/5	34	HC-RFS153(B)G5 1/11	52	HC-RFS103(B)G7 1/21	70	HC-RFS503(B)G7 1/11
17	HC-RFS203(B)G2 1/9	35	HC-RFS153(B)G5 1/21	53	HC-RFS103(B)G7 1/33	71	HC-RFS503(B)G7 1/21
18	HC-RFS203(B)G2 1/20	36	HC-RFS153(B)G5 1/33	54	HC-RFS103(B)G7 1/45		

Note. All of the related models of the products described above are included. (B): With brake

2.6 HA-LFS Series

No.	Model	No.	Model	No.	Model	No.	Model
1	HA-LFS601(4)(B)	8	HA-LFS37K1(4)	15	HA-LFS45K1M4	22	HA-LFS30K2(4)
2	HA-LFS801(4)(B)	9	HA-LFS701M(4)(B)	16	HA-LFS50K1M4	23	HA-LFS37K2(4)
3	HA-LFS12K1(4)(B)	10	HA-LFS11K1M(4)(B)	17	HA-LFS502	24	HA-LFS45K24
4	HA-LFS15K1(4)	11	HA-LFS15K1M(4)(B)	18	HA-LFS702	25	HA-LFS55K24
5	HA-LFS20K1(4)	12	HA-LFS22K1M(4)	19	HA-LFS11K2(4)(B)		
6	HA-LFS25K1(4)	13	HA-LFS30K1M(4)	20	HA-LFS15K2(4)(B)		
7	HA-LFS30K1(4)	14	HA-LFS37K1M(4)	21	HA-LFS22K2(4)(B)		

Note. All of the related models of the products described above are included. (4): 400 V specifications (B): With brake

2.7 HC-UFS Series

No.	Model	No.	Model	No.	Model
1	HC-UFS72(B)	4	HC-UFS352(B)	7	HC-UFS23(B)
2	HC-UFS152(B)	5	HC-UFS502(B)	8	HC-UFS43(B)
3	HC-UFS202(B)	6	HC-UFS13(B)	9	HC-UFS73(B)

Note. All of the related models of the products described above are included. (B): With brake

3. OPTIONS

No.	Model	Target amplifier	No.	Model	Target amplifier	No.	Model	Target amplifier
1	MR-J2S-CLP01	J2S	15	MR-HP4CN1	J2S	29	MR-J2M-FAN4	J2M
2	MR-J2S-T01	J2S	16	MR-RB65	J2S	30	MR-J2M-FAN6	J2M
3	MR-J2S-T02	J2S	17	MR-RB66	J2S	31	MR-J2M-FAN8	J2M
4	MR-J2S-N01	J2S	18	MR-RB67	J2S	32	MR-JC4CBL_M-H	J2M
5	MR-MG30	J2S	19	MR-RB1L-4	J2S	33	MR-J2MCN1	J2M
6	MR-JCCBL_M-L	J2S, J2M	20	MR-RB3H-4	J2S	34	MR-J2MBTCBL_M	J2M
7	MR-JCCBL_M-H	J2S, J2M	21	MR-RB5H-4	J2S	35	MR-PWCNK3	J2M
8	MR-ENCBL_M-H	J2S	22	MR-JACN15K	J2S	36	MR-J2MCNM	J2M
9	MR-J2CNM	J2S, J2M	23	MR-JACN22K	J2S	37	MRZJW3-SETUP161 (Note 3)	J2S, J2M
10	MR-ENCNS	J2S	24	MR-ACNP55K	J2S	38	SF1252	J2S
11	MR-H3CBL1M	J2S	25	MR-ACN30K	J2S	39	SF1253	J2S, J2M
12	MR-PWCNK1	J2S, J2M	26	FR-BAL (Note 1)	J2S, J2M			
13	MR-PWCNK2	J2S, J2M	27	FR-BEL (Note 1)	J2S			
14	MR-J2CN3TM	J2S, J2M	28	MR-J2M-D01	J2M			

Note 1. These products have been discontinued since the last day of February 2013.
2. All of the related models of the products described above are included.
3. The installer for MRZJW3-SETUP161 can be downloaded free of charge from our "Mitsubishi Electric FA Website" from October 1st, 2013.

Appendix 2: Precautions for Replacing MR-J2S Series with MR-J4/J3 Series

1. OUTLINE

This document describes the changes that are applied when replacing a system using the MR-J2S series to a system using the MR-J4/J3 series. The functions and performance of the MR-J4/J3 series are much higher when compared to the MR-J2S series.

2. REPLACEMENT MODELS

This section describes the recommended basic amplifier and motor replacements as a set combination.

2.1 Servo Amplifiers

2.1.1 Servo Amplifier Replacement Models and Compatibility

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
200 V AC general-purpose interface	MR-J2S-10A	MR-J4-10A	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20A	MR-J4-20A	○	
	MR-J2S-40A	MR-J4-40A	○	
	MR-J2S-60A	MR-J4-60A	○	
	MR-J2S-70A	MR-J4-70A	○	
	MR-J2S-100A	MR-J4-100A	○	
	MR-J2S-200A	MR-J4-200A	(Note 1)	
	MR-J2S-350A	MR-J4-350A	(Note 1)	
	MR-J2S-500A	MR-J4-500A	(Note 1)	
	MR-J2S-700A	MR-J4-700A	(Note 1)	
	MR-J2S-11KA	MR-J4-11KA	(Note 1)	
	MR-J2S-15KA	MR-J4-15KA	(Note 1)	
	MR-J2S-22KA	MR-J4-22KA	(Note 1)	
	MR-J2S-30KA+MR-HP30KA	MR-J4-DU30KA+MR-CR55K	(Note 2)	
	MR-J2S-37KA+MR-HP30KA	MR-J4-DU37KA+MR-CR55K	(Note 2)	

Note 1. These replacement models do not have compatibility in mounting. Use the mounting plate holes of the renewal tool.
2. These replacement models do not have compatibility in mounting. The mounting plate of the renewal tool will be available in the future to have the compatibility. (For the release date of the renewal tool, contact Mitsubishi Electric System & Service.)

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
400 V AC general-purpose interface	MR-J2S-60A4	MR-J4-60A4	(Note 1)	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-100A4	MR-J4-100A4	(Note 1)	
	MR-J2S-200A4	MR-J4-200A4	(Note 1)	
	MR-J2S-350A4	MR-J4-350A4	(Note 1)	
	MR-J2S-500A4	MR-J4-500A4	○	
	MR-J2S-700A4	MR-J4-700A4	(Note 1)	
	MR-J2S-11KA4	MR-J4-11KA4	(Note 1)	
	MR-J2S-15KA4	MR-J4-15KA4	(Note 1)	
	MR-J2S-22KA4	MR-J4-22KA4	(Note 1)	
	MR-J2S-30KA4+MR-HP55KA4	MR-J4-DU30KA4+MR-CR55K4	(Note 1)	
	MR-J2S-37KA4+MR-HP55KA4	MR-J4-DU37KA4+MR-CR55K4	(Note 1)	
	MR-J2S-45KA4+MR-HP55KA4	MR-J4-DU45KA4+MR-CR55K4	(Note 1)	
	MR-J2S-55KA4+MR-HP55KA4	MR-J4-DU55KA4+MR-CR55K4	(Note 1)	

Note 1. These replacement models do not have compatibility in mounting. The mounting plate of the renewal tool will be available in the future to have the compatibility. (For the release date of the renewal tool, contact Mitsubishi Electric System & Service.)

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
100 V AC general-purpose interface	MR-J2S-10A1	MR-J4-10A1	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20A1	MR-J4-20A1	○	
	MR-J2S-40A1	MR-J4-40A1	○	

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
200 V AC SSCNET interface	MR-J2S-10B	MR-J4-10B	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20B	MR-J4-20B	○	
	MR-J2S-40B	MR-J4-40B	○	
	MR-J2S-60B	MR-J4-60B	○	
	MR-J2S-70B	MR-J4-70B	○	
	MR-J2S-100B	MR-J4-100B	○	
	MR-J2S-200B	MR-J4-200B	(Note 1)	
	MR-J2S-350B	MR-J4-350B	(Note 1)	
	MR-J2S-500B	MR-J4-500B	(Note 1)	
	MR-J2S-700B	MR-J4-700B	(Note 1)	
	MR-J2S-11KB	MR-J4-11KB	(Note 1)	
	MR-J2S-15KB	MR-J4-15KB	(Note 1)	
	MR-J2S-22KB	MR-J4-22KB	(Note 1)	
	MR-J2S-30KB+MR-HP30KA	MR-J4-DU30KB+MR-CR55K	(Note 2)	
	MR-J2S-37KB+MR-HP30KA	MR-J4-DU37KB+MR-CR55K	(Note 2)	

Note 1. These replacement models do not have compatibility in mounting. Use the mounting plate holes of the renewal tool.
2. These replacement models do not have compatibility in mounting. The mounting plate of the renewal tool will be available in the future to have the compatibility. (For the release date of the renewal tool, contact Mitsubishi Electric System & Service.)
3. These replacement models are for batch update of the system. For other update methods, refer to "Transition from MELSERVO-J2-Super/J2M Series to J4 Series Handbook (L(NA)03093)".

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
400 V AC SSCNET interface	MR-J2S-60B4	MR-J4-60B4	(Note 1)	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-100B4	MR-J4-100B4	(Note 1)	
	MR-J2S-200B4	MR-J4-200B4	(Note 1)	
	MR-J2S-350B4	MR-J4-350B4	(Note 1)	
	MR-J2S-500B4	MR-J4-500B4	○	
	MR-J2S-700B4	MR-J4-700B4	(Note 1)	
	MR-J2S-11KB4	MR-J4-11KB4	(Note 1)	
	MR-J2S-15KB4	MR-J4-15KB4	(Note 1)	
	MR-J2S-22KB4	MR-J4-22KB4	(Note 1)	
	MR-J2S-30KB4+MR-HP55KA4	MR-J4-DU30KB4+MR-CR55K4	(Note 1)	
	MR-J2S-37KB4+MR-HP55KA4	MR-J4-DU37KB4+MR-CR55K4	(Note 1)	
	MR-J2S-45KB4+MR-HP55KA4	MR-J4-DU45KB4+MR-CR55K4	(Note 1)	
	MR-J2S-55KB4+MR-HP55KA4	MR-J4-DU55KB4+MR-CR55K4	(Note 1)	

Note 1. These replacement models do not have compatibility in mounting. The mounting plate of the renewal tool will be available in the future and will be compatible. (For the release date of the renewal tool, contact Mitsubishi Electric System & Service.)
2. These replacement models are for batch update of the system. For other update methods, refer to "Transition from MELSERVO-J2-Super/J2M Series to J4 Series Handbook (L(NA)03093)".

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
100 V AC SSCNET interface	MR-J2S-10B1	MR-J4-10B1	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20B1	MR-J4-20B1	○	
	MR-J2S-40B1	MR-J4-40B1	○	

Note 1. These replacement models are for batch update of the system. For other update methods, refer to "Transition from MELSERVO-J2-Super/J2M Series to J4 Series Handbook (L(NA)03093)".

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
200 V AC built-in positioning function	MR-J2S-10CP	MR-J4-10A-RJ (Note 2)	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20CP	MR-J4-20A-RJ (Note 2)	○	
	MR-J2S-40CP	MR-J4-40A-RJ (Note 2)	○	
	MR-J2S-60CP	MR-J4-60A-RJ (Note 2)	○	
	MR-J2S-70CP	MR-J4-70A-RJ (Note 2)	○	
	MR-J2S-100CP	MR-J4-100A-RJ (Note 2)	○	
	MR-J2S-200CP	MR-J4-200A-RJ (Note 2)	(Note 1)	
	MR-J2S-350CP	MR-J4-350A-RJ (Note 2)	(Note 1)	
	MR-J2S-500CP	MR-J4-500A-RJ (Note 2)	(Note 1)	
	MR-J2S-700CP	MR-J4-700A-RJ (Note 2)	(Note 1)	

Note 1. These replacement models do not have compatibility in mounting. The mounting plate of the renewal tool will be available in the future to have the compatibility. (For the release date of the renewal tool, contact Mitsubishi Electric System & Service.)
2. The available software version of these replacement models is B3 or later. The software version is B3 from May 2014 production.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
100 V AC built-in positioning function	MR-J2S-10CP1	MR-J4-10A1-RJ (Note 1)	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20CP1	MR-J4-20A1-RJ (Note 1)	○	
	MR-J2S-40CP1	MR-J4-40A1-RJ (Note 1)	○	

Note 1. The available software version of these replacement models is B3 or later. The software version is B3 from May 2014 production.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
200 V AC built-in program operation function	MR-J2S-10CL	MR-J4-10A-RJ (Note 2)	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20CL	MR-J4-20A-RJ (Note 2)	○	
	MR-J2S-40CL	MR-J4-40A-RJ (Note 2)	○	
	MR-J2S-60CL	MR-J4-60A-RJ (Note 2)	○	
	MR-J2S-70CL	MR-J4-70A-RJ (Note 2)	○	
	MR-J2S-100CL	MR-J4-100A-RJ (Note 2)	○	
	MR-J2S-200CL	MR-J4-200A-RJ (Note 2)	(Note 1)	
	MR-J2S-350CL	MR-J4-350A-RJ (Note 2)	(Note 1)	
	MR-J2S-500CL	MR-J4-500A-RJ (Note 2)	(Note 1)	
	MR-J2S-700CL	MR-J4-700A-RJ (Note 2)	(Note 1)	

Note 1. These replacement models do not have compatibility in mounting. The mounting plate of the renewal tool will be available in the future to have the compatibility. (For the release date of the renewal tool, contact Mitsubishi Electric System & Service.)
2. The available software version of these replacement models is B3 or later. The software version is B3 from May 2014 production.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
100 V AC built-in program operation function	MR-J2S-10CL1	MR-J4-10A1-RJ (Note 1)	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20CL1	MR-J4-20A1-RJ (Note 1)	○	
	MR-J2S-40CL1	MR-J4-40A1-RJ (Note 1)	○	

Note 1. The available software version of these replacement models is B3 or later. The software version is B3 from May 2014 production.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
200 V AC CC-Link interface	MR-J2S-10CP-S084+MR-J2S-T01	MR-J3-10T	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20CP-S084+MR-J2S-T01	MR-J3-20T	○	
	MR-J2S-40CP-S084+MR-J2S-T01	MR-J3-40T	○	
	MR-J2S-60CP-S084+MR-J2S-T01	MR-J3-60T	○	
	MR-J2S-70CP-S084+MR-J2S-T01	MR-J3-70T	○	
	MR-J2S-100CP-S084+MR-J2S-T01	MR-J3-100T	○	
	MR-J2S-200CP-S084+MR-J2S-T01	MR-J3-200T	(Note 1)	
	MR-J2S-350CP-S084+MR-J2S-T01	MR-J3-350T	(Note 1)	
	MR-J2S-500CP-S084+MR-J2S-T01	MR-J3-500T	○	
	MR-J2S-700CP-S084+MR-J2S-T01	MR-J3-700T	(Note 1)	

Note 1. These replacement models do not have compatibility in mounting.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
100 V AC CC-Link interface	MR-J2S-10CP1-S084+MR-J2S-T01	MR-J3-10T1	○	Refer to "Appendix 2: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in the functions.
	MR-J2S-20CP1-S084+MR-J2S-T01	MR-J3-20T1	○	
	MR-J2S-40CP1-S084+MR-J2S-T01	MR-J3-40T1	○	

2.1.2 Comparison of Servo Amplifier Dimensions

■200 V Class (22 kW or less, A/B types)

The following table shows the comparison of the MR-J2S series and MR-J4 series dimensions. The height and width of the MR-J4 series are the same or smaller than the MR-J2S series. Please note the following when replacing: The depth is larger for the 400 W and 600 W capacities. For the mounting dimensions, the 1 kW or less capacity types are interchangeable. The number of mounting screws will be changed for the 2 kW and 3.5 kW capacities, and the mounting screw pitch will be changed for the 5 kW to 22 kW capacities. The screw sizes will be changed for the 11 kW and 15 kW capacities.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model	Model	Height		Width		Depth		Mounting screw pitch	
MR-J2S series	MR-J4 series	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4
MR-J2S-10(A/B)	MR-J4-10(A/B)	168	168	50	40	135	135	156 (Vertical) (2 places)	156 (Vertical) (2 places)
MR-J2S-20(A/B)	MR-J4-20(A/B)								
MR-J2S-40(A/B)	MR-J4-40(A/B)			70			170 (Note 1)		
MR-J2S-60(A/B)	MR-J4-60(A/B)								
MR-J2S-70(A/B)	MR-J4-70(A/B)				60	190	185	156 (Vertical)/ 42 (Horizontal) (3 places)	156 (Vertical)/ 42 (Horizontal) (3 places)
MR-J2S-100(A/B)	MR-J4-100(A/B)								
MR-J2S-200(A/B)	MR-J4-200(A/B)			90	90	195	195	156 (Vertical)/ 78 (Horizontal) (4 places)	156 (Vertical)/ 78 (Horizontal) (3 places) (Note 2)
MR-J2S-350(A/B)	MR-J4-350(A/B)								
MR-J2S-500(A/B)	MR-J4-500(A/B)	250	250	130	105	200	200	235 (Vertical)/ 118 (Horizontal) (4 places)	235 (Vertical)/ 93 (Horizontal) (4 places)
MR-J2S-700(A/B)	MR-J4-700(A/B)	350	300	180	172			335 (Vertical)/ 160 (Horizontal) (4 places)	285 (Vertical)/ 160 (Horizontal) (4 places)
MR-J2S-11K(A/B)	MR-J4-11K(A/B)	400	400	260	220	260	260	376 (Vertical)/ 236 (Horizontal) (4 places)	380 (Vertical)/ 196 (Horizontal) (4 places)
MR-J2S-15K(A/B)	MR-J4-15K(A/B)								
MR-J2S-22K(A/B)	MR-J4-22K(A/B)			350	260			376 (Vertical)/ 326 (Horizontal) (4 places)	376 (Vertical)/ 236 (Horizontal) (4 places)

Note 1. The depth will increase.
2. The number and position of mounting screws will be changed.
3. Dimensions with differences are shown with shading.

■200 V Class (30 kW or more A/B)

The following table shows the comparison of the MR-J2S series and MR-J4 series dimensions. The height and width of the MR-J4 series are the same or smaller than the MR-J2S series. The depth will increase when a heat sink is placed in a cabinet. For the mounting dimensions, the mounting screw pitch and screw size will be changed.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model	Model	Height		Width		Depth		Mounting screw pitch	
MR-J2S series	MR-J4 series	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4
MR-J2S-30K(A/B)	MR-J4-DU30K(A/B)	500	380	450	300	300	200 (328) (Note 1)	480 (Vertical)/ 360 (Horizontal) (4 places)	360 (Vertical)/ 260 (Horizontal) (4 places)
MR-J2S-37K(A/B)	MR-J4-DU37K(A/B)								
MR-HP30KA	MR-CR55K			200	300			480 (Vertical)/ 110 (Horizontal) (4 places)	

Note 1. The values in the parentheses are applied to when a heat sink is placed in a cabinet. The depth will increase.
2. Dimensions with differences are shown with shading.

■400 V Class (22 kW or less A/B)

The following table shows the comparison of the MR-J2S series and MR-J4 series dimensions. The height and width of the MR-J4 series are the same or smaller than the MR-J2S series. For the 5kW capacity, these models have compatibility in mounting. The number of mounting screws will be changed for the 600 W to 2 kW capacities, and the mounting screw pitch will be changed for the 3.5 kW and 7 kW to 22 kW capacities. The screw sizes will be changed for the 11 kW and 15 kW capacities.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model MR-J2S series	Model MR-J4 series	Height		Width		Depth		Mounting screw pitch	
		MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4
MR-J2S-60(A4/B4)	MR-J4-60(A4/B4)	168	168	90	60	195	195	156 (Vertical)/ 78 (Horizontal) (4 places)	156 (Vertical)/ 42 (Horizontal) (3 places)(Note 1)
MR-J2S-100(A4/B4)	MR-J4-100(A4/B4)								
MR-J2S-200(A4/B4)	MR-J4-200(A4/B4)				90				156 (Vertical)/ 78 (Horizontal) (3 places) (Note 1)
MR-J2S-350(A4/B4)	MR-J4-350(A4/B4)	250	250	130	105	200	200	235 (Vertical)/ 118 (Horizontal) (4 places)	235 (Vertical)/ 93 (Horizontal) (4 places)
MR-J2S-500(A4/B4)	MR-J4-500(A4/B4)				130				235 (Vertical)/ 118 (Horizontal) (4 places)
MR-J2S-700(A4/B4)	MR-J4-700(A4/B4)	350	300	180	172			335 (Vertical)/ 160 (Horizontal) (4 places)	285 (Vertical)/ 160 (Horizontal) (4 places)
MR-J2S-11K(A4/4B)	MR-J4-11K(A4/B4)	400	400	260	220	260	260	376 (Vertical)/ 236 (Horizontal) (4 places)	380 (Vertical)/ 196 (Horizontal) (4 places)
MR-J2S-15K(A4/B4)	MR-J4-15K(A4/B4)								
MR-J2S-22K(A4/B4)	MR-J4-22K(A4/B4)			350	260			376 (Vertical)/ 326 (Horizontal) (4 places)	376 (Vertical)/ 236 (Horizontal) (4 places)

Note 1. The number and position of mounting screws will be changed.
2. Dimensions with differences are shown with shading.

■400 V Class (30 kW or more A/B)

The following table shows the comparison of the MR-J2S series and MR-J4 series dimensions. The height and width of the MR-J4 series are the same or smaller than the MR-J2S series. The depth will increase when a heat sink is placed in a cabinet. For the mounting dimensions, the mounting screw pitch and screw sizes will be changed.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model MR-J2S series	Model MR-J4 series	Height		Width		Depth		Mounting screw pitch	
		MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4
MR-J2S-30K(A/B)4	MR-J4-DU30K(A/B)4	500	380	380	240	300	200 (328) (Note 1)	480 (Vertical)/ 290 (Horizontal) (4 places)	360 (Vertical)/ 120 (Horizontal) (4 places)
MR-J2S-37K(A/B)4	MR-J4-DU37K(A/B)4			450	300			480 (Vertical)/ 360 (Horizontal) (4 places)	360 (Vertical)/ 260 (Horizontal) (4 places)
MR-J2S-45K(A/B)4	MR-J4-DU45K(A/B)4								
MR-J2S-55K(A/B)4	MR-J4-DU55K(A/B)4								
MR-HP55KA4	MR-CR55K4			200				480 (Vertical)/ 110 (Horizontal) (4 places)	

Note 1. The values in the parentheses are applied to when a heat sink is placed in a cabinet. The depth will increase.
2. Dimensions with differences are shown with shading.

■100 V Class (0.4 kW or less A/B)

The following table shows the comparison of the MR-J2S series and MR-J4 series dimensions. The height and width of the MR-J4 series are the same or smaller than the MR-J2S series. The depth is larger for the 400 W capacity. The mounting dimensions are interchangeable.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model	Model	Height		Width		Depth		Mounting screw pitch	
MR-J2S series	MR-J4 series	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4
MR-J2S-10(A/B)1	MR-J4-10(A/B)1	168	168	50	40	135	135	156 (Vertical) (2 places)	156 (Vertical) (2 places)
MR-J2S-20(A/B)1	MR-J4-20(A/B)1								
MR-J2S-40(A/B)1	MR-J4-40(A/B)1			70			170 (Note 1)		

Note 1. The depth will increase.
2. Dimensions with differences are shown with shading.

■200 V Class (7 kW or less CP/CL)

The following table shows the comparison of the MR-J2S series and MR-J4 series dimensions. The height and width of the MR-J4 series are the same or smaller than the MR-J2S series. The depth is larger for the 400 W and 600 W capacities. For the mounting dimensions, the 1 kW or less capacity types are interchangeable. The number of mounting screws will be changed for the 2 kW and 3.5 kW capacities, and the mounting screw pitch will be changed for the 5 kW to 7 kW capacities.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model	Model	Height		Width		Depth		Mounting screw pitch	
MR-J2S series	MR-J4 series	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4
MR-J2S-10(CP/CL)	MR-J4-10A-RJ	168	168	50	40	135	135	156 (Vertical) (2 places)	156 (Vertical) (2 places)
MR-J2S-20(CP/CL)	MR-J4-20A-RJ								
MR-J2S-40(CP/CL)	MR-J4-40A-RJ			70			170 (Note 1)		
MR-J2S-60(CP/CL)	MR-J4-60A-RJ								
MR-J2S-70(CP/CL)	MR-J4-70A-RJ				60	190	185	156 (Vertical)/ 42 (Horizontal) (3 places)	156 (Vertical)/ 42 (Horizontal) (3 places)
MR-J2S-100(CP/CL)	MR-J4-100A-RJ								
MR-J2S-200(CP/CL)	MR-J4-200A-RJ			90	90	195	195	156 (Vertical)/ 78 (Horizontal) (4 places)	156 (Vertical)/ 78 (Horizontal) (3 places) (Note 2)
MR-J2S-350(CP/CL)	MR-J4-350A-RJ								
MR-J2S-500(CP/CL)	MR-J4-500A-RJ	250	250	130	105	200	200	235 (Vertical)/ 118 (Horizontal) (4 places)	235 (Vertical)/ 93 (Horizontal) (4 places)
MR-J2S-700(CP/CL)	MR-J4-700A-RJ	350	300	180	172			335 (Vertical)/ 160 (Horizontal) (4 places)	285 (Vertical)/ 160 (Horizontal) (4 places)

Note 1. The depth will increase.
2. The number and position of mounting screws will be changed.
3. Dimensions with differences are shown with shading.

■100 V Class (0.4 kW or less CP/CL)

The following table shows the comparison of the MR-J2S series and MR-J4 series dimensions. The height and width of the MR-J4 series are the same as the MR-J2S series. The depth is larger for the 400 W capacity. The mounting dimensions are interchangeable.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model	Model	Height		Width		Depth		Mounting screw pitch	
MR-J2S series	MR-J4 series	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4	MR-J2S	MR-J4
MR-J2S-10(CP/CL)1	MR-J4-10A1-RJ	168	168	50	40	135	135	156 (Vertical) (2 places)	156 (Vertical) (2 places)
MR-J2S-20(CP/CL)1	MR-J4-20A1-RJ								
MR-J2S-40(CP/CL)1	MR-J4-40A1-RJ			70			170 (Note 1)		

Note 1. The depth will increase.
2. Dimensions with differences are shown with shading.

■200 V Class (7 kW or less CP-S084)

The following table shows the comparison of the MR-J2S series and MR-J3 series dimensions. The height and width of the MR-J3 series are the same or smaller than the MR-J2S series. The depth is larger for the 400 W and 600 W capacities. For the mounting dimensions, the 1 kW or less capacity types are interchangeable. The number of mounting screws will be changed for the 2 kW and 3.5 kW capacities, and the mounting screw pitch will be changed for the 5 kW to 7 kW capacities.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model	Model	Height		Width		Depth		Mounting screw pitch	
MR-J2S series	MR-J3 series	MR-J2S	MR-J3	MR-J2S	MR-J3	MR-J2S	MR-J3	MR-J2S	MR-J3
MR-J2S-10CP-S084 +MR-J2S-T01	MR-J3-10T	168	168	75	40	135	135	<Servo amplifier> 156 (Vertical) (2 places) <Interface unit> 156 (Vertical) (2 places)	156 (Vertical) (2 places)
MR-J2S-20CP-S084 +MR-J2S-T01	MR-J3-20T								
MR-J2S-40CP-S084 +MR-J2S-T01	MR-J3-40T			95			170 (Note 1)		
MR-J2S-60CP-S084 +MR-J2S-T01	MR-J3-60T								
MR-J2S-70CP-S084 +MR-J2S-T01	MR-J3-70T				60	190	185	<Servo amplifier> 156 (Vertical)/ 42 (Horizontal) (3 places) <Interface unit> 156 (Vertical) (2 places)	156 (Vertical)/ 42 (Horizontal) (3 places)
MR-J2S-100CP-S084 +MR-J2S-T01	MR-J3-100T								
MR-J2S-200CP-S084 +MR-J2S-T01	MR-J3-200T			115	90	195	195	<Servo amplifier> 156 (Vertical)/ 78 (Horizontal) (4 places) <Interface unit> 156 (Vertical) (2 places)	156 (Vertical)/ 78 (Horizontal) (3 places) (Note 2)
MR-J2S-350CP-S084 +MR-J2S-T01	MR-J3-350T								
MR-J2S-500CP-S084 +MR-J2S-T01	MR-J3-500T	250	250	155	130	200	200	<Servo amplifier> 235 (Vertical)/ 118 (Horizontal) (4 places) <Interface unit> 156 (Vertical) (2 places)	235 (Vertical)/ 118 (Horizontal) (4 places)
MR-J2S-700CP-S084 +MR-J2S-T01	MR-J3-700T	350	300	205	172			<Servo amplifier> 335 (Vertical)/ 160 (Horizontal) (4 places) <Interface unit> 156 (Vertical) (2 places)	285 (Vertical)/ 160 (Horizontal) (4 places)

Note 1. The depth will increase.
2. The number and position of mounting screws will be changed.
3. Dimensions with differences are shown with shading.

■100 V Class (0.4 kW or less CP-S084)

The following table shows the comparison of the MR-J2S series and MR-J3 series dimensions. The height and width of the MR-J3 series are the same or smaller than the MR-J2S series. The depth is larger for the 400 W capacity. The mounting dimensions are interchangeable.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model	Model	Height		Width		Depth		Mounting screw pitch	
MR-J2S series	MR-J3 series	MR-J2S	MR-J3	MR-J2S	MR-J3	MR-J2S	MR-J3	MR-J2S	MR-J3
MR-J2S-10CP1-S084 +MR-J2S-T01	MR-J3-10T1	168	168	75	40	135	135	<Servo amplifier> 156 (Vertical) (2 places) <Interface unit> 156 (Vertical) (2 places)	156 (Vertical) (2 places)
MR-J2S-20CP1-S084 +MR-J2S-T01	MR-J3-20T1								
MR-J2S-40CP1-S084 +MR-J2S-T01	MR-J3-40T1			95			170 (Note 1)		

Note 1. The depth will increase.
2. Dimensions with differences are shown with shading.

2.2 Servo Motors

2.2.1 Servo Motor Replacement Models and Compatibility

"Compatibility" means mounting compatibility.
Refer to the catalogs, Instruction Manuals, and "Transition from MELSERVO-J2-Super/J2M Series to J4 Series Handbook" for the compatibility of servo motor dimensions, gear reducer specifications, moment of inertia ratios, connector specifications, and torque characteristics.

■MR-J2S-_A/B 100 V, 200 V, 400 V compatible servo motor replacement models

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, low inertia HC-KFS series Standard/With brake (B): With brake	HC-KFS053(B)	HG-KR053(B)	○	・The torque characteristic of the with the ◆ symbol does not support the high-speed rotation range. Refer to "Transition from MELSERVO-J2-Super/J2M Series to J4 Series Handbook" for the details. ・For replacement from the ◇ models, the capacity of the compatible servo amplifier is different. HG-KR43 is compatible with the MR-J4-40_ servo amplifier.
	HC-KFS13(B)	HG-KR13(B)		
	HC-KFS23(B)	HG-KR23(B)		
	HC-KFS43(B)	HG-KR43(B)		
	HC-KFS73(B)	HG-KR73(B)		
	HC-KFS46 ◇	HG-KR43		
	HC-KFS410 ◇	HG-KR43 ◆		
Small capacity, low inertia HC-KFS series with general gear reducers (G1) (B): With brake	HC-KFS053(B)G1 1/5	HG-KR053(B)G1 1/5	○	・Actual gear reduction ratios of the reducers with the ◆ symbol differ; therefore setting the electronic gear is required. Refer to "Appendix 2: 2.2.5 Comparison of Actual Reduction Ratios for Geared Servo Motors" for the details.
	HC-KFS053(B)G1 1/12	HG-KR053(B)G1 1/12		
	HC-KFS053(B)G1 1/20	HG-KR053(B)G1 1/20		
	HC-KFS13(B)G1 1/5	HG-KR13(B)G1 1/5		
	HC-KFS13(B)G1 1/12	HG-KR13(B)G1 1/12		
	HC-KFS13(B)G1 1/20	HG-KR13(B)G1 1/20		
	HC-KFS23(B)G1 1/5	HG-KR23(B)G1 1/5		
	HC-KFS23(B)G1 1/12	HG-KR23(B)G1 1/12 ◆		
	HC-KFS23(B)G1 1/20	HG-KR23(B)G1 1/20 ◆		
	HC-KFS43(B)G1 1/5	HG-KR43(B)G1 1/5		
	HC-KFS43(B)G1 1/12	HG-KR43(B)G1 1/12 ◆		
	HC-KFS43(B)G1 1/20	HG-KR43(B)G1 1/20 ◆		
	HC-KFS73(B)G1 1/5	HG-KR73(B)G1 1/5		
	HC-KFS73(B)G1 1/12	HG-KR73(B)G1 1/12 ◆		
	HC-KFS73(B)G1 1/20	HG-KR73(B)G1 1/20		

Note 1. The power supply and the encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, low inertia HC-KFS series with high precision reducer (G2) (B): With brake	HC-KFS053(B)G2 1/5	HG-KR053(B)G7 1/5	(Note 1)	
	HC-KFS053(B)G2 1/9	HG-KR053(B)G7 1/9		
	HC-KFS053(B)G2 1/20	HG-KR053(B)G7 1/21		
	HC-KFS053(B)G2 1/29	HG-KR053(B)G7 1/33		
	HC-KFS13(B)G2 1/5	HG-KR13(B)G7 1/5		
	HC-KFS13(B)G2 1/9	HG-KR13(B)G7 1/11		
	HC-KFS13(B)G2 1/20	HG-KR13(B)G7 1/21		
	HC-KFS13(B)G2 1/29	HG-KR13(B)G7 1/33		
	HC-KFS23(B)G2 1/5	HG-KR23(B)G7 1/5		
	HC-KFS23(B)G2 1/9	HG-KR23(B)G7 1/11		
	HC-KFS23(B)G2 1/20	HG-KR23(B)G7 1/21		
	HC-KFS23(B)G2 1/29	HG-KR23(B)G7 1/33		
	HC-KFS43(B)G2 1/5	HG-KR43(B)G7 1/5		
	HC-KFS43(B)G2 1/9	HG-KR43(B)G7 1/11		
	HC-KFS43(B)G2 1/20	HG-KR43(B)G7 1/21		
	HC-KFS43(B)G2 1/29	HG-KR43(B)G7 1/33		
	HC-KFS73(B)G2 1/5	HG-KR73(B)G7 1/5		
	HC-KFS73(B)G2 1/9	HG-KR73(B)G7 1/11		
	HC-KFS73(B)G2 1/20	HG-KR73(B)G7 1/21		
	HC-KFS73(B)G2 1/29	HG-KR73(B)G7 1/33		
Small capacity, low inertia HC-KFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-KFS053(B)G5 1/5	HG-KR053(B)G5 1/5	○	
	HC-KFS053(B)G5 1/11	HG-KR053(B)G5 1/11		
	HC-KFS053(B)G5 1/21	HG-KR053(B)G5 1/21		
	HC-KFS053(B)G5 1/33	HG-KR053(B)G5 1/33		
	HC-KFS053(B)G5 1/45	HG-KR053(B)G5 1/45		
	HC-KFS13(B)G5 1/5	HG-KR13(B)G5 1/5		
	HC-KFS13(B)G5 1/11	HG-KR13(B)G5 1/11		
	HC-KFS13(B)G5 1/21	HG-KR13(B)G5 1/21		
	HC-KFS13(B)G5 1/33	HG-KR13(B)G5 1/33		
	HC-KFS13(B)G5 1/45	HG-KR13(B)G5 1/45		
	HC-KFS23(B)G5 1/5	HG-KR23(B)G5 1/5		
	HC-KFS23(B)G5 1/11	HG-KR23(B)G5 1/11		
	HC-KFS23(B)G5 1/21	HG-KR23(B)G5 1/21		
	HC-KFS23(B)G5 1/33	HG-KR23(B)G5 1/33		
	HC-KFS23(B)G5 1/45	HG-KR23(B)G5 1/45		
	HC-KFS43(B)G5 1/5	HG-KR43(B)G5 1/5		
	HC-KFS43(B)G5 1/11	HG-KR43(B)G5 1/11		
	HC-KFS43(B)G5 1/21	HG-KR43(B)G5 1/21		
	HC-KFS43(B)G5 1/33	HG-KR43(B)G5 1/33		
	HC-KFS43(B)G5 1/45	HG-KR43(B)G5 1/45		
	HC-KFS73(B)G5 1/5	HG-KR73(B)G5 1/5		
	HC-KFS73(B)G5 1/11	HG-KR73(B)G5 1/11		
	HC-KFS73(B)G5 1/21	HG-KR73(B)G5 1/21		
	HC-KFS73(B)G5 1/33	HG-KR73(B)G5 1/33		
	HC-KFS73(B)G5 1/45	HG-KR73(B)G5 1/45		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, low inertia HC-KFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-KFS053(B)G7 1/5	HG-KR053(B)G7 1/5	○	
	HC-KFS053(B)G7 1/11	HG-KR053(B)G7 1/11		
	HC-KFS053(B)G7 1/21	HG-KR053(B)G7 1/21		
	HC-KFS053(B)G7 1/33	HG-KR053(B)G7 1/33		
	HC-KFS053(B)G7 1/45	HG-KR053(B)G7 1/45		
	HC-KFS13(B)G7 1/5	HG-KR13(B)G7 1/5		
	HC-KFS13(B)G7 1/11	HG-KR13(B)G7 1/11		
	HC-KFS13(B)G7 1/21	HG-KR13(B)G7 1/21		
	HC-KFS13(B)G7 1/33	HG-KR13(B)G7 1/33		
	HC-KFS13(B)G7 1/45	HG-KR13(B)G7 1/45		
	HC-KFS23(B)G7 1/5	HG-KR23(B)G7 1/5		
	HC-KFS23(B)G7 1/11	HG-KR23(B)G7 1/11		
	HC-KFS23(B)G7 1/21	HG-KR23(B)G7 1/21		
	HC-KFS23(B)G7 1/33	HG-KR23(B)G7 1/33		
	HC-KFS23(B)G7 1/45	HG-KR23(B)G7 1/45		
	HC-KFS43(B)G7 1/5	HG-KR43(B)G7 1/5		
	HC-KFS43(B)G7 1/11	HG-KR43(B)G7 1/11		
	HC-KFS43(B)G7 1/21	HG-KR43(B)G7 1/21		
	HC-KFS43(B)G7 1/33	HG-KR43(B)G7 1/33		
	HC-KFS43(B)G7 1/45	HG-KR43(B)G7 1/45		
	HC-KFS73(B)G7 1/5	HG-KR73(B)G7 1/5		
	HC-KFS73(B)G7 1/11	HG-KR73(B)G7 1/11		
	HC-KFS73(B)G7 1/21	HG-KR73(B)G7 1/21		
	HC-KFS73(B)G7 1/33	HG-KR73(B)G7 1/33		
	HC-KFS73(B)G7 1/45	HG-KR73(B)G7 1/45		
Small capacity, ultra-low inertia HC-MFS series Standard/With brake (B): With brake	HC-MFS053(B)	HG-MR053(B)	○	
	HC-MFS13(B)	HG-MR13(B)		
	HC-MFS23(B)	HG-MR23(B)		
	HC-MFS43(B)	HG-MR43(B)		
	HC-MFS73(B)	HG-MR73(B)		
Small capacity, ultra-low inertia HC-MFS series with general gear reducers (G1) (B): With brake	HC-MFS053(B)G1 1/5	HG-KR053(B)G1 1/5	○	・The HG-MR series does not support the geared model. The geared model is supported with the HG-KR series. ・Actual gear reduction ratios of the reducers with the ◆ symbol differ; therefore setting the electronic gear is required. Refer to "Appendix 2: 2.2.5 Comparison of Actual Reduction Ratios for Geared Servo Motors" for the details.
	HC-MFS053(B)G1 1/12	HG-KR053(B)G1 1/12		
	HC-MFS053(B)G1 1/20	HG-KR053(B)G1 1/20		
	HC-MFS13(B)G1 1/5	HG-KR13(B)G1 1/5		
	HC-MFS13(B)G1 1/12	HG-KR13(B)G1 1/12		
	HC-MFS13(B)G1 1/20	HG-KR13(B)G1 1/20		
	HC-MFS23(B)G1 1/5	HG-KR23(B)G1 1/5		
	HC-MFS23(B)G1 1/12	HG-KR23(B)G1 1/12 ◆		
	HC-MFS23(B)G1 1/20	HG-KR23(B)G1 1/20 ◆		
	HC-MFS43(B)G1 1/5	HG-KR43(B)G1 1/5		
	HC-MFS43(B)G1 1/12	HG-KR43(B)G1 1/12 ◆		
	HC-MFS43(B)G1 1/20	HG-KR43(B)G1 1/20 ◆		
	HC-MFS73(B)G1 1/5	HG-KR73(B)G1 1/5		
	HC-MFS73(B)G1 1/12	HG-KR73(B)G1 1/12 ◆		
	HC-MFS73(B)G1 1/20	HG-KR73(B)G1 1/20		

Note 1. The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, ultra-low inertia HC-MFS series with high precision reducer (G2) (B): With brake	HC-MFS053(B)G2 1/5	HG-KR053(B)G7 1/5	(Note 1)	・The HG-MR series does not support the geared model. The geared model is supported with the HG-KR series.
	HC-MFS053(B)G2 1/9	HG-KR053(B)G7 1/9		
	HC-MFS053(B)G2 1/20	HG-KR053(B)G7 1/21		
	HC-MFS053(B)G2 1/29	HG-KR053(B)G7 1/33		
	HC-MFS13(B)G2 1/5	HG-KR13(B)G7 1/5		
	HC-MFS13(B)G2 1/9	HG-KR13(B)G7 1/11		
	HC-MFS13(B)G2 1/20	HG-KR13(B)G7 1/21		
	HC-MFS13(B)G2 1/29	HG-KR13(B)G7 1/33		
	HC-MFS23(B)G2 1/5	HG-KR23(B)G7 1/5		
	HC-MFS23(B)G2 1/9	HG-KR23(B)G7 1/11		
	HC-MFS23(B)G2 1/20	HG-KR23(B)G7 1/21		
	HC-MFS23(B)G2 1/29	HG-KR23(B)G7 1/33		
	HC-MFS43(B)G2 1/5	HG-KR43(B)G7 1/5		
	HC-MFS43(B)G2 1/9	HG-KR43(B)G7 1/11		
	HC-MFS43(B)G2 1/20	HG-KR43(B)G7 1/21		
	HC-MFS43(B)G2 1/29	HG-KR43(B)G7 1/33		
	HC-MFS73(B)G2 1/5	HG-KR73(B)G7 1/5		
	HC-MFS73(B)G2 1/9	HG-KR73(B)G7 1/11		
	HC-MFS73(B)G2 1/20	HG-KR73(B)G7 1/21		
	HC-MFS73(B)G2 1/29	HG-KR73(B)G7 1/33		
Small capacity, ultra-low inertia HC-MFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-MFS053(B)G5 1/5	HG-KR053(B)G5 1/5	○	・The HG-MR series does not support the geared model. The geared model is supported with the HG-KR series.
	HC-MFS053(B)G5 1/11	HG-KR053(B)G5 1/11		
	HC-MFS053(B)G5 1/21	HG-KR053(B)G5 1/21		
	HC-MFS053(B)G5 1/33	HG-KR053(B)G5 1/33		
	HC-MFS053(B)G5 1/45	HG-KR053(B)G5 1/45		
	HC-MFS13(B)G5 1/5	HG-KR13(B)G5 1/5		
	HC-MFS13(B)G5 1/11	HG-KR13(B)G5 1/11		
	HC-MFS13(B)G5 1/21	HG-KR13(B)G5 1/21		
	HC-MFS13(B)G5 1/33	HG-KR13(B)G5 1/33		
	HC-MFS13(B)G5 1/45	HG-KR13(B)G5 1/45		
	HC-MFS23(B)G5 1/5	HG-KR23(B)G5 1/5		
	HC-MFS23(B)G5 1/11	HG-KR23(B)G5 1/11		
	HC-MFS23(B)G5 1/21	HG-KR23(B)G5 1/21		
	HC-MFS23(B)G5 1/33	HG-KR23(B)G5 1/33		
	HC-MFS23(B)G5 1/45	HG-KR23(B)G5 1/45		
	HC-MFS43(B)G5 1/5	HG-KR43(B)G5 1/5		
	HC-MFS43(B)G5 1/11	HG-KR43(B)G5 1/11		
	HC-MFS43(B)G5 1/21	HG-KR43(B)G5 1/21		
	HC-MFS43(B)G5 1/33	HG-KR43(B)G5 1/33		
	HC-MFS43(B)G5 1/45	HG-KR43(B)G5 1/45		
	HC-MFS73(B)G5 1/5	HG-KR73(B)G5 1/5		
	HC-MFS73(B)G5 1/11	HG-KR73(B)G5 1/11		
	HC-MFS73(B)G5 1/21	HG-KR73(B)G5 1/21		
	HC-MFS73(B)G5 1/33	HG-KR73(B)G5 1/33		
	HC-MFS73(B)G5 1/45	HG-KR73(B)G5 1/45		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, ultra-low inertia HC-MFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-MFS053(B)G7 1/5	HG-KR053(B)G7 1/5	○	・The HG-MR series does not support the geared model. The geared model is supported with the HG-KR series.
	HC-MFS053(B)G7 1/11	HG-KR053(B)G7 1/11		
	HC-MFS053(B)G7 1/21	HG-KR053(B)G7 1/21		
	HC-MFS053(B)G7 1/33	HG-KR053(B)G7 1/33		
	HC-MFS053(B)G7 1/45	HG-KR053(B)G7 1/45		
	HC-MFS13(B)G7 1/5	HG-KR13(B)G7 1/5		
	HC-MFS13(B)G7 1/11	HG-KR13(B)G7 1/11		
	HC-MFS13(B)G7 1/21	HG-KR13(B)G7 1/21		
	HC-MFS13(B)G7 1/33	HG-KR13(B)G7 1/33		
	HC-MFS13(B)G7 1/45	HG-KR13(B)G7 1/45		
	HC-MFS23(B)G7 1/5	HG-KR23(B)G7 1/5		
	HC-MFS23(B)G7 1/11	HG-KR23(B)G7 1/11		
	HC-MFS23(B)G7 1/21	HG-KR23(B)G7 1/21		
	HC-MFS23(B)G7 1/33	HG-KR23(B)G7 1/33		
	HC-MFS23(B)G7 1/45	HG-KR23(B)G7 1/45		
	HC-MFS43(B)G7 1/5	HG-KR43(B)G7 1/5		
	HC-MFS43(B)G7 1/11	HG-KR43(B)G7 1/11		
	HC-MFS43(B)G7 1/21	HG-KR43(B)G7 1/21		
	HC-MFS43(B)G7 1/33	HG-KR43(B)G7 1/33		
	HC-MFS43(B)G7 1/45	HG-KR43(B)G7 1/45		
	HC-MFS73(B)G7 1/5	HG-KR73(B)G7 1/5		
	HC-MFS73(B)G7 1/11	HG-KR73(B)G7 1/11		
	HC-MFS73(B)G7 1/21	HG-KR73(B)G7 1/21		
	HC-MFS73(B)G7 1/33	HG-KR73(B)G7 1/33		
	HC-MFS73(B)G7 1/45	HG-KR73(B)G7 1/45		
Medium capacity, medium inertia HC-SFS series Standard/With brake (4): 400 V specifications (B): With brake	HC-SFS81(B)	HG-SR81(B)	○	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side. ・The HG-SR servo motor does not have an oil seal. Use HG-SR_J when an oil seal is required.
	HC-SFS121(B)	HG-SR121(B)		
	HC-SFS201(B)	HG-SR201(B)		
	HC-SFS301(B)	HG-SR301(B)		
	HC-SFS52(4)(B)	HG-SR52(4)(B)		
	HC-SFS102(4)(B)	HG-SR102(4)(B)		
	HC-SFS152(4)(B)	HG-SR152(4)(B)		
	HC-SFS202(4)(B)	HG-SR202(4)(B)		
	HC-SFS352(4)(B)	HG-SR352(4)(B)		
	HC-SFS502(4)(B)	HG-SR502(4)(B)		
	HC-SFS702(4)(B)	HG-SR702(4)(B)		
	HC-SFS53(B)	HG-SR52(B)		
	HC-SFS103(B)	HG-SR102(B)		
	HC-SFS153(B)	HG-SR152(B)		
	HC-SFS203(B)	HG-SR202(B)		
	HC-SFS353(B)	HG-SR352(B)		

Note 1. The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Medium capacity, medium inertia HC-SFS series with general gear reducer (4): 400 V specifications (B): With brake G1: Flange-mounting G1H: Foot-mounting	HC-SFS52(4)(B)G1(H) 1/6	HG-SR52(4)(B)G1(H) 1/6	○	▪ The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS52(4)(B)G1(H) 1/11	HG-SR52(4)(B)G1(H) 1/11		
	HC-SFS52(4)(B)G1(H) 1/17	HG-SR52(4)(B)G1(H) 1/17		
	HC-SFS52(4)(B)G1(H) 1/29	HG-SR52(4)(B)G1(H) 1/29		
	HC-SFS52(4)(B)G1(H) 1/35	HG-SR52(4)(B)G1(H) 1/35		
	HC-SFS52(4)(B)G1(H) 1/43	HG-SR52(4)(B)G1(H) 1/43		
	HC-SFS52(4)(B)G1(H) 1/59	HG-SR52(4)(B)G1(H) 1/59		
	HC-SFS102(4)(B)G1(H) 1/6	HG-SR102(4)(B)G1(H) 1/6		
	HC-SFS102(4)(B)G1(H) 1/11	HG-SR102(4)(B)G1(H) 1/11		
	HC-SFS102(4)(B)G1(H) 1/17	HG-SR102(4)(B)G1(H) 1/17		
	HC-SFS102(4)(B)G1(H) 1/29	HG-SR102(4)(B)G1(H) 1/29		
	HC-SFS102(4)(B)G1(H) 1/35	HG-SR102(4)(B)G1(H) 1/35		
	HC-SFS102(4)(B)G1(H) 1/43	HG-SR102(4)(B)G1(H) 1/43		
	HC-SFS102(4)(B)G1(H) 1/59	HG-SR102(4)(B)G1(H) 1/59		
	HC-SFS152(4)(B)G1(H) 1/6	HG-SR152(4)(B)G1(H) 1/6		
	HC-SFS152(4)(B)G1(H) 1/11	HG-SR152(4)(B)G1(H) 1/11		
	HC-SFS152(4)(B)G1(H) 1/17	HG-SR152(4)(B)G1(H) 1/17		
	HC-SFS152(4)(B)G1(H) 1/29	HG-SR152(4)(B)G1(H) 1/29		
	HC-SFS152(4)(B)G1(H) 1/35	HG-SR152(4)(B)G1(H) 1/35		
	HC-SFS152(4)(B)G1(H) 1/43	HG-SR152(4)(B)G1(H) 1/43		
	HC-SFS152(4)(B)G1(H) 1/59	HG-SR152(4)(B)G1(H) 1/59		
	HC-SFS202(4)(B)G1(H) 1/6	HG-SR202(4)(B)G1(H) 1/6		
	HC-SFS202(4)(B)G1(H) 1/11	HG-SR202(4)(B)G1(H) 1/11		
	HC-SFS202(4)(B)G1(H) 1/17	HG-SR202(4)(B)G1(H) 1/17		
	HC-SFS202(4)(B)G1(H) 1/29	HG-SR202(4)(B)G1(H) 1/29		
	HC-SFS202(4)(B)G1(H) 1/35	HG-SR202(4)(B)G1(H) 1/35		
	HC-SFS202(4)(B)G1(H) 1/43	HG-SR202(4)(B)G1(H) 1/43		
	HC-SFS202(4)(B)G1(H) 1/59	HG-SR202(4)(B)G1(H) 1/59		
	HC-SFS352(4)(B)G1(H) 1/6	HG-SR352(4)(B)G1(H) 1/6		
	HC-SFS352(4)(B)G1(H) 1/11	HG-SR352(4)(B)G1(H) 1/11		
	HC-SFS352(4)(B)G1(H) 1/17	HG-SR352(4)(B)G1(H) 1/17		
	HC-SFS352(4)(B)G1(H) 1/29	HG-SR352(4)(B)G1(H) 1/29		
	HC-SFS352(4)(B)G1(H) 1/35	HG-SR352(4)(B)G1(H) 1/35		
	HC-SFS352(4)(B)G1(H) 1/43	HG-SR352(4)(B)G1(H) 1/43		
	HC-SFS352(4)(B)G1(H) 1/59	HG-SR352(4)(B)G1(H) 1/59		
	HC-SFS502(4)(B)G1(H) 1/11	HG-SR502(4)(B)G1(H) 1/11		
	HC-SFS502(4)(B)G1(H) 1/17	HG-SR502(4)(B)G1(H) 1/17		
	HC-SFS502(4)(B)G1(H) 1/29	HG-SR502(4)(B)G1(H) 1/29		
	HC-SFS502(4)(B)G1(H) 1/35	HG-SR502(4)(B)G1(H) 1/35		
	HC-SFS502(4)(B)G1(H) 1/43	HG-SR502(4)(B)G1(H) 1/43		
	HC-SFS702(4)(B)G1(H) 1/11	HG-SR702(4)(B)G1(H) 1/11		
	HC-SFS702(4)(B)G1(H) 1/17	HG-SR702(4)(B)G1(H) 1/17		
	HC-SFS702(4)(B)G1(H) 1/29	HG-SR702(4)(B)G1(H) 1/29		
	HC-SFS702(4)(B)G1(H) 1/35	HG-SR702(4)(B)G1(H) 1/35		
	HC-SFS702(4)(B)G1(H) 1/43	HG-SR702(4)(B)G1(H) 1/43		

Note 1. The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Medium capacity, medium inertia HC-SFS series with high precision reducer (G2) (4): 400 V specifications (B): With brake	HC-SFS52(4)(B)G2 1/5	HG-SR52(4)(B)G7 1/5	(Note 1)	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS52(4)(B)G2 1/9	HG-SR52(4)(B)G7 1/11		
	HC-SFS52(4)(B)G2 1/20	HG-SR52(4)(B)G7 1/21		
	HC-SFS52(4)(B)G2 1/29	HG-SR52(4)(B)G7 1/33		
	HC-SFS52(4)(B)G2 1/45	HG-SR52(4)(B)G7 1/45		
	HC-SFS102(4)(B)G2 1/5	HG-SR102(4)(B)G7 1/5		
	HC-SFS102(4)(B)G2 1/9	HG-SR102(4)(B)G7 1/11		
	HC-SFS102(4)(B)G2 1/20	HG-SR102(4)(B)G7 1/21		
	HC-SFS102(4)(B)G2 1/29	HG-SR102(4)(B)G7 1/33		
	HC-SFS102(4)(B)G2 1/45	HG-SR102(4)(B)G7 1/45		
	HC-SFS152(4)(B)G2 1/5	HG-SR152(4)(B)G7 1/5		
	HC-SFS152(4)(B)G2 1/9	HG-SR152(4)(B)G7 1/11		
	HC-SFS152(4)(B)G2 1/20	HG-SR152(4)(B)G7 1/21		
	HC-SFS152(4)(B)G2 1/29	HG-SR152(4)(B)G7 1/33		
	HC-SFS152(4)(B)G2 1/45	HG-SR152(4)(B)G7 1/45		
	HC-SFS202(4)(B)G2 1/5	HG-SR202(4)(B)G7 1/5		
	HC-SFS202(4)(B)G2 1/9	HG-SR202(4)(B)G7 1/11		
	HC-SFS202(4)(B)G2 1/20	HG-SR202(4)(B)G7 1/21		
	HC-SFS202(4)(B)G2 1/29	HG-SR202(4)(B)G7 1/33		
	HC-SFS202(4)(B)G2 1/45	HG-SR202(4)(B)G7 1/45		
	HC-SFS352(4)(B)G2 1/5	HG-SR352(4)(B)G7 1/5		
	HC-SFS352(4)(B)G2 1/9	HG-SR352(4)(B)G7 1/11		
	HC-SFS352(4)(B)G2 1/20	HG-SR352(4)(B)G7 1/21		
	HC-SFS502(4)(B)G2 1/5	HG-SR502(4)(B)G7 1/5		
	HC-SFS502(4)(B)G2 1/9	HG-SR502(4)(B)G7 1/11		
	HC-SFS702(4)(B)G2 1/5	HG-SR702(4)(B)G7 1/5		
Medium capacity, medium inertia HC-SFS series Flange output type with high precision gear reducer (G5) (4): 400 V specifications (B): With brake	HC-SFS52(4)(B)G5 1/5	HG-SR52(4)(B)G5 1/5	○	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS52(4)(B)G5 1/11	HG-SR52(4)(B)G5 1/11		
	HC-SFS52(4)(B)G5 1/21	HG-SR52(4)(B)G5 1/21		
	HC-SFS52(4)(B)G5 1/33	HG-SR52(4)(B)G5 1/33		
	HC-SFS52(4)(B)G5 1/45	HG-SR52(4)(B)G5 1/45		
	HC-SFS102(4)(B)G5 1/5	HG-SR102(4)(B)G5 1/5		
	HC-SFS102(4)(B)G5 1/11	HG-SR102(4)(B)G5 1/11		
	HC-SFS102(4)(B)G5 1/21	HG-SR102(4)(B)G5 1/21		
	HC-SFS102(4)(B)G5 1/33	HG-SR102(4)(B)G5 1/33		
	HC-SFS102(4)(B)G5 1/45	HG-SR102(4)(B)G5 1/45		
	HC-SFS152(4)(B)G5 1/5	HG-SR152(4)(B)G5 1/5		
	HC-SFS152(4)(B)G5 1/11	HG-SR152(4)(B)G5 1/11		
	HC-SFS152(4)(B)G5 1/21	HG-SR152(4)(B)G5 1/21		
	HC-SFS152(4)(B)G5 1/33	HG-SR152(4)(B)G5 1/33		
	HC-SFS152(4)(B)G5 1/45	HG-SR152(4)(B)G5 1/45		
	HC-SFS202(4)(B)G5 1/5	HG-SR202(4)(B)G5 1/5		
	HC-SFS202(4)(B)G5 1/11	HG-SR202(4)(B)G5 1/11		
	HC-SFS202(4)(B)G5 1/21	HG-SR202(4)(B)G5 1/21		
	HC-SFS202(4)(B)G5 1/33	HG-SR202(4)(B)G5 1/33		
	HC-SFS202(4)(B)G5 1/45	HG-SR202(4)(B)G5 1/45		
	HC-SFS352(4)(B)G5 1/5	HG-SR352(4)(B)G5 1/5		
	HC-SFS352(4)(B)G5 1/11	HG-SR352(4)(B)G5 1/11		
	HC-SFS352(4)(B)G5 1/21	HG-SR352(4)(B)G5 1/21		
	HC-SFS502(4)(B)G5 1/5	HG-SR502(4)(B)G5 1/5		
	HC-SFS502(4)(B)G5 1/11	HG-SR502(4)(B)G5 1/11		
	HC-SFS702(4)(B)G5 1/5	HG-SR702(4)(B)G5 1/5		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Medium capacity, medium inertia HC-SFS series Shaft output type with high precision gear reducer (G7) (4): 400 V specifications (B): With brake	HC-SFS52(4)(B)G7 1/5	HG-SR52(4)(B)G7 1/5	○	▪ The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS52(4)(B)G7 1/11	HG-SR52(4)(B)G7 1/11		
	HC-SFS52(4)(B)G7 1/21	HG-SR52(4)(B)G7 1/21		
	HC-SFS52(4)(B)G7 1/33	HG-SR52(4)(B)G7 1/33		
	HC-SFS52(4)(B)G7 1/45	HG-SR52(4)(B)G7 1/45		
	HC-SFS102(4)(B)G7 1/5	HG-SR102(4)(B)G7 1/5		
	HC-SFS102(4)(B)G7 1/11	HG-SR102(4)(B)G7 1/11		
	HC-SFS102(4)(B)G7 1/21	HG-SR102(4)(B)G7 1/21		
	HC-SFS102(4)(B)G7 1/33	HG-SR102(4)(B)G7 1/33		
	HC-SFS102(4)(B)G7 1/45	HG-SR102(4)(B)G7 1/45		
	HC-SFS152(4)(B)G7 1/5	HG-SR152(4)(B)G7 1/5		
	HC-SFS152(4)(B)G7 1/11	HG-SR152(4)(B)G7 1/11		
	HC-SFS152(4)(B)G7 1/21	HG-SR152(4)(B)G7 1/21		
	HC-SFS152(4)(B)G7 1/33	HG-SR152(4)(B)G7 1/33		
	HC-SFS152(4)(B)G7 1/45	HG-SR152(4)(B)G7 1/45		
	HC-SFS202(4)(B)G7 1/5	HG-SR202(4)(B)G7 1/5		
	HC-SFS202(4)(B)G7 1/11	HG-SR202(4)(B)G7 1/11		
	HC-SFS202(4)(B)G7 1/21	HG-SR202(4)(B)G7 1/21		
	HC-SFS202(4)(B)G7 1/33	HG-SR202(4)(B)G7 1/33		
	HC-SFS202(4)(B)G7 1/45	HG-SR202(4)(B)G7 1/45		
	HC-SFS352(4)(B)G7 1/5	HG-SR352(4)(B)G7 1/5		
	HC-SFS352(4)(B)G7 1/11	HG-SR352(4)(B)G7 1/11		
	HC-SFS352(4)(B)G7 1/21	HG-SR352(4)(B)G7 1/21		
	HC-SFS502(4)(B)G7 1/5	HG-SR502(4)(B)G7 1/5		
	HC-SFS502(4)(B)G7 1/11	HG-SR502(4)(B)G7 1/11		
	HC-SFS702(4)(B)G7 1/5	HG-SR702(4)(B)G7 1/5		
Medium capacity, ultra-low inertia HC-RFS series (B): With brake	HC-RFS103(B)	HG-RR103(B)	○	
	HC-RFS153(B)	HG-RR153(B)		
	HC-RFS203(B)	HG-RR203(B)		
	HC-RFS353(B)	HG-RR353(B)		
	HC-RFS503(B)	HG-RR503(B)		
Medium capacity, ultra-low inertia HC-RFS series with high precision reducer (G2) (B): With brake	HC-RFS103(B)G2 1/5 ◇	HG-SR102(B)G7 1/5	(Note 1)	▪ The HG-RR series does not support the geared model. The geared model is supported with the HG-SR series. ▪ Gear reduction ratios of the reducers with the ◆ symbol greatly differ; therefore confirm the output torque. ▪ For replacement from the ◇ models, the capacity of the compatible servo amplifier is different. HG-SR102, HG-SR202, and HG-SR352 are compatible with the MR-J4-100_, MR-J4-200_, and MR-J4-350_ servo amplifiers, respectively.
	HC-RFS103(B)G2 1/9 ◇	HG-SR102(B)G7 1/11		
	HC-RFS103(B)G2 1/20 ◇	HG-SR102(B)G7 1/21		
	HC-RFS103(B)G2 1/29 ◇	HG-SR102(B)G7 1/33		
	HC-RFS103(B)G2 1/45 ◇	HG-SR102(B)G7 1/45		
	HC-RFS153(B)G2 1/5	HG-SR152(B)G7 1/5		
	HC-RFS153(B)G2 1/9	HG-SR152(B)G7 1/11		
	HC-RFS153(B)G2 1/20	HG-SR152(B)G7 1/21		
	HC-RFS153(B)G2 1/29	HG-SR152(B)G7 1/33		
	HC-RFS153(B)G2 1/45	HG-SR152(B)G7 1/45		
	HC-RFS203(B)G2 1/5 ◇	HG-SR202(B)G7 1/5		
	HC-RFS203(B)G2 1/9 ◇	HG-SR202(B)G7 1/11		
	HC-RFS203(B)G2 1/20 ◇	HG-SR202(B)G7 1/21		
	HC-RFS203(B)G2 1/29 ◇	HG-SR202(B)G7 1/33		
	HC-RFS203(B)G2 1/45 ◇	HG-SR202(B)G7 1/45		
	HC-RFS353(B)G2 1/5 ◇	HG-SR352(B)G7 1/5		
	HC-RFS353(B)G2 1/9 ◇	HG-SR352(B)G7 1/11		
	HC-RFS353(B)G2 1/20 ◇	HG-SR352(B)G7 1/21		
	HC-RFS353(B)G2 1/29 ◇	HG-SR352(B)G7 1/21 ◆		
	HC-RFS503(B)G2 1/5	HG-SR502(B)G7 1/5		
	HC-RFS503(B)G2 1/9	HG-SR502(B)G7 1/11		
	HC-RFS503(B)G2 1/20	HG-SR502(B)G7 1/11 ◆		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Medium capacity, ultra-low inertia HC-RFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-RFS103(B)G5 1/5 ◇	HG-SR102(B)G5 1/5	(Note 1)	・The HG-RR series does not support the geared model. The geared model is supported with the HG-SR series. ・Gear reduction ratios of the reducers with the ◆ symbol greatly differ; therefore confirm the output torque. ・For replacement from the ◇ models, the capacity of the compatible servo amplifier is different. HG-SR102, HG-SR202, and HG-SR352 are compatible with the MR-J4-100_, MR-J4-200_, and MR-J4-350_ servo amplifiers, respectively.
	HC-RFS103(B)G5 1/11 ◇	HG-SR102(B)G5 1/11		
	HC-RFS103(B)G5 1/21 ◇	HG-SR102(B)G5 1/21		
	HC-RFS103(B)G5 1/33 ◇	HG-SR102(B)G5 1/33		
	HC-RFS103(B)G5 1/45 ◇	HG-SR102(B)G5 1/45		
	HC-RFS153(B)G5 1/5	HG-SR152(B)G5 1/5		
	HC-RFS153(B)G5 1/11	HG-SR152(B)G5 1/11		
	HC-RFS153(B)G5 1/21	HG-SR152(B)G5 1/21		
	HC-RFS153(B)G5 1/33	HG-SR152(B)G5 1/33		
	HC-RFS153(B)G5 1/45	HG-SR152(B)G5 1/45		
	HC-RFS203(B)G5 1/5 ◇	HG-SR202(B)G5 1/5		
	HC-RFS203(B)G5 1/11 ◇	HG-SR202(B)G5 1/11		
	HC-RFS203(B)G5 1/21 ◇	HG-SR202(B)G5 1/21		
	HC-RFS203(B)G5 1/33 ◇	HG-SR202(B)G5 1/33		
	HC-RFS203(B)G5 1/45 ◇	HG-SR202(B)G5 1/45		
	HC-RFS353(B)G5 1/5 ◇	HG-SR352(B)G5 1/5		
	HC-RFS353(B)G5 1/11 ◇	HG-SR352(B)G5 1/11		
	HC-RFS353(B)G5 1/21 ◇	HG-SR352(B)G5 1/21		
	HC-RFS353(B)G5 1/33 ◇	HG-SR352(B)G5 1/21 ◆		
	HC-RFS503(B)G5 1/5	HG-SR502(B)G5 1/5		
	HC-RFS503(B)G5 1/11	HG-SR502(B)G5 1/11		
	HC-RFS503(B)G5 1/21	HG-SR502(B)G5 1/11 ◆		
Medium capacity, ultra-low inertia HC-RFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-RFS103(B)G7 1/5 ◇	HG-SR102(B)G7 1/5	(Note 1)	・The HG-RR series does not support the geared model. The geared model is supported with the HG-SR series. ・Gear reduction ratios of the reducers with the ◆ symbol greatly differ; therefore confirm the output torque. ・For replacement from the ◇ models, the capacity of the compatible servo amplifier is different. HG-SR102, HG-SR202, and HG-SR352 are compatible with the MR-J4-100_, MR-J4-200_, and MR-J4-350_ servo amplifiers, respectively.
	HC-RFS103(B)G7 1/11 ◇	HG-SR102(B)G7 1/11		
	HC-RFS103(B)G7 1/21 ◇	HG-SR102(B)G7 1/21		
	HC-RFS103(B)G7 1/33 ◇	HG-SR102(B)G7 1/33		
	HC-RFS103(B)G7 1/45 ◇	HG-SR102(B)G7 1/45		
	HC-RFS153(B)G7 1/5	HG-SR152(B)G7 1/5		
	HC-RFS153(B)G7 1/11	HG-SR152(B)G7 1/11		
	HC-RFS153(B)G7 1/21	HG-SR152(B)G7 1/21		
	HC-RFS153(B)G7 1/33	HG-SR152(B)G7 1/33		
	HC-RFS153(B)G7 1/45	HG-SR152(B)G7 1/45		
	HC-RFS203(B)G7 1/5 ◇	HG-SR202(B)G7 1/5		
	HC-RFS203(B)G7 1/11 ◇	HG-SR202(B)G7 1/11		
	HC-RFS203(B)G7 1/21 ◇	HG-SR202(B)G7 1/21		
	HC-RFS203(B)G7 1/33 ◇	HG-SR202(B)G7 1/33		
	HC-RFS203(B)G7 1/45 ◇	HG-SR202(B)G7 1/45		
	HC-RFS353(B)G7 1/5 ◇	HG-SR352(B)G7 1/5		
	HC-RFS353(B)G7 1/11 ◇	HG-SR352(B)G7 1/11		
	HC-RFS353(B)G7 1/21 ◇	HG-SR352(B)G7 1/21		
	HC-RFS353(B)G7 1/33 ◇	HC-SR352(B)G7 1/21 ◆		
	HC-RFS503(B)G7 1/5	HG-SR502(B)G7 1/5		
	HC-RFS503(B)G7 1/11	HG-SR502(B)G7 1/11		
	HC-RFS503(B)G7 1/21	HG-SR502(B)G7 1/11 ◆		
Medium capacity, low inertia HC-LFS series (B): With brake	HC-LFS52(B) ◇	HG-JR73(B)	(Note 1)	・For replacement from the ◇ models, the capacity of the compatible servo amplifier is different. HG-JR73, HG-JR153, and HG-JR353 are compatible with the MR-J4-70_, MR-J4-200_, and MR-J4-350_ servo amplifiers, respectively.
	HC-LFS102(B) ◇	HG-JR153(B)		
	HC-LFS152(B) ◇	HG-JR353(B)		
	HC-LFS202(B)			
	HC-LFS302(B)	HG-JR503(B)		

Note 1. Refer to "Appendix 2: 2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions" and "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, flat type HC-UFS series (B): With brake	HC-UFS13(B)	HG-KR13(B)	(Note 1)	▪ The HG-KR servo motor does not have an oil seal. Use HG-KR_J when an oil seal is required.
	HC-UFS23(B)	HG-KR23(B)		
	HC-UFS43(B)	HG-KR43(B)		
	HC-UFS73(B)	HG-KR73(B)		
Medium capacity, flat type HC-UFS series (B): With brake	HC-UFS72(B)	HG-UR72(B)	○	
	HC-UFS152(B)	HG-UR152(B)		
	HC-UFS202(B)	HG-UR202(B)		
	HC-UFS352(B)	HG-UR352(B)		
	HC-UFS502(B)	HG-UR502(B)		
Medium and large capacities, low inertia HA-LFS 1000 r/min series (4): 400 V specifications (B): With brake	HA-LFS601(4)(B)	HG-JR601(4)(B)	(Note 1)	
	HA-LFS801(4)(B)	HG-JR801(4)(B)		
	HA-LFS12K1(4)(B)	HG-JR12K1(4)(B)		
	HA-LFS15K1(4)	HG-JR15K1(4)		
	HA-LFS20K1(4)	HG-JR20K1(4)		
	HA-LFS25K1(4)	HG-JR25K1(4)		
	HA-LFS30K1(4)	HG-JR30K1(4)		
	HA-LFS37K1(4)	HG-JR37K1(4)		
Medium and large capacities, low inertia HA-LFS 1500 r/min series (4): 400 V specifications (B): With brake	HA-LFS701M(4)(B)	HG-JR701M(4)(B)	(Note 1)	
	HA-LFS11K1M(4)(B)	HG-JR11K1M(4)(B)		
	HA-LFS15K1M(4)(B)	HG-JR15K1M(4)(B)		
	HA-LFS22K1M(4)	HG-JR22K1M(4)		
	HA-LFS30K1M(4)	HG-JR30K1M(4)		
	HA-LFS37K1M(4)	HG-JR37K1M(4)		
	HA-LFS45K1M4	HG-JR45K1M4		
	HA-LFS50K1M4	HG-JR55K1M4		
Medium and large capacities, low inertia HA-LFS 2000 r/min series (4): 400 V specifications (B): With brake	HA-LFS502	HG-SR502	(Note 1)	▪ The HG-SR servo motor does not have an oil seal. Use HG-SR_J when an oil seal is required. ▪ For replacement from the ◇ models, the capacity of the compatible servo amplifier is different. HG-JR11K1M, HG-JR15K1M, HG-JR22K1M, HG-JR30K1M, HG-JR37K1M, and HG-JR45K1M4 are compatible with the MR-J4-11K_, MR-J4-15K_, MR-J4-22K_, MR-J4-30K_, MR-J4-DU37K_, and MR-J4-DU45K4_ servo amplifiers, respectively.
	HA-LFS702	HG-SR702		
	HA-LFS11K2(4)(B)	HG-JR11K1M(4)(B)		
	HA-LFS15K2(4)(B) ◇			
	HA-LFS22K2(4)(B) ◇	HG-JR15K1M(4)(B)		
	HA-LFS30K2(4) ◇	HG-JR22K1M(4)		
	HA-LFS37K2(4) ◇	HG-JR30K1M(4)		
	HA-LFS45K24 ◇	HG-JR37K1M4		
	HA-LFS55K24 ◇	HG-JR45K1M4		

Note 1. Refer to "Appendix 2: 2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.
3. Replacement models have different motor thermal wiring from HA-LFS 1000 r/min series servo motor of 15 kW or more, HA-LFS 1500 r/min series servo motor of 22 kW or more, and HA-LFS 2000 r/min series servo motor of 30 kW or more. Lay new encoder cables.

■MR-J2S-_CP-S084 100 V, 200 V compatible servo motor replacement models

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, low inertia HC-KFS series Standard/With brake (B): With brake	HC-KFS053(B)	HF-KP053(B)	○	・The torque characteristic of the model with the ◆ symbol does not support the high-speed rotation range. ・For replacement from the ◇ models, the capacity of the compatible servo amplifier is different. HF-KP43 is compatible with the MR-J3-40_ servo amplifier.
	HC-KFS13(B)	HF-KP13(B)		
	HC-KFS23(B)	HF-KP23(B)		
	HC-KFS43(B)	HF-KP43(B)		
	HC-KFS73(B)	HF-KP73(B)		
	HC-KFS46 ◇	HF-KP43		
	HC-KFS410 ◇	HF-KP43 ◆		
Small capacity, low inertia HC-KFS series with general gear reducers (G1) (B): With brake	HC-KFS053(B)G1 1/5	HF-KP053(B)G1 1/5	○	
	HC-KFS053(B)G1 1/12	HF-KP053(B)G1 1/12		
	HC-KFS053(B)G1 1/20	HF-KP053(B)G1 1/20		
	HC-KFS13(B)G1 1/5	HF-KP13(B)G1 1/5		
	HC-KFS13(B)G1 1/12	HF-KP13(B)G1 1/12		
	HC-KFS13(B)G1 1/20	HF-KP13(B)G1 1/20		
	HC-KFS23(B)G1 1/5	HF-KP23(B)G1 1/5		
	HC-KFS23(B)G1 1/12	HF-KP23(B)G1 1/12		
	HC-KFS23(B)G1 1/20	HF-KP23(B)G1 1/20		
	HC-KFS43(B)G1 1/5	HF-KP43(B)G1 1/5		
	HC-KFS43(B)G1 1/12	HF-KP43(B)G1 1/12		
	HC-KFS43(B)G1 1/20	HF-KP43(B)G1 1/20		
	HC-KFS73(B)G1 1/5	HF-KP73(B)G1 1/5		
	HC-KFS73(B)G1 1/12	HF-KP73(B)G1 1/12		
	HC-KFS73(B)G1 1/20	HF-KP73(B)G1 1/20		
Small capacity, low inertia HC-KFS series with high precision reducer (G2) (B): With brake	HC-KFS053(B)G2 1/5	HF-KP053(B)G7 1/5	(Note 1)	
	HC-KFS053(B)G2 1/9	HF-KP053(B)G7 1/11		
	HC-KFS053(B)G2 1/20	HF-KP053(B)G7 1/21		
	HC-KFS053(B)G2 1/29	HF-KP053(B)G7 1/33		
	HC-KFS13(B)G2 1/5	HF-KP13(B)G7 1/5		
	HC-KFS13(B)G2 1/9	HF-KP13(B)G7 1/11		
	HC-KFS13(B)G2 1/20	HF-KP13(B)G7 1/21		
	HC-KFS13(B)G2 1/29	HF-KP13(B)G7 1/33		
	HC-KFS23(B)G2 1/5	HF-KP23(B)G7 1/5		
	HC-KFS23(B)G2 1/9	HF-KP23(B)G7 1/11		
	HC-KFS23(B)G2 1/20	HF-KP23(B)G7 1/21		
	HC-KFS23(B)G2 1/29	HF-KP23(B)G7 1/33		
	HC-KFS43(B)G2 1/5	HF-KP43(B)G7 1/5		
	HC-KFS43(B)G2 1/9	HF-KP43(B)G7 1/11		
	HC-KFS43(B)G2 1/20	HF-KP43(B)G7 1/21		
	HC-KFS43(B)G2 1/29	HF-KP43(B)G7 1/33		
	HC-KFS73(B)G2 1/5	HF-KP73(B)G7 1/5		
	HC-KFS73(B)G2 1/9	HF-KP73(B)G7 1/11		
	HC-KFS73(B)G2 1/20	HF-KP73(B)G7 1/21		
	HC-KFS73(B)G2 1/29	HF-KP73(B)G7 1/33		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, low inertia HC-KFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-KFS053(B)G5 1/5	HF-KP053(B)G5 1/5	○	
	HC-KFS053(B)G5 1/11	HF-KP053(B)G5 1/11		
	HC-KFS053(B)G5 1/21	HF-KP053(B)G5 1/21		
	HC-KFS053(B)G5 1/33	HF-KP053(B)G5 1/33		
	HC-KFS053(B)G5 1/45	HF-KP053(B)G5 1/45		
	HC-KFS13(B)G5 1/5	HF-KP13(B)G5 1/5		
	HC-KFS13(B)G5 1/11	HF-KP13(B)G5 1/11		
	HC-KFS13(B)G5 1/21	HF-KP13(B)G5 1/21		
	HC-KFS13(B)G5 1/33	HF-KP13(B)G5 1/33		
	HC-KFS13(B)G5 1/45	HF-KP13(B)G5 1/45		
	HC-KFS23(B)G5 1/5	HF-KP23(B)G5 1/5		
	HC-KFS23(B)G5 1/11	HF-KP23(B)G5 1/11		
	HC-KFS23(B)G5 1/21	HF-KP23(B)G5 1/21		
	HC-KFS23(B)G5 1/33	HF-KP23(B)G5 1/33		
	HC-KFS23(B)G5 1/45	HF-KP23(B)G5 1/45		
	HC-KFS43(B)G5 1/5	HF-KP43(B)G5 1/5		
	HC-KFS43(B)G5 1/11	HF-KP43(B)G5 1/11		
	HC-KFS43(B)G5 1/21	HF-KP43(B)G5 1/21		
	HC-KFS43(B)G5 1/33	HF-KP43(B)G5 1/33		
	HC-KFS43(B)G5 1/45	HF-KP43(B)G5 1/45		
	HC-KFS73(B)G5 1/5	HF-KP73(B)G5 1/5		
	HC-KFS73(B)G5 1/11	HF-KP73(B)G5 1/11		
	HC-KFS73(B)G5 1/21	HF-KP73(B)G5 1/21		
	HC-KFS73(B)G5 1/33	HF-KP73(B)G5 1/33		
	HC-KFS73(B)G5 1/45	HF-KP73(B)G5 1/45		
Small capacity, low inertia HC-KFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-KFS053(B)G7 1/5	HF-KP053(B)G7 1/5	○	
	HC-KFS053(B)G7 1/11	HF-KP053(B)G7 1/11		
	HC-KFS053(B)G7 1/21	HF-KP053(B)G7 1/21		
	HC-KFS053(B)G7 1/33	HF-KP053(B)G7 1/33		
	HC-KFS053(B)G7 1/45	HF-KP053(B)G7 1/45		
	HC-KFS13(B)G7 1/5	HF-KP13(B)G7 1/5		
	HC-KFS13(B)G7 1/11	HF-KP13(B)G7 1/11		
	HC-KFS13(B)G7 1/21	HF-KP13(B)G7 1/21		
	HC-KFS13(B)G7 1/33	HF-KP13(B)G7 1/33		
	HC-KFS13(B)G7 1/45	HF-KP13(B)G7 1/45		
	HC-KFS23(B)G7 1/5	HF-KP23(B)G7 1/5		
	HC-KFS23(B)G7 1/11	HF-KP23(B)G7 1/11		
	HC-KFS23(B)G7 1/21	HF-KP23(B)G7 1/21		
	HC-KFS23(B)G7 1/33	HF-KP23(B)G7 1/33		
	HC-KFS23(B)G7 1/45	HF-KP23(B)G7 1/45		
	HC-KFS43(B)G7 1/5	HF-KP43(B)G7 1/5		
	HC-KFS43(B)G7 1/11	HF-KP43(B)G7 1/11		
	HC-KFS43(B)G7 1/21	HF-KP43(B)G7 1/21		
	HC-KFS43(B)G7 1/33	HF-KP43(B)G7 1/33		
	HC-KFS43(B)G7 1/45	HF-KP43(B)G7 1/45		
	HC-KFS73(B)G7 1/5	HF-KP73(B)G7 1/5		
	HC-KFS73(B)G7 1/11	HF-KP73(B)G7 1/11		
	HC-KFS73(B)G7 1/21	HF-KP73(B)G7 1/21		
	HC-KFS73(B)G7 1/33	HF-KP73(B)G7 1/33		
	HC-KFS73(B)G7 1/45	HF-KP73(B)G7 1/45		

Note 1. The power supply and encoder connector will be changed.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, ultra-low inertia HC-MFS series Standard/With brake (B): With brake	HC-MFS053(B)	HF-MP053(B)	○	
	HC-MFS13(B)	HF-MP13(B)		
	HC-MFS23(B)	HF-MP23(B)		
	HC-MFS43(B)	HF-MP43(B)		
	HC-MFS73(B)	HF-MP73(B)		
Small capacity, ultra-low inertia HC-MFS series with general gear reducers (G1) (B): With brake	HC-MFS053(B)G1 1/5	HF-MP053(B)G1 1/5	○	
	HC-MFS053(B)G1 1/12	HF-MP053(B)G1 1/12		
	HC-MFS053(B)G1 1/20	HF-MP053(B)G1 1/20		
	HC-MFS13(B)G1 1/5	HF-MP13(B)G1 1/5		
	HC-MFS13(B)G1 1/12	HF-MP13(B)G1 1/12		
	HC-MFS13(B)G1 1/20	HF-MP13(B)G1 1/20		
	HC-MFS23(B)G1 1/5	HF-MP23(B)G1 1/5		
	HC-MFS23(B)G1 1/12	HF-MP23(B)G1 1/12		
	HC-MFS23(B)G1 1/20	HF-MP23(B)G1 1/20		
	HC-MFS43(B)G1 1/5	HF-MP43(B)G1 1/5		
	HC-MFS43(B)G1 1/12	HF-MP43(B)G1 1/12		
	HC-MFS43(B)G1 1/20	HF-MP43(B)G1 1/20		
	HC-MFS73(B)G1 1/5	HF-MP73(B)G1 1/5		
	HC-MFS73(B)G1 1/12	HF-MP73(B)G1 1/12		
	HC-MFS73(B)G1 1/20	HF-MP73(B)G1 1/20		
Small capacity, ultra-low inertia HC-MFS series with high precision reducer (G2) (B): With brake	HC-MFS053(B)G2 1/5	HF-MP053(B)G7 1/5	(Note 1)	
	HC-MFS053(B)G2 1/9	HF-MP053(B)G7 1/11		
	HC-MFS053(B)G2 1/20	HF-MP053(B)G7 1/21		
	HC-MFS053(B)G2 1/29	HF-MP053(B)G7 1/33		
	HC-MFS13(B)G2 1/5	HF-MP13(B)G7 1/5		
	HC-MFS13(B)G2 1/9	HF-MP13(B)G7 1/11		
	HC-MFS13(B)G2 1/20	HF-MP13(B)G7 1/21		
	HC-MFS13(B)G2 1/29	HF-MP13(B)G7 1/33		
	HC-MFS23(B)G2 1/5	HF-MP23(B)G7 1/5		
	HC-MFS23(B)G2 1/9	HF-MP23(B)G7 1/11		
	HC-MFS23(B)G2 1/20	HF-MP23(B)G7 1/21		
	HC-MFS23(B)G2 1/29	HF-MP23(B)G7 1/33		
	HC-MFS43(B)G2 1/5	HF-MP43(B)G7 1/5		
	HC-MFS43(B)G2 1/9	HF-MP43(B)G7 1/11		
	HC-MFS43(B)G2 1/20	HF-MP43(B)G7 1/21		
	HC-MFS43(B)G2 1/29	HF-MP43(B)G7 1/33		
	HC-MFS73(B)G2 1/5	HF-MP73(B)G7 1/5		
	HC-MFS73(B)G2 1/9	HF-MP73(B)G7 1/11		
	HC-MFS73(B)G2 1/20	HF-MP73(B)G7 1/21		
	HC-MFS73(B)G2 1/29	HF-MP73(B)G7 1/33		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Small capacity, ultra-low inertia HC-MFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-MFS053(B)G5 1/5	HF-MP053(B)G5 1/5	○	
	HC-MFS053(B)G5 1/11	HF-MP053(B)G5 1/11		
	HC-MFS053(B)G5 1/21	HF-MP053(B)G5 1/21		
	HC-MFS053(B)G5 1/33	HF-MP053(B)G5 1/33		
	HC-MFS053(B)G5 1/45	HF-MP053(B)G5 1/45		
	HC-MFS13(B)G5 1/5	HF-MP13(B)G5 1/5		
	HC-MFS13(B)G5 1/11	HF-MP13(B)G5 1/11		
	HC-MFS13(B)G5 1/21	HF-MP13(B)G5 1/21		
	HC-MFS13(B)G5 1/33	HF-MP13(B)G5 1/33		
	HC-MFS13(B)G5 1/45	HF-MP13(B)G5 1/45		
	HC-MFS23(B)G5 1/5	HF-MP23(B)G5 1/5		
	HC-MFS23(B)G5 1/11	HF-MP23(B)G5 1/11		
	HC-MFS23(B)G5 1/21	HF-MP23(B)G5 1/21		
	HC-MFS23(B)G5 1/33	HF-MP23(B)G5 1/33		
	HC-MFS23(B)G5 1/45	HF-MP23(B)G5 1/45		
	HC-MFS43(B)G5 1/5	HF-MP43(B)G5 1/5		
	HC-MFS43(B)G5 1/11	HF-MP43(B)G5 1/11		
	HC-MFS43(B)G5 1/21	HF-MP43(B)G5 1/21		
	HC-MFS43(B)G5 1/33	HF-MP43(B)G5 1/33		
	HC-MFS43(B)G5 1/45	HF-MP43(B)G5 1/45		
	HC-MFS73(B)G5 1/5	HF-MP73(B)G5 1/5		
	HC-MFS73(B)G5 1/11	HF-MP73(B)G5 1/11		
	HC-MFS73(B)G5 1/21	HF-MP73(B)G5 1/21		
	HC-MFS73(B)G5 1/33	HF-MP73(B)G5 1/33		
	HC-MFS73(B)G5 1/45	HF-MP73(B)G5 1/45		
Small capacity, ultra-low inertia HC-MFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-MFS053(B)G7 1/5	HF-MP053(B)G7 1/5	○	
	HC-MFS053(B)G7 1/11	HF-MP053(B)G7 1/11		
	HC-MFS053(B)G7 1/21	HF-MP053(B)G7 1/21		
	HC-MFS053(B)G7 1/33	HF-MP053(B)G7 1/33		
	HC-MFS053(B)G7 1/45	HF-MP053(B)G7 1/45		
	HC-MFS13(B)G7 1/5	HF-MP13(B)G7 1/5		
	HC-MFS13(B)G7 1/11	HF-MP13(B)G7 1/11		
	HC-MFS13(B)G7 1/21	HF-MP13(B)G7 1/21		
	HC-MFS13(B)G7 1/33	HF-MP13(B)G7 1/33		
	HC-MFS13(B)G7 1/45	HF-MP13(B)G7 1/45		
	HC-MFS23(B)G7 1/5	HF-MP23(B)G7 1/5		
	HC-MFS23(B)G7 1/11	HF-MP23(B)G7 1/11		
	HC-MFS23(B)G7 1/21	HF-MP23(B)G7 1/21		
	HC-MFS23(B)G7 1/33	HF-MP23(B)G7 1/33		
	HC-MFS23(B)G7 1/45	HF-MP23(B)G7 1/45		
	HC-MFS43(B)G7 1/5	HF-MP43(B)G7 1/5		
	HC-MFS43(B)G7 1/11	HF-MP43(B)G7 1/11		
	HC-MFS43(B)G7 1/21	HF-MP43(B)G7 1/21		
	HC-MFS43(B)G7 1/33	HF-MP43(B)G7 1/33		
	HC-MFS43(B)G7 1/45	HF-MP43(B)G7 1/45		
	HC-MFS73(B)G7 1/5	HF-MP73(B)G7 1/5		
	HC-MFS73(B)G7 1/11	HF-MP73(B)G7 1/11		
	HC-MFS73(B)G7 1/21	HF-MP73(B)G7 1/21		
	HC-MFS73(B)G7 1/33	HF-MP73(B)G7 1/33		
	HC-MFS73(B)G7 1/45	HF-MP73(B)G7 1/45		

Note 1. The power supply and encoder connector will be changed.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Medium capacity, medium inertia HC-SFS series Standard/With brake (B): With brake	HC-SFS81(B)	HF-SP81(B)	○	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side. ・The HF-SP servo motor does not have an oil seal. Use HF-SP_J when an oil seal is required.
	HC-SFS121(B)	HF-SP121(B)		
	HC-SFS201(B)	HF-SP201(B)		
	HC-SFS301(B)	HF-SP301(B)		
	HC-SFS52(B)	HF-SP52(B)		
	HC-SFS102(B)	HF-SP102(B)		
	HC-SFS152(B)	HF-SP152(B)		
	HC-SFS202(B)	HF-SP202(B)		
	HC-SFS352(B)	HF-SP352(B)		
	HC-SFS502(B)	HF-SP502(B)		
	HC-SFS702(B)	HF-SP702(B)		
	HC-SFS53(B)	HF-SP52(B)		
	HC-SFS103(B)	HF-SP102(B)		
	HC-SFS153(B)	HF-SP152(B)		
	HC-SFS203(B)	HF-SP202(B)		
	HC-SFS353(B)	HF-SP352(B)		
Medium capacity, medium inertia HC-SFS series with general gear reducer (B): With brake G1: Flange-mounting G1H: Foot-mounting	HC-SFS52(B)G1(H) 1/6	HF-SP52(B)G1(H) 1/6	○	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS52(B)G1(H) 1/11	HF-SP52(B)G1(H) 1/11		
	HC-SFS52(B)G1(H) 1/17	HF-SP52(B)G1(H) 1/17		
	HC-SFS52(B)G1(H) 1/29	HF-SP52(B)G1(H) 1/29		
	HC-SFS52(B)G1(H) 1/35	HF-SP52(B)G1(H) 1/35		
	HC-SFS52(B)G1(H) 1/43	HF-SP52(B)G1(H) 1/43		
	HC-SFS52(B)G1(H) 1/59	HF-SP52(B)G1(H) 1/59		
	HC-SFS102(B)G1(H) 1/6	HF-SP102(B)G1(H) 1/6		
	HC-SFS102(B)G1(H) 1/11	HF-SP102(B)G1(H) 1/11		
	HC-SFS102(B)G1(H) 1/17	HF-SP102(B)G1(H) 1/17		
	HC-SFS102(B)G1(H) 1/29	HF-SP102(B)G1(H) 1/29		
	HC-SFS102(B)G1(H) 1/35	HF-SP102(B)G1(H) 1/35		
	HC-SFS102(B)G1(H) 1/43	HF-SP102(B)G1(H) 1/43		
	HC-SFS102(B)G1(H) 1/59	HF-SP102(B)G1(H) 1/59		
	HC-SFS152(B)G1(H) 1/6	HF-SP152(B)G1(H) 1/6		
	HC-SFS152(B)G1(H) 1/11	HF-SP152(B)G1(H) 1/11		
	HC-SFS152(B)G1(H) 1/17	HF-SP152(B)G1(H) 1/17		
	HC-SFS152(B)G1(H) 1/29	HF-SP152(B)G1(H) 1/29		
	HC-SFS152(B)G1(H) 1/35	HF-SP152(B)G1(H) 1/35		
	HC-SFS152(B)G1(H) 1/43	HF-SP152(B)G1(H) 1/43		
	HC-SFS152(B)G1(H) 1/59	HF-SP152(B)G1(H) 1/59		
	HC-SFS202(B)G1(H) 1/6	HF-SP202(B)G1(H) 1/6		
	HC-SFS202(B)G1(H) 1/11	HF-SP202(B)G1(H) 1/11		
	HC-SFS202(B)G1(H) 1/17	HF-SP202(B)G1(H) 1/17		
	HC-SFS202(B)G1(H) 1/29	HF-SP202(B)G1(H) 1/29		
	HC-SFS202(B)G1(H) 1/35	HF-SP202(B)G1(H) 1/35		
	HC-SFS202(B)G1(H) 1/43	HF-SP202(B)G1(H) 1/43		
	HC-SFS202(B)G1(H) 1/59	HF-SP202(B)G1(H) 1/59		
	HC-SFS352(B)G1(H) 1/6	HF-SP352(B)G1(H) 1/6		
	HC-SFS352(B)G1(H) 1/11	HF-SP352(B)G1(H) 1/11		
	HC-SFS352(B)G1(H) 1/17	HF-SP352(B)G1(H) 1/17		
	HC-SFS352(B)G1(H) 1/29	HF-SP352(B)G1(H) 1/29		
	HC-SFS352(B)G1(H) 1/35	HF-SP352(B)G1(H) 1/35		

Note 1. The power supply and encoder connector will be changed.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Medium capacity, medium inertia HC-SFS series with general gear reducer (B): With brake G1: Flange-mounting G1H: Foot-mounting	HC-SFS352(B)G1(H) 1/43	HF-SP352(B)G1(H) 1/43	○	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS352(B)G1(H) 1/59	HF-SP352(B)G1(H) 1/59		
	HC-SFS502(B)G1(H) 1/11	HF-SP502(B)G1(H) 1/11		
	HC-SFS502(B)G1(H) 1/17	HF-SP502(B)G1(H) 1/17		
	HC-SFS502(B)G1(H) 1/29	HF-SP502(B)G1(H) 1/29		
	HC-SFS502(B)G1(H) 1/35	HF-SP502(B)G1(H) 1/35		
	HC-SFS502(B)G1(H) 1/43	HF-SP502(B)G1(H) 1/43		
	HC-SFS702(B)G1(H) 1/11	HF-SP702(B)G1(H) 1/11		
	HC-SFS702(B)G1(H) 1/17	HF-SP702(B)G1(H) 1/17		
	HC-SFS702(B)G1(H) 1/29	HF-SP702(B)G1(H) 1/29		
	HC-SFS702(B)G1(H) 1/35	HF-SP702(B)G1(H) 1/35		
	HC-SFS702(B)G1(H) 1/43	HF-SP702(B)G1(H) 1/43		
Medium capacity, medium inertia HF-SFS series with high precision reducer (G2) (B): With brake	HC-SFS52(B)G2 1/5	HF-SP52(B)G7 1/5	(Note 1)	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS52(B)G2 1/9	HF-SP52(B)G7 1/11		
	HC-SFS52(B)G2 1/20	HF-SP52(B)G7 1/21		
	HC-SFS52(B)G2 1/29	HF-SP52(B)G7 1/33		
	HC-SFS52(B)G2 1/45	HF-SP52(B)G7 1/45		
	HC-SFS102(B)G2 1/5	HF-SP102(B)G7 1/5		
	HC-SFS102(B)G2 1/9	HF-SP102(B)G7 1/11		
	HC-SFS102(B)G2 1/20	HF-SP102(B)G7 1/21		
	HC-SFS102(B)G2 1/29	HF-SP102(B)G7 1/33		
	HC-SFS102(B)G2 1/45	HF-SP102(B)G7 1/45		
	HC-SFS152(B)G2 1/5	HF-SP152(B)G7 1/5		
	HC-SFS152(B)G2 1/9	HF-SP152(B)G7 1/11		
	HC-SFS152(B)G2 1/20	HF-SP152(B)G7 1/21		
	HC-SFS152(B)G2 1/29	HF-SP152(B)G7 1/33		
	HC-SFS152(B)G2 1/45	HF-SP152(B)G7 1/45		
	HC-SFS202(B)G2 1/5	HF-SP202(B)G7 1/5		
	HC-SFS202(B)G2 1/9	HF-SP202(B)G7 1/11		
	HC-SFS202(B)G2 1/20	HF-SP202(B)G7 1/21		
	HC-SFS202(B)G2 1/29	HF-SP202(B)G7 1/33		
	HC-SFS202(B)G2 1/45	HF-SP202(B)G7 1/45		
	HC-SFS352(B)G2 1/5	HF-SP352(B)G7 1/5		
	HC-SFS352(B)G2 1/9	HF-SP352(B)G7 1/11		
	HC-SFS352(B)G2 1/20	HF-SP352(B)G7 1/21		
	HC-SFS502(B)G2 1/5	HF-SP502(B)G7 1/5		
	HC-SFS502(B)G2 1/9	HF-SP502(B)G7 1/11		
	HC-SFS702(B)G2 1/5	HF-SP702(B)G7 1/5		
Medium capacity, medium inertia HC-SFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-SFS52(B)G5 1/5	HF-SP52(B)G5 1/5	○	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS52(B)G5 1/11	HF-SP52(B)G5 1/11		
	HC-SFS52(B)G5 1/21	HF-SP52(B)G5 1/21		
	HC-SFS52(B)G5 1/33	HF-SP52(B)G5 1/33		
	HC-SFS52(B)G5 1/45	HF-SP52(B)G5 1/45		
	HC-SFS102(B)G5 1/5	HF-SP102(B)G5 1/5		
	HC-SFS102(B)G5 1/11	HF-SP102(B)G5 1/11		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Medium capacity, medium inertia HC-SFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-SFS102(B)G5 1/21	HF-SP102(B)G5 1/21	○	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS102(B)G5 1/33	HF-SP102(B)G5 1/33		
	HC-SFS102(B)G5 1/45	HF-SP102(B)G5 1/45		
	HC-SFS152(B)G5 1/5	HF-SP152(B)G5 1/5		
	HC-SFS152(B)G5 1/11	HF-SP152(B)G5 1/11		
	HC-SFS152(B)G5 1/21	HF-SP152(B)G5 1/21		
	HC-SFS152(B)G5 1/33	HF-SP152(B)G5 1/33		
	HC-SFS152(B)G5 1/45	HF-SP152(B)G5 1/45		
	HC-SFS202(B)G5 1/5	HF-SP202(B)G5 1/5		
	HC-SFS202(B)G5 1/11	HF-SP202(B)G5 1/11		
	HC-SFS202(B)G5 1/21	HF-SP202(B)G5 1/21		
	HC-SFS202(B)G5 1/33	HF-SP202(B)G5 1/33		
	HC-SFS202(B)G5 1/45	HF-SP202(B)G5 1/45		
	HC-SFS352(B)G5 1/5	HF-SP352(B)G5 1/5		
	HC-SFS352(B)G5 1/11	HF-SP352(B)G5 1/11		
	HC-SFS352(B)G5 1/21	HF-SP352(B)G5 1/21		
	HC-SFS502(B)G5 1/5	HF-SP502(B)G5 1/5		
	HC-SFS502(B)G5 1/11	HF-SP502(B)G5 1/11		
	HC-SFS702(B)G5 1/5	HF-SP702(B)G5 1/5		
Medium capacity, medium inertia HC-SFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-SFS52(B)G7 1/5	HF-SP52(B)G7 1/5	○	・The total length of the motor will be shorter, so confirm that the motor connector does not interfere with the machine side.
	HC-SFS52(B)G7 1/11	HF-SP52(B)G7 1/11		
	HC-SFS52(B)G7 1/21	HF-SP52(B)G7 1/21		
	HC-SFS52(B)G7 1/33	HF-SP52(B)G7 1/33		
	HC-SFS52(B)G7 1/45	HF-SP52(B)G7 1/45		
	HC-SFS102(B)G7 1/5	HF-SP102(B)G7 1/5		
	HC-SFS102(B)G7 1/11	HF-SP102(B)G7 1/11		
	HC-SFS102(B)G7 1/21	HF-SP102(B)G7 1/21		
	HC-SFS102(B)G7 1/33	HF-SP102(B)G7 1/33		
	HC-SFS102(B)G7 1/45	HF-SP102(B)G7 1/45		
	HC-SFS152(B)G7 1/5	HF-SP152(B)G7 1/5		
	HC-SFS152(B)G7 1/11	HF-SP152(B)G7 1/11		
	HC-SFS152(B)G7 1/21	HF-SP152(B)G7 1/21		
	HC-SFS152(B)G7 1/33	HF-SP152(B)G7 1/33		
	HC-SFS152(B)G7 1/45	HF-SP152(B)G7 1/45		
	HC-SFS202(B)G7 1/5	HF-SP202(B)G7 1/5		
	HC-SFS202(B)G7 1/11	HF-SP202(B)G7 1/11		
	HC-SFS202(B)G7 1/21	HF-SP202(B)G7 1/21		
	HC-SFS202(B)G7 1/33	HF-SP202(B)G7 1/33		
	HC-SFS202(B)G7 1/45	HF-SP202(B)G7 1/45		
	HC-SFS352(B)G7 1/5	HF-SP352(B)G7 1/5		
	HC-SFS352(B)G7 1/11	HF-SP352(B)G7 1/11		
	HC-SFS352(B)G7 1/21	HF-SP352(B)G7 1/21		
	HC-SFS502(B)G7 1/5	HF-SP502(B)G7 1/5		
	HC-SFS502(B)G7 1/11	HF-SP502(B)G7 1/11		
	HC-SFS702(B)G7 1/5	HF-SP702(B)G7 1/5		

Note 1. The power supply and encoder connector will be changed.

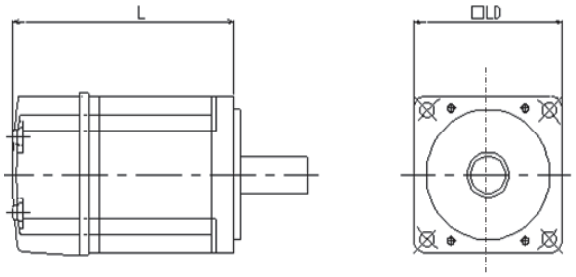
Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Medium capacity, ultra-low inertia HC-RFS series (B): With brake	HC-RFS103(B)	HC-RP103(B)	○	
	HC-RFS153(B)	HC-RP153(B)		
	HC-RFS203(B)	HC-RP203(B)		
	HC-RFS353(B)	HC-RP353(B)		
	HC-RFS503(B)	HC-RP503(B)		
Medium capacity, ultra-low inertia HC-RFS series with high precision reducer (G2) (B): With brake	HC-RFS103(B)G2 1/5	HC-RP103(B)G7 1/5	(Note 1)	
	HC-RFS103(B)G2 1/9	HC-RP103(B)G7 1/11		
	HC-RFS103(B)G2 1/20	HC-RP103(B)G7 1/21		
	HC-RFS103(B)G2 1/29	HC-RP103(B)G7 1/33		
	HC-RFS103(B)G2 1/45	HC-RP103(B)G7 1/45		
	HC-RFS153(B)G2 1/5	HC-RP153(B)G7 1/5		
	HC-RFS153(B)G2 1/9	HC-RP153(B)G7 1/11		
	HC-RFS153(B)G2 1/20	HC-RP153(B)G7 1/21		
	HC-RFS153(B)G2 1/29	HC-RP153(B)G7 1/33		
	HC-RFS153(B)G2 1/45	HC-RP153(B)G7 1/45		
	HC-RFS203(B)G2 1/5	HC-RP203(B)G7 1/5		
	HC-RFS203(B)G2 1/9	HC-RP203(B)G7 1/11		
	HC-RFS203(B)G2 1/20	HC-RP203(B)G7 1/21		
	HC-RFS203(B)G2 1/29	HC-RP203(B)G7 1/33		
	HC-RFS203(B)G2 1/45	HC-RP203(B)G7 1/45		
	HC-RFS353(B)G2 1/5	HC-RP353(B)G7 1/5		
	HC-RFS353(B)G2 1/9	HC-RP353(B)G7 1/11		
	HC-RFS353(B)G2 1/20	HC-RP353(B)G7 1/21		
	HC-RFS353(B)G2 1/29	HC-RP353(B)G7 1/33		
	HC-RFS503(B)G2 1/5	HC-RP503(B)G7 1/5		
	HC-RFS503(B)G2 1/9	HC-RP503(B)G7 1/11		
	HC-RFS503(B)G2 1/20	HC-RP503(B)G7 1/21		
Medium capacity, ultra-low inertia HC-RFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-RFS103(B)G5 1/5	HC-RP103(B)G5 1/5	○	
	HC-RFS103(B)G5 1/11	HC-RP103(B)G5 1/11		
	HC-RFS103(B)G5 1/21	HC-RP103(B)G5 1/21		
	HC-RFS103(B)G5 1/33	HC-RP103(B)G5 1/33		
	HC-RFS103(B)G5 1/45	HC-RP103(B)G5 1/45		
	HC-RFS153(B)G5 1/5	HC-RP153(B)G5 1/5		
	HC-RFS153(B)G5 1/11	HC-RP153(B)G5 1/11		
	HC-RFS153(B)G5 1/21	HC-RP153(B)G5 1/21		
	HC-RFS153(B)G5 1/33	HC-RP153(B)G5 1/33		
	HC-RFS153(B)G5 1/45	HC-RP153(B)G5 1/45		
	HC-RFS203(B)G5 1/5	HC-RP203(B)G5 1/5		
	HC-RFS203(B)G5 1/11	HC-RP203(B)G5 1/11		
	HC-RFS203(B)G5 1/21	HC-RP203(B)G5 1/21		
	HC-RFS203(B)G5 1/33	HC-RP203(B)G5 1/33		
	HC-RFS203(B)G5 1/45	HC-RP203(B)G5 1/45		
	HC-RFS353(B)G5 1/5	HC-RP353(B)G5 1/5		
	HC-RFS353(B)G5 1/11	HC-RP353(B)G5 1/11		
	HC-RFS353(B)G5 1/21	HC-RP353(B)G5 1/21		
	HC-RFS353(B)G5 1/33	HC-RP353(B)G5 1/33		
	HC-RFS503(B)G5 1/5	HC-RP503(B)G5 1/5		
	HC-RFS503(B)G5 1/11	HC-RP503(B)G5 1/11		
	HC-RFS503(B)G5 1/21	HC-RP503(B)G5 1/21		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed.

Series	Model	Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
Medium capacity, ultra-low inertia HC-RFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-RFS103(B)G7 1/5	HC-RP103(B)G7 1/5	○	
	HC-RFS103(B)G7 1/11	HC-RP103(B)G7 1/11		
	HC-RFS103(B)G7 1/21	HC-RP103(B)G7 1/21		
	HC-RFS103(B)G7 1/33	HC-RP103(B)G7 1/33		
	HC-RFS103(B)G7 1/45	HC-RP103(B)G7 1/45		
	HC-RFS153(B)G7 1/5	HC-RP153(B)G7 1/5		
	HC-RFS153(B)G7 1/11	HC-RP153(B)G7 1/11		
	HC-RFS153(B)G7 1/21	HC-RP153(B)G7 1/21		
	HC-RFS153(B)G7 1/33	HC-RP153(B)G7 1/33		
	HC-RFS153(B)G7 1/45	HC-RP153(B)G7 1/45		
	HC-RFS203(B)G7 1/5	HC-RP203(B)G7 1/5		
	HC-RFS203(B)G7 1/11	HC-RP203(B)G7 1/11		
	HC-RFS203(B)G7 1/21	HC-RP203(B)G7 1/21		
	HC-RFS203(B)G7 1/33	HC-RP203(B)G7 1/33		
	HC-RFS203(B)G7 1/45	HC-RP203(B)G7 1/45		
	HC-RFS353(B)G7 1/5	HC-RP353(B)G7 1/5		
	HC-RFS353(B)G7 1/11	HC-RP353(B)G7 1/11		
	HC-RFS353(B)G7 1/21	HC-RP353(B)G7 1/21		
	HC-RFS353(B)G7 1/33	HC-RP353(B)G7 1/33		
	HC-RFS503(B)G7 1/5	HC-RP503(B)G7 1/5		
	HC-RFS503(B)G7 1/11	HC-RP503(B)G7 1/11		
	HC-RFS503(B)G7 1/21	HC-RP503(B)G7 1/21		
Medium capacity, low inertia HC-LFS series (B): With brake	HC-LFS52(B)	HC-LP52(B)	○	
	HC-LFS102(B)	HC-LP102(B)		
	HC-LFS152(B)	HC-LP152(B)		
	HC-LFS202(B)	HC-LP202(B)		
	HC-LFS302(B)	HC-LP302(B)		
Small capacity, flat type HC-UFS series (B): With brake	HC-UFS13(B)	HF-KP13(B)	(Note 1)	・The HF-KP servo motor does not have an oil seal. Use HF-KP_J when an oil seal is required.
	HC-UFS23(B)	HF-KP23(B)		
	HC-UFS43(B)	HF-KP43(B)		
	HC-UFS73(B)	HF-KP73(B)		
Medium capacity, flat type HC-UFS series (B): With brake	HC-UFS72(B)	HC-UP72(B)	○	
	HC-UFS152(B)	HC-UP152(B)		
	HC-UFS202(B)	HC-UP202(B)		
	HC-UFS352(B)	HC-UP352(B)		
	HC-UFS502(B)	HC-UP502(B)		
Medium and large capacities, low inertia HA-LFS series (B): With brake	HA-LFS601(B)	HA-LP601(B)	○	
	HA-LFS701M(B)	HA-LP701M(B)		
	HA-LFS502	HA-LP502		
	HA-LFS702	HA-LP702		

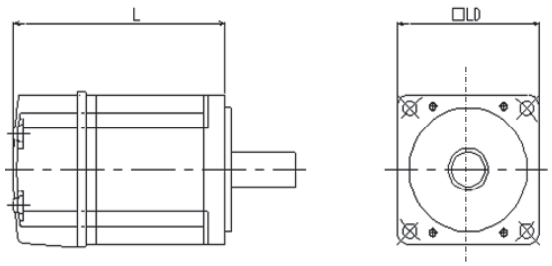
Note 1. Refer to "Appendix 2: 2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions" for mounting dimensions.
2. The power supply and encoder connector will be changed.

2.2.2 Comparison of Servo Motor Mounting Dimensions



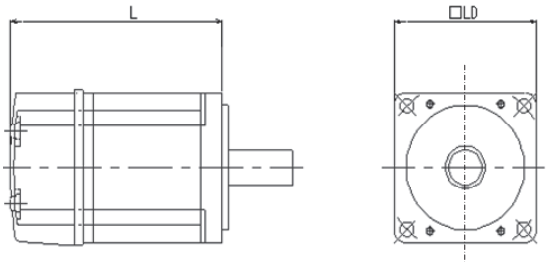
Currently Used Product			Replacement Product			Precautions
Model	L	LD	Model	L	LD	
HC-KFS053(B) HC-MFS053(B)	81.5 (109.5)	40	HG-KR053(B) HG-MR053(B)	66.4 (107)	40	For replacement from the HC-MFS series, some part of the mounting dimension is different. Refer to "Appendix 2: 2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions" for more details.
			HF-KP053(B) HF-MP053(B)	66.4 (107.5)		
HC-KFS13(B) HC-MFS13(B)	96.5 (124.5)		HG-KR13(B) HG-MR13(B)	82.4 (123)		
			HF-KP13(B) HF-MP13(B)	82.4 (123.5)		
HC-KFS23(B) HC-MFS23(B)	99.5 (131.5)	60	HG-KR23(B) ◇ HG-MR23(B) ◇	76.6 (113.4)	60	For the models with the ◇ symbol, some part of the mounting dimension is different. Refer to "Appendix 2: 2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions" for more details.
			HF-KP23(B) HF-MP23(B)	76.6 (116.1)		
HC-KFS43(B) HC-MFS43(B)	124.5 (156.5)		HG-KR43(B) ◇ HG-MR43(B) ◇	98.3 (135.1)		
			HF-KP43(B) HF-MP43(B)	98.5 (138)		
HC-KFS73(B) HC-MFS73(B)	142 (177.5)	80	HG-KR73(B) ◇ HG-MR73(B) ◇	112 (152.3)	80	
			HF-KP73(B) HF-MP73(B)	113.8 (157)		
HC-KFS46 HC-KFS410	134	60	HG-KR43 ◇	98.3	60	
			HF-KP43	98.5		
HC-SFS81(B)	170 (203)	130	HG-SR81(B)	146.5 (181)	130	
			HF-SP81(B)	162.5 (197)		
HC-SFS121(B)	145 (193)	176	HG-SR121(B)	138.5 (188)	176	
			HF-SP121(B)	143.5 (193)		
HC-SFS201(B)	187 (235)		HG-SR201(B)	162.5 (212)		
			HF-SP201(B)	183.5 (233)		
HC-SFS301(B)	208 (256)		HG-SR301(B)	178.5 (228)		
			HF-SP301(B)	203.5 (253)		
HC-SFS52(B) HC-SFS524(B) HC-SFS53(B)	120 (153)	130	HG-SR52(B) HG-SR524(B)	118.5 (153)	130	
			HF-SP52(B)	118.5 (153)		
HC-SFS102(B) HC-SFS1024(B) HC-SFS103(B)	145 (178)		HG-SR102(B) HG-SR1024(B)	132.5 (167)		
			HF-SP102(B)	140.5 (175)		
HC-SFS152(B) HC-SFS1524(B) HC-SFS153(B)	170 (203)		HG-SR152(B) HG-SR1524(B)	146.5 (181)		
			HF-SP152(B)	162.5 (197)		
HC-SFS202(B) HC-SFS2024(B) HC-SFS203(B)	145 (193)	176	HG-SR202(B) HG-SR2024(B)	138.5 (188)	176	
			HF-SP202(B)	143.5 (193)		
HC-SFS352(B) HC-SFS3524(B) HC-SFS353(B)	187 (235)		HG-SR352(B) HG-SR3524(B)	162.5 (212)		
			HF-SP352(B)	183.5 (233)		
HC-SFS502(B) HC-SFS5024(B)	208 (256)		HG-SR502(B) HG-SR5024(B)	178.5 (228)		
			HF-SP502(B)	203.5 (253)		
HC-SFS702(B) HC-SFS7024(B)	292 (340)		HG-SR702(B) HG-SR7024(B)	218.5 (268)		
			HF-SP702(B)	263.5 (313)		

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake [Unit: mm]



Currently Used Product			Replacement Product			Precautions
Model	L	LD	Model	L	LD	
HC-RFS103(B)	147 (185)	100	HG-RR103(B)	145.5 (183)	100	
			HC-RP103(B)	145.5 (183.5)		
HC-RFS153(B)	172 (210)		HG-RR153(B)	170.5 (208)		
			HC-RP153(B)	170.5 (208.5)		
HC-RFS203(B)	197 (235)		HG-RR203(B)	195.5 (233)		
			HC-RP203(B)	195.5 (233.5)		
HC-RFS353(B)	217 (254)	130	HG-RR353(B)	215.5 (252)	130	
			HC-RP353(B)	215.5 (252.5)		
HC-RFS503(B)	274 (311)		HG-RR503(B)	272.5 (309)		
			HC-RP503(B)	272.5 (309.5)		
HC-LFS52(B)	145.5 (178.5)	130	HG-JR73(B)	145.5 (191)	90	The models without the ◇ symbol do not have mounting compatibility. Refer to "Appendix 2: 2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions" for more details.
			HC-LP52(B) ◇	144 (177)	130	
HC-LFS102(B)	165.5 (198.5)		HG-JR153(B)	199.5 (245)	90	
			HC-LP102(B) ◇	164 (197)	130	
HC-LFS152(B)	193 (226)		HG-JR353(B)	213 (251.5)		
			HC-LP152(B) ◇	191.5 (224.5)		
HC-LFS202(B)	200 (248)	176	HG-JR353(B)	213 (251.5)	130	
			HC-LP202(B) ◇	198.5 (246.5)	176	
HC-LFS302(B)	250 (298)		HG-JR503(B)	267 (305.5)	130	
			HC-LP302(B) ◇	248.5 (296.5)	176	
HC-UFS13(B)	70 (100)	60	HG-KR13(B)	82.4 (123)	40	No mounting compatibility. Refer to "Appendix 2: 2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions" for more details.
			HF-KP13(B)	82.4 (123.5)		
HC-UFS23(B)	77 (111)	80	HG-KR23(B)	76.6 (113.4)	60	
			HF-KP23(B)	76.6 (116.1)		
HC-UFS43(B)	92 (126)		HG-KR43(B)	98.3 (135.1)		
			HF-KP43(B)	98.5 (138)		
HC-UFS73(B)	85 (111)	123	HG-KR73(B)	112 (152.3)	80	
			HF-KP73(B)	113.8 (157)		
HC-UFS72(B)	110.5 (144)	176	HG-UR72(B)	109 (142.5)	176	
			HC-UP72(B)	109 (142.5)		
HC-UFS152(B)	120 (153.5)		HG-UR152(B)	118.5 (152)		
			HC-UP152(B)	118.5 (152)		
HC-UFS202(B)	118 (161)	220	HG-UR202(B)	116.5 (159.5)	220	
			HC-UP202(B)	116.5 (159.5)		
HC-UFS352(B)	142 (185)		HG-UR352(B)	140.5 (183.5)		
			HC-UP352(B)	140.5 (183.5)		
HC-UFS502(B)	166 (209)		HG-UR502(B)	164.5 (207.5)		
			HC-UP502(B)	164.5 (207.5)		

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake [Unit: mm]

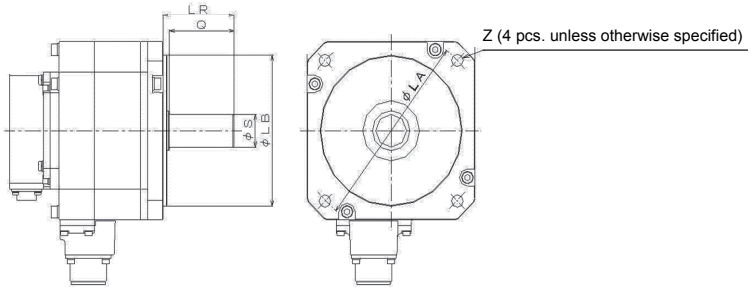


Currently Used Product			Replacement Product			Precautions
Model	L	LD	Model	L	LD	
HA-LFS601(B) HA-LFS6014(B)	480 (550)	200	HG-JR601(B) HG-JR6014(B)	299.5 (372)	220	The models without the ◇ symbol do not have mounting compatibility. Refer to "Appendix 2: 2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions" for more details.
HA-LFS601(B)			HA-LP601(B) ◇	480 (550)	200	
HA-LFS801(B) HA-LFS8014(B)	495 (610)	250	HG-JR801(B) HG-JR8014(B)	339.5 (412)	220	
HA-LFS12K1(B) HA-LFS12K14(B)	555 (670)		HG-JR12K1(B) HG-JR12K14(B)	439.5 (512)		
HA-LFS15K1 HA-LFS15K14	605	280	HG-JR15K1 HG-JR15K14	476	250	
HA-LFS20K1 HA-LFS20K14	650		HG-JR20K1 HG-JR20K14	538		
HA-LFS25K1 HA-LFS25K14	640	350	HG-JR25K1 HG-JR25K14	600		
HA-LFS30K1 HA-LFS30K14	685		HG-JR30K1 HG-JR30K14	600	280	
HA-LFS37K1 HA-LFS37K14	785		HG-JR37K1 HG-JR37K14	664		
HA-LFS701M(B) HA-LFS701M4(B)	480 (550)	200	HG-JP701M(B) HG-JP701M4(B)	299.5 (372)	220	
HA-LFS701M(B)			HA-LP701M(B) ◇	480 (550)	200	
HA-LFS11K1M(B) HA-LFS11K1M4(B)	495 (610)	250	HG-JR11K1M(B) HG-JR11K1M4(B)	339.5 (412)	220	
HA-LFS15K1M(B) HA-LFS15K1M4(B)	555 (670)		HG-JR15K1M(B) HG-JR15K1M4(B)	439.5 (512)		
HA-LFS22K1M HA-LFS22K1M4	605	280	HG-JR22K1M HG-JR22K1M4	476	250	
HA-LFS30K1M	660		HG-JR30K1M HG-JR30K1M4	538		
HA-LFS30K1M4	650					
HA-LFS37K1M HA-LFS37K1M4	640	350	HG-JR37K1M HG-JR37K1M4	600		
HA-LFS45K1M4	685		HG-JR45K1M4	600	280	
HA-LFS50K1M4	785		HG-JR55K1M4	664		
HA-LFS502	300	200	HG-SR502	178.5	176	
			HA-LP502 ◇	298	200	
HA-LFS702	342		HG-SR702	218.5	176	
			HA-LP702 ◇	340	200	
HA-LFS11K2(B) HA-LFS11K24(B)	480 (550)		HG-JR11K1M(B) HG-JR11K1M4(B)	339.5 (412)	220	
HA-LFS15K2(B) HA-LFS15K24(B)	495 (610)	250				
HA-LFS22K2(B) HA-LFS22K24(B)	555 (670)		HG-JR15K1M(B) HG-JR15K1M4(B)	439.5 (512)		
HA-LFS30K2	615	280	HG-JR22K1M HG-JR22K1M4	476	250	
HA-LFS30K24	605					
HA-LFS37K2	660		HG-JR30K1M HG-JR30K1M4	538		
HA-LFS37K24	650					
HA-LFS45K24	640	350	HG-JR37K1M4	600		
HA-LFS55K24	685		HG-JR45K1M4	600	280	

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake [Unit: mm]

2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions

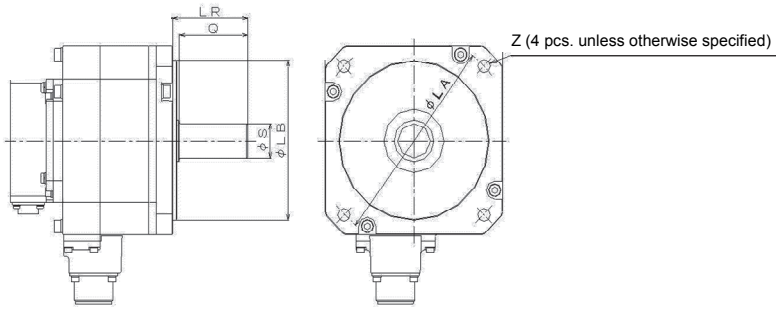
The following table shows the detailed comparison of dimensions between models that have no compatibility in mounting.



Currently Used Product							Replacement Product						
Model	LA	LB	LR	Q	S	Z	Model	LA	LB	LR	Q	S	Z
HC-MFS053(B)	46	30	25	22.5	8	2-4.5	HG-MR053(B) HF-MP053(B)	46	30	25	21.5	8	2-4.5
HC-MFS13(B)	46	30	25	22.5	8	2-4.5	HG-MR13(B) HF-MP13(B)	46	30	25	21.5	8	2-4.5
HC-KFS23(B) HC-MFS23(B)	70	50	30	27	14	5.8	HG-KR23(B) HG-MR23(B)	70	50	30	26	14	5.8
HC-KFS43(B) HC-MFS43(B)	70	50	30	27	14	5.8	HG-KR43(B) HG-MR43(B)	70	50	30	26	14	5.8
HC-KFS73(B) HC-MFS73(B)	90	70	40	37	19	6.6	HG-KR73(B) HG-MR73(B)	90	70	40	36	19	6.6
HC-KFS46	70	50	30	27	14	5.8	HG-KR43	70	50	30	26	14	5.8
HC-KFS410	70	50	30	27	14	5.8							
HC-LFS52(B)	145	110	55	50	24	9	HG-JR73(B)	100	80	40	30	16	6.6
HC-LFS102(B)	145	110	55	50	24	9	HG-JR153(B)	100	80	40	30	16	6.6
HC-LFS152(B)	145	110	55	50	24	9	HG-JR353(B)	145	110	55	50	28	9
HC-LFS202(B)	200	114.3	79	75	35	13.5	HG-JR353(B)	145	110	55	50	28	9
HC-LFS302(B)	200	114.3	79	75	35	13.5	HG-JR503(B)	145	110	55	50	28	9
HC-UFS13(B)	70	50	25	19	8	5.8	HG-KR13(B)	46	30	25	21.5	8	2-4.5
							HF-KP13(B)	46	30	25	21.5	8	2-4.5
HC-UFS23(B)	90	70	30	23.5	14	6.6	HG-KR23(B)	70	50	30	26	14	5.8
							HF-KP23(B)	70	50	30	-	14	5.8
HC-UFS43(B)	90	70	30	23.5	14	6.6	HG-KR43(B)	70	50	30	26	14	5.8
							HF-KP43(B)	70	50	30	-	14	5.8
HC-UFS73(B)	145	110	40	32.5	19	9	HG-KR73(B)	90	70	40	36	19	6.6
							HF-KP73(B)	90	70	40	-	19	6.6
HA-LFS601(B) HA-LFS6014(B)	215	180	85	80	42	14.5	HG-JR601(B) HG-JR6014(B)	235	200	85	79	42	13.5
HA-LFS801(B) HA-LFS8014(B)	265	230	110	100	55	14.5	HG-JR801(B) HG-JR8014(B)	235	200	116	110	55	13.5
HA-LFS12K1(B) HA-LFS12K14(B)	265	230	110	100	55	14.5	HG-JR12K1(B) HG-JR12K14(B)	235	200	116	110	55	13.5
HA-LFS15K1 HA-LFS15K14	300	250	140	140	60	19	HG-JR15K1 HG-JR15K14	265	230	140	130	65	24
HA-LFS20K1 HA-LFS20K14	300	250	140	140	60	19	HG-JR20K1 HG-JR20K14	265	230	140	130	65	24
HA-LFS25K1 HA-LFS25K14	350	300	140	140	65	19	HG-JR25K1 HG-JR25K14	265	230	140	130	65	24
HA-LFS30K1 HA-LFS30K14	350	300	140	140	65	19	HG-JR30K1 HG-JR30K14	300	250	140	140	80	24
HA-LFS37K1 HA-LFS37K14	350	300	170	170	80	19	HG-JR37K1 HG-JR37K14	300	250	140	140	80	24

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake [Unit: mm]

2. Dimensions with differences are shown with shading.



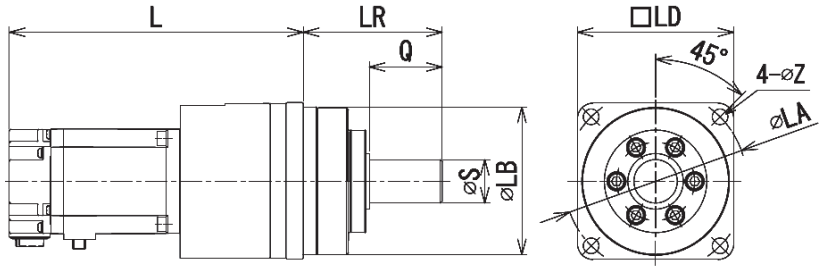
Currently Used Product							Replacement Product						
Model	LA	LB	LR	Q	S	Z	Model	LA	LB	LR	Q	S	Z
HA-LFS701M(B) HA-LFS701M4(B)	215	180	85	80	42	14.5	HG-JR701M(B) HG-JR701M4(B)	235	200	85	79	42	13.5
HA-LFS11K1M(B) HA-LFS11K1M4(B)	265	230	110	100	55	14.5	HG-JR11K1M(B) HG-JR11K1M4(B)	235	200	116	110	55	13.5
HA-LFS15K1M(B) HA-LFS15K1M4(B)	265	230	110	100	55	14.5	HG-JR15K1M(B) HG-JR15K1M4(B)	235	200	116	110	55	13.5
HA-LFS22K1M HA-LFS22K1M4	300	250	140	140	60	19	HG-JR22K1M HG-JR22K1M4	265	230	140	130	65	24
HA-LFS30K1M HA-LFS30K1M4	300	250	140	140	60	19	HG-JR30K1M HG-JR30K1M4	265	230	140	130	65	24
HA-LFS37K1M HA-LFS37K1M4	350	300	140	140	65	19	HG-JR37K1M HG-JR37K1M4	265	230	140	130	65	24
HA-LFS45K1M4	350	300	140	140	65	19	HG-JR45K1M4	300	250	140	140	80	24
HA-LFS50K1M4	350	300	170	170	80	19	HG-JR55K1M4	300	250	140	140	80	24
HA-LFS502	215	180	85	80	42	14.5	HG-SR502	200	114.3	79	75	35	13.5
HA-LFS702	215	180	85	80	42	14.5	HG-SR702	200	114.3	79	75	35	13.5
HA-LFS11K2(B) HA-LFS11K24(B)	215	180	85	80	42	14.5	HG-JR11K1M(B) HG-JR11K1M4(B)	235	200	116	110	55	13.5
HA-LFS15K2(B) HA-LFS15K24(B)	265	230	110	100	55	14.5	HG-JR11K1M(B) HG-JR11K1M4(B)	235	200	116	110	55	13.5
HA-LFS22K2(B) HA-LFS22K24(B)	265	230	110	100	55	14.5	HG-JR15K1M(B) HG-JR15K1M4(B)	235	200	116	110	55	13.5
HA-LFS30K2 HA-LFS30K24	300	250	140	140	60	19	HG-JR22K1M HG-JR22K1M4	265	230	140	130	65	24
HA-LFS37K2 HA-LFS37K24	300	250	140	140	60	19	HG-JR30K1M HG-JR30K1M4	265	230	140	130	65	24
HA-LFS45K24	350	300	140	140	65	19	HG-JR37K1M4	265	230	140	130	65	24
HA-LFS55K24	350	300	140	140	65	19	HG-JR45K1M4	300	250	140	140	80	24

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake [Unit: mm]

2. Dimensions with differences are shown with shading.

2.2.4 Comparison of Geared Servo Motor Mounting Dimensions

(For high precision applications: HC-KFS, HC-MFS_G2 → HG-KR, HF-KP, HF-MP_G7)

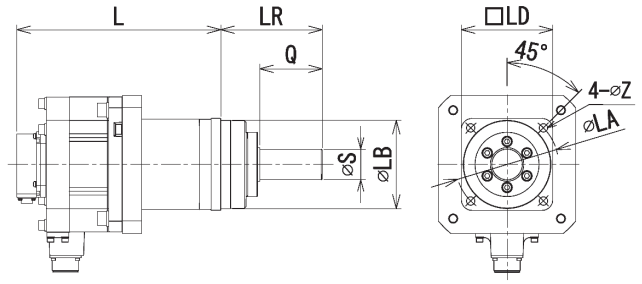


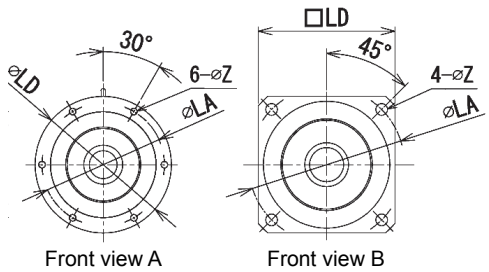
Output (W)	HC-KFS, HC-MFS series (G2)									HG-KR, HF-KP, HF-MP series (G7)								
	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z
50	1/5	130 (158)	55	25	16	80	65	70	6.6	1/5	105.9 (146.5)	42	20	10	46	40	40	3.4
											130.4 (171)	58	28	16	70	56	60	5.5
	1/9	146 (174)	55	25	16	80	65	70	6.6	1/9	105.9 (146.5)	42	20	10	46	40	40	3.4
	1/20	146 (174)	55	25	16	80	65	70	6.6	1/21	130.4 (171)	58	28	16	70	56	60	5.5
	1/29	146 (174)	55	25	16	80	65	70	6.6	1/33	130.4 (171)	58	28	16	70	56	60	5.5
100	1/5	145 (173)	55	25	16	80	65	70	6.6	1/5	121.9 (162.5)	42	20	10	46	40	40	3.4
											146.4 (187)	58	28	16	70	56	60	5.5
	1/9	161 (189)	55	25	16	80	65	70	6.6	1/11	146.4 (187)	58	28	16	70	56	60	5.5
	1/20	167 (195)	75	35	20	100	80	85	6.6	1/21	146.4 (187)	58	28	16	70	56	60	5.5
	1/29	167 (195)	75	35	20	100	80	85	6.6	1/33	148.9 (189.5)	80	42	25	105	85	90	9
200	1/5	157 (189)	55	25	16	80	65	70	6.6	1/5	140.6 (177.4)	58	28	16	70	56	60	5.5
	1/9	175 (207)	75	35	20	100	80	85	6.6	1/11	140.6 (177.4)	58	28	16	70	56	60	5.5
	1/20	180 (212)	85	40	25	115	95	100	9	1/21	147.6 (184.4)	80	42	25	105	85	90	9
	1/29	180 (212)	85	40	25	115	95	100	9	1/33	147.6 (184.4)	80	42	25	105	85	90	9
400	1/5	184 (216)	75	35	20	100	80	85	6.6	1/5	162.3 (199.1)	58	28	16	70	56	60	5.5
	1/9	205 (237)	85	40	25	115	95	100	9	1/11	169.3 (206.1)	80	42	25	105	85	90	9
	1/20	211 (243)	100	50	32	135	110	115	11	1/21	169.3 (206.1)	80	42	25	105	85	90	9
	1/29	211 (243)	100	50	32	135	110	115	11	1/33	181.3 (218.1)	133	82	40	135	115	120	11
750	1/5	212 (247.5)	85	40	25	115	95	100	9	1/5	190 (230.3)	80	42	25	105	85	90	9
	1/9	240 (275.5)	100	50	32	135	110	115	11	1/11	190 (230.3)	80	42	25	105	85	90	9
	1/20	248 (283.5)	115	60	40	150	125	130	14	1/21	200 (240.3)	133	82	40	135	115	120	11
	1/29	248 (283.5)	115	60	40	150	125	130	14	1/33	200 (240.3)	133	82	40	135	115	120	11

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. (B): With brake [Unit: mm]

(For high precision applications: HC-SFS_G2 → HG-SR, HF-SP_G7 0.5 kW to 1.5 kW)

HC-SFS_G2 front view





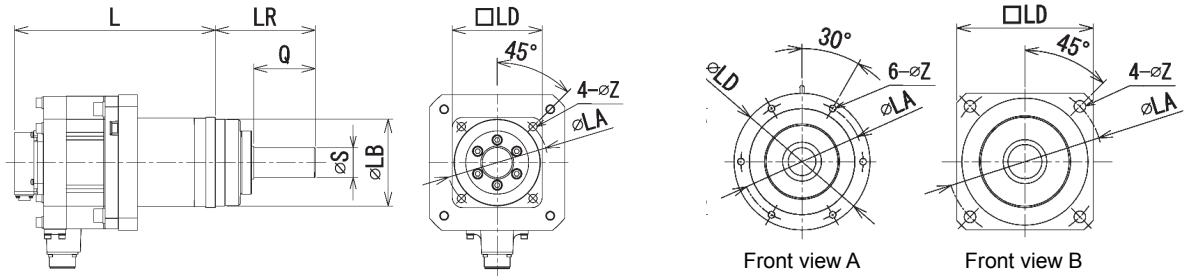
Front view A Front view B

Output (kW)	HC-SFS series (G2)										HG-SR, HF-SP series (G7)								
	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z	Front view	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z
0.5	1/5	276 (309)	100	55	35	160	130	140	12	B	1/5	213.5 (248)	80	42	25	105	85	90	9
	1/9	288 (321)	100	55	35	160	130	140	12	B	1/11	213.5 (248)	80	42	25	105	85	90	9
	1/20	309 (342)	100	55	35	160	130	140	12	B	1/21	225.5 (260)	133	82	40	135	115	120	11
	1/29	337 (370)	140	75	50	220	190	245	12	A	1/33	225.5 (260)	133	82	40	135	115	120	11
	1/45	343 (376)	140	75	50	220	190	245	12	A	1/45	225.5 (260)	133	82	40	135	115	120	11
1.0	1/5	301 (334)	100	55	35	160	130	140	12	B	1/5	227.5 (262)	80	42	25	105	85	90	9
	1/9	313 (346)	100	55	35	160	130	140	12	B	1/11	239.5 (274)	133	82	40	135	115	120	11
	1/20	362 (395)	140	75	50	220	190	245	12	A	1/21	239.5 (274)	133	82	40	135	115	120	11
	1/29	362 (395)	140	75	50	220	190	245	12	A	1/33	255.5 (290)	156	82	50	190	165	170	14
	1/45	389 (422)	160	90	60	280	240	310	14	A	1/45	255.5 (290)	156	82	50	190	165	170	14
1.5	1/5	326 (359)	100	55	35	160	130	140	12	B	1/5	241.5 (276)	80	42	25	105	85	90	9
	1/9	379 (412)	140	75	50	220	190	245	12	A	1/11	253.5 (288)	133	82	40	135	115	120	11
	1/20	387 (420)	140	75	50	220	190	245	12	A	1/21	269.5 (304)	156	82	50	190	165	170	14
	1/29	411 (444)	160	90	60	280	240	310	14	A	1/33	269.5 (304)	156	82	50	190	165	170	14
	1/45	414 (447)	160	90	60	280	240	310	14	A	1/45	269.5 (304)	156	82	50	190	165	170	14

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake [Unit: mm]

(For high precision applications: HC-SFS_G2 → HG-SR, HF-SP_G7 2.0 kW to 7.0 kW)

HC-SFS_G2 front view



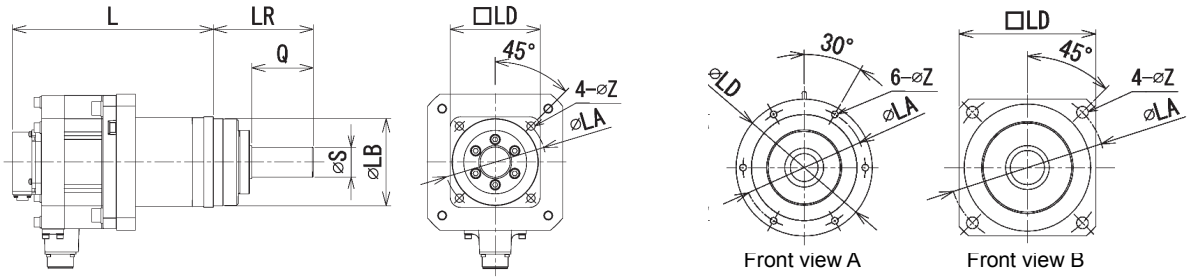
Front view A　　Front view B

Output (kW)	HC-SFS series (G2)										HG-SR, HF-SP series (G7)								
	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z	Front view	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z
2.0	1/5	348 (396)	140	75	50	220	190	245	12	A	1/5	267.5 (317)	133	82	40	135	115	120	11
	1/9	375 (423)	140	75	50	220	190	245	12	A	1/11	267.5 (317)	133	82	40	135	115	120	11
	1/20	407 (455)	160	90	60	280	240	310	14	A	1/21	287.5 (337)	156	82	50	190	165	170	14
	1/29	407 (455)	160	90	60	280	240	310	14	A	1/33	287.5 (337)	156	82	50	190	165	170	14
	1/45	410 (458)	160	90	60	280	240	310	14	A	1/45	287.5 (337)	156	82	50	190	165	170	14
3.5	1/5	410 (458)	160	90	60	280	240	310	14	A	1/5	291.5 (341)	133	82	40	135	115	120	11
	1/9	442 (490)	160	90	60	280	240	310	14	A	1/11	311.5 (361)	156	82	50	190	165	170	14
	1/20	449 (497)	160	90	60	280	240	310	14	A	1/21	311.5 (361)	156	82	50	190	165	170	14
5.0	1/5	431 (479)	160	90	60	280	240	310	14	A	1/5	327.5 (377)	156	82	50	190	165	170	14
	1/9	463 (511)	160	90	60	280	240	310	14	A	1/11	327.5 (377)	156	82	50	190	165	170	14
7.0	1/5	515 (563)	160	90	60	280	240	310	14	A	1/5	367.5 (417)	156	82	50	190	165	170	14

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake　[Unit: mm]

(For high precision applications: HC-RFS_G2 → HG-SR_G7)

HC-RFS_G2 front view

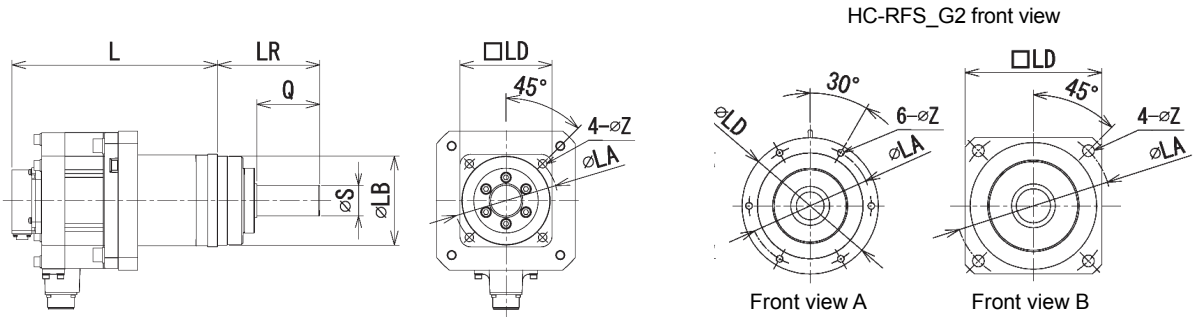


Front view A　　Front view B

Output (kW)	HC-RFS series (G2)										HG-SR series (G7)								
	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z	Front view	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z
1.0	1/5	301 (339)	100	55	35	160	130	140	12	B	1/5	227.5 (262)	80	42	25	105	85	90	9
	1/9	313 (351)	100	55	35	160	130	140	12	B	1/11	239.5 (274)	133	82	40	135	115	120	11
	1/20	354 (392)	140	75	50	220	190	245	12	A	1/21	239.5 (274)	133	82	40	135	115	120	11
	1/29	354 (392)	140	75	50	220	190	245	12	A	1/33	255.5 (290)	156	82	50	190	165	170	14
	1/45	364 (402)	140	75	50	220	190	245	12	A	1/45	255.5 (290)	156	82	50	190	165	170	14
1.5	1/5	326 (364)	100	55	35	160	130	140	12	B	1/5	241.5 (276)	80	42	25	105	85	90	9
	1/9	375 (413)	140	75	50	220	190	245	12	A	1/11	253.5 (288)	133	82	40	135	115	120	11
	1/20	379 (417)	140	75	50	220	190	245	12	A	1/21	269.5 (304)	156	82	50	190	165	170	14
	1/29	379 (417)	140	75	50	220	190	245	12	A	1/33	269.5 (304)	156	82	50	190	165	170	14
	1/45	410 (448)	160	90	60	280	240	310	14	A	1/45	269.5 (304)	156	82	50	190	165	170	14
2.0	1/5	351 (389)	100	55	35	160	130	140	12	B	1/5	267.5 (317)	133	82	40	135	115	120	11
	1/9	400 (438)	140	75	50	220	190	245	12	A	1/11	267.5 (317)	133	82	40	135	115	120	11
	1/20	404 (442)	140	75	50	220	190	245	12	A	1/21	287.5 (337)	156	82	50	190	165	170	14
	1/29	425 (463)	160	90	60	280	240	310	14	A	1/33	287.5 (337)	156	82	50	190	165	170	14
	1/45	435 (473)	160	90	60	280	240	310	14	A	1/45	287.5 (337)	156	82	50	190	165	170	14
3.5	1/5	418 (455)	140	75	50	220	190	245	12	A	1/5	291.5 (341)	133	82	40	135	115	120	11
	1/9	470 (507)	160	90	60	280	240	310	14	A	1/11	311.5 (361)	156	82	50	190	165	170	14
	1/20	470 (507)	160	90	60	280	240	310	14	A	1/21	311.5 (361)	156	82	50	190	165	170	14
	1/29	470 (507)	160	90	60	280	240	310	14	A	1/21	311.5 (361)	156	82	50	190	165	170	14
5.0	1/5	495 (532)	160	90	60	280	240	310	14	A	1/5	327.5 (377)	156	82	50	190	165	170	14
	1/9	527 (564)	160	90	60	280	240	310	14	A	1/11	327.5 (377)	156	82	50	190	165	170	14
	1/20	527 (564)	160	90	60	280	240	310	14	A	1/11	327.5 (377)	156	82	50	190	165	170	14

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake　[Unit: mm]

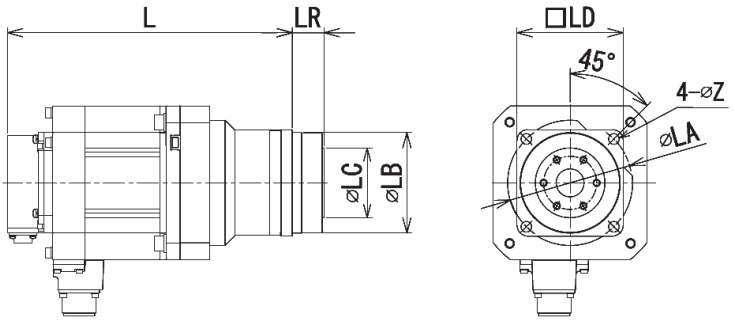
(For high precision applications: HC-RFS_G2 → HC-RP_G7)



Output (kW)	HC-RFS series (G2)										HC-RP series (G7)								
	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z	Front view	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z
1.0	1/5	301 (339)	100	55	35	160	130	140	12	B	1/5	227.5 (265.5)	80	42	25	105	85	90	9
	1/9	313 (351)	100	55	35	160	130	140	12	B	1/11	227.5 (265.5)	80	42	25	105	85	90	9
	1/20	354 (392)	140	75	50	220	190	245	12	A	1/21	255.5 (293.5)	133	82	40	135	115	120	11
	1/29	354 (392)	140	75	50	220	190	245	12	A	1/33	255.5 (293.5)	133	82	40	135	115	120	11
	1/45	364 (402)	140	75	50	220	190	245	12	A	1/45	268.5 (306.5)	156	82	50	190	165	170	14
1.5	1/5	326 (364)	100	55	35	160	130	140	12	B	1/5	252.5 (290.5)	80	42	25	105	85	90	9
	1/9	375 (413)	140	75	50	220	190	245	12	A	1/11	280.5 (318.5)	133	82	40	135	115	120	11
	1/20	379 (417)	140	75	50	220	190	245	12	A	1/21	280.5 (318.5)	133	82	40	135	115	120	11
	1/29	379 (417)	140	75	50	220	190	245	12	A	1/33	293.5 (331.5)	156	82	50	190	165	170	14
	1/45	410 (448)	160	90	60	280	240	310	14	A	1/45	293.5 (331.5)	156	82	50	190	165	170	14
2.0	1/5	351 (389)	100	55	35	160	130	140	12	B	1/5	277.5 (315.5)	80	42	25	105	85	90	9
	1/9	400 (438)	140	75	50	220	190	245	12	A	1/11	305.5 (343.5)	133	82	40	135	115	120	11
	1/20	404 (442)	140	75	50	220	190	245	12	A	1/21	318.5 (356.5)	156	82	50	190	165	170	14
	1/29	425 (463)	160	90	60	280	240	310	14	A	1/33	318.5 (356.5)	156	82	50	190	165	170	14
	1/45	435 (473)	160	90	60	280	240	310	14	A	1/45	318.5 (356.5)	156	82	50	190	165	170	14
3.5	1/5	418 (455)	140	75	50	220	190	245	12	A	1/5	344.5 (381.5)	133	82	40	135	115	120	11
	1/9	470 (507)	160	90	60	280	240	310	14	A	1/11	344.5 (381.5)	133	82	40	135	115	120	11
	1/20	470 (507)	160	90	60	280	240	310	14	A	1/21	364.5 (401.5)	156	82	50	190	165	170	14
	1/29	470 (507)	160	90	60	280	240	310	14	A	1/33	364.5 (401.5)	156	82	50	190	165	170	14
5.0	1/5	495 (532)	160	90	60	280	240	310	14	A	1/5	401.5 (438.5)	133	82	40	135	115	120	11
	1/9	527 (564)	160	90	60	280	240	310	14	A	1/11	421.5 (458.5)	156	82	50	190	165	170	14
	1/20	527 (564)	160	90	60	280	240	310	14	A	1/21	421.5 (458.5)	156	82	50	190	165	170	14

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake [Unit: mm]

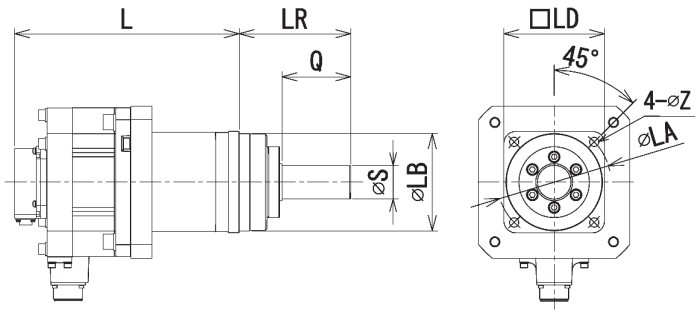
(For high precision applications: HC-RFS_G5 → HG-SR_G5)



Output (kW)	HC-RFS series (G5)								HG-SR series (G5)							
	Reduction ratio	L	LR	LA	LB	LC	LD	Z	Reduction ratio	L	LR	LA	LB	LC	LD	Z
1.0	1/5	229 (267)	27	105	85	59	90	9	1/5	227.5 (262)	27	105	85	59	90	9
	1/11	229 (267)	27	105	85	59	90	9	1/11	239.5 (274)	35	135	115	84	120	11
	1/21	257 (295)	35	135	115	84	120	11	1/21	239.5 (274)	35	135	115	84	120	11
	1/33	257 (295)	35	135	115	84	120	11	1/33	255.5 (290)	53	190	165	122	170	14
	1/45	270 (308)	53	190	165	122	170	14	1/45	255.5 (290)	53	190	165	122	170	14
1.5	1/5	254 (292)	27	105	85	59	90	9	1/5	241.5 (276)	27	105	85	59	90	9
	1/11	282 (320)	35	135	115	84	120	11	1/11	253.5 (288)	35	135	115	84	120	11
	1/21	282 (320)	35	135	115	84	120	11	1/21	269.5 (304)	53	190	165	122	170	14
	1/33	295 (333)	53	190	165	122	170	14	1/33	269.5 (304)	53	190	165	122	170	14
	1/45	295 (333)	53	190	165	122	170	14	1/45	269.5 (304)	53	190	165	122	170	14
2.0	1/5	279 (317)	27	105	85	59	90	9	1/5	267.5 (317)	35	135	115	84	120	11
	1/11	307 (345)	35	135	115	84	120	11	1/11	267.5 (317)	35	135	115	84	120	11
	1/21	320 (358)	53	190	165	122	170	14	1/21	287.5 (337)	53	190	165	122	170	14
	1/33	320 (358)	53	190	165	122	170	14	1/33	287.5 (337)	53	190	165	122	170	14
	1/45	320 (358)	53	190	165	122	170	14	1/45	287.5 (337)	53	190	165	122	170	14
3.5	1/5	346 (383)	35	135	115	84	120	11	1/5	291.5 (341)	35	135	115	84	120	11
	1/11	346 (383)	35	135	115	84	120	11	1/11	311.5 (361)	53	190	165	122	170	14
	1/21	366 (403)	53	190	165	122	170	14	1/21	311.5 (361)	53	190	165	122	170	14
	1/33	366 (403)	53	190	165	122	170	14	1/21	311.5 (361)	53	190	165	122	170	14
5.0	1/5	403 (440)	35	135	115	84	120	11	1/5	327.5 (377)	53	190	165	122	170	14
	1/11	423 (460)	53	190	165	122	170	14	1/11	327.5 (377)	53	190	165	122	170	14
	1/21	423 (460)	53	190	165	122	170	14	1/11	327.5 (377)	53	190	165	122	170	14

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake [Unit: mm]

(For high precision applications: HC-RFS_G7 → HG-SR_G7)



Output (kW)	HC-RFS series (G7)									HG-SR series (G7)								
	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z	Reduction ratio	L	LR	Q	S	LA	LB	LD	Z
1.0	1/5	229 (267)	80	42	25	105	85	90	9	1/5	227.5 (262)	80	42	25	105	85	90	9
	1/11	229 (267)	80	42	25	105	85	90	9	1/11	239.5 (274)	133	82	40	135	115	120	11
	1/21	257 (295)	133	82	40	135	115	120	11	1/21	239.5 (274)	133	82	40	135	115	120	11
	1/33	257 (295)	133	82	40	135	115	120	11	1/33	255.5 (290)	156	82	50	190	165	170	14
	1/45	270 (308)	156	82	50	190	165	170	14	1/45	255.5 (290)	156	82	50	190	165	170	14
1.5	1/5	254 (292)	80	42	25	105	85	90	9	1/5	241.5 (276)	80	42	25	105	85	90	9
	1/11	282 (320)	133	82	40	135	115	120	11	1/11	253.5 (288)	133	82	40	135	115	120	11
	1/21	282 (320)	133	82	40	135	115	120	11	1/21	269.5 (304)	156	82	50	190	165	170	14
	1/33	295 (333)	156	82	50	190	165	170	14	1/33	269.5 (304)	156	82	50	190	165	170	14
	1/45	295 (333)	156	82	50	190	165	170	14	1/45	269.5 (304)	156	82	50	190	165	170	14
2.0	1/5	279 (317)	80	42	25	105	85	90	9	1/5	267.5 (317)	133	82	40	135	115	120	11
	1/11	307 (345)	133	82	40	135	115	120	11	1/11	267.5 (317)	133	82	40	135	115	120	11
	1/21	320 (358)	156	82	50	190	165	170	14	1/21	287.5 (337)	156	82	50	190	165	170	14
	1/33	320 (358)	156	82	50	190	165	170	14	1/33	287.5 (337)	156	82	50	190	165	170	14
	1/45	320 (358)	156	82	50	190	165	170	14	1/45	287.5 (337)	156	82	50	190	165	170	14
3.5	1/5	346 (383)	133	82	40	135	115	120	11	1/5	291.5 (341)	133	82	40	135	115	120	11
	1/11	346 (383)	133	82	40	135	115	120	11	1/11	311.5 (361)	156	82	50	190	165	170	14
	1/21	366 (403)	156	82	50	190	165	170	14	1/21	311.5 (361)	156	82	50	190	165	170	14
	1/33	366 (403)	156	82	50	190	165	170	14	1/21	311.5 (361)	156	82	50	190	165	170	14
5.0	1/5	403 (440)	133	82	40	135	115	120	11	1/5	327.5 (377)	156	82	50	190	165	170	14
	1/11	423 (460)	156	82	50	190	165	170	14	1/11	327.5 (377)	156	82	50	190	165	170	14
	1/21	423 (460)	156	82	50	190	165	170	14	1/11	327.5 (377)	156	82	50	190	165	170	14

Note 1. As for the dimensions not listed here, refer to the catalog or Instruction Manual. ( ): With brake [Unit: mm]

2.2.5 Comparison of Actual Reduction Ratios for Geared Servo Motors

When replacing HC-KFS or HC-MFS_G1 with HG-KR_G1, some models require setting the electronic gear because actual reduction ratios are different.

(For general industrial machines: HC-KFS, HC-MFS_G1 → HG-KR_G1)

Output (W)	Reduction ratio	Actual reduction ratio	
		HC-KFS, HC-MFS series (G1)	HG-KR series (G1)
50	1/5	9/44	9/44
	1/12	49/576	49/576
	1/20	25/484	25/484
100	1/5	9/44	9/44
	1/12	49/576	49/576
	1/20	25/484	25/484
200	1/5	19/96	19/96
	1/12	25/288	961/11664
	1/20	253/5000	513/9984
400	1/5	19/96	19/96
	1/12	25/288	961/11664
	1/20	253/5000	7/135
750	1/5	1/5	1/5
	1/12	525/6048	7/87
	1/20	625/12544	625/12544

Note. Actual reduction ratios with differences are shown with shading.

2.2.6 Comparison of Moment of Inertia

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Small capacity, low inertia HC-KFS series (B): With brake	HC-KFS053(B)	0.053 (0.056)	15 times or less	HG-KR053(B)	0.0450 (0.0472)	17 times or less
				HF-KP053(B)	0.052 (0.054)	15 times or less
	HC-KFS13(B)	0.084 (0.087)		HG-KR13(B)	0.0777 (0.0837)	17 times or less
				HF-KP13(B)	0.088 (0.090)	15 times or less
	HC-KFS23(B)	0.260 (0.310)	24 times or less	HG-KR23(B)	0.221 (0.243)	26 times or less
				HF-KP23(B)	0.24 (0.31)	24 times or less
	HC-KFS43(B)	0.460 (0.510)	22 times or less	HG-KR43(B)	0.371 (0.393)	25 times or less
				HF-KP43(B)	0.42 (0.50)	22 times or less
	HC-KFS73(B)	1.51 (1.635)	15 times or less	HG-KR73(B)	1.26 (1.37)	17 times or less
				HF-KP73(B)	1.43 (1.63)	15 times or less
	HC-KFS46	0.64		HG-KR43	0.371	25 times or less
				HF-KP43	0.42	22 times or less
	HC-KFS410	0.47		HG-KR43	0.371	25 times or less
				HF-KP43	0.42	22 times or less
Small capacity, low inertia HC-KFS series with general gear reducers (G1) (B): With brake	HC-KFS053(B)G1 1/5	0.090 (0.093)	5 times or less	HG-KR053(B)G1 1/5	0.0820 (0.0840)	5 times or less
				HF-KP053(B)G1 1/5	0.089 (0.091)	
	HC-KFS053(B)G1 1/12	0.112 (0.115)		HG-KR053(B)G1 1/12	0.104 (0.106)	
				HF-KP053(B)G1 1/12	0.111 (0.113)	
	HC-KFS053(B)G1 1/20	0.094 (0.097)		HG-KR053(B)G1 1/20	0.0860 (0.0880)	
				HF-KP053(B)G1 1/20	0.093 (0.095)	
	HC-KFS13(B)G1 1/5	0.121 (0.124)		HG-KR13(B)G1 1/5	0.115 (0.121)	
				HF-KP13(B)G1 1/5	0.125 (0.127)	
	HC-KFS13(B)G1 1/12	0.143 (0.146)		HG-KR13(B)G1 1/12	0.137 (0.143)	
				HF-KP13(B)G1 1/12	0.147 (0.149)	
	HC-KFS13(B)G1 1/20	0.125 (0.128)		HG-KR13(B)G1 1/20	0.119 (0.125)	
				HF-KP13(B)G1 1/20	0.129 (0.131)	
	HC-KFS23(B)G1 1/5	0.420 (0.470)	7 times or less	HG-KR23(B)G1 1/5	0.375 (0.397)	7 times or less
				HF-KP23(B)G1 1/5	0.400 (0.470)	
	HC-KFS23(B)G1 1/12	0.470 (0.520)		HG-KR23(B)G1 1/12	0.418 (0.440)	
				HF-KP23(B)G1 1/12	0.450 (0.520)	
	HC-KFS23(B)G1 1/20	0.440 (0.490)		HG-KR23(B)G1 1/20	0.391 (0.413)	
				HF-KP23(B)G1 1/20	0.420 (0.490)	
	HC-KFS43(B)G1 1/5	0.610 (0.660)		HG-KR43(B)G1 1/5	0.525 (0.547)	
				HF-KP43(B)G1 1/5	0.570 (0.650)	
	HC-KFS43(B)G1 1/12	0.660 (0.710)		HG-KR43(B)G1 1/12	0.568 (0.590)	
				HF-KP43(B)G1 1/12	0.620 (0.700)	
	HC-KFS43(B)G1 1/20	0.970 (1.02)		HG-KR43(B)G1 1/20	0.881 (0.903)	
				HF-KP43(B)G1 1/20	0.930 (1.01)	
	HC-KFS73(B)G1 1/5	1.930 (2.055)	5 times or less	HG-KR73(B)G1 1/5	1.68 (1.79)	5 times or less
				HF-KP73(B)G1 1/5	1.85 (2.05)	
	HC-KFS73(B)G1 1/12	2.596 (2.721)		HG-KR73(B)G1 1/12	2.35 (2.46)	
				HF-KP73(B)G1 1/12	2.52 (2.72)	
	HC-KFS73(B)G1 1/20	2.660 (2.785)		HG-KR73(B)G1 1/20	2.41 (2.52)	
				HF-KP73(B)G1 1/20	2.58 (2.78)	

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Small capacity, low inertia HC-KFS series with high precision reducer (G2) (B): With brake	HC-KFS053(B)G2 1/5	0.101 (0.104)	5 times or less	HG-KR053(B)G7 1/5 (□40)	0.0512 (0.0534)	10 times or less
				HG-KR053(B)G7 1/5 (□60)	0.119 (0.121)	
				HF-KP053(B)G7 1/5	0.126 (0.128)	
	HC-KFS053(B)G2 1/9	0.095 (0.098)		HG-KR053(B)G7 1/9	0.0492 (0.0514)	
				HF-KP053(B)G7 1/11	0.113 (0.115)	
	HC-KFS053(B)G2 1/20	0.104 (0.107)		HG-KR053(B)G7 1/21	0.0960 (0.0980)	
				HF-KP053(B)G7 1/21	0.103 (0.105)	
	HC-KFS053(B)G2 1/29	0.092 (0.095)		HG-KR053(B)G7 1/33	0.0900 (0.0920)	
				HF-KP053(B)G7 1/33	0.097 (0.099)	
	HC-KFS13(B)G2 1/5	0.132 (0.135)		HG-KR13(B)G7 1/5 (□40)	0.0839 (0.0899)	
				HG-KR13(B)G7 1/5 (□60)	0.152 (0.158)	
				HF-KP13(B)G7 1/5	0.162 (0.164)	
	HC-KFS13(B)G2 1/9	0.126 (0.129)		HG-KR13(B)G7 1/11	0.139 (0.145)	
				HF-KP13(B)G7 1/11	0.149 (0.151)	
	HC-KFS13(B)G2 1/20	0.176 (0.179)		HG-KR13(B)G7 1/21	0.129 (0.135)	
				HF-KP13(B)G7 1/21	0.139 (0.141)	
	HC-KFS13(B)G2 1/29	0.150 (0.153)		HG-KR13(B)G7 1/33	0.141 (0.147)	
				HF-KP13(B)G7 1/33	0.151 (0.153)	
	HC-KFS23(B)G2 1/5	0.360 (0.410)	7 times or less	HG-KR23(B)G7 1/5	0.428 (0.450)	14 times or less
				HF-KP23(B)G7 1/5	0.447 (0.517)	
	HC-KFS23(B)G2 1/9	0.380 (0.430)		HG-KR23(B)G7 1/11	0.424 (0.446)	
				HF-KP23(B)G7 1/11	0.443 (0.513)	
	HC-KFS23(B)G2 1/20	0.530 (0.580)		HG-KR23(B)G7 1/21	0.721 (0.743)	
				HF-KP23(B)G7 1/21	0.740 (0.810)	
	HC-KFS23(B)G2 1/29	0.450 (0.500)		HG-KR23(B)G7 1/33	0.674 (0.696)	
				HF-KP23(B)G7 1/33	0.693 (0.763)	
	HC-KFS43(B)G2 1/5	0.610 (0.660)		HG-KR43(B)G7 1/5	0.578 (0.600)	
				HF-KP43(B)G7 1/5	0.627 (0.707)	
	HC-KFS43(B)G2 1/9	0.640 (0.690)		HG-KR43(B)G7 1/11	0.955 (0.977)	
				HF-KP43(B)G7 1/11	1.00 (1.08)	
	HC-KFS43(B)G2 1/20	0.740 (0.790)		HG-KR43(B)G7 1/21	0.871 (0.893)	
				HF-KP43(B)G7 1/21	0.920 (1.00)	
	HC-KFS43(B)G2 1/29	0.660 (0.710)		HG-KR43(B)G7 1/33	0.927 (0.949)	
				HF-KP43(B)G7 1/33	0.976 (1.06)	
	HC-KFS73(B)G2 1/5	1.883 (2.008)	5 times or less	HG-KR73(B)G7 1/5	1.95 (2.06)	10 times or less
				HF-KP73(B)G7 1/5	2.12 (2.32)	
	HC-KFS73(B)G2 1/9	1.890 (2.015)		HG-KR73(B)G7 1/11	1.83 (1.94)	
				HF-KP73(B)G7 1/11	2.00 (2.20)	
	HC-KFS73(B)G2 1/20	1.926 (2.051)		HG-KR73(B)G7 1/21	2.03 (2.14)	
				HF-KP73(B)G7 1/21	2.20 (2.40)	
	HC-KFS73(B)G2 1/29	1.820 (1.945)		HG-KR73(B)G7 1/33	1.80 (1.91)	
				HF-KP73(B)G7 1/33	1.97 (2.17)	

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Small capacity, low inertia HC-KFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-KFS053(B)G5 1/5	0.121 (0.124)	10 times or less	HG-KR053(B)G5 1/5	0.113 (0.115)	10 times or less
				HF-KP053(B)G5 1/5	0.120 (0.122)	
	HC-KFS053(B)G5 1/11	0.113 (0.116)		HG-KR053(B)G5 1/11	0.105 (0.107)	
				HF-KP053(B)G5 1/11	0.112 (0.114)	
	HC-KFS053(B)G5 1/21	0.104 (0.107)		HG-KR053(B)G5 1/21	0.0960 (0.0980)	
				HF-KP053(B)G5 1/21	0.103 (0.105)	
	HC-KFS053(B)G5 1/33	0.098 (0.101)		HG-KR053(B)G5 1/33	0.0900 (0.0920)	
				HF-KP053(B)G5 1/33	0.097 (0.099)	
	HC-KFS053(B)G5 1/45	0.098 (0.101)		HG-KR053(B)G5 1/45	0.0900 (0.0920)	
				HF-KP053(B)G5 1/45	0.097 (0.099)	
	HC-KFS13(B)G5 1/5	0.152 (0.155)		HG-KR13(B)G5 1/5	0.146 (0.152)	
				HF-KP13(B)G5 1/5	0.156 (0.158)	
	HC-KFS13(B)G5 1/11	0.144 (0.147)		HG-KR13(B)G5 1/11	0.138 (0.144)	
				HF-KP13(B)G5 1/11	0.148 (0.150)	
	HC-KFS13(B)G5 1/21	0.135 (0.138)		HG-KR13(B)G5 1/21	0.129 (0.135)	
				HF-KP13(B)G5 1/21	0.139 (0.141)	
	HC-KFS13(B)G5 1/33	0.146 (0.149)		HG-KR13(B)G5 1/33	0.140 (0.146)	
				HF-KP13(B)G5 1/33	0.150 (0.152)	
	HC-KFS13(B)G5 1/45	0.145 (0.148)		HG-KR13(B)G5 1/45	0.139 (0.145)	
				HF-KP13(B)G5 1/45	0.149 (0.151)	
	HC-KFS23(B)G5 1/5	0.461 (0.511)	14 times or less	HG-KR23(B)G5 1/5	0.422 (0.444)	14 times or less
				HF-KP23(B)G5 1/5	0.441 (0.511)	
	HC-KFS23(B)G5 1/11	0.463 (0.513)		HG-KR23(B)G5 1/11	0.424 (0.446)	
				HF-KP23(B)G5 1/11	0.443 (0.513)	
	HC-KFS23(B)G5 1/21	0.758 (0.808)		HG-KR23(B)G5 1/21	0.719 (0.741)	
				HF-KP23(B)G5 1/21	0.738 (0.808)	
	HC-KFS23(B)G5 1/33	0.712 (0.762)		HG-KR23(B)G5 1/33	0.673 (0.695)	
				HF-KP23(B)G5 1/33	0.692 (0.762)	
	HC-KFS23(B)G5 1/45	0.711 (0.761)		HG-KR23(B)G5 1/45	0.672 (0.694)	
				HF-KP23(B)G5 1/45	0.691 (0.761)	
	HC-KFS43(B)G5 1/5	0.661 (0.711)		HG-KR43(B)G5 1/5	0.572 (0.594)	
				HF-KP43(B)G5 1/5	0.621 (0.701)	
	HC-KFS43(B)G5 1/11	1.04 (1.09)		HG-KR43(B)G5 1/11	0.947 (0.969)	
				HF-KP43(B)G5 1/11	0.996 (1.08)	
	HC-KFS43(B)G5 1/21	0.960 (1.01)		HG-KR43(B)G5 1/21	0.869 (0.891)	
				HF-KP43(B)G5 1/21	0.918 (0.998)	
	HC-KFS43(B)G5 1/33	1.01 (1.06)		HG-KR43(B)G5 1/33	0.921 (0.943)	
				HF-KP43(B)G5 1/33	0.970 (1.05)	
	HC-KFS43(B)G5 1/45	1.00 (1.05)		HG-KR43(B)G5 1/45	0.915 (0.937)	
				HF-KP43(B)G5 1/45	0.964 (1.04)	
	HC-KFS73(B)G5 1/5	2.16 (2.28)	10 times or less	HG-KR73(B)G5 1/5	1.91 (2.02)	10 times or less
				HF-KP73(B)G5 1/5	2.08 (2.28)	
	HC-KFS73(B)G5 1/11	2.07 (2.19)		HG-KR73(B)G5 1/11	1.82 (1.93)	
				HF-KP73(B)G5 1/11	1.99 (2.19)	
	HC-KFS73(B)G5 1/21	2.26 (2.39)		HG-KR73(B)G5 1/21	2.01 (2.12)	
				HF-KP73(B)G5 1/21	2.18 (2.38)	
	HC-KFS73(B)G5 1/33	2.04 (2.17)		HG-KR73(B)G5 1/33	1.79 (1.90)	
				HF-KP73(B)G5 1/33	1.96 (2.16)	
	HC-KFS73(B)G5 1/45	2.04 (2.16)		HG-KR73(B)G5 1/45	1.79 (1.90)	
				HF-KP73(B)G5 1/45	1.96 (2.16)	

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake

When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Small capacity, low inertia HC-KFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-KFS053(B)G7 1/5	0.127 (0.130)	10 times or less	HG-KR053(B)G7 1/5	0.119 (0.121)	10 times or less
				HF-KP053(B)G7 1/5	0.126 (0.128)	
	HC-KFS053(B)G7 1/11	0.114 (0.117)		HG-KR053(B)G7 1/11	0.106 (0.108)	
				HF-KP053(B)G7 1/11	0.113 (0.115)	
	HC-KFS053(B)G7 1/21	0.104 (0.107)		HG-KR053(B)G7 1/21	0.0960 (0.0980)	
				HF-KP053(B)G7 1/21	0.103 (0.105)	
	HC-KFS053(B)G7 1/33	0.098 (0.101)		HG-KR053(B)G7 1/33	0.0900 (0.0920)	
				HF-KP053(B)G7 1/33	0.097 (0.099)	
	HC-KFS053(B)G7 1/45	0.098 (0.101)		HG-KR053(B)G7 1/45	0.0900 (0.0920)	
				HF-KP053(B)G7 1/45	0.097 (0.099)	
	HC-KFS13(B)G7 1/5	0.158 (0.161)		HG-KR13(B)G7 1/5	0.152 (0.158)	
				HF-KP13(B)G7 1/5	0.162 (0.164)	
	HC-KFS13(B)G7 1/11	0.145 (0.148)		HG-KR13(B)G7 1/11	0.139 (0.145)	
				HF-KP13(B)G7 1/11	0.149 (0.151)	
	HC-KFS13(B)G7 1/21	0.135 (0.138)		HG-KR13(B)G7 1/21	0.129 (0.135)	
				HF-KP13(B)G7 1/21	0.139 (0.141)	
	HC-KFS13(B)G7 1/33	0.147 (0.150)		HG-KR13(B)G7 1/33	0.141 (0.147)	
				HF-KP13(B)G7 1/33	0.151 (0.153)	
	HC-KFS13(B)G7 1/45	0.145 (0.148)		HG-KR13(B)G7 1/45	0.139 (0.145)	
				HF-KP13(B)G7 1/45	0.149 (0.151)	
	HC-KFS23(B)G7 1/5	0.467 (0.517)	14 times or less	HG-KR23(B)G7 1/5	0.428 (0.450)	14 times or less
				HF-KP23(B)G7 1/5	0.447 (0.517)	
	HC-KFS23(B)G7 1/11	0.463 (0.513)		HG-KR23(B)G7 1/11	0.424 (0.446)	
				HF-KP23(B)G7 1/11	0.443 (0.513)	
	HC-KFS23(B)G7 1/21	0.760 (0.810)		HG-KR23(B)G7 1/21	0.721 (0.743)	
				HF-KP23(B)G7 1/21	0.740 (0.810)	
	HC-KFS23(B)G7 1/33	0.713 (0.763)		HG-KR23(B)G7 1/33	0.674 (0.696)	
				HF-KP23(B)G7 1/33	0.693 (0.763)	
	HC-KFS23(B)G7 1/45	0.711 (0.761)		HG-KR23(B)G7 1/45	0.672 (0.694)	
				HF-KP23(B)G7 1/45	0.691 (0.761)	
	HC-KFS43(B)G7 1/5	0.667 (0.717)		HG-KR43(B)G7 1/5	0.578 (0.600)	
				HF-KP43(B)G7 1/5	0.627 (0.707)	
	HC-KFS43(B)G7 1/11	1.04 (1.09)		HG-KR43(B)G7 1/11	0.955 (0.977)	
				HF-KP43(B)G7 1/11	1.00 (1.08)	
	HC-KFS43(B)G7 1/21	0.960 (1.01)		HG-KR43(B)G7 1/21	0.871 (0.893)	
				HF-KP43(B)G7 1/21	0.920 (1.00)	
	HC-KFS43(B)G7 1/33	1.02 (1.07)		HG-KR43(B)G7 1/33	0.927 (0.949)	
				HF-KP43(B)G7 1/33	0.976 (1.06)	
	HC-KFS43(B)G7 1/45	1.01 (1.06)		HG-KR43(B)G7 1/45	0.918 (0.940)	
				HF-KP43(B)G7 1/45	0.967 (1.05)	
	HC-KFS73(B)G7 1/5	2.20 (2.32)	10 times or less	HG-KR73(B)G7 1/5	1.95 (2.06)	10 times or less
				HF-KP73(B)G7 1/5	2.12 (2.32)	
	HC-KFS73(B)G7 1/11	2.08 (2.20)		HG-KR73(B)G7 1/11	1.83 (1.94)	
				HF-KP73(B)G7 1/11	2.00 (2.20)	
	HC-KFS73(B)G7 1/21	2.28 (2.40)		HG-KR73(B)G7 1/21	2.03 (2.14)	
				HF-KP73(B)G7 1/21	2.20 (2.40)	
	HC-KFS73(B)G7 1/33	2.05 (2.17)		HG-KR73(B)G7 1/33	1.80 (1.91)	
				HF-KP73(B)G7 1/33	1.97 (2.17)	
	HC-KFS73(B)G7 1/45	2.04 (2.17)		HG-KR73(B)G7 1/45	1.79 (1.90)	
				HF-KP73(B)G7 1/45	1.96 (2.16)	

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When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Small capacity, ultra-low inertia HC-MFS series (B): With brake	HC-MFS053(B)	0.019 (0.022)	30 times or less	HG-MR053(B)	0.0162 (0.0224)	35 times or less
				HF-MP053(B)	0.019 (0.025)	30 times or less
	HC-MFS13(B)	0.03 (0.032)		HG-MR13(B)	0.0300 (0.0362)	32 times or less
				HF-MP13(B)	0.032 (0.039)	30 times or less
	HC-MFS23(B)	0.088 (0.136)		HG-MR23(B)	0.0865 (0.109)	32 times or less
				HF-MP23(B)	0.088 (0.12)	30 times or less
	HC-MFS43(B)	0.143 (0.191)		HG-MR43(B)	0.142 (0.164)	32 times or less
				HF-MP43(B)	0.15 (0.18)	30 times or less
	HC-MFS73(B)	0.6 (0.725)		HG-MR73(B)	0.586 (0.694)	32 times or less
				HF-MP73(B)	0.60 (0.70)	30 times or less
Small capacity, ultra-low inertia HC-MFS series with general gear reducers (G1) (B): With brake	HC-MFS053(B)G1 1/5	0.055 (0.058)	25 times or less	HG-KR053(B)G1 1/5	0.0820 (0.0840)	5 times or less
				HF-MP053(B)G1 1/5	0.056 (0.062)	25 times or less
	HC-MFS053(B)G1 1/12	0.077 (0.080)		HG-KR053(B)G1 1/12	0.104 (0.106)	5 times or less
				HF-MP053(B)G1 1/12	0.078 (0.084)	25 times or less
	HC-MFS053(B)G1 1/20	0.059 (0.062)		HG-KR053(B)G1 1/20	0.0860 (0.0880)	5 times or less
				HF-MP053(B)G1 1/20	0.060 (0.066)	25 times or less
	HC-MFS13(B)G1 1/5	0.067 (0.069)		HG-KR13(B)G1 1/5	0.115 (0.121)	5 times or less
				HF-MP13(B)G1 1/5	0.069 (0.076)	25 times or less
	HC-MFS13(B)G1 1/12	0.089 (0.091)		HG-KR13(B)G1 1/12	0.137 (0.143)	5 times or less
				HF-MP13(B)G1 1/12	0.091 (0.098)	25 times or less
	HC-MFS13(B)G1 1/20	0.071 (0.073)		HG-KR13(B)G1 1/20	0.119 (0.125)	5 times or less
				HF-MP13(B)G1 1/20	0.073 (0.080)	25 times or less
	HC-MFS23(B)G1 1/5	0.249 (0.289)		HG-KR23(B)G1 1/5	0.375 (0.397)	7 times or less
				HF-MP23(B)G1 1/5	0.248 (0.280)	25 times or less
	HC-MFS23(B)G1 1/12	0.293 (0.333)		HG-KR23(B)G1 1/12	0.418 (0.440)	7 times or less
				HF-MP23(B)G1 1/12	0.298 (0.330)	25 times or less
	HC-MFS23(B)G1 1/20	0.266 (0.306)		HG-KR23(B)G1 1/20	0.391 (0.413)	7 times or less
				HF-MP23(B)G1 1/20	0.268 (0300)	25 times or less
	HC-MFS43(B)G1 1/5	0.296 (0.344)		HG-KR43(B)G1 1/5	0.525 (0.547)	7 times or less
				HF-MP43(B)G1 1/5	0.300 (0.330)	25 times or less
	HC-MFS43(B)G1 1/12	0.339 (0.388)		HG-KR43(B)G1 1/12	0.568 (0.590)	7 times or less
				HF-MP43(B)G1 1/12	0.350 (0.380)	25 times or less
	HC-MFS43(B)G1 1/20	0.653 (0.700)		HG-KR43(B)G1 1/20	0.881 (0.903)	7 times or less
				HF-MP43(B)G1 1/20	0.660 (0.690)	25 times or less
	HC-MFS73(B)G1 1/5	1.02 (1.145)		HG-KR73(B)G1 1/5	1.68 (1.79)	5 times or less
				HF-MP73(B)G1 1/5	1.02 (1.12)	25 times or less
	HC-MFS73(B)G1 1/12	1.686 (1.811)		HG-KR73(B)G1 1/12	2.35 (2.46)	5 times or less
				HF-MP73(B)G1 1/12	1.69 (1.79)	25 times or less
	HC-MFS73(B)G1 1/20	1.75 (1.875)		HG-KR73(B)G1 1/20	2.41 (2.52)	5 times or less
				HF-MP73(B)G1 1/20	1.75 (1.85)	25 times or less

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Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Small capacity, ultra-low inertia HC-MFS series with high precision reducer (G2) (B): With brake	HC-MFS053(B)G2 1/5	0.067 (0.070)	25 times or less	HG-KR053(B)G7 1/5 (□40)	0.0512 (0.0534)	10 times or less
				HG-KR053(B)G7 1/5 (□60)	0.119 (0.121)	
				HF-MP053(B)G7 1/5	0.093 (0.099)	25 times or less
	HC-MFS053(B)G2 1/9	0.060 (0.063)		HG-KR053(B)G7 1/9	0.0492 (0.0514)	10 times or less
				HF-MP053(B)G7 1/11	0.080 (0.086)	25 times or less
	HC-MFS053(B)G2 1/20	0.069 (0.072)		HG-KR053(B)G7 1/21	0.0960 (0.0980)	10 times or less
				HF-MP053(B)G7 1/21	0.070 (0.076)	25 times or less
	HC-MFS053(B)G2 1/29	0.057 (0.060)		HG-KR053(B)G7 1/33	0.0900 (0.0920)	10 times or less
				HF-MP053(B)G7 1/33	0.064 (0.070)	25 times or less
	HC-MFS13(B)G2 1/5	0.078 (0.080)		HG-KR13(B)G7 1/5 (□40)	0.0839 (0.0899)	10 times or less
				HG-KR13(B)G7 1/5 (□60)	0.152 (0.158)	
				HF-MP13(B)G7 1/5	0.106 (0.113)	25 times or less
	HC-MFS13(B)G2 1/9	0.072 (0.074)		HG-KR13(B)G7 1/11	0.139 (0.145)	10 times or less
				HF-MP13(B)G7 1/11	0.093 (0.100)	25 times or less
	HC-MFS13(B)G2 1/20	0.122 (0.124)		HG-KR13(B)G7 1/21	0.129 (0.135)	10 times or less
				HF-MP13(B)G7 1/21	0.083 (0.090)	25 times or less
	HC-MFS13(B)G2 1/29	0.096 (0.098)		HG-KR13(B)G7 1/33	0.141 (0.147)	10 times or less
				HF-MP13(B)G7 1/33	0.095 (0.102)	25 times or less
	HC-MFS23(B)G2 1/5	0.191 (0.239)		HG-KR23(B)G7 1/5	0.428 (0.450)	14 times or less
				HF-MP23(B)G7 1/5	0.295 (0.327)	25 times or less
	HC-MFS23(B)G2 1/9	0.208 (0.256)		HG-KR23(B)G7 1/11	0.424 (0.446)	14 times or less
				HF-MP23(B)G7 1/11	0.291 (0.323)	25 times or less
	HC-MFS23(B)G2 1/20	0.357 (0.405)		HG-KR23(B)G7 1/21	0.721 (0.743)	14 times or less
				HF-MP23(B)G7 1/21	0.588 (0.620)	25 times or less
	HC-MFS23(B)G2 1/29	0.276 (0.324)		HG-KR23(B)G7 1/33	0.674 (0.696)	14 times or less
				HF-MP23(B)G7 1/33	0.541 (0.573)	25 times or less
	HC-MFS43(B)G2 1/5	0.295 (0.344)		HG-KR43(B)G7 1/5	0.578 (0.600)	14 times or less
				HF-MP43(B)G7 1/5	0.357 (0.387)	25 times or less
	HC-MFS43(B)G2 1/9	0.323 (0.372)		HG-KR43(B)G7 1/11	0.955 (0.977)	14 times or less
				HF-MP43(B)G7 1/11	0.734 (0.764)	25 times or less
	HC-MFS43(B)G2 1/20	0.426 (0.475)		HG-KR43(B)G7 1/21	0.871 (0.893)	14 times or less
				HF-MP43(B)G7 1/21	0.650 (0.680)	25 times or less
	HC-MFS43(B)G2 1/29	0.338 (0.386)		HG-KR43(B)G7 1/33	0.927 (0.949)	14 times or less
				HF-MP43(B)G7 1/33	0.706 (0.736)	25 times or less
	HC-MFS73(B)G2 1/5	0.973 (1.098)		HG-KR73(B)G7 1/5	1.95 (2.06)	10 times or less
				HF-MP73(B)G7 1/5	1.29 (1.39)	25 times or less
	HC-MFS73(B)G2 1/9	0.980 (1.105)		HG-KR73(B)G7 1/11	1.83 (1.94)	10 times or less
				HF-MP73(B)G7 1/11	1.17 (1.27)	25 times or less
	HC-MFS73(B)G2 1/20	1.016 (1.141)		HG-KR73(B)G7 1/21	2.03 (2.14)	10 times or less
				HF-MP73(B)G7 1/21	1.37 (1.47)	25 times or less
	HC-MFS73(B)G2 1/29	0.910 (1.035)		HG-KR73(B)G7 1/33	1.80 (1.91)	10 times or less
				HF-MP73(B)G7 1/33	1.14 (1.24)	25 times or less

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Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Small capacity, ultra-low inertia HC-MFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-MFS053(B)G5 1/5	0.087 (0.090)	25 times or less	HG-KR053(B)G5 1/5	0.113 (0.115)	10 times or less
				HF-MP053(B)G5 1/5	0.087 (0.093)	25 times or less
	HC-MFS053(B)G5 1/11	0.079 (0.082)		HG-KR053(B)G5 1/11	0.105 (0.107)	10 times or less
				HF-MP053(B)G5 1/11	0.079 (0.085)	25 times or less
	HC-MFS053(B)G5 1/21	0.070 (0.073)		HG-KR053(B)G5 1/21	0.0960 (0.0980)	10 times or less
				HF-MP053(B)G5 1/21	0.070 (0.076)	25 times or less
	HC-MFS053(B)G5 1/33	0.064 (0.067)		HG-KR053(B)G5 1/33	0.0900 (0.0920)	10 times or less
				HF-MP053(B)G5 1/33	0.064 (0.070)	25 times or less
	HC-MFS053(B)G5 1/45	0.064 (0.067)		HG-KR053(B)G5 1/45	0.0900 (0.0920)	10 times or less
				HF-MP053(B)G5 1/45	0.064 (0.070)	25 times or less
	HC-MFS13(B)G5 1/5	0.098 (0.100)		HG-KR13(B)G5 1/5	0.146 (0.152)	10 times or less
				HF-MP13(B)G5 1/5	0.100 (0.107)	25 times or less
	HC-MFS13(B)G5 1/11	0.090 (0.092)		HG-KR13(B)G5 1/11	0.138 (0.144)	10 times or less
				HF-MP13(B)G5 1/11	0.092 (0.099)	25 times or less
	HC-MFS13(B)G5 1/21	0.081 (0.083)		HG-KR13(B)G5 1/21	0.129 (0.135)	10 times or less
				HF-MP13(B)G5 1/21	0.083 (0.090)	25 times or less
	HC-MFS13(B)G5 1/33	0.092 (0.094)		HG-KR13(B)G5 1/33	0.140 (0.146)	10 times or less
				HF-MP13(B)G5 1/33	0.094 (0.101)	25 times or less
	HC-MFS13(B)G5 1/45	0.091 (0.093)		HG-KR13(B)G5 1/45	0.139 (0.145)	10 times or less
				HF-MP13(B)G5 1/45	0.093 (0.100)	25 times or less
	HC-MFS23(B)G5 1/5	0.289 (0.337)		HG-KR23(B)G5 1/5	0.422 (0.444)	14 times or less
				HF-MP23(B)G5 1/5	0.289 (0.321)	25 times or less
	HC-MFS23(B)G5 1/11	0.291 (0.339)		HG-KR23(B)G5 1/11	0.424 (0.446)	14 times or less
				HF-MP23(B)G5 1/11	0.291 (0.323)	25 times or less
	HC-MFS23(B)G5 1/21	0.586 (0.634)		HG-KR23(B)G5 1/21	0.719 (0.741)	14 times or less
				HF-MP23(B)G5 1/21	0.586 (0.618)	25 times or less
	HC-MFS23(B)G5 1/33	0.540 (0.588)		HG-KR23(B)G5 1/33	0.673 (0.695)	14 times or less
				HF-MP23(B)G5 1/33	0.540 (0.572)	25 times or less
	HC-MFS23(B)G5 1/45	0.539 (0.587)		HG-KR23(B)G5 1/45	0.672 (0.694)	14 times or less
				HF-MP23(B)G5 1/45	0.539 (0.571)	25 times or less
	HC-MFS43(B)G5 1/5	0.344 (0.392)		HG-KR43(B)G5 1/5	0.572 (0.594)	14 times or less
				HF-MP43(B)G5 1/5	0.351 (0.381)	25 times or less
	HC-MFS43(B)G5 1/11	0.719 (0.767)		HG-KR43(B)G5 1/11	0.947 (0.969)	14 times or less
				HF-MP43(B)G5 1/11	0.726 (0.756)	25 times or less
	HC-MFS43(B)G5 1/21	0.641 (0.689)		HG-KR43(B)G5 1/21	0.869 (0.891)	14 times or less
				HF-MP43(B)G5 1/21	0.648 (0.678)	25 times or less
	HC-MFS43(B)G5 1/33	0.693 (0.741)		HG-KR43(B)G5 1/33	0.921 (0.943)	14 times or less
				HF-MP43(B)G5 1/33	0.700 (0.730)	25 times or less
	HC-MFS43(B)G5 1/45	0.687 (0.735)		HG-KR43(B)G5 1/45	0.915 (0.937)	14 times or less
				HF-MP43(B)G5 1/45	0.694 (0.724)	25 times or less
	HC-MFS73(B)G5 1/5	1.25 (1.37)		HG-KR73(B)G5 1/5	1.91 (2.02)	10 times or less
				HF-MP73(B)G5 1/5	1.25 (1.35)	25 times or less
	HC-MFS73(B)G5 1/11	1.16 (1.28)		HG-KR73(B)G5 1/11	1.82 (1.93)	10 times or less
				HF-MP73(B)G5 1/11	1.16 (1.26)	25 times or less
	HC-MFS73(B)G5 1/21	1.35 (1.48)		HG-KR73(B)G5 1/21	2.01 (2.12)	10 times or less
				HF-MP73(B)G5 1/21	1.35 (1.45)	25 times or less
	HC-MFS73(B)G5 1/33	1.13 (1.26)		HG-KR73(B)G5 1/33	1.79 (1.90)	10 times or less
				HF-MP73(B)G5 1/33	1.13 (1.23)	25 times or less
	HC-MFS73(B)G5 1/45	1.13 (1.25)		HG-KR73(B)G5 1/45	1.79 (1.90)	10 times or less
				HF-MP73(B)G5 1/45	1.13 (1.23)	25 times or less

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Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Small capacity, ultra-low inertia HC-MFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-MFS053(B)G7 1/5	0.093 (0.096)	25 times or less	HG-KR053(B)G7 1/5	0.119 (0.121)	10 times or less
				HF-MP053(B)G7 1/5	0.093 (0.099)	25 times or less
	HC-MFS053(B)G7 1/11	0.080 (0.083)		HG-KR053(B)G7 1/11	0.106 (0.108)	10 times or less
				HF-MP053(B)G7 1/11	0.080 (0.086)	25 times or less
	HC-MFS053(B)G7 1/21	0.070 (0.073)		HG-KR053(B)G7 1/21	0.0960 (0.0980)	10 times or less
				HF-MP053(B)G7 1/21	0.070 (0.076)	25 times or less
	HC-MFS053(B)G7 1/33	0.064 (0.067)		HG-KR053(B)G7 1/33	0.0900 (0.0920)	10 times or less
				HF-MP053(B)G7 1/33	0.064 (0.070)	25 times or less
	HC-MFS053(B)G7 1/45	0.064 (0.067)		HG-KR053(B)G7 1/45	0.0900 (0.0920)	10 times or less
				HF-MP053(B)G7 1/45	0.064 (0.070)	25 times or less
	HC-MFS13(B)G7 1/5	0.104 (0.106)		HG-KR13(B)G7 1/5	0.152 (0.158)	10 times or less
				HF-MP13(B)G7 1/5	0.106 (0.113)	25 times or less
	HC-MFS13(B)G7 1/11	0.091 (0.093)		HG-KR13(B)G7 1/11	0.139 (0.145)	10 times or less
				HF-MP13(B)G7 1/11	0.093 (0.100)	25 times or less
	HC-MFS13(B)G7 1/21	0.081 (0.083)		HG-KR13(B)G7 1/21	0.129 (0.135)	10 times or less
				HF-MP13(B)G7 1/21	0.083 (0.090)	25 times or less
	HC-MFS13(B)G7 1/33	0.093 (0.095)		HG-KR13(B)G7 1/33	0.141 (0.147)	10 times or less
				HF-MP13(B)G7 1/33	0.095 (0.102)	25 times or less
	HC-MFS13(B)G7 1/45	0.091 (0.093)		HG-KR13(B)G7 1/45	0.139 (0.145)	10 times or less
				HF-MP13(B)G7 1/45	0.093 (0.100)	25 times or less
	HC-MFS23(B)G7 1/5	0.295 (0.343)		HG-KR23(B)G7 1/5	0.428 (0.450)	14 times or less
				HF-MP23(B)G7 1/5	0.295 (0.327)	25 times or less
	HC-MFS23(B)G7 1/11	0.291 (0.339)		HG-KR23(B)G7 1/11	0.424 (0.446)	14 times or less
				HF-MP23(B)G7 1/11	0.291 (0.323)	25 times or less
	HC-MFS23(B)G7 1/21	0.588 (0.636)		HG-KR23(B)G7 1/21	0.721 (0.743)	14 times or less
				HF-MP23(B)G7 1/21	0.588 (0.620)	25 times or less
	HC-MFS23(B)G7 1/33	0.541 (0.589)		HG-KR23(B)G7 1/33	0.674 (0.696)	14 times or less
				HF-MP23(B)G7 1/33	0.541 (0.573)	25 times or less
	HC-MFS23(B)G7 1/45	0.539 (0.587)		HG-KR23(B)G7 1/45	0.672 (0.694)	14 times or less
				HF-MP23(B)G7 1/45	0.539 (0.571)	25 times or less
	HC-MFS43(B)G7 1/5	0.350 (0.398)		HG-KR43(B)G7 1/5	0.578 (0.600)	14 times or less
				HF-MP43(B)G7 1/5	0.357 (0.387)	25 times or less
	HC-MFS43(B)G7 1/11	0.727 (0.775)		HG-KR43(B)G7 1/11	0.955 (0.977)	14 times or less
				HF-MP43(B)G7 1/11	0.734 (0.764)	25 times or less
	HC-MFS43(B)G7 1/21	0.643 (0.691)		HG-KR43(B)G7 1/21	0.871 (0.893)	14 times or less
				HF-MP43(B)G7 1/21	0.650 (0.680)	25 times or less
	HC-MFS43(B)G7 1/33	0.699 (0.747)		HG-KR43(B)G7 1/33	0.927 (0.949)	14 times or less
				HF-MP43(B)G7 1/33	0.706 (0.736)	25 times or less
	HC-MFS43(B)G7 1/45	0.690 (0.738)		HG-KR43(B)G7 1/45	0.918 (0.940)	14 times or less
				HF-MP43(B)G7 1/45	0.697 (0.727)	25 times or less
	HC-MFS73(B)G7 1/5	1.29 (1.41)		HG-KR73(B)G7 1/5	1.95 (2.06)	10 times or less
				HF-MP73(B)G7 1/5	1.29 (1.39)	25 times or less
	HC-MFS73(B)G7 1/11	1.17 (1.29)		HG-KR73(B)G7 1/11	1.83 (1.94)	10 times or less
				HF-MP73(B)G7 1/11	1.17 (1.27)	25 times or less
	HC-MFS73(B)G7 1/21	1.37 (1.49)		HG-KR73(B)G7 1/21	2.03 (2.14)	10 times or less
				HF-MP73(B)G7 1/21	1.37 (1.47)	25 times or less
	HC-MFS73(B)G7 1/33	1.14 (1.26)		HG-KR73(B)G7 1/33	1.80 (1.91)	10 times or less
				HF-MP73(B)G7 1/33	1.14 (1.24)	25 times or less
	HC-MFS73(B)G7 1/45	1.13 (1.26)		HG-KR73(B)G7 1/45	1.79 (1.90)	10 times or less
				HF-MP73(B)G7 1/45	1.13 (1.23)	25 times or less

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, medium inertia HC-SFS series (B): With brake	HC-SFS81(B)	20.0 (22.0)	15 times or less	HG-SR81(B)	16.0 (18.2)	17 times or less
				HF-SP81(B)	17.8 (20.0)	15 times or less
	HC-SFS121(B)	42.5 (52.5)		HG-SR121(B)	46.8 (56.5)	
				HF-SP121(B)	38.3 (47.9)	
	HC-SFS201(B)	82.0 (92.0)		HG-SR201(B)	78.6 (88.2)	
				HF-SP201(B)	75.0 (84.7)	
	HC-SFS301(B)	101 (111)		HG-SR301(B)	99.7 (109)	
				HF-SP301(B)	97.0 (107)	
	HC-SFS52(B),53(B) HC-SFS524(B)	6.6 (8.6)		HG-SR52(B) HG-SR524(B)	7.26 (9.48)	
	HC-SFS52(B),53(B)			HF-SP52(B)	6.1 (8.3)	
	HC-SFS102(B),103(B) HC-SFS1024(B)	13.7 (15.7)		HG-SR102(B) HG-SR1024(B)	11.6 (13.8)	17 times or less
	HC-SFS102(B),103(B)			HF-SP102(B)	11.9 (14.0)	15 times or less
	HC-SFS152(B),153(B) HC-SFS1524(B)	20.0 (22.0)		HG-SR152(B) HG-SR1524(B)	16.0 (18.2)	17 times or less
	HC-SFS152(B),153(B)			HF-SP152(B)	17.8 (20.0)	15 times or less
	HC-SFS202(B),203(B) HC-SFS2024(B)	42.5 (52.5)		HG-SR202(B) HG-SR2024(B)	46.8 (56.5)	
	HC-SFS202(B),203(B)			HF-SP202(B)	38.3 (47.9)	
	HC-SFS352(B),353(B) HC-SFS3524(B)	82.0 (92.0)		HG-SR352(B) HG-SR3524(B)	78.6 (88.2)	
	HC-SFS352(B),353(B)			HF-SP352(B)	75.0 (84.7)	
	HC-SFS502(B) HC-SFS5024(B)	101 (111)		HG-SR502(B) HG-SR5024(B)	99.7 (109)	
	HC-SFS502(B)			HF-SP502(B)	97.0 (107)	
	HC-SFS702(B) HC-SFS7024(B)	160 (170)		HG-SR702(B) HG-SR7024(B)	151 (161)	
	HC-SFS702(B)			HF-SP702(B)	154 (164)	
Medium capacity, medium inertia HC-SFS series with general gear reducer (4): 400 V specifications (B): With brake G1: Flange-mounting G1H: Foot-mounting	HC-SFS52(4)(B)G1(H) 1/6	7.33 (9.03)	4 times or less	HG-SR52(4)(B)G1(H) 1/6	8.08 (10.3)	4 times or less
	HC-SFS52(B)G1(H) 1/6			HF-SP52(B)G1(H) 1/6	7.10 (9.30)	
	HC-SFS52(4)(B)G1(H) 1/11	6.95 (8.65)		HG-SR52(4)(B)G1(H) 1/11	7.65 (9.85)	
	HC-SFS52(B)G1(H) 1/11			HF-SP52(B)G1(H) 1/11	6.70 (8.80)	
	HC-SFS52(4)(B)G1(H) 1/17	6.85 (8.55)		HG-SR52(4)(B)G1(H) 1/17	7.53 (9.73)	
	HC-SFS52(B)G1(H) 1/17			HF-SP52(B)G1(H) 1/17	6.60 (8.70)	
	HC-SFS52(4)(B)G1(H) 1/29	6.78 (8.48)		HG-SR52(4)(B)G1(H) 1/29	7.47 (9.67)	
	HC-SFS52(B)G1(H) 1/29			HF-SP52(B)G1(H) 1/29	6.50 (8.70)	
	HC-SFS52(4)(B)G1(H) 1/35	7.5 (9.2)		HG-SR52(4)(B)G1(H) 1/35	8.26 (10.5)	
	HC-SFS52(B)G1(H) 1/35			HF-SP52(B)G1(H) 1/35	7.30 (9.40)	
	HC-SFS52(4)(B)G1(H) 1/43	7.45 (9.15)		HG-SR52(4)(B)G1(H) 1/43	8.22 (10.4)	
	HC-SFS52(B)G1(H) 1/43			HF-SP52(B)G1(H) 1/43	7.30 (9.40)	
	HC-SFS52(4)(B)G1(H) 1/59	7.43 (9.13)		HG-SR52(4)(B)G1(H) 1/59	8.18 (10.4)	
	HC-SFS52(B)G1(H) 1/59			HF-SP52(B)G1(H) 1/59	7.20 (9.40)	
	HC-SFS102(4)(B)G1(H) 1/6	16.8 (18.5)		HG-SR102(4)(B)G1(H) 1/6	14.8 (17.0)	
	HC-SFS102(B)G1(H) 1/6			HF-SP102(B)G1(H) 1/6	15.4 (17.5)	
	HC-SFS102(4)(B)G1(H) 1/11	15.3 (17.0)		HG-SR102(4)(B)G1(H) 1/11	13.3 (15.5)	
	HC-SFS102(B)G1(H) 1/11			HF-SP102(B)G1(H) 1/11	13.9 (16.0)	
	HC-SFS102(4)(B)G1(H) 1/17	14.9 (16.6)		HG-SR102(4)(B)G1(H) 1/17	12.9 (15.1)	
	HC-SFS102(B)G1(H) 1/17			HF-SP102(B)G1(H) 1/17	13.5 (15.6)	
	HC-SFS102(4)(B)G1(H) 1/29	14.6 (16.3)		HG-SR102(4)(B)G1(H) 1/29	12.6 (14.8)	
	HC-SFS102(B)G1(H) 1/29			HF-SP102(B)G1(H) 1/29	13.2 (15.3)	

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, medium inertia HC-SFS series with general gear reducer (4): 400 V specifications (B): With brake G1: Flange-mounting G1H: Foot-mounting	HC-SFS102(4)(B)G1(H) 1/35	14.6 (16.3)	4 times or less	HG-SR102(4)(B)G1(H) 1/35	12.6 (14.8)	4 times or less
	HC-SFS102(B)G1(H) 1/35			HF-SP102(B)G1(H) 1/35	13.2 (15.3)	
	HC-SFS102(4)(B)G1(H) 1/43	15.7 (17.4)		HG-SR102(4)(B)G1(H) 1/43	13.8 (16.0)	
	HC-SFS102(B)G1(H) 1/43			HF-SP102(B)G1(H) 1/43	14.3 (16.5)	
	HC-SFS102(4)(B)G1(H) 1/59	19.5 (21.2)		HG-SR102(4)(B)G1(H) 1/59	19.1 (21.3)	
	HC-SFS102(B)G1(H) 1/59			HF-SP102(B)G1(H) 1/59	20.3 (22.4)	
	HC-SFS152(4)(B)G1(H) 1/6	23.1 (24.8)		HG-SR152(4)(B)G1(H) 1/6	19.2 (21.4)	
	HC-SFS152(B)G1(H) 1/6			HF-SP152(B)G1(H) 1/6	21.3 (23.4)	
	HC-SFS152(4)(B)G1(H) 1/11	21.5 (23.2)		HG-SR152(4)(B)G1(H) 1/11	17.7 (19.9)	
	HC-SFS152(B)G1(H) 1/11			HF-SP152(B)G1(H) 1/11	19.8 (21.9)	
	HC-SFS152(4)(B)G1(H) 1/17	21.2 (22.9)		HG-SR152(4)(B)G1(H) 1/17	17.3 (19.5)	
	HC-SFS152(B)G1(H) 1/17			HF-SP152(B)G1(H) 1/17	19.4 (21.6)	
	HC-SFS152(4)(B)G1(H) 1/29	22.1 (23.8)		HG-SR152(4)(B)G1(H) 1/29	18.4 (20.6)	
	HC-SFS152(B)G1(H) 1/29			HF-SP152(B)G1(H) 1/29	20.4 (22.6)	
	HC-SFS152(4)(B)G1(H) 1/35	22.0 (23.7)		HG-SR152(4)(B)G1(H) 1/35	18.3 (20.5)	
	HC-SFS152(B)G1(H) 1/35			HF-SP152(B)G1(H) 1/35	20.4 (22.5)	
	HC-SFS152(4)(B)G1(H) 1/43	25.8 (27.5)		HG-SR152(4)(B)G1(H) 1/43	23.6 (25.8)	
	HC-SFS152(B)G1(H) 1/43			HF-SP152(B)G1(H) 1/43	26.3 (28.4)	
	HC-SFS152(4)(B)G1(H) 1/59	25.7 (27.4)		HG-SR152(4)(B)G1(H) 1/59	23.5 (25.7)	
	HC-SFS152(B)G1(H) 1/59			HF-SP152(B)G1(H) 1/59	26.2 (28.3)	
	HC-SFS202(4)(B)G1(H) 1/6	45.6 (55.6)		HG-SR202(4)(B)G1(H) 1/6	50.0 (59.4)	
	HC-SFS202(B)G1(H) 1/6			HF-SP202(B)G1(H) 1/6	42.1 (51.7)	
	HC-SFS202(4)(B)G1(H) 1/11	44.1 (54.1)		HG-SR202(4)(B)G1(H) 1/11	48.4 (57.8)	
	HC-SFS202(B)G1(H) 1/11			HF-SP202(B)G1(H) 1/11	40.5 (50.2)	
	HC-SFS202(4)(B)G1(H) 1/17	43.7 (53.7)		HG-SR202(4)(B)G1(H) 1/17	48.1 (57.5)	
	HC-SFS202(B)G1(H) 1/17			HF-SP202(B)G1(H) 1/17	40.2 (49.8)	
	HC-SFS202(4)(B)G1(H) 1/29	48.9 (58.9)		HG-SR202(4)(B)G1(H) 1/29	54.8 (64.2)	
	HC-SFS202(B)G1(H) 1/29			HF-SP202(B)G1(H) 1/29	46.9 (56.6)	
	HC-SFS202(4)(B)G1(H) 1/35	48.6 (58.6)		HG-SR202(4)(B)G1(H) 1/35	54.5 (63.9)	
	HC-SFS202(B)G1(H) 1/35			HF-SP202(B)G1(H) 1/35	46.7 (56.4)	
	HC-SFS202(4)(B)G1(H) 1/43	48.4 (58.4)		HG-SR202(4)(B)G1(H) 1/43	54.3 (63.7)	
	HC-SFS202(B)G1(H) 1/43			HF-SP202(B)G1(H) 1/43	46.4 (56.1)	
	HC-SFS202(4)(B)G1(H) 1/59	48.3 (58.3)		HG-SR202(4)(B)G1(H) 1/59	54.2 (63.6)	
	HC-SFS202(B)G1(H) 1/59			HF-SP202(B)G1(H) 1/59	46.4 (56.0)	
	HC-SFS352(4)(B)G1(H) 1/6	90.1 (100.1)		HG-SR352(4)(B)G1(H) 1/6	87.1 (96.5)	
	HC-SFS352(B)G1(H) 1/6			HF-SP352(B)G1(H) 1/6	84.4 (94.0)	
	HC-SFS352(4)(B)G1(H) 1/11	86.2 (96.2)		HG-SR352(4)(B)G1(H) 1/11	82.8 (92.2)	
	HC-SFS352(B)G1(H) 1/11			HF-SP352(B)G1(H) 1/11	80.1 (89.8)	
	HC-SFS352(4)(B)G1(H) 1/17	85.0 (95.0)		HG-SR352(4)(B)G1(H) 1/17	81.5 (90.9)	
	HC-SFS352(B)G1(H) 1/17			HF-SP352(B)G1(H) 1/17	78.8 (88.5)	
	HC-SFS352(4)(B)G1(H) 1/29	88.4 (98.4)		HG-SR352(4)(B)G1(H) 1/29	86.6 (96.0)	
	HC-SFS352(B)G1(H) 1/29			HF-SP352(B)G1(H) 1/29	83.9 (93.6)	
	HC-SFS352(4)(B)G1(H) 1/35	88.1 (98.1)		HG-SR352(4)(B)G1(H) 1/35	86.3 (95.7)	
	HC-SFS352(B)G1(H) 1/35			HF-SP352(B)G1(H) 1/35	83.7 (93.3)	
	HC-SFS352(4)(B)G1(H) 1/43	106.5 (116.5)		HG-SR352(4)(B)G1(H) 1/43	105 (114)	
	HC-SFS352(B)G1(H) 1/43			HF-SP352(B)G1(H) 1/43	101.9 (111.5)	
	HC-SFS352(4)(B)G1(H) 1/59	105.9 (115.9)		HG-SR352(4)(B)G1(H) 1/59	104 (113)	
	HC-SFS352(B)G1(H) 1/59			HF-SP352(B)G1(H) 1/59	101.3 (110.9)	

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, medium inertia HC-SFS series with general gear reducer (4): 400 V specifications (B): With brake G1: Flange-mounting G1H: Foot-mounting	HC-SFS502(4)(B)G1(H) 1/11	113.4 (123.4)	4 times or less	HG-SR502(4)(B)G1(H) 1/11	114 (123)	4 times or less
	HC-SFS502(B)G1(H) 1/11			HF-SP502(B)G1(H) 1/11	108.9 (118.5)	
	HC-SFS502(4)(B)G1(H) 1/17	109.4 (119.4)		HG-SR502(4)(B)G1(H) 1/17	110 (119)	
	HC-SFS502(B)G1(H) 1/17			HF-SP502(B)G1(H) 1/17	104.8 (114.5)	
	HC-SFS502(4)(B)G1(H) 1/29	138.5 (148.5)		HG-SR502(4)(B)G1(H) 1/29	141 (150)	
	HC-SFS502(B)G1(H) 1/29			HF-SP502(B)G1(H) 1/29	135.6 (145.3)	
	HC-SFS502(4)(B)G1(H) 1/35	138.0 (148.0)		HG-SR502(4)(B)G1(H) 1/35	140 (150)	
	HC-SFS502(B)G1(H) 1/35			HF-SP502(B)G1(H) 1/35	135.1 (144.8)	
	HC-SFS502(4)(B)G1(H) 1/43	137.0 (147.0)		HG-SR502(4)(B)G1(H) 1/43	139 (149)	
	HC-SFS502(B)G1(H) 1/43			HF-SP502(B)G1(H) 1/43	134.1 (143.8)	
	HC-SFS702(4)(B)G1(H) 1/11	198.8 (208.8)		HG-SR702(4)(B)G1(H) 1/11	190 (199)	
	HC-SFS702(B)G1(H) 1/11			HF-SP702(B)G1(H) 1/11	190.2 (199.9)	
	HC-SFS702(4)(B)G1(H) 1/17	190.0 (200.0)		HG-SR702(4)(B)G1(H) 1/17	182 (192)	
	HC-SFS702(B)G1(H) 1/17			HF-SP702(B)G1(H) 1/17	182.7 (192.4)	
	HC-SFS702(4)(B)G1(H) 1/29	197.5 (207.5)		HG-SR702(4)(B)G1(H) 1/29	192 (202)	
	HC-SFS702(B)G1(H) 1/29			HF-SP702(B)G1(H) 1/29	192.3 (202.0)	
	HC-SFS702(4)(B)G1(H) 1/35	197.0 (207.0)		HG-SR702(4)(B)G1(H) 1/35	192 (201)	
	HC-SFS702(B)G1(H) 1/35			HF-SP702(B)G1(H) 1/35	191.8 (201.5)	
	HC-SFS702(4)(B)G1(H) 1/43	256.8 (266.8)		HG-SR702(4)(B)G1(H) 1/43	267 (277)	
	HC-SFS702(B)G1(H) 1/43			HF-SP702(B)G1(H) 1/43	269.8 (278.3)	
Medium capacity, medium inertia HC-SFS series with high precision reducer (G2) (4): 400 V specifications (B): With brake	HC-SFS52(4)(B)G2 1/5	7.9 (9.6)	5 times or less	HG-SR52(4)(B)G7 1/5	7.95 (10.2)	10 times or less
	HC-SFS52(B)G2 1/5			HF-SP52(B)G7 1/5	6.79 (8.99)	
	HC-SFS52(4)(B)G2 1/9	7.55 (9.25)		HG-SR52(4)(B)G7 1/11	7.82 (10.0)	
	HC-SFS52(B)G2 1/9			HF-SP52(B)G7 1/11	6.66 (8.86)	
	HC-SFS52(4)(B)G2 1/20	8.03 (9.73)		HG-SR52(4)(B)G7 1/21	10.2 (12.4)	
	HC-SFS52(B)G2 1/20			HF-SP52(B)G7 1/21	9.00 (11.2)	
	HC-SFS52(4)(B)G2 1/29	9.4 (11.1)		HG-SR52(4)(B)G7 1/33	9.96 (12.2)	
	HC-SFS52(B)G2 1/29			HF-SP52(B)G7 1/33	8.80 (11.0)	
	HC-SFS52(4)(B)G2 1/45	8.43 (10.1)		HG-SR52(4)(B)G7 1/45	9.96 (12.2)	
	HC-SFS52(B)G2 1/45			HF-SP52(B)G7 1/45	8.80 (11.0)	
	HC-SFS102(4)(B)G2 1/5	15.0 (16.7)		HG-SR102(4)(B)G7 1/5	12.3 (14.5)	
	HC-SFS102(B)G2 1/5			HF-SP102(B)G7 1/5	12.6 (14.7)	
	HC-SFS102(4)(B)G2 1/9	14.6 (16.3)		HG-SR102(4)(B)G7 1/11	15.0 (17.2)	
	HC-SFS102(B)G2 1/9			HF-SP102(B)G7 1/11	15.3 (17.4)	
	HC-SFS102(4)(B)G2 1/20	18.4 (20.1)		HG-SR102(4)(B)G7 1/21	14.5 (16.7)	
	HC-SFS102(B)G2 1/20			HF-SP102(B)G7 1/21	14.8 (16.9)	
	HC-SFS102(4)(B)G2 1/29	16.5 (18.2)		HG-SR102(4)(B)G7 1/33	16.3 (18.5)	
	HC-SFS102(B)G2 1/29			HF-SP102(B)G7 1/33	16.6 (18.7)	
	HC-SFS102(4)(B)G2 1/45	20.3 (22.0)		HG-SR102(4)(B)G7 1/45	16.3 (18.5)	
	HC-SFS102(B)G2 1/45			HF-SP102(B)G7 1/45	16.6 (18.7)	
	HC-SFS152(4)(B)G2 1/5	21.2 (22.9)		HG-SR152(4)(B)G7 1/5	16.7 (18.9)	
	HC-SFS152(B)G2 1/5			HF-SP152(B)G7 1/5	18.5 (20.7)	
	HC-SFS152(4)(B)G2 1/9	24.7 (26.4)		HG-SR152(4)(B)G7 1/11	19.4 (21.6)	
	HC-SFS152(B)G2 1/9			HF-SP152(B)G7 1/11	21.2 (23.4)	
	HC-SFS152(4)(B)G2 1/20	24.6 (26.3)		HG-SR152(4)(B)G7 1/21	21.7 (23.9)	
	HC-SFS152(B)G2 1/20			HF-SP152(B)G7 1/21	23.5 (25.7)	
	HC-SFS152(4)(B)G2 1/29	30.3 (32.0)		HG-SR152(4)(B)G7 1/33	20.7 (22.9)	
	HC-SFS152(B)G2 1/29			HF-SP152(B)G7 1/33	22.5 (24.7)	
	HC-SFS152(4)(B)G2 1/45	26.5 (28.2)		HG-SR152(4)(B)G7 1/45	20.7 (22.9)	
	HC-SFS152(B)G2 1/45			HF-SP152(B)G7 1/45	22.5 (24.7)	

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, medium inertia HC-SFS series with high precision reducer (G2) (4): 400 V specifications (B): With brake	HC-SFS202(4)(B)G2 1/5	49.6 (59.6)	5 times or less	HG-SR202(4)(B)G7 1/5	51.7 (61.4)	10 times or less
	HC-SFS202(B)G2 1/5			HF-SP202(B)G7 1/5	43.2 (52.8)	
	HC-SFS202(4)(B)G2 1/9	47.2 (57.2)		HG-SR202(4)(B)G7 1/11	51.3 (61.0)	
	HC-SFS202(B)G2 1/9			HF-SP202(B)G7 1/11	42.8 (52.4)	
	HC-SFS202(4)(B)G2 1/20	59.6 (69.6)		HG-SR202(4)(B)G7 1/21	53.3 (63.0)	
	HC-SFS202(B)G2 1/20			HF-SP202(B)G7 1/21	44.8 (54.4)	
	HC-SFS202(4)(B)G2 1/29	52.8 (62.8)		HG-SR202(4)(B)G7 1/33	52.2 (61.9)	
	HC-SFS202(B)G2 129			HF-SP202(B)G7 1/33	43.7 (53.3)	
	HC-SFS202(4)(B)G2 1/45	49.1 (59.1)		HG-SR202(4)(B)G7 1/45	52.2 (61.9)	
	HC-SFS202(B)G2 1/45			HF-SP202(B)G7 1/45	43.7 (53.3)	
	HC-SFS352(4)(B)G2 1/5	99.4 (109.4)		HG-SR352(4)(B)G7 1/5	83.5 (93.1)	
	HC-SFS352(B)G2 1/5			HF-SP352(B)G7 1/5	79.9 (89.6)	
	HC-SFS352(4)(B)G2 1/9	91.5 (101.5)		HG-SR352(4)(B)G7 1/11	87.0 (96.6)	
	HC-SFS352(B)G2 1/9			HF-SP352(B)G7 1/11	83.4 (93.1)	
	HC-SFS352(4)(B)G2 1/20	99.1 (109.1)		HG-SR352(4)(B)G7 1/21	85.1 (94.7)	
	HC-SFS352(B)G2 1/20			HF-SP352(B)G7 1/21	81.5 (91.2)	
	HC-SFS502(4)(B)G2 1/5	118.4 (128.4)		HG-SR502(4)(B)G7 1/5	111 (121)	
	HC-SFS502(B)G2 1/5			HF-SP502(B)G7 1/5	108.5 (118.5)	
	HC-SFS502(4)(B)G2 1/9	110.5 (120.5)		HG-SR502(4)(B)G7 1/11	108 (117)	
	HC-SFS502(B)G2 1/9			HF-SP502(B)G7 1/11	105.4 (115.4)	
	HC-SFS702(4)(B)G2 1/5	177.4 (187.4)		HG-SR702(4)(B)G7 1/5	163 (173)	
	HC-SFS702(B)G2 1/5			HF-SP702(B)G7 1/5	165.5 (175.5)	
Medium capacity, medium inertia HC-SFS series Flange output type with high precision gear reducer (G5) (4): 400 V specifications (B): With brake	HC-SFS52(4)(B)G5 1/5	7.25 (9.25)	10 times or less	HG-SR52(4)(B)G5 1/5	7.91 (10.1)	10 times or less
	HC-SFS52(B)G5 1/5			HF-SP52(B)G5 1/5	6.75 (8.95)	
	HC-SFS52(4)(B)G5 1/11	7.16 (9.16)		HG-SR52(4)(B)G5 1/11	7.82 (10.0)	
	HC-SFS52(B)G5 1/11			HF-SP52(B)G5 1/11	6.66 (8.86)	
	HC-SFS52(4)(B)G5 1/21	9.50 (11.5)		HG-SR52(4)(B)G5 1/21	10.2 (12.4)	
	HC-SFS52(B)G5 1/21			HF-SP52(B)G5 1/21	9.00 (11.2)	
	HC-SFS52(4)(B)G5 1/33	9.30 (11.3)		HG-SR52(4)(B)G5 1/33	9.96 (12.2)	
	HC-SFS52(B)G5 1/33			HF-SP52(B)G5 1/33	8.80 (11.0)	
	HC-SFS52(4)(B)G5 1/45	9.30 (11.3)		HG-SR52(4)(B)G5 1/45	9.96 (12.2)	
	HC-SFS52(B)G5 1/45			HF-SP52(B)G5 1/45	8.80 (11.0)	
	HC-SFS102(4)(B)G5 1/5	14.4 (16.4)		HG-SR102(4)(B)G5 1/5	12.3 (14.5)	
	HC-SFS102(B)G5 1/5			HF-SP102(B)G5 1/5	12.6 (14.7)	
	HC-SFS102(4)(B)G5 1/11	17.0 (19.0)		HG-SR102(4)(B)G5 1/11	14.9 (17.1)	
	HC-SFS102(B)G5 1/11			HF-SP102(B)G5 1/11	15.2 (17.3)	
	HC-SFS102(4)(B)G5 1/21	16.6 (18.6)		HG-SR102(4)(B)G5 1/21	14.5 (16.7)	
	HC-SFS102(B)G5 1/21			HF-SP102(B)G5 1/21	14.8 (16.9)	
	HC-SFS102(4)(B)G5 1/33	18.4 (20.4)		HG-SR102(4)(B)G5 1/33	16.3 (18.5)	
	HC-SFS102(B)G5 1/33			HF-SP102(B)G5 1/33	16.6 (18.7)	
	HC-SFS102(4)(B)G5 1/45	18.3 (20.3)		HG-SR102(4)(B)G5 1/45	16.2 (18.4)	
	HC-SFS102(B)G5 1/45			HF-SP102(B)G5 1/45	16.5 (18.6)	
	HC-SFS152(4)(B)G5 1/5	20.7 (22.7)		HG-SR152(4)(B)G5 1/5	16.7 (18.9)	
	HC-SFS152(B)G5 1/5			HF-SP152(B)G5 1/5	18.5 (20.7)	
	HC-SFS152(4)(B)G5 1/11	23.3 (25.3)		HG-SR152(4)(B)G5 1/11	19.3 (21.5)	
	HC-SFS152(B)G5 1/11			HF-SP152(B)G5 1/11	21.1 (23.3)	
	HC-SFS152(4)(B)G5 1/21	25.7 (27.7)		HG-SR152(4)(B)G5 1/21	21.7 (23.9)	
	HC-SFS152(B)G5 1/21			HF-SP152(B)G5 1/21	23.5 (25.7)	

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, medium inertia HC-SFS series Flange output type with high precision gear reducer (G5) (4): 400 V specifications (B): With brake	HC-SFS152(4)(B)G5 1/33	24.7 (26.7)	10 times or less	HG-SR152(4)(B)G5 1/33	20.7 (22.9)	10 times or less
	HC-SFS152(B)G5 1/33			HF-SP152(B)G5 1/33	22.5 (24.7)	
	HC-SFS152(4)(B)G5 1/45	24.6 (26.6)		HG-SR152(4)(B)G5 1/45	20.6 (22.8)	
	HC-SFS152(B)G5 1/45			HF-SP152(B)G5 1/45	22.4 (24.6)	
	HC-SFS202(4)(B)G5 1/5	47.1 (57.1)		HG-SR202(4)(B)G5 1/5	51.4 (61.1)	
	HC-SFS202(B)G5 1/5			HF-SP202(B)G5 1/5	42.9 (52.5)	
	HC-SFS202(4)(B)G5 1/11	46.9 (56.9)		HG-SR202(4)(B)G5 1/11	51.2 (60.9)	
	HC-SFS202(B)G5 1/11			HF-SP202(B)G5 1/11	42.7 (52.3)	
	HC-SFS202(4)(B)G5 1/21	48.9 (58.9)		HG-SR202(4)(B)G5 1/21	53.2 (62.9)	
	HC-SFS202(B)G5 1/21			HF-SP202(B)G5 1/21	44.7 (54.3)	
	HC-SFS202(4)(B)G5 1/33	47.9 (57.9)		HG-SR202(4)(B)G5 1/33	52.2 (61.9)	
	HC-SFS202(B)G5 1/33			HF-SP202(B)G5 1/33	43.7 (53.3)	
	HC-SFS202(4)(B)G5 1/45	47.9 (57.9)		HG-SR202(4)(B)G5 1/45	52.2 (61.9)	
	HC-SFS202(B)G5 1/45			HF-SP202(B)G5 1/45	43.7 (53.3)	
	HC-SFS352(4)(B)G5 1/5	86.6 (96.6)		HG-SR352(4)(B)G5 1/5	83.2 (92.8)	
	HC-SFS352(B)G5 1/5			HF-SP352(B)G5 1/5	79.6 (89.3)	
	HC-SFS352(4)(B)G5 1/11	90.1 (100)		HG-SR352(4)(B)G5 1/11	86.7 (96.3)	
	HC-SFS352(B)G5 1/11			HF-SP352(B)G5 1/11	83.1 (92.8)	
	HC-SFS352(4)(B)G5 1/21	88.4 (98.4)		HG-SR352(4)(B)G5 1/21	85.0 (94.6)	
	HC-SFS352(B)G5 1/21			HF-SP352(B)G5 1/21	81.4 (91.1)	
	HC-SFS502(4)(B)G5 1/5	111 (121)		HG-SR502(4)(B)G5 1/5	110 (119)	
	HC-SFS502(B)G5 1/5			HF-SP502(B)G5 1/5	107.1 (117.1)	
	HC-SFS502(4)(B)G5 1/11	109 (119)		HG-SR502(4)(B)G5 1/11	108 (117)	
	HC-SFS502(B)G5 1/11			HF-SP502(B)G5 1/11	105.1 (115.1)	
	HC-SFS702(4)(B)G5 1/5	170 (180)		HG-SR702(4)(B)G5 1/5	161 (171)	
	HC-SFS702(B)G5 1/5			HF-SP702(B)G5 1/5	164.1 (174.1)	
Medium capacity, medium inertia HC-SFS series Shaft output type with high precision gear reducer (G7) (4): 400 V specifications (B): With brake	HC-SFS52(4)(B)G7 1/5	7.29 (9.29)	10 times or less	HG-SR52(4)(B)G7 1/5	7.95 (10.2)	10 times or less
	HC-SFS52(B)G7 1/5			HF-SP52(B)G7 1/5	6.79 (8.99)	
	HC-SFS52(4)(B)G7 1/11	7.16 (9.16)		HG-SR52(4)(B)G7 1/11	7.82 (10.0)	
	HC-SFS52(B)G7 1/11			HF-SP52(B)G7 1/11	6.66 (8.86)	
	HC-SFS52(4)(B)G7 1/21	9.50 (11.5)		HG-SR52(4)(B)G7 1/21	10.2 (12.4)	
	HC-SFS52(B)G7 1/21			HF-SP52(B)G7 1/21	9.00 (11.2)	
	HC-SFS52(4)(B)G7 1/33	9.30 (11.3)		HG-SR52(4)(B)G7 1/33	9.96 (12.2)	
	HC-SFS52(B)G7 1/33			HF-SP52(B)G7 1/33	8.80 (11.0)	
	HC-SFS52(4)(B)G7 1/45	9.30 (11.3)		HG-SR52(4)(B)G7 1/45	9.96 (12.2)	
	HC-SFS52(B)G7 1/45			HF-SP52(B)G7 1/45	8.80 (11.0)	
	HC-SFS102(4)(B)G7 1/5	14.4 (16.4)		HG-SR102(4)(B)G7 1/5	12.3 (14.5)	
	HC-SFS102(B)G7 1/5			HF-SP102(B)G7 1/5	12.6 (14.7)	
	HC-SFS102(4)(B)G7 1/11	17.1 (19.1)		HG-SR102(4)(B)G7 1/11	15.0 (17.2)	
	HC-SFS102(B)G7 1/11			HF-SP102(B)G7 1/11	15.3 (17.4)	
	HC-SFS102(4)(B)G7 1/21	16.6 (18.6)		HG-SR102(4)(B)G7 1/21	14.5 (16.7)	
	HC-SFS102(B)G7 1/21			HF-SP102(B)G7 1/21	14.8 (16.9)	
	HC-SFS102(4)(B)G7 1/33	18.4 (20.4)		HG-SR102(4)(B)G7 1/33	16.3 (18.5)	
	HC-SFS102(B)G7 1/33			HF-SP102(B)G7 1/33	16.6 (18.7)	
	HC-SFS102(4)(B)G7 1/45	18.4 (20.4)		HG-SR102(4)(B)G7 1/45	16.3 (18.5)	
	HC-SFS102(B)G7 1/45			HF-SP102(B)G7 1/45	16.6 (18.7)	
	HC-SFS152(4)(B)G7 1/5	20.7 (22.7)		HG-SR152(4)(B)G7 1/5	16.7 (18.9)	
	HC-SFS152(B)G7 1/5			HF-SP152(B)G7 1/5	18.5 (20.7)	
	HC-SFS152(4)(B)G7 1/11	23.4 (25.4)		HG-SR152(4)(B)G7 1/11	19.4 (21.6)	
	HC-SFS152(B)G7 1/11			HF-SP152(B)G7 1/11	21.2 (23.4)	

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, medium inertia HC-SFS series Shaft output type with high precision gear reducer (G7) (4): 400 V specifications (B): With brake	HC-SFS152(4)(B)G7 1/21	25.7 (27.7)	10 times or less	HG-SR152(4)(B)G7 1/21	21.7 (23.9)	10 times or less
	HC-SFS152(B)G7 1/21			HF-SP152(B)G7 1/21	23.5 (25.7)	
	HC-SFS152(4)(B)G7 1/33	24.7 (26.7)		HG-SR152(4)(B)G7 1/33	20.7 (22.9)	
	HC-SFS152(B)G7 1/33			HF-SP152(B)G7 1/33	22.5 (24.7)	
	HC-SFS152(4)(B)G7 1/45	24.7 (26.7)		HG-SR152(4)(B)G7 1/45	20.7 (22.9)	
	HC-SFS152(B)G7 1/45			HF-SP152(B)G7 1/45	22.5 (24.7)	
	HC-SFS202(4)(B)G7 1/5	47.4 (57.4)		HG-SR202(4)(B)G7 1/5	51.7 (61.4)	
	HC-SFS202(B)G7 1/5			HF-SP202(B)G7 1/5	43.2 (52.8)	
	HC-SFS202(4)(B)G7 1/11	47.0 (57.0)		HG-SR202(4)(B)G7 1/11	51.3 (61.0)	
	HC-SFS202(B)G7 1/11			HF-SP202(B)G7 1/11	42.8 (52.4)	
	HC-SFS202(4)(B)G7 1/21	49.0 (59.0)		HG-SR202(4)(B)G7 1/21	53.3 (63.0)	
	HC-SFS202(B)G7 1/21			HF-SP202(B)G7 1/21	44.8 (54.4)	
	HC-SFS202(4)(B)G7 1/33	47.9 (57.9)		HG-SR202(4)(B)G7 1/33	52.2 (61.9)	
	HC-SFS202(B)G7 1/33			HF-SP202(B)G7 1/33	43.7 (53.3)	
	HC-SFS202(4)(B)G7 1/45	47.9 (57.9)		HG-SR202(4)(B)G7 1/45	52.2 (61.9)	
	HC-SFS202(B)G7 1/45			HF-SP202(B)G7 1/45	43.7 (53.3)	
	HC-SFS352(4)(B)G7 1/5	86.9 (96.9)		HG-SR352(4)(B)G7 1/5	83.5 (93.1)	
	HC-SFS352(B)G7 1/5			HF-SP352(B)G7 1/5	79.9 (89.6)	
	HC-SFS352(4)(B)G7 1/11	90.4 (100)		HG-SR352(4)(B)G7 1/11	87.0 (96.6)	
	HC-SFS352(B)G7 1/11			HF-SP352(B)G7 1/11	83.4 (93.1)	
	HC-SFS352(4)(B)G7 1/21	88.5 (98.5)		HG-SR352(4)(B)G7 1/21	85.1 (94.7)	
	HC-SFS352(B)G7 1/21			HF-SP352(B)G7 1/21	81.5 (91.2)	
	HC-SFS502(4)(B)G7 1/5	113 (123)		HG-SR502(4)(B)G7 1/5	111 (121)	
	HC-SFS502(B)G7 1/5			HF-SP502(B)G7 1/5	108.5 (118.5)	
	HC-SFS502(4)(B)G7 1/11	109 (119)		HG-SR502(4)(B)G7 1/11	108 (117)	
	HC-SFS502(B)G7 1/11			HF-SP502(B)G7 1/11	105.4 (115.4)	
	HC-SFS702(4)(B)G7 1/5	172 (182)		HG-SR702(4)(B)G7 1/5	163 (173)	
	HC-SFS702(B)G7 1/5			HF-SP702(B)G7 1/5	165.5 (175.5)	

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, ultra-low inertia HC-RFS series (B): With brake	HC-RFS103(B)	1.5 (1.85)	5 times or less	HG-RR103(B)	1.50 (1.85)	5 times or less
				HC-RP103(B)		
	HC-RFS153(B)	1.9 (2.25)		HG-RR153(B)	1.90 (2.25)	
				HC-RP153(B)		
	HC-RFS203(B)	2.3 (2.65)		HG-RR203(B)	2.30 (2.65)	
				HC-RP203(B)		
	HC-RFS353(B)	8.6 (11.8)		HG-RR353(B)	8.30 (11.8)	
				HC-RP353(B)		
	HC-RFS503(B)	12.0 (15.5)		HG-RR503(B)	12.0 (15.5)	
				HC-RP503(B)		
Medium capacity, ultra-low inertia HC-RFS series with high precision reducer (G2) (B): With brake	HC-RFS103(B)G2 1/5	4.95 (5.3)	5 times or less	HG-SR102(B)G7 1/5	12.3 (14.5)	10 times or less
				HC-RP103(B)G7 1/5	2.37 (2.72)	5 times or less
	HC-RFS103(B)G2 1/9	4.6 (4.95)		HG-SR102(B)G7 1/11	15.0 (17.2)	10 times or less
				HC-RP103(B)G7 1/11	2.25 (2.60)	5 times or less
	HC-RFS103(B)G2 1/20	8.35 (8.7)		HG-SR102(B)G7 1/21	14.5 (16.7)	10 times or less
				HC-RP103(B)G7 1/21	4.40 (4.75)	5 times or less
	HC-RFS103(B)G2 1/29	6.45 (6.8)		HG-SR102(B)G7 1/33	16.3 (18.5)	10 times or less
				HC-RP103(B)G7 1/33	4.20 (4.55)	5 times or less
	HC-RFS103(B)G2 1/45	5.48 (5.83)		HG-SR102(B)G7 1/45	16.3 (18.5)	10 times or less
				HC-RP103(B)G7 1/45	6.20 (6.55)	5 times or less
	HC-RFS153(B)G2 1/5	5.35 (5.7)		HG-SR152(B)G7 1/5	16.7 (18.9)	10 times or less
				HC-RP153(B)G7 1/5	2.77 (3.12)	5 times or less
	HC-RFS153(B)G2 1/9	6.68 (7.03)		HG-SR152(B)G7 1/11	19.4 (21.6)	10 times or less
				HC-RP153(B)G7 1/11	5.30 (5.65)	5 times or less
	HC-RFS153(B)G2 1/20	8.75 (9.1)		HG-SR152(B)G7 1/21	21.7 (23.9)	10 times or less
				HC-RP153(B)G7 1/21	4.80 (5.15)	5 times or less
	HC-RFS153(B)G2 1/29	6.85 (7.2)		HG-SR152(B)G7 1/33	20.7 (22.9)	10 times or less
				HC-RP153(B)G7 1/33	6.60 (6.95)	5 times or less
	HC-RFS153(B)G2 1/45	8.55 (8.9)		HG-SR152(B)G7 1/45	20.7 (22.9)	10 times or less
				HC-RP153(B)G7 1/45	6.60 (6.95)	5 times or less
	HC-RFS203(B)G2 1/5	5.75 (6.1)		HG-SR202(B)G7 1/5	51.7 (61.4)	10 times or less
				HC-RP203(B)G7 1/5	3.17 (3.52)	5 times or less
	HC-RFS203(B)G2 1/9	7.08 (7.43)		HG-SR202(B)G7 1/11	51.3 (61.0)	10 times or less
				HC-RP203(B)G7 1/11	5.70 (6.05)	5 times or less
	HC-RFS203(B)G2 1/20	9.15 (9.5)		HG-SR202(B)G7 1/21	53.3 (63.0)	10 times or less
				HC-RP203(B)G7 1/21	8.00 (8.35)	5 times or less
	HC-RFS203(B)G2 1/29	12.7 (13.1)		HG-SR202(B)G7 1/33	52.2 (61.9)	10 times or less
				HC-RP203(B)G7 1/33	7.00 (7.35)	5 times or less
	HC-RFS203(B)G2 1/45	8.95 (9.3)		HG-SR202(B)G7 1/45	52.2 (61.9)	10 times or less
				HC-RP203(B)G7 1/45	7.00 (7.35)	5 times or less
	HC-RFS353(B)G2 1/5	18.8 (20.8)		HG-SR352(B)G7 1/5	83.5 (93.1)	10 times or less
				HC-RP353(B)G7 1/5	13.5 (17.0)	5 times or less
	HC-RFS353(B)G2 1/9	21.1 (23.1)		HG-SR352(B)G7 1/11	87.0 (96.6)	10 times or less
				HC-RP353(B)G7 1/11	13.1 (16.6)	5 times or less
	HC-RFS353(B)G2 1/20	28.8 (30.8)		HG-SR352(B)G7 1/21	85.1 (94.7)	10 times or less
				HC-RP353(B)G7 1/21	15.1 (18.6)	5 times or less
	HC-RFS353(B)G2 1/29	22.0 (24.0)		HG-SR352(B)G7 1/21	85.1 (94.7)	10 times or less
				HC-RP353(B)G7 1/33	14.1 (17.6)	5 times or less

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, ultra-low inertia HC-RFS series with high precision reducer (G2) (B): With brake	HC-RFS503(B)G2 1/5	32.4 (34.4)	5 times or less	HG-SR502(B)G7 1/5	111 (121)	10 times or less
				HC-RP503(B)G7 1/5	17.2 (20.7)	5 times or less
	HC-RFS503(B)G2 1/9	24.5 (26.5)		HG-SR502(B)G7 1/11	108 (117)	10 times or less
				HC-RP503(B)G7 1/11	20.7 (24.2)	5 times or less
	HC-RFS503(B)G2 1/20	32.2 (34.2)		HG-SR502(B)G7 1/11	108 (117)	10 times or less
				HC-RP503(B)G7 1/21	18.8 (22.3)	5 times or less
Medium capacity, ultra-low inertia HC-RFS series Flange output type with high precision gear reducer (G5) (B): With brake	HC-RFS103(B)G5 1/5	2.33 (2.68)	5 times or less	HG-SR102(B)G5 1/5	12.3 (14.5)	10 times or less
				HC-RP103(B)G5 1/5	2.33 (2.68)	5 times or less
	HC-RFS103(B)G5 1/11	2.25 (2.60)		HG-SR102(B)G5 1/11	14.9 (17.1)	10 times or less
				HC-RP103(B)G5 1/11	2.25 (2.60)	5 times or less
	HC-RFS103(B)G5 1/21	4.40 (4.75)		HG-SR102(B)G5 1/21	14.5 (16.7)	10 times or less
				HC-RP103(B)G5 1/21	4.40 (4.75)	5 times or less
	HC-RFS103(B)G5 1/33	4.20 (4.55)		HG-SR102(B)G5 1/33	16.3 (18.5)	10 times or less
				HC-RP103(B)G5 1/33	4.20 (4.55)	5 times or less
	HC-RFS103(B)G5 1/45	6.10 (6.45)		HG-SR102(B)G5 1/45	16.2 (18.4)	10 times or less
				HC-RP103(B)G5 1/45	6.10 (6.45)	5 times or less
	HC-RFS153(B)G5 1/5	2.73 (3.08)		HG-SR152(B)G5 1/5	16.7 (18.9)	10 times or less
				HC-RP153(B)G5 1/5	2.73 (3.08)	5 times or less
	HC-RFS153(B)G5 1/11	5.20 (5.55)		HG-SR152(B)G5 1/11	19.3 (21.5)	10 times or less
				HC-RP153(B)G5 1/11	5.20 (5.55)	5 times or less
	HC-RFS153(B)G5 1/21	4.80 (5.15)		HG-SR152(B)G5 1/21	21.7 (23.9)	10 times or less
				HC-RP153(B)G5 1/21	4.80 (5.15)	5 times or less
	HC-RFS153(B)G5 1/33	6.60 (6.95)		HG-SR152(B)G5 1/33	20.7 (22.9)	10 times or less
				HC-RP153(B)G5 1/33	6.60 (6.95)	5 times or less
	HC-RFS153(B)G5 1/45	6.50 (6.85)		HG-SR152(B)G5 1/45	20.6 (22.8)	10 times or less
				HC-RP153(B)G5 1/45	6.50 (6.85)	5 times or less
	HC-RFS203(B)G5 1/5	3.13 (3.48)		HG-SR202(B)G5 1/5	51.4 (61.1)	10 times or less
				HC-RP203(B)G5 1/5	3.13 (3.48)	5 times or less
	HC-RFS203(B)G5 1/11	5.60 (5.95)		HG-SR202(B)G5 1/11	51.2 (60.9)	10 times or less
				HC-RP203(B)G5 1/11	5.60 (5.95)	5 times or less
	HC-RFS203(B)G5 1/21	8.00 (8.35)		HG-SR202(B)G5 1/21	53.2 (62.9)	10 times or less
				HC-RP203(B)G5 1/21	8.00 (8.35)	5 times or less
	HC-RFS203(B)G5 1/33	7.00 (7.35)		HG-SR202(B)G5 1/33	52.2 (61.9)	10 times or less
				HC-RP203(B)G5 1/33	7.00 (7.35)	5 times or less
	HC-RFS203(B)G5 1/45	6.90 (7.25)		HG-SR202(B)G5 1/45	52.2 (61.9)	10 times or less
				HC-RP203(B)G5 1/45	6.90 (7.25)	5 times or less
	HC-RFS353(B)G5 1/5	13.5 (16.7)		HG-SR352(B)G5 1/5	83.2 (92.8)	10 times or less
				HC-RP353(B)G5 1/5	13.2 (16.7)	5 times or less
	HC-RFS353(B)G5 1/11	13.3 (16.5)		HG-SR352(B)G5 1/11	86.7 (96.3)	10 times or less
				HC-RP353(B)G5 1/11	13.0 (16.5)	5 times or less
	HC-RFS353(B)G5 1/21	15.3 (18.5)		HG-SR352(B)G5 1/21	85.0 (94.6)	10 times or less
				HC-RP353(B)G5 1/21	15.0 (18.5)	5 times or less
	HC-RFS353(B)G5 1/33	14.4 (17.6)		HG-SR352(B)G5 1/21	85.0 (94.6)	10 times or less
				HC-RP353(B)G5 1/33	14.1 (17.6)	5 times or less
	HC-RFS503(B)G5 1/5	16.9 (20.4)		HG-SR502(B)G5 1/5	110 (119)	10 times or less
				HC-RP503(B)G5 1/5	16.9 (20.4)	5 times or less
	HC-RFS503(B)G5 1/11	20.5 (24.0)		HG-SR502(B)G5 1/11	108 (117)	10 times or less
				HC-RP503(B)G5 1/11	20.5 (24.0)	5 times or less
	HC-RFS503(B)G5 1/21	18.7 (22.2)		HG-SR502(B)G5 1/11	108 (117)	10 times or less
				HC-RP503(B)G5 1/21	18.7 (22.2)	5 times or less

Note 1. As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake
When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, ultra-low inertia HC-RFS series Shaft output type with high precision gear reducer (G7) (B): With brake	HC-RFS103(B)G7 1/5	2.37 (2.72)	5 times or less	HG-SR102(B)G7 1/5	12.3 (14.5)	10 times or less
				HC-RP103(B)G7 1/5	2.37 (2.72)	5 times or less
	HC-RFS103(B)G7 1/11	2.25 (2.60)		HG-SR102(B)G7 1/11	15.0 (17.2)	10 times or less
				HC-RP103(B)G7 1/11	2.25 (2.60)	5 times or less
	HC-RFS103(B)G7 1/21	4.40 (4.75)		HG-SR102(B)G7 1/21	14.5 (16.7)	10 times or less
				HC-RP103(B)G7 1/21	4.40 (4.75)	5 times or less
	HC-RFS103(B)G7 1/33	4.20 (4.55)		HG-SR102(B)G7 1/33	16.3 (18.5)	10 times or less
				HC-RP103(B)G7 1/33	4.20 (4.55)	5 times or less
	HC-RFS103(B)G7 1/45	6.20 (6.55)		HG-SR102(B)G7 1/45	16.3 (18.5)	10 times or less
				HC-RP103(B)G7 1/45	6.20 (6.55)	5 times or less
	HC-RFS153(B)G7 1/5	2.77 (3.12)		HG-SR152(B)G7 1/5	16.7 (18.9)	10 times or less
				HC-RP153(B)G7 1/5	2.77 (3.12)	5 times or less
	HC-RFS153(B)G7 1/11	5.30 (5.65)		HG-SR152(B)G7 1/11	19.4 (21.6)	10 times or less
				HC-RP153(B)G7 1/11	5.30 (5.65)	5 times or less
	HC-RFS153(B)G7 1/21	4.80 (5.15)		HG-SR152(B)G7 1/21	21.7 (23.9)	10 times or less
				HC-RP153(B)G7 1/21	4.80 (5.15)	5 times or less
	HC-RFS153(B)G7 1/33	6.60 (6.95)		HG-SR152(B)G7 1/33	20.7 (22.9)	10 times or less
				HC-RP153(B)G7 1/33	6.60 (6.95)	5 times or less
	HC-RFS153(B)G7 1/45	6.60 (6.95)		HG-SR152(B)G7 1/45	20.7 (22.9)	10 times or less
				HC-RP153(B)G7 1/45	6.60 (6.95)	5 times or less
	HC-RFS203(B)G7 1/5	3.17 (3.52)		HG-SR202(B)G7 1/5	51.7 (61.4)	10 times or less
				HC-RP203(B)G7 1/5	3.17 (3.52)	5 times or less
	HC-RFS203(B)G7 1/11	5.70 (6.05)		HG-SR202(B)G7 1/11	51.3 (61.0)	10 times or less
				HC-RP203(B)G7 1/11	5.70 (6.05)	5 times or less
	HC-RFS203(B)G7 1/21	8.00 (8.35)		HG-SR202(B)G7 1/21	53.3 (63.0)	10 times or less
				HC-RP203(B)G7 1/21	8.00 (8.35)	5 times or less
	HC-RFS203(B)G7 1/33	7.00 (7.35)		HG-SR202(B)G7 1/33	52.2 (61.9)	10 times or less
				HC-RP203(B)G7 1/33	7.00 (7.35)	5 times or less
	HC-RFS203(B)G7 1/45	7.00 (7.35)		HG-SR202(B)G7 1/45	52.2 (61.9)	10 times or less
				HC-RP203(B)G7 1/45	7.00 (7.35)	5 times or less
	HC-RFS353(B)G7 1/5	13.8 (17.0)		HG-SR352(B)G7 1/5	83.5 (93.1)	10 times or less
				HC-RP353(B)G7 1/5	13.5 (17.0)	5 times or less
	HC-RFS353(B)G7 1/11	13.4 (16.6)		HG-SR352(B)G7 1/11	87.0 (96.6)	10 times or less
				HC-RP353(B)G7 1/11	13.1 (16.6)	5 times or less
	HC-RFS353(B)G7 1/21	15.4 (18.6)		HG-SR352(B)G7 1/21	85.1 (94.7)	10 times or less
				HC-RP353(B)G7 1/21	15.1 (18.6)	5 times or less
	HC-RFS353(B)G7 1/33	14.4 (17.6)		HG-SR352(B)G7 1/21	85.1 (94.7)	10 times or less
				HC-RP353(B)G7 1/33	14.1 (17.6)	5 times or less
	HC-RFS503(B)G7 1/5	17.2 (20.7)		HG-SR502(B)G7 1/5	111 (121)	10 times or less
				HC-RP503(B)G7 1/5	17.2 (20.7)	5 times or less
	HC-RFS503(B)G7 1/11	20.7 (24.2)		HG-SR502(B)G7 1/11	108 (117)	10 times or less
				HC-RP503(B)G7 1/11	20.7 (24.2)	5 times or less
	HC-RFS503(B)G7 1/21	18.8 (22.3)		HG-SR502(B)G7 1/11	108 (117)	10 times or less
				HC-RP503(B)G7 1/21	18.8 (22.3)	5 times or less

Note 1.As for the motor specifications not listed here, refer to the catalog or Instruction Manual. ( ): With brake

When the load to motor inertia ratio differs between the current product and a replacement product, and the ratio of the current product exceeds the load to motor inertia ratio of the replacement product, please contact a sales representative.

Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium capacity, low inertia HC-LFS series (B): With brake	HC-LFS52(B)	3.2 (5.2)	10 times or less	HG-JR73(B)	2.09 (2.59)	10 times or less
				HC-LP52(B)	3.10 (5.20)	
	HC-LFS102(B)	4.6 (6.6)		HG-JR153(B)	3.79 (4.29)	
				HC-LP102(B)	4.62 (6.72)	
	HC-LFS152(B)	6.4 (8.4)		HG-JR353(B)	13.2 (15.4)	
				HC-LP152(B)	6.42 (8.52)	
	HC-LFS202(B)	22 (32)		HG-JR353(B)	13.2 (15.4)	
				HC-LP202(B)	22.0 (32.0)	
	HC-LFS302(B)	36 (46)		HG-JR503(B)	19.0 (21.2)	
				HC-LP302(B)	36.0 (46.0)	
Small capacity, flat type HC-UFS series (B): With brake	HC-UFS13(B)	0.066 (0.074)	15 times or less	HG-KR13(B)	0.0777 (0.0837)	17 times or less
				HF-KP13(B)	0.088 (0.090)	15 times or less
	HC-UFS23(B)	0.241 (0.323)		HG-KR23(B)	0.221 (0.243)	26 times or less
				HF-KP23(B)	0.24 (0.31)	24 times or less
	HC-UFS43(B)	0.365 (0.447)		HG-KR43(B)	0.371 (0.393)	25 times or less
				HF-KP43(B)	0.42 (0.50)	22 times or less
	HC-UFS73(B)	5.90 (6.10)		HG-KR73(B)	1.26 (1.37)	17 times or less
				HF-KP73(B)	1.43 (1.63)	15 times or less
Medium capacity, flat type HC-UFS series (B): With brake	HC-UFS72(B)	10.4 (12.4)	15 times or less	HG-UR72(B)	10.4 (12.5)	15 times or less
				HC-UP72(B)		
	HC-UFS152(B)	22.1 (24.1)		HG-UR152(B)	22.1 (24.2)	
				HC-UP152(B)		
	HC-UFS202(B)	38.2 (46.8)		HG-UR202(B)	38.2 (46.8)	
				HC-UP202(B)		
	HC-UFS352(B)	76.5 (85.1)		HG-UR352(B)	76.5 (85.1)	
				HC-UP352(B)		
	HC-UFS502(B)	115 (123.6)		HG-UR502(B)	115 (124)	
				HC-UP502(B)		

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Series	Currently Used Product			Replacement Product		
	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio	Model	Moment of inertia J $\times 10^{-4}$kg•m^2	Load to motor inertia ratio
Medium and large capacities, low inertia HA-LFS 1000 r/min series (B): With brake	HA-LFS601(B) HA-LFS6014(B)	105 (113)	10 times or less	HG-JR601(B) HG-JR6014(B)	176 (196)	10 times or less
	HA-LFS601(B)			HA-LP601(B)	105 (113)	
	HA-LFS801(B) HA-LFS8014(B)	220 (293)		HG-JR801(B) HG-JR8014(B)	220 (240)	
	HA-LFS12K1(B) HA-LFS12K14(B)	295 (369)		HG-JR12K1(B) HG-JR12K14(B)	315 (336)	
	HA-LFS15K1 HA-LFS15K14	550		HG-JR15K1 HG-JR15K14	489	
	HA-LFS20K1 HA-LFS20K14	650		HG-JR20K1 HG-JR20K14	627	
	HA-LFS25K1 HA-LFS25K14	1080		HG-JR25K1 HG-JR25K14	764	
	HA-LFS30K1 HA-LFS30K14	1310		HG-JR30K1 HG-JR30K14	1377	
	HA-LFS37K1 HA-LFS37K14	1870		HG-JR37K1 HG-JR37K14	1637	
Medium and large capacities, low inertia HA-LFS 1500 r/min series (B): With brake	HA-LFS701M(B) HA-LFS701M4(B)	105 (113)		HG-JR701M(B) HG-JR701M4(B)	176 (196)	
	HA-LFS701M(B)			HA-LP701M(B)	105 (113)	
	HA-LFS11K1M(B) HA-LFS11K1M4(B)	220 (293)		HG-JR11K1M(B) HG-JR11K1M4(B)	220 (240)	
	HA-LFS15K1M(B) HA-LFS15K1M4(B)	295 (369)		HG-JR15K1M(B) HG-JR15K1M4(B)	315 (336)	
	HA-LFS22K1M HA-LFS22K1M4	550		HG-JR22K1M HG-JR22K1M4	489	
	HA-LFS30K1M HA-LFS30K1M4	650		HG-JR30K1M HG-JR30K1M4	627	
	HA-LFS37K1M HA-LFS37K1M4	1080		HG-JR37K1M HG-JR37K1M4	764	
	HA-LFS45K1M4	1310		HG-JR45K1M4	1377	
	HA-LFS50K1M4	1870		HG-JR55K1M4	1637	
Medium and large capacities, low inertia HA-LFS 2000 r/min series (B): With brake	HA-LFS502	74.0		HG-SR502	99.7	15 times or less
				HA-LP502	74.0	10 times or less
	HA-LFS702	94.2		HG-SR702	151	15 times or less
				HA-LP702	94.2	10 times or less
	HA-LFS11K2(B) HA-LFS11K24(B)	105 (113)		HG-JR11K1M(B) HG-JR11K1M4(B)	220 (240)	10 times or less
	HA-LFS15K2(B) HA-LFS15K24(B)	220 (293)				
	HA-LFS22K2(B) HA-LFS22K24(B)	295 (369)		HG-JR15K1M(B) HG-JR15K1M4(B)	315 (336)	
	HA-LFS30K2 HA-LFS30K24	550		HG-JR22K1M HG-JR22K1M4	489	
	HA-LFS37K2 HA-LFS37K24	650		HG-JR30K1M HG-JR30K1M4	627	
	HA-LFS45K24	1080		HG-JR37K1M4	764	
	HA-LFS55K24	1310		HG-JR45K1M4	1377	

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2.3 Regenerative Options

2.3.1 For 200/100 V

<Combination and regenerative power for the J2S series>

Servo amplifier model MR-J2S-	Built-in regenerative resistors [W]	Permissible regenerative power of regenerative options [W] MR-RB								
		032 [40Ω]	12 [40Ω]	30 [13Ω]	3N [9Ω]	31 [6.7Ω]	32 [40Ω]	(Note 1) 50 [13Ω]	(Note 1) 5N [9Ω]	(Note 1) 51 [6.7Ω]
10A(1)/B(1)/CP(1)/CL(1)		30								
20A(1)/B(1)/CP(1)/CL(1)	10	30	100							
40A(1)/B(1)/CP(1)/CL(1)	10	30	100							
60A/B/CP/CL	10	30	100							
70A/B/CP/CL	20	30	100				300			
100A/B/CP/CL	20	30	100				300			
200A/B/CP/CL	100			300				500		
350A/B/CP/CL	100			300				500		
500A/B/CP/CL	130			300				500		
700A/B/CP/CL	170					300				500
11KA/B										
15KA/B										
22KA/B										
30KA/B										
37KA/B										

Servo amplifier model MR-J2S-	Built-in regenerative resistors [W]	(Note 2) Standard accessories [External]	Permissible regenerative power of regenerative options [W] MR-RB							
			(Note 2) 5R [3.2Ω]	(Note 2) 65 [8Ω]	(Note 2) 66 [5Ω]	(Note 2) 67 [4Ω]	(Note 2) 9F [3Ω]	(Note 2) 9T [2.5Ω]	139 [1.3Ω]	(Note 3) 137 [1.3Ω]
10A(1)/B(1)/CP(1)/CL(1)										
20A(1)/B(1)/CP(1)/CL(1)	10									
40A(1)/B(1)/CP(1)/CL(1)	10									
60A/B/CP/CL	10									
70A/B/CP/CL	20									
100A/B/CP/CL	20									
200A/B/CP/CL	100									
350A/B/CP/CL	100									
500A/B/CP/CL	130									
700A/B/CP/CL	170									
11KA/B		GRZG400 -2Ω×4 500 (800)		500 (800)						
15KA/B		GRZG400 -1Ω×5 850 (1300)			850 (1300)					
22KA/B		GRZG400 -0.8Ω×5 850 (1300)				850 (1300)				
30KA/B									1300	3900
37KA/B									1300	3900

Note 1. Be sure to install a cooling fan.
2. The values in the parentheses apply when a cooling fan is installed.
3. The value of MR-RB137 is the resultant resistance of three units.

<Combination and regenerative power for the J4 series (replacement model)>

Servo amplifier model MR-J4-	Built-in regenerative resistors [W]	Permissible regenerative power of regenerative options [W] MR-RB								
		032 [40Ω]	12 [40Ω]	30 [13Ω]	3N [9Ω]	31 [6.7Ω]	32 [40Ω]	(Note 1) 50 [13Ω]	(Note 1) 5N [9Ω]	(Note 1) 51 [6.7Ω]
10A/B(-RJ)		30								
20A/B(-RJ)	10	30	100							
40A/B(-RJ)	10	30	100							
60A/B(-RJ)	10	30	100							
70A/B(-RJ)	20	30	100				300			
100A/B(-RJ)	20	30	100				300			
200A/B(-RJ)	100			300				500		
350A/B(-RJ)	100				300				500	
500A/B(-RJ)	130					300				500
700A/B(-RJ)	170					300				500
11KA/B										
15KA/B										
22KA/B										
DU30KA/B										
DU37KA/B										

Servo amplifier model MR-J4-	Built-in regenerative resistors [W]	(Note 2) Standard accessories [External]	Permissible regenerative power of regenerative options [W] MR-RB							
			(Note 2) 5R [3.2Ω]	(Note 2) 65 [8Ω]	(Note 2) 66 [5Ω]	(Note 2) 67 [4Ω]	(Note 2) 9F [3Ω]	(Note 2) 9T [2.5Ω]	139 [1.3Ω]	(Note 5) 137 [1.3Ω]
10A/B(-RJ)										
20A/B(-RJ)	10									
40A/B(-RJ)	10									
60A/B(-RJ)	10									
70A/B(-RJ)	20									
100A/B(-RJ)	20									
200A/B(-RJ)	100									
350A/B(-RJ)	100									
500A/B(-RJ)	130									
700A/B(-RJ)	170									
11KA/B		GRZG400 -0.8Ω×4 500 (800)	500 (800)							
15KA/B		GRZG400 -0.6Ω×5 850 (1300)					850 (1300)			
22KA/B		GRZG400 -0.5Ω×5 850 (1300)						850 (1300)		
DU30KA/B									1300	3900
DU37KA/B									1300	3900

Note 1. Be sure to install a cooling fan.
2. The values in the parentheses apply when a cooling fan is installed.
3. Combinations with differences are shown with shading.
4. Parameter settings (PA02 for J4) may be required depending on the regenerative option model. Refer to the Instruction Manual for details.
5. This is the resultant resistance when three MR-RB137 are connected in parallel.

<Combination and regenerative power for the J3 series (replacement model)>

Servo amplifier model MR-J3-	Built-in regenerative resistors [W]	Permissible regenerative power of regenerative options [W] MR-RB								
		032 [40Ω]	12 [40Ω]	30 [13Ω]	31 [6.7Ω]	32 [40Ω]	(Note 1) 50 [13Ω]	(Note 1) 51 [6.7Ω]	139 [1.3Ω]	137 [1.3Ω] (Note 2)
10A1/B1/T(1)		30								
20A1/B1/T(1)	10	30	100							
40A1/B1/T(1)	10	30	100							
60T	10	30	100							
70T	20	30	100			300				
100T	20	30	100			300				
200T	100			300			500			
350T	100			300			500			
500T	130				300			500		
700T	170				300			500		

Note 1. Be sure to install a cooling fan.
2. The value of MR-RB137 is the resultant resistance of three units.
3. Combinations with differences are shown with shading.
4. Parameter settings (PA02 for J3 22 kW or less, converter unit parameter PA01 for 30 kW or more) may be required depending on the regenerative option model. Refer to the Instruction Manual for details.

2.3.2 For 400 V

<Combination and regenerative power for the J2S series>

Servo amplifier model MR-J2S-	Built-in regenerative resistors [W]	Permissible regenerative power of regenerative options [W] MR-RB										
		1H-4 [82Ω]	1L-4 [270Ω]	(Note 1) 3M-4 [120Ω]	(Note 1) 3H-4 [80Ω]	(Note 1) 3G-4 [47Ω]	(Note 1) 34-4 [26Ω]	(Note 1) 3U-4 [22Ω]	(Note 1) 5H-4 [80Ω]	(Note 1) 5G-4 [47Ω]	(Note 1) 54-4 [26Ω]	(Note 1) 5U-4 [22Ω]
60A4/B4	30		100									
100A4/B4	100			300								
200A4/B4	100				300				500			
350A4/B4	100					300				500		
500A4/B4	130					300				500		
700A4/B4	170						300				500	
11KA4/B4												
15KA4/B4												
22KA4/B4												
30KA4/B4												
37KA4/B4												
45KA4/B4												
55KA4/B4												

Servo amplifier model MR-J2S-	Built-in regenerative resistors [W]	(Note 2) Standard accessories [External]	Permissible regenerative power of regenerative options [W] MR-RB					
			(Note 2) 5K-4 [10Ω]	(Note 2) 6B-4 [20Ω]	(Note 2) 60-4 [12.5Ω]	(Note 2) 6K-4 [10Ω]	136-4 [5Ω]	(Note 3) 138-4 [5Ω]
60A4/B4	30							
100A4/B4	100							
200A4/B4	100							
350A4/B4	100							
500A4/B4	130							
700A4/B4	170							
11KA4/B4		GRZG400 -5Ω×4 500 (800)		500 (800)				
15KA4/B4		GRZG400 -2.5Ω×5 850 (1300)			850 (1300)			
22KA4/B4		GRZG400 -2Ω×5 850 (1300)				850 (1300)		
30KA4/B4							1300	3900
37KA4/B4							1300	3900
45KA4/B4							1300	3900
55KA4/B4							1300	3900

Note 1. Be sure to install a cooling fan.
2. The values in the parentheses apply when a cooling fan is installed.
3. The value of MR-RB138-4 is the resultant resistance of three units.

<Combination and regenerative power for the J4 series (replacement model)>

Servo amplifier model MR-J4-	Built-in regenerative resistors [W]	Permissible regenerative power of regenerative options [W] MR-RB										
		1H-4 [82Ω]	1L-4 [270Ω]	(Note 1) 3M-4 [120Ω]	(Note 1) 3H-4 [80Ω]	(Note 1) 3G-4 [47Ω]	(Note 1) 34-4 [26Ω]	(Note 1) 3U-4 [22Ω]	(Note 1) 5H-4 [80Ω]	(Note 1) 5G-4 [47Ω]	(Note 1) 54-4 [26Ω]	(Note 1) 5U-4 [22Ω]
60A4/B4	15	100		300								
100A4/B4	15	100		300								
200A4/B4	100					300				500		
350A4/B4	100					300				500		
500A4/B4	130						300				500	
700A4/B4	170							500				500
11KA4/B4												
15KA4/B4												
22KA4/B4												
30KA4/B4												
37KA4/B4												
45KA4/B4												
55KA4/B4												

Servo amplifier model MR-J4-	Built-in regenerative resistors [W]	(Note 2) Standard accessories [External]	Permissible regenerative power of regenerative options [W] MR-RB					
			(Note 2) 5K-4 [10Ω]	(Note 2) 6B-4 [20Ω]	(Note 2) 60-4 [12.5Ω]	(Note 2) 6K-4 [10Ω]	137-4 [4Ω]	(Note 5) 13V-4 [4Ω]
60A4/B4	15							
100A4/B4	15							
200A4/B4	100							
350A4/B4	100							
500A4/B4	130							
700A4/B4	170							
11KA4/B4		GRZG400 -2.5Ω×4 500 (800)	500 (800)					
15KA4/B4		GRZG400 -2Ω×5 850 (1300)				850 (1300)		
22KA4/B4		GRZG400 -2Ω×5 850 (1300)				850 (1300)		
30KA4/B4							1300	3900
37KA4/B4							1300	3900
45KA4/B4							1300	3900
55KA4/B4							1300	3900

Note 1. Be sure to install a cooling fan.
2. The values in the parentheses apply when a cooling fan is installed.
3. Combinations with differences are shown with shading.
4. Parameter settings (PA02 for J4) may be required depending on the regenerative option model. Refer to the Instruction Manual for details.
5. The value is the resultant resistance when three MR-RB13V-4 are connected in parallel.

2.4 Dynamic Brake Option

Model	Applicable servo amplifiers	
DBU-11K	MR-J2S-11KA/B	MR-J4-11KA/B
DBU-15K	MR-J2S-15KA/B	MR-J4-15KA/B
DBU-22K	MR-J2S-22KA/B	–
DBU-22K-R1	–	MR-J4-22KA/B
DBU-37K	MR-J2S-30KA/B MR-J2S-37KA/B	–
DBU-37K-R1	–	MR-J4-DU30KA/B MR-J4-DU37KA/B
DBU-11K-4	MR-J2S-11KA4/B4	MR-J4-11KA4/B4
DBU-22K-4	MR-J2S-15KA4/B4 MR-J2S-22KA4/B4	MR-J4-15KA4/B4 MR-J4-22KA4/B4
DBU-55K-4	MR-J2S-30KA4/B4 MR-J2S-37KA4/B4 MR-J2S-45KA4/B4 MR-J2S-55KA4/B4	–
DBU-55K-4-R5	–	MR-J4-DU30KA4/B4 MR-J4-DU37KA4/B4 MR-J4-DU45KA4/B4 MR-J4-DU55KA4/B4

Note. Combinations with differences are shown with shading.

2.5 Cable Options

Application		MR-J2S series	MR-J4 series		Precautions
Encoder cable		MR-JCCBL_M-_	MR-J3ENCBL_M-A_-_ MR-J3JCBL03M-A_-L MR-EKCBL_M-_		Connector shape will be changed. Cable must be changed. _M: Cable length A_: Leading direction -_: Bending life
		MR-JHSCBL_M-_	MR-J3JSCBL03M-A_-L MR-J3ENECBL_M-H-(MTH)		(MTH) is required for MR-J4-22K_. _M: Cable length A_: Leading direction
		MR-ENCBL_M-H			
Encoder connector set		MR-J2CNM	MR-ECNM		Connector shape will be changed. Cable must be changed. _: Encoder side connector shape
		MR-J2CNS	MR-J3SCNS_ MR-ENCNS2_		
		MR-ENCNS			
Controller to amplifier cable	B type	MR-J2HBUS_M-A	MR-J2HBUS_M		Connector will be changed due to change from metal communication to optical communication. _: Cable length
CN1 connector set		MR-J2CN1-A	MR-CCN1		
Controller to amplifier cable	A type	MR-J2HBUS_M	MR-J2M-CN1TBL_M		Connector shape and the number of pin poles will be changed. _: Cable length
CN1 connector set		MR-J2CN1	MR-J3CN1		
Junction terminal block		MR-TB20	MR-TB50		
Servo motor power supply cable		—	MR-PWS1CBL_M-A_-_		Cable options are available for J4. _M: Cable length A_: Leading direction -_: Bending life
			MR-PWS2CBL03M-A_-L		
Power connector set (Servo motor side power connector)		MR-PWCNK_ MR-PWCNS_	MR-PWCNS_		Connector shape will be changed. _: Differ depends on the applied motor.
Electromagnetic brake cable		—	MR-BKS1CBL_M-A_-_		Cable options are available for J4. _M: Cable length A_: Leading direction -_: Bending life
			MR-BKS2CBL03M-A_-L		
Electromagnetic brake connector set		MR-BKCN	MR-BKCNS1_ MR-BKCNS2_		Connector shape will be changed. _: Connector shape
Servo amplifier power connector (up to 1 kW)		—	06JFAT-SAXGDK-H7.5	CNP1	Change from screw-type to connector-type
			05JFAT-SAXGDK-H5.0	CNP2	
			03JFAT-SAXGDK-H7.5	CNP3	
Servo amplifier power connector (2 kW)			06JFAT-SAXGFK-XL	CNP1	
			05JFAT-SAXGDK-H5.0	CNP2	
			03JFAT-SAXGFK-XL	CNP3	
Servo amplifier power connector (3.5 kW)			06JFAT-SAXGFK-XL	CNP1	
			05JFAT-SAXGDK-H5.0	CNP2	
			03JFAT-SAXGFK-XL	CNP3	
CN3 communication cable		MR-CPCATCBL3M	MR-J3USBCBL3M		Change from RS-232C communication to USB communication

Application		MR-J2S series	MR-J3 series		Precautions
Encoder cable		MR-JCCBL_M-_	MR-J3ENCBL_M-A_-_ MR-J3JCBL03M-A_-L MR-EKCBL_M-_		Connector shape will be changed. Cable must be changed, _M: Cable length A_: Leading direction -_: Bending life
		MR-JHSCBL_M-_ MR-ENCBL_M-H	MR-J3JSCBL03M-A_-L		_M: Cable length A_: Leading direction
Encoder connector set		MR-J2CNM	MR-ECNM		Connector shape will be changed. Cable must be changed, _: Encoder side connector shape
		MR-J2CNS MR-ENCNS	MR-J3SCNS_ MR-ENCNS2_		
Controller to amplifier cable	B type	MR-J2HBUS_M-A	MR-J2HBUS_M		Connector will be changed due to change from metal communication to optical communication. _: Cable length
CN1 connector set		MR-J2CN1-A	MR-CCN1		
Controller to amplifier cable	A type	MR-J2HBUS_M	MR-J2M-CN1TBL_M		Connector shape and the number of pin poles will be changed. _: Cable length
CN1 connector set		MR-J2CN1	MR-J3CN1		
Junction terminal block		MR-TB20	MR-TB50		
Servo motor power supply cable		—	MR-PWS1CBL_M-A_-_		Cable options are available for J3. _M: Cable length A_: Leading direction -_: Bending life
			MR-PWS2CBL03M-A_-L		
Power connector set (Servo motor side power connector)		MR-PWCNK_ MR-PWCNS_	MR-PWCNS_		Connector shape will be changed. _: Differ depends on the applied motor.
Electromagnetic brake cable		—	MR-BKS1CBL_M-A_-_		Cable options are available for J3. _M: Cable length A_: Leading direction -_: Bending life
			MR-BKS2CBL03M-A_-L		
Electromagnetic brake connector set		MR-BKCN	MR-BKCNS1_ MR-BKCNS2_		Connector shape will be changed. _: Connector shape
Servo amplifier power connector (up to 1 kW)		—	54928-0670	CNP1	Change from screw-type to connector-type
			54927-0520	CNP2	
			54928-0370	CNP3	
Servo amplifier power connector (2 kW)			721-207/026-000	CNP1	
			721-205/026-000	CNP2	
			721-203/026-000	CNP3	
Servo amplifier power connector (3.5 kW)			PC4/6-STF-7.62-CRWH	CNP1	
			54927-0520	CNP2	
			PC4/3-STF-7.62-CRWH	CNP3	
CN3 communication cable		MR-CPCATCBL3M	MR-J3USBCBL3M		Change from RS-232C communication to USB communication

3. COMPARISON OF FUNCTIONS

3.1 Comparison Between J2S and J4 (A/B)

	Item	MR-J2S series	MR-J4 series
1	Capacity range	(100 V Class) 0.1 to 0.4 kW (200 V Class) 0.1 to 37 kW (400 V Class) 0.6 to 55 kW	(100 V Class) 0.1 to 0.4 kW (200 V Class) 0.1 to 37 kW (400 V Class) 0.6 to 55 kW
2	Internal regenerative resistor	Built-in (0.2 to 7 kW) External (11 to 22 kW)	Built-in (0.2 to 7 kW) External (11 to 22 kW)
3	Dynamic brakes	Built-in (0.1 to 7 kW) External (11 to 55 kW)	Built-in (0.1 to 7 kW) External (11 to 55 kW) Coasting distance may be different. (Note 1)
4	Control circuit power	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase 200 V AC to 230 V AC (400 V Class) 24 V DC (to 7 kW) Single-phase 380 V AC to 480 V AC (11 k to 55 kW)	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase 200 V AC to 240 V AC (400 V Class) Single-phase 380 V AC to 480 V AC
5	Main circuit power	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase 230 V/3-phase 200 V AC to 230 V AC (to 750 W) 3-phase 200 V AC to 230 V AC (1 to 37 kW) (400 V Class) 3-phase 380 V AC to 480 V AC	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase/3-phase 200 V AC to 240 V AC (to 750 W) 3-phase 200 V AC to 240 V AC (1 to 37 kW) (400 V Class) 3-phase 380 V AC to 480 V AC
6	24 V DC power	Built-in	External supply required
7	Auto tuning	Real-time auto tuning: 15 steps	Real-time auto tuning: 40 steps One-touch tuning
8	Control mode	(A) General-purpose interface ・Position control mode (pulse command) ・Speed control mode (analog command/ internal speed command) ・Torque control mode (analog command) (B) SSCNET compatible ・Position control mode ・Speed control mode	(A) General-purpose interface ・Position control mode (pulse command) ・Speed control mode (analog command/ internal speed command) ・Torque control mode (analog command) (B) SSCNET III/H compatible ・Position control mode ・Speed control mode ・Torque control mode
9	Maximum input pulses	Differential pulse 500 kpps Open collector 200 kpps Command pulse: Sink	Differential pulse 4 Mpps Open collector 200 kpps Command pulse: Sink
10	The number of DIO points (excluding EM1)	(A) General-purpose interface DI: 8 points, DO: 6 points (B) SSCNET compatible DI: 0 points, DO: 2 points	(A) General-purpose interface DI: 9 points, DO: 6 points (B) SSCNET III/H compatible DI: 3 points, DO: 3 points
11	Encoder pulse output	ABZ-phase (differential) (A) General-purpose interface Z-phase (open collector)	ABZ-phase (differential) (A) General-purpose interface Z-phase (open collector)
12	DIO interface	Input: Sink/source Output: Sink	Input: Sink/source Output: Sink/source
13	Analog input/output	(A) General-purpose interface (Input) 2 ch 10-bit torque, 14-bit speed or equivalent (Output) 10-bit or equivalent × 2 ch (B) SSCNET compatible (Output) 10-bit or equivalent × 2 ch	(A) General-purpose interface (Input) 2 ch 10-bit torque, 14-bit speed or equivalent (Output) 10-bit or equivalent × 2 ch (B) SSCNET III/H compatible (Output) 10-bit or equivalent × 2 ch
14	The number of internal speed commands (Type A)	7 points	7 points
15	Parameter setting method	Setup software (SETUP1_ _) Push-button (Type A)	MR Configurator2 Push-button (Type A)
16	Setup S/W communication	RS-232C	USB
17	Servo motor (Encoder resolution)	HC series (17-bit ABS) HA series (17-bit ABS)	HG series (22-bit ABS)
18	Motor maximum torque	HC-KFS 300%	HG-KR 350%
		HC-MFS 300%	HG-MR 300%
		HC-SFS 300%	HG-SR 300%
		HA-LFS 250%, 300%	HG-JR 300%

Note 1. Refer to Dynamic Characteristics of Instruction Manual for the coasting distance.

Item		MR-J2S series	MR-J4 series
19	Button (Type A)	Four buttons	Four buttons
20	LED indicator	(Type A) 7-segment 5-digit (Type B) 7-segment 2-digit	(Type A) 7-segment 5-digit (Type B) 7-segment 3-digit
21	Advanced vibration suppression control II	Unavailable	Available
22	Adaptive filters	Available (Adaptive vibration suppression control)	Available (Adaptive filter II with improved functions)
23	Notch filters	Available (2 filters.)	Available (5 filters.)
24	Tough drive	Unavailable	Available
25	Drive recorder	Unavailable	Available
26	Forced stop	EM1 (DB stop)	Select EM1 (DB stop) or EM2 (deceleration to a stop)
Note:	Functions with difference are shown with shading.		

3.2 Comparison Between J2S(CP/CL) and J4(A-RJ)

Item		MR-J2S(CP/CL) series	MR-J4-A-RJ series (7 kW or less, 100 V/200 V class)
1	Capacity range	(100 V Class) 0.1 to 0.4 kW (200 V Class) 0.1 to 7 kW	(100 V Class) 0.1 to 0.4 kW (200 V Class) 0.1 to 7 kW
2	Internal regenerative resistor	Built-in (0.2 to 7 kW)	Built-in (0.2 to 7 kW)
3	Dynamic brakes	Built-in (0.1 to 7 kW)	Built-in (0.1 to 7 kW) Coasting distance may be different. (Note 1)
4	Control circuit power	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase 200 V AC to 230 V AC	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase 200 V AC to 240 V AC
5	Main circuit power	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase 230 V/3-phase 200 V AC to 230 V AC (to 750 W) 3-phase 200 V AC to 230 V AC (1 to 7 kW)	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase/3-phase 200 V AC to 240 V AC (to 750 W) 3-phase 200 V AC to 240 V AC(1 k to 7 kW)
6	24 V DC power	Built-in	External supply required
7	Auto tuning	Real-time auto tuning: 15 steps	Real-time auto tuning: 40 steps One-touch tuning
8	Control mode	(CP) Built-in positioning function (CL) Built-in program operation function	Built-in positioning function Built-in program operation function Position control mode (pulse command) Speed control mode (analog command) Torque control mode (analog command)
9	Maximum input pulses of manual pulse generator	Open collector 200 kpps	Open collector 200 kpps
10	The number of DIO points (excluding EM1)	DI: 8 points, DO: 5 points, DI/DO combination: 1 point	DI:11 points, DO: 8 points
11	Encoder pulse output	ABZ-phase (differential), Z-phase (open collector)	ABZ-phase (differential), Z-phase (open collector)
12	DIO interface	Input: Sink/source Output: Sink	Input: Sink/source Output: Sink/source
13	Analog input/output	(Input) 2 ch 10-bit torque limit, 10-bit override (Output) 10-bit or equivalent × 2 ch	(Input) 2 ch 10-bit torque limit, 10-bit override or equivalent (Output) 10-bit or equivalent × 2 ch
14	The number of internal speed commands (Type A)	7 points	7 points
15	Parameter setting method	Setup software(SETUP1_ _) Push-button	MR Configurator2 Push-button Parameter unit
16	Setup S/W communication	RS-232C	USB
17	Servo motor (Encoder resolution)	HC series (17-bit ABS) HA series (17-bit ABS)	HG series (22-bit ABS)
18	Motor maximum torque	HC-KFS 300%	HG-KR 350%
		HC-MFS 300%	HG-MR 300%
		HC-SFS 300%	HG-SR 300%
		HA-LFS 250%, 300%	HG-JR 300%
19	Button	Four buttons	Four buttons
20	LED indicator	7-segment 5-digit	7-segment 5-digit
21	Advanced vibration suppression control	Unavailable	Available
22	Adaptive filter	Available (Adaptive vibration suppression control)	Available (Adaptive filter II with improved functions)
23	Notch filter	Available (2 filters)	Available (5 filters)
24	Tough drive	Unavailable	Available
25	Drive recorder	Unavailable	Available

Item		MR-J2S(CP/CL) series	MR-J4-A-RJ series (7 kW or less, 100 V/200 V class)
26	Forced stop	EM1 (DB stop)	Select EM1 (DB stop) or EM2 (deceleration to a stop)
27	The number of point tables	(CP) Up to 31 points tables	Up to 255 point tables
28	The number of programs	(CL) Up to16 programs (120 steps)	Up to 256 programs (640 steps)
29	Communication function (RS-422 communication) Protocol communication specifications	Baud rate: 9600/19200/38400/57600 asynchronous systems	Baud rate: 9600/19200/38400/57600/115200 asynchronous systems
30	Position data unit	mm	mm / degree / inch / pulse
31	Mark detection function (current position latch function)	Unavailable	Available
Note:	Functions with difference are shown with shading.		

Note 1. Refer to Dynamic Characteristics of Instruction Manual for the coasting distance.

3.3 Comparison Between J2S(CP-S084) and J3(T/T+MR-J3-D01)

Item		MR-J2S(CP-S084) series	MR-J3 series (7kW or less, 100 V/200 V class)
1	Capacity range	(100 V Class) 0.1 to 0.4 kW (200 V Class) 0.1 to 7 kW	(100 V Class) 0.1 to 0.4 kW (200 V Class) 0.1 to 7 kW
2	Internal regenerative resistor	Built-in (0.2 to 7 kW)	Built-in (0.2 to 7 kW)
3	Dynamic brakes	Built-in (0.1 to 7 kW)	Built-in (0.1 to 7 kW) Coasting distance may be different. (Note 1)
4	Control circuit power	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase 200 V AC to 230 V AC	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase 200 V AC to 230 V AC
5	Main circuit power	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase 230 V/3-phase 200 V AC to 230 V AC (to 750 W) 3-phase 200 V AC to 230 V AC (1 to 7 kW)	(100 V Class) Single-phase 100 V AC to 120 V AC (200 V Class) Single-phase/3-phase 200 V AC to 230 V AC (to 750 W) 3-phase 200 V AC to 230 V AC (1 k to 7 kW)
6	24 V DC power	Built-in	External supply required
7	Auto tuning	Real-time auto tuning: 15 steps	Real-time auto tuning: 32 steps
8	Control mode	CC-Link compatible built-in positioning function	CC-Link compatible built-in positioning function
9	Maximum input pulses of manual pulse generator	Open collector 200 kpps	Open collector 200 kpps
10	The number of DIO points (excluding EM1)	DI: 8 points, DO: 5 points DI/DO combination: 1 point	DI: 3 points, DO: 3 points
11	Encoder pulse output	Unavailable	ABZ-phase (differential) Z-phase (open collector) Unavailable
12	DIO interface	Input: Sink/source Output: Sink	Input: Sink/source Output: Sink/source
13	Analog input/output	(Input) Unavailable (Output) Unavailable	(Input) Unavailable (Output) Unavailable
14	The number of internal speed commands (Type A)	7 points	7 points
15	Parameter setting method	Setup software (SETUP1_ _) Push-button	MR Configurator (SETUP221) MR Configurator2 Parameter unit (MR-PRU03)
16	Setup S/W communication	RS-232C	USB
17	Servo motor (Encoder resolution)	HC series (17-bit ABS) HA series (17-bit ABS)	HF series (18-bit ABS)
18	Motor maximum torque	HC-KFS 300%	HF-KP 350%
		HC-MFS 300%	HF-MP 300%
		HC-SFS 300%	HF-SP 300%
		HA-LFS 250%, 300%	HF-JP 300%
19	Button	Four buttons	Unavailable
20	LED indicator	7-segment 5-digit	7-segment 3-digit
21	Advanced vibration suppression control	Unavailable	Available
22	Adaptive filter	Available (Adaptive vibration suppression control)	Available (Adaptive filter II with improved functions)
23	Notch filter	Available (2 filters)	Available (2 filters)
24	Tough drive	Unavailable	Unavailable
25	Drive recorder	Unavailable	Unavailable
26	Forced stop	EM1 (DB stop)	EM1 (DB stop)
Note:	Functions with difference are shown with shading.		

Note 1. Refer to Dynamic Characteristics of Instruction Manual for the coasting distance.
2. For the programs running on MR-J2S-CL, please run on the upper programmable controllers.

4. COMPARISON OF NETWORKS

<Comparison of servo system network specifications>

<table>
<tr><td rowspan="2">Item</td><td>SSCNET</td><td rowspan="2"></td><td>SSCNET III</td><td>SSCNET III/H</td></tr>
<tr><td>MR-J2S series</td><td>MR-J3/J4 series (Note 1)</td><td>MR-J4 series (Note 1)</td></tr>
<tr><td>Communication media</td><td>Metal cable</td><td colspan="3">Optical-fiber cable</td></tr>
<tr><td>Communication speed</td><td>5.6 Mbps</td><td>50 Mbps</td><td>150 Mbps</td></tr>
<tr><td rowspan="2">Transmission distance</td><td rowspan="2">Overall length 30 m</td><td rowspan="2">→</td><td colspan="2">[Standard cord inside cabinet/standard cable outside cabinet]
Maximum distance between stations: 20 m
Maximum overall distance: 320 m
(20 m × 16 axes)</td></tr>
<tr><td>[Long distance cable]
Maximum distance between stations: 50 m
Maximum overall distance: 800 m
(50 m × 16 axes)</td><td>[Long distance cable]
Maximum distance between stations: 100 m
Maximum overall distance: 1600 m
(100 m × 16 axes)</td></tr>
</table>

Note 1. If the first controller communication is connected using SSCNET III/H in the factory setting, the operation mode will be fixed to the "J4 mode". If using SSCNET III, the mode will be fixed to "J3 compatibility mode". To return to the factory setting or to select an arbitrary mode, change the setting with the application "MR-J4(W)-B mode selection".
The application "MR-J4(W)-B mode selection" is available with MR Configurator2 Version 1.12N and later. If using a version older than 1.12N, download an updated version from MITSUBISHI ELECTRIC FA Global Website.

Appendix 3: Precautions for Replacing MR-J2M Series with MR-J4 Series

1. OUTLINE

This document describes the changes that are applied to when replacing a system using the MR-J2M series with a system using the MR-J4 series. The functions and performance of the MR-J4 series are greatly improved over that of the MR-J2M series. Mounting dimensions of both series are significantly different. For the details of the differences, refer to the descriptions in this document.

2. REPLACEMENT MODELS

This section shows the basic models recommended for replacing the amplifier and motor as a set.

2.1 Servo Amplifiers

2.1.1 Servo Amplifier Replacement Models and Compatibility

Series	Model			Replacement Model Example	Mounting Compatibility (○: Interchangeable)	Precautions
	Base unit	Interface unit	Drive unit			
200 V AC general-purpose interface	MR-J2M-BU_	MR-J2M-P8A	MR-J2M-10DU	MR-J4-10A	(Note 1)	Refer to "Appendix 3: 3. COMPARISON OF FUNCTIONS" or later for the detailed specifications and differences in functions.
			MR-J2M-20DU	MR-J4-20A	(Note 1)	
			MR-J2M-40DU	MR-J4-40A	(Note 1)	
			MR-J2M-70DU	MR-J4-70A	(Note 1)	
200 V AC SSCNET interface	MR-J2M-BU_	MR-J2M-P8B	MR-J2M-10DU	MR-J4-10B	(Note 1)	
			MR-J2M-20DU	MR-J4-20B	(Note 1)	
			MR-J2M-40DU	MR-J4-40B	(Note 1)	
			MR-J2M-70DU	MR-J4-70B	(Note 1)	

Note 1. These replacement models do not have mounting compatibility.

2.1.2 Comparison of Servo Amplifier Dimensions

The following table shows the comparison of the MR-J2M series and MR-J4 series dimensions. The width of the MR-J4 series is the same or smaller than the MR-J2M series. The depth is larger for the 400 W and 750 W capacities. Note that the height is larger for all the capacities. Mounting dimensions of the both series are significantly different. Pay attention to these differences.

Comparison of dimensions (comparison between the same capacity types) Unit: mm

Model	Model	Height		Width		Depth		Mounting screw pitch	
MR-J2M series	MR-J4 series	MR-J2M	MR-J4	MR-J2M	MR-J4	MR-J2M	MR-J4	MR-J2M	MR-J4
MR-J2M-BU4+ MR-J2M-P8A/B+ MR-J2M-_DU	MR-J4-10, 20A/B × 4 units	140	168 (Note 1)	230	40×4 =160	158	135	86 (Vertical)/218 (Horizontal) (4 places)	156 (Vertical) (2 places) × 4
	MR-J4-40A/B × 4 units						170 (Note 1)		
	MR-J4-70A/B × 2 units				60×2 =120		185 (Note 1)		156 (Vertical)/42 (Horizontal) (3 places) × 2
MR-J2M-BU6+ MR-J2M-P8A/B+ MR-J2M-_DU	MR-J4-10, 20A/B × 6 units	140	168 (Note 1)	290	40×6 =240	158	135	86 (Vertical)/278 (Horizontal) (4 places)	156 (Vertical) (2 places) × 6
	MR-J4-40A/B × 6 units						170 (Note 1)		
	MR-J4-70A/B × 3 units				60×3 =180		185 (Note 1)		156 (Vertical)/42 (Horizontal) (3 places) × 3
MR-J2M-BU8+ MR-J2M-P8A/B+ MR-J2M-_DU	MR-J4-10, 20A/B × 8 units	140	168 (Note 1)	350	40×8 =320	158	135	86 (Vertical)/338 (Horizontal) (4 places)	156 (Vertical) (2 places) × 8
	MR-J4-40A/B × 8 units						170 (Note 1)		
	MR-J4-70A/B × 4 units				60×4 =240		185 (Note 1)		156 (Vertical)/42 (Horizontal) (3 places) × 4
MR-J2M-BU4+ MR-J2M-P8B+ MR-J2M-_DU	MR-J4W2-44B × 2 units	140	168 (Note 1)	230	60×2 =120	158	195 (Note 1)	86 (Vertical)/218 (Horizontal) (4 places)	156 (Vertical) (2 places) × 2
	MR-J4W2-77B × 1 unit				85×1 =85		195 (Note 1)		156 (Vertical) (2 places) × 1
MR-J2M-BU6+ MR-J2M-P8B+ MR-J2M-_DU	MR-J4W2-44B × 3 units	140	168 (Note 1)	290	60×3 =180	158	195 (Note 1)	86 (Vertical)/278 (Horizontal) (4 places)	156 (Vertical) (2 places) × 3
	MR-J4W2-77B × 1 unit + MR-J4-70B × 1 unit				85×1+ 60×1=145		195 (Note 1)		156 (Vertical) (2 places) × 2
MR-J2M-BU8+ MR-J2M-P8B+ MR-J2M-_DU	MR-J4W2-22, 44B × 4 units	140	168 (Note 1)	350	60×4 =240	158	195 (Note 1)	86 (Vertical)/338 (Horizontal) (4 places)	156 (Vertical) (2 places) × 4
	MR-J4W2-77B × 2 unit				85×2 =170		195 (Note 1)		156 (Vertical) (2 places) × 2

Note 1. The depth will increase.
2. The number of mounting screws will be changed.
3. Dimensions with differences are shown with shading.

2.2 Servo Motors

2.2.1 Servo Motor Replacement Models and Compatibility

"Compatibility" means mounting compatibility.
Refer to the catalogs, Instruction Manuals, and "Transition from MELSERVO-J2-Super/J2M Series to J4 Series Handbook" for the compatibility of servo motor dimensions, gear reducer specifications, moment of inertia, connector specifications, and torque characteristics.

Series	Model	Replacement Model Example	Compatibility (○: Compatible)	Precautions
Small capacity, low inertia HC-KFS series Standard/With brake (B): With brake	HC-KFS053(B)	HG-KR053(B)	○	
	HC-KFS13(B)	HG-KR13(B)		
	HC-KFS23(B)	HG-KR23(B)		
	HC-KFS43(B)	HG-KR43(B)		
	HC-KFS73(B)	HG-KR73(B)		
Small capacity, low inertia HC-KFS series with general gear reducer (G1) (B): With brake	HC-KFS053(B)G1 1/5	HG-KR053(B)G1 1/5	○	・Actual reduction ratio of the gear reducer with the symbol ◆ differs; therefore setting the electronic gear is required. Refer to "Appendix 2: 2.2.5 Comparison of Actual Reduction Ratios for Geared Servo Motors" for the details.
	HC-KFS053(B)G1 1/12	HG-KR053(B)G1 1/12		
	HC-KFS053(B)G1 1/20	HG-KR053(B)G1 1/20		
	HC-KFS13(B)G1 1/5	HG-KR13(B)G1 1/5		
	HC-KFS13(B)G1 1/12	HG-KR13(B)G1 1/12		
	HC-KFS13(B)G1 1/20	HG-KR13(B)G1 1/20		
	HC-KFS23(B)G1 1/5	HG-KR23(B)G1 1/5		
	HC-KFS23(B)G1 1/12	HG-KR23(B)G1 1/12 ◆		
	HC-KFS23(B)G1 1/20	HG-KR23(B)G1 1/20 ◆		
	HC-KFS43(B)G1 1/5	HG-KR43(B)G1 1/5		
	HC-KFS43(B)G1 1/12	HG-KR43(B)G1 1/12 ◆		
	HC-KFS43(B)G1 1/20	HG-KR43(B)G1 1/20 ◆		
	HC-KFS73(B)G1 1/5	HG-KR73(B)G1 1/5		
	HC-KFS73(B)G1 1/12	HG-KR73(B)G1 1/12 ◆		
	HC-KFS73(B)G1 1/20	HG-KR73(B)G1 1/20		
Small capacity, low inertia HC-KFS series with high precision gear reducer (G2) (B): With brake	HC-KFS053(B)G2 1/5	HG-KR053(B)G7 1/5	(Note 1)	
	HC-KFS053(B)G2 1/9	HG-KR053(B)G7 1/11		
	HC-KFS053(B)G2 1/20	HG-KR053(B)G7 1/21		
	HC-KFS053(B)G2 1/29	HG-KR053(B)G7 1/33		
	HC-KFS13(B)G2 1/5	HG-KR13(B)G7 1/5		
	HC-KFS13(B)G2 1/9	HG-KR13(B)G7 1/11		
	HC-KFS13(B)G2 1/20	HG-KR13(B)G7 1/21		
	HC-KFS13(B)G2 1/29	HG-KR13(B)G7 1/33		
	HC-KFS23(B)G2 1/5	HG-KR23(B)G7 1/5		
	HC-KFS23(B)G2 1/9	HG-KR23(B)G7 1/11		
	HC-KFS23(B)G2 1/20	HG-KR23(B)G7 1/21		
	HC-KFS23(B)G2 1/29	HG-KR23(B)G7 1/33		
	HC-KFS43(B)G2 1/5	HG-KR43(B)G7 1/5		
	HC-KFS43(B)G2 1/9	HG-KR43(B)G7 1/11		
	HC-KFS43(B)G2 1/20	HG-KR43(B)G7 1/21		
	HC-KFS43(B)G2 1/29	HG-KR43(B)G7 1/33		
	HC-KFS73(B)G2 1/5	HG-KR73(B)G7 1/5		
	HC-KFS73(B)G2 1/9	HG-KR73(B)G7 1/11		
	HC-KFS73(B)G2 1/20	HG-KR73(B)G7 1/21		
	HC-KFS73(B)G2 1/29	HG-KR73(B)G7 1/33		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.
Refer to the catalog or Instruction Manual for details on the motor specifications and dimensions.

Series	Model	Replacement Model Example	Compatibility (○: Compatible)	Precautions
Small capacity, ultra-low inertia HC-MFS series Standard/With brake (B): With brake	HC-MFS053(B)	HG-MR053(B)	○	
	HC-MFS13(B)	HG-MR13(B)		
	HC-MFS23(B)	HG-MR23(B)		
	HC-MFS43(B)	HG-MR43(B)		
	HC-MFS73(B)	HG-MR73(B)		
Small capacity, ultra-low inertia HC-MFS series with general gear reducer (G1) (B): With brake	HC-MFS053(B)G1 1/5	HG-KR053(B)G1 1/5	○	・The HG-MR series does not support the geared model. The geared model is supported with the HG-KR series. ・Actual reduction ratio of the gear reducer with the ◆ symbol differs; therefore setting the electronic gear is required. Refer to "Appendix 2: 2.2.5 Comparison of Actual Reduction Ratios for Geared Servo Motors" for the details.
	HC-MFS053(B)G1 1/12	HG-KR053(B)G1 1/12		
	HC-MFS053(B)G1 1/20	HG-KR053(B)G1 1/20		
	HC-MFS13(B)G1 1/5	HG-KR13(B)G1 1/5		
	HC-MFS13(B)G1 1/12	HG-KR13(B)G1 1/12		
	HC-MFS13(B)G1 1/20	HG-KR13(B)G1 1/20		
	HC-MFS23(B)G1 1/5	HG-KR23(B)G1 1/5		
	HC-MFS23(B)G1 1/12	HG-KR23(B)G1 1/12 ◆		
	HC-MFS23(B)G1 1/20	HG-KR23(B)G1 1/20 ◆		
	HC-MFS43(B)G1 1/5	HG-KR43(B)G1 1/5		
	HC-MFS43(B)G1 1/12	HG-KR43(B)G1 1/12 ◆		
	HC-MFS43(B)G1 1/20	HG-KR43(B)G1 1/20 ◆		
	HC-MFS73(B)G1 1/5	HG-KR73(B)G1 1/5		
	HC-MFS73(B)G1 1/12	HG-KR73(B)G1 1/12 ◆		
	HC-MFS73(B)G1 1/20	HG-KR73(B)G1 1/20		
Small capacity, ultra-low inertia HC-MFS series with high precision gear reducer (G2) (B): With brake	HC-MFS053(B)G2 1/5	HG-KR053(B)G7 1/5	(Note 1)	・The HG-MR series does not support the geared model. The geared model is supported with the HG-KR series.
	HC-MFS053(B)G2 1/9	HG-KR053(B)G7 1/11		
	HC-MFS053(B)G2 1/20	HG-KR053(B)G7 1/21		
	HC-MFS053(B)G2 1/29	HG-KR053(B)G7 1/33		
	HC-MFS13(B)G2 1/5	HG-KR13(B)G7 1/5		
	HC-MFS13(B)G2 1/9	HG-KR13(B)G7 1/11		
	HC-MFS13(B)G2 1/20	HG-KR13(B)G7 1/21		
	HC-MFS13(B)G2 1/29	HG-KR13(B)G7 1/33		
	HC-MFS23(B)G2 1/5	HG-KR23(B)G7 1/5		
	HC-MFS23(B)G2 1/9	HG-KR23(B)G7 1/11		
	HC-MFS23(B)G2 1/20	HG-KR23(B)G7 1/21		
	HC-MFS23(B)G2 1/29	HG-KR23(B)G7 1/33		
	HC-MFS43(B)G2 1/5	HG-KR43(B)G7 1/5		
	HC-MFS43(B)G2 1/9	HG-KR43(B)G7 1/11		
	HC-MFS43(B)G2 1/20	HG-KR43(B)G7 1/21		
	HC-MFS43(B)G2 1/29	HG-KR43(B)G7 1/33		
	HC-MFS73(B)G2 1/5	HG-KR73(B)G7 1/5		
	HC-MFS73(B)G2 1/9	HG-KR73(B)G7 1/11		
	HC-MFS73(B)G2 1/20	HG-KR73(B)G7 1/21		
	HC-MFS73(B)G2 1/29	HG-KR73(B)G7 1/33		

Note 1. Refer to "Appendix 2: 2.2.4 Comparison of Geared Servo Motor Mounting Dimensions" for mounting dimensions.
The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.
Refer to the catalog or Instruction Manual for details on the motor specifications and dimensions.

Series	Model	Replacement Model Example	Compatibility (○: Compatible)	Precautions
Small capacity, flat type HC-UFS series (B): With brake	HC-UFS13(B)	HF-KP13(B)	(Note 1)	・The HF-KP servo motor does not have an oil seal. Use HF-KP_J when an oil seal is required.
	HC-UFS23(B)	HF-KP23(B)		
	HC-UFS43(B)	HF-KP43(B)		
	HC-UFS73(B)	HF-KP73(B)		
Medium capacity, flat type HC-UFS series (B): With brake	HC-UFS72(B)	HC-UP72(B)	○	
	HC-UFS152(B)	HC-UP152(B)		
	HC-UFS202(B)	HC-UP202(B)		
	HC-UFS352(B)	HC-UP352(B)		
	HC-UFS502(B)	HC-UP502(B)		

Note 1. Refer to "Appendix 2: 2.2.3 Detailed Comparison of Servo Motor Mounting Dimensions" for mounting dimensions.
The power supply and encoder connector will be changed. For replacement using the existing wiring, use a renewal tool.
Refer to the catalog or Instruction Manual for details on the motor specifications and dimensions.

2.3 Regenerative Options

<Combination and regenerative power for the J2M series>

Servo amplifier model	Regenerative power[W]				
	Built-in regenerative resistor	MR-RB032 [40Ω]	MR-RB14 [26Ω]	MR-RB34 [26Ω]	MR-RB54 [26Ω]
MR-J2M-BU4		30	100	300	500
MR-J2M-BU6					
MR-J2M-BU8					

<Combination and regenerative power for the J4 series (replacement model)>

Servo amplifier model	Regenerative power[W]			
	Built-in regenerative resistor	MR-RB032 [40Ω]	MR-RB12 [40Ω]	MR-RB32 [40Ω]
MR-J4-10A/B		30		
MR-J4-20A/B	10	30	100	
MR-J4-40A/B	10	30	100	
MR-J4-70A/B	20	30	100	300

Note. Parameter settings (PA02 for J4) may be required depending on the regenerative option model. Refer to the Instruction Manual for details.

3. COMPARISON OF FUNCTIONS

Item		MR-J2M series	MR-J4 series
1	Capacity range (to 0.75 kW/200 V)	0.1 kW to 0.75 kW/200 V	0.1 kW to 0.75 kW/200 V
2	Internal regenerative resistor	External	Built-in (200 W or more)
3	Dynamic brakes	Built-in	Built-in Coasting distance may be different. (Note 1)
4	Control circuit power	Single-phase 200 V AC to 230 V AC	Single-phase 200 VAC to 240 VAC
5	Main circuit power	Single-phase/3-phase 200 V AC to 230 V AC 3-phase 200 V AC to 230 V AC	Single-phase/3-phase 200 V AC to 240 V AC 3-phase 200 V AC to 240 V AC
6	24 V DC power	Built-in	External supply required
7	Auto tuning	Real-time auto tuning: 15 steps	Real-time auto tuning: 40 steps Advanced gain search (available in the future) One-touch tuning
8	Control mode	(A) General-purpose interface ・Position control mode (pulse command) (B) SSCNET compatible ・Position control mode	(A) General-purpose interface ・Position control mode (pulse command) ・Speed control mode (analog command) ・Torque control mode (analog command) (B) SSCNET III/H compatible ・Position control mode ・Speed control mode ・Torque control mode
9	Maximum input pulses	Differential pulse 500 kpps Command pulse: Sink	Differential pulse 4 Mpps Command pulse: Sink
10	The number of DIO points (excluding EM1)	(A) General-purpose interface DI: 4 points × 8 axes, DO: 3 points × 8 axes (B) SSCNET compatible DI: 0 points, DO: 0 points * When using the extension I/O unit: DI: 32 points, DO: 8 points added	(A) General-purpose interface DI: 9 points, DO: 6 points (B) SSCNET III/H compatible DI: 3 points, DO: 3 points
11	Encoder pulse output	ABZ-phase (differential) * When using the extension I/O unit (MR-J2M-D01): (A) General-purpose interface Z-phase (open collector)	ABZ-phase (differential) (A) General-purpose interface Z-phase (open collector)
12	DIO interface	Input: Sink Output: Sink	Input: Sink/source Output: Sink/source
13	Analog input/output	(A) General-purpose interface (Input) Unprovided (Output) 10-bit or equivalent × 3 ch (B) SSCNET compatible (Output) 10-bit or equivalent × 3 ch	(A) General-purpose interface (Input) 2 ch 10-bit torque, 14-bit speed or equivalent (Output) 10-bit or equivalent × 2 ch (B) SSCNET III/H compatible (Output) 10-bit or equivalent × 2 ch

Item		MR-J2M series	MR-J4 series
14	The number of internal speed commands (Type A)	0 points	7 points
15	Parameter setting method	Setup software (SETUP1_ _) Push-button (Type A) (Type B: Only interface unit parameters are configurable)	MR Configurator 2 Push-button (Type A)
16	Setup S/W communication	RS-232C	USB
17	Servo motor (Encoder resolution)	HC series (17-bit ABS)	HG series (22-bit ABS)
18	Motor maximum torque	HC-KFS 300% HC-MFS 300%	HG-KR 350% HG-MR 300%
19	Button	Four buttons	Four buttons (Type A)
20	LED indicator	(Type A) 7-segment 5-digit (Type B) 7-segment 5-digit	(Type A) 7-segment 5-digit (Type B) 7-segment 3-digit

Note 1. Refer to Dynamic Characteristics of Instruction Manual for the coasting distance.

Item		MR-J2M series	MR-J4 series
21	Advanced vibration suppression control II	Unavailable	Available
22	Adaptive filter	Available (Adaptive vibration suppression control)	Available (Adaptive filter II with improved functions)
23	Notch filter	Available (2 filters.)	Available (5 filters.)
24	Tough drive	Unavailable	Available
25	Drive recorder	Unavailable	Available
26	Forced stop	EM1 (DB stop)	Select EM1 (DB stop) or EM2 (deceleration to a stop)
Note:	Functions with difference are shown with shading.		

4. COMPARISON OF NETWORKS

<Comparison of servo system network specifications>

Item	SSCNET		SSCNET III	SSCNET III/H
	MR-J2M series		MR-J4 series (Note 1)	MR-J4 series (Note 1)
Communication media	Metal cable		Optical-fiber cable	
Communication speed	5.6 Mbps		50 Mbps	150 Mbps
Transmission distance	Overall length 30 m	→	[Standard cord inside cabinet/standard cable outside cabinet] Maximum distance between stations: 20 m Maximum overall distance: 320 m (20 m × 16 axes)	
			[Long distance cable] Maximum distance between stations: 50 m Maximum overall distance: 800 m (50 m × 16 axes)	[Long distance cable] Maximum distance between stations: 100 m Maximum overall distance: 1600 m (100 m × 16 axes)

Note 1. If the first controller communication is connected using SSCNET III/H in the factory setting, the operation mode will be fixed to the "J4 mode". If using SSCNET III, the mode will be fixed to "J3 compatibility mode". To return to the factory setting or to select an arbitrary mode, change the setting with the "MR-J4(W)-B mode selection" application.
The application "MR-J4(W)-B mode selection" is available with MR Configurator2 Version 1.12N and later. If using a version older than 1.12N, download an updated version from the MITSUBISHI ELECTRIC FA Global Website.