
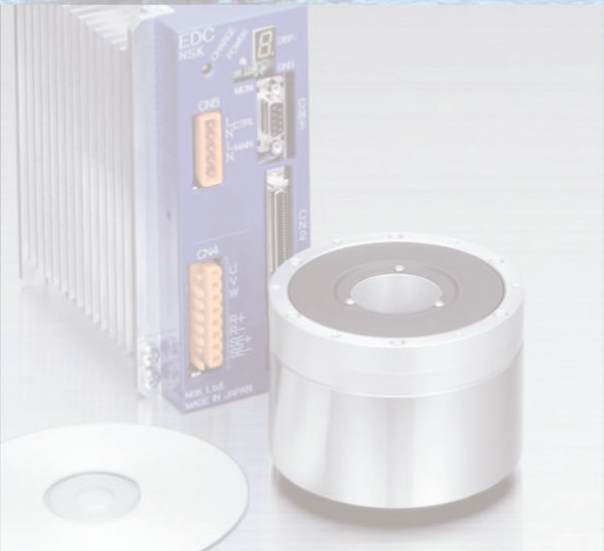
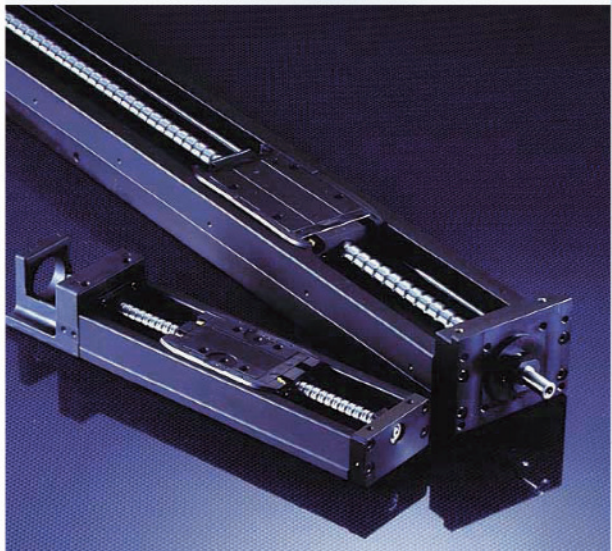
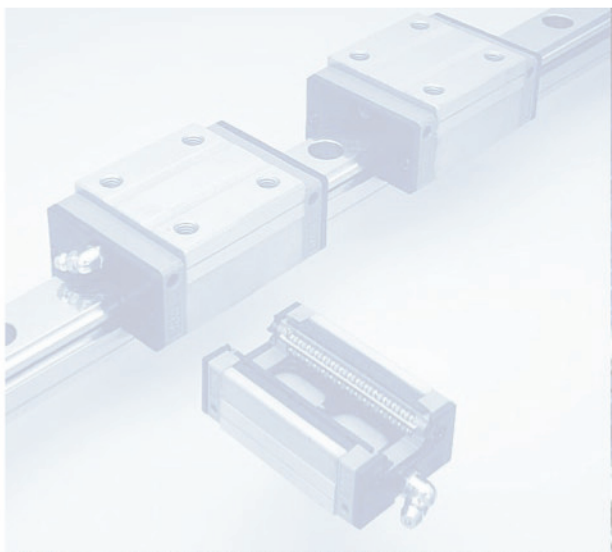


Precision Machine Components

- Monocarrier

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MCM Series – Light weight type



2 MCM Series

2.1 MCM Series Reference Number Coding

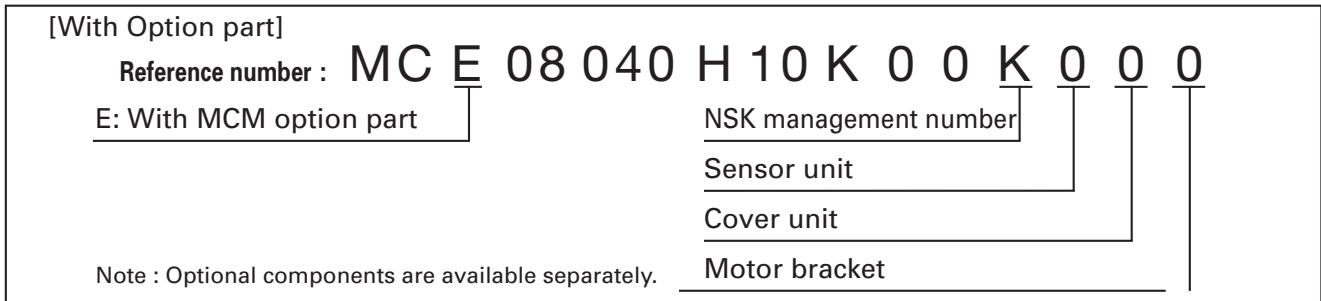
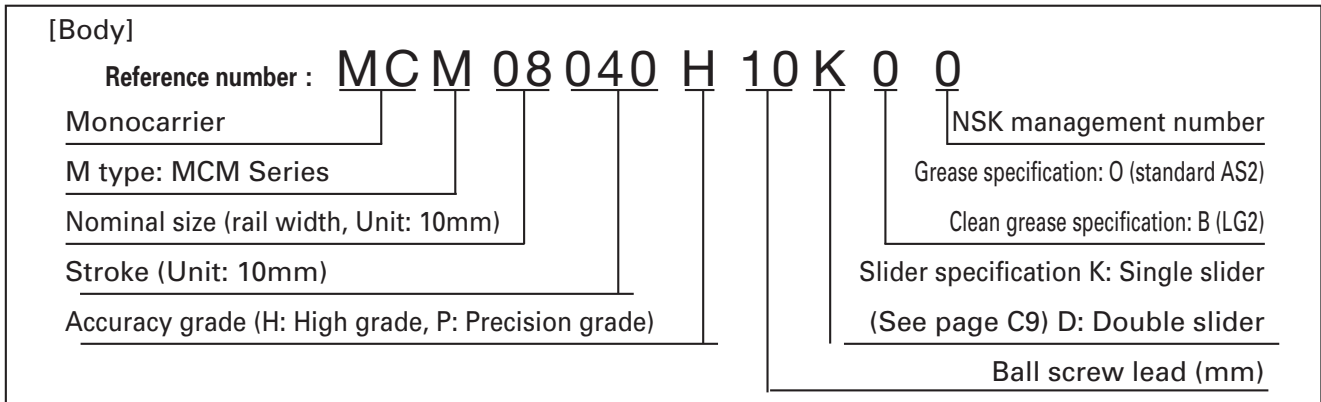


Table 2-1 Sensor unit (See page 125~128)

Reference number code	Specification	Reference number
0	N/A	—
1	Proximity switch (b-contact 3pieces)	MC – SRxx – 10
2	Proximity switch (a-contact 3pieces)	MC – SRxx – 11
3	Proximity switch (a-contact 1pieces, b-contact 2pieces)	MC – SRxx – 12
4	Photo sensor 3pieces	MC – SRxx – 13

Note xx: Reference number

Table 2-2 Cover unit (See page 129~130)

Reference number code	Specification	Reference number
0	N/A	—
1	With top cover	MC – CVxxxx – 01 (02) ❁
2	Full cover	MC – CVxxxx – 00

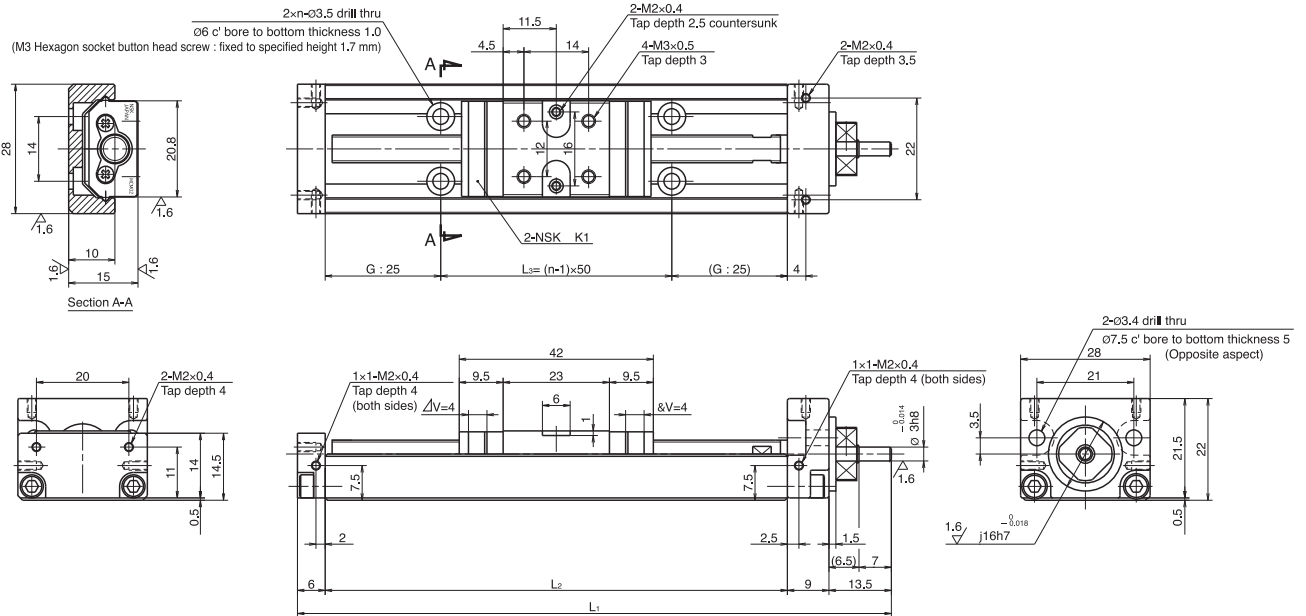
Note ❁: Monocarrier "-02" is only used for MCM03

Note xxxxx: Reference number and stroke number

Table 2-3 The reference number of motor bracket

Reference number code	Reference number				
	MCM03	MCM05	MCM06	MCM08	MCM10
0	N/A	N/A	N/A	N/A	N/A
1	MC-BK03-146-00	MC-BK05-145-00	MC-BK06-145-00	MC-BK08-145-00	MC-BK10-170-00
2	MC-BK03-148-01	MC-BK05-146-00	MC-BK06-146-00	MC-BK08-146-00	MC-BK10-170-01
3	MC-BK03-231-00	MC-BK05-148-00	MC-BK06-148-00	MC-BK08-160-00	MC-BK10-190-00
4		MC-BK05-160-00	MC-BK06-160-00	MC-BK08-170-00	MC-BK10-270-00
5		MC-BK05-250-00	MC-BK06-170-00	MC-BK08-170-01	
6			MC-BK06-170-01	MC-BK08-190-00	
7			MC-BK06-250-00	MC-BK08-250-00	
8				MC-BK08-270-00	

2.2 MCM Series dimension table of standard products MCM02



ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit (mm)	Ball screw lead (mm)	Body length (mm)			No. of mounting hole n	Inertia $\times 10^{-7}$ (kg \cdot m 2)	Mass (kg)
				L ₁	L ₂	L ₃			
MCM02005H01K	50	58	1	128.5	100	50	2	0.93	0.26
MCM02005P01K									
MCM02005H02K									
MCM02005P02K									
MCM02010H01K	100	108	1	178.5	150	100	3	1.36	0.32
MCM02010P01K									
MCM02010H02K									
MCM02010P02K									
MCM02015H01K	150	158	1	228.5	200	150	4	1.81	0.39
MCM02015P01K									
MCM02015H02K									
MCM02015P02K									

Items not marked are available from standard stock.

Monocarrier dynamic torque specification (N \cdot cm)			
		High grade	Precision
Ball screw lead (mm)	1	0.1~1.3	0.2~1.6
	2		

- Frictional resistance of NSK K1 is included in the dynamic torque in the table.
- Grease is packed into ball screw, linear guide parts and support unit.
- Consult NSK for life estimates under large moment loads.
- Stroke limit = stroke + (4[margin] \times 2)

Basic load rating

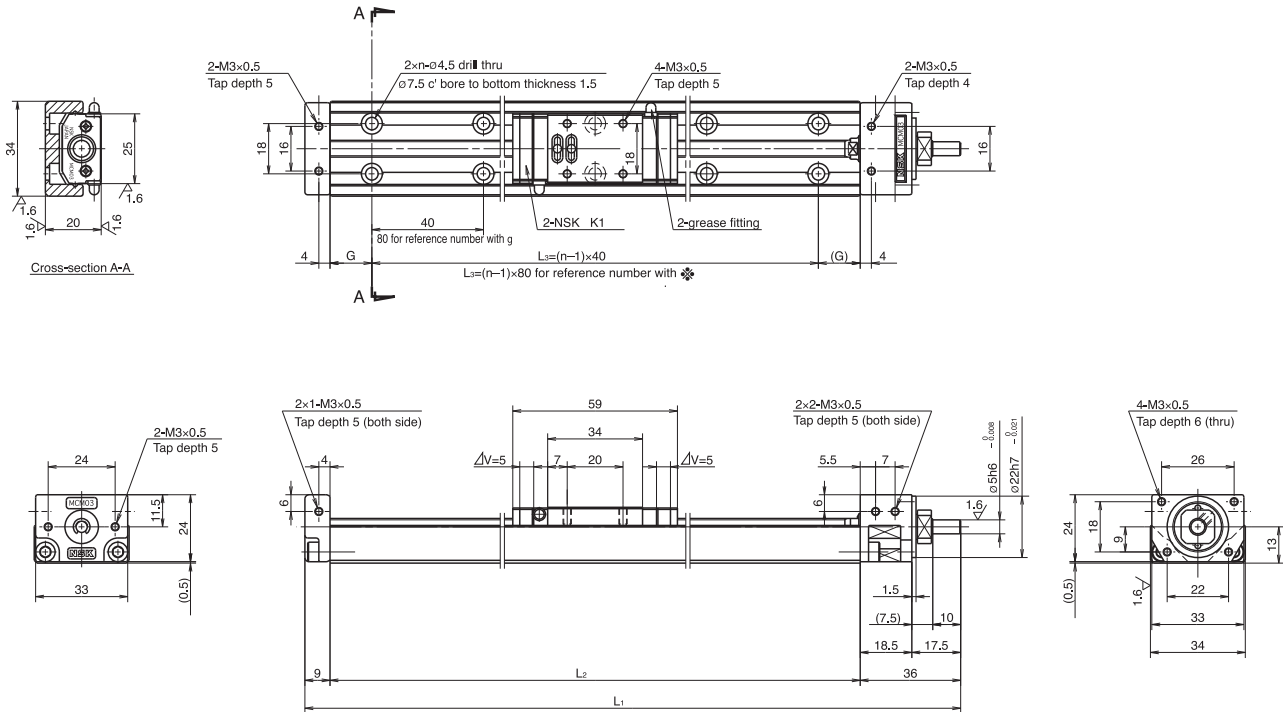
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
1	$\varnothing 6$	340 (High grade) 405 (Precision)	4910	615	1	555 (High grade) 615 (Precision)	2120	490
2		340 (High grade) 405 (Precision)				3900		

Basic static moment load of linear guide

Slider	Basic static moment load (N \cdot m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	24	8	8

MCM03 Ball screw lead 1 and 2

Accuracy grade: Precision (P)



Dimension of MCM03 (Single slider)

ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)				No. of mounting hole n	Inertia $\times 10^{-5}$ (kg \cdot m 2)	Mass (kg)
				L ₁	L ₂	G	L ₃			
❖ MCM03005P01K00 ❖ MCM03005P02K00	50	56 (66)	1	160	115	17.5	80	2	0.015 0.016	0.6
2										
MCM03010P01K00 MCM03010P02K00	100	131 (141)	1	235	190	15	160	5	0.021 0.022	0.7
2										
★ MCM03015P01K00 ★ MCM03015P02K00	150	181 (191)	1	285	240	20	200	6	0.025 0.026	0.8
2										

Items not marked with ★ are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Bolt hole pitch L₃ on the items marked with ❖ is 80 mm.

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.
4. Optional spacer is required, when I put cover unit, sensor unit or the both together in ball screw lead of 1 and 2mm (See page C39).
5. Stroke limit = stroke + (3[margin] \times 2)

Monocarrier dynamic torque specification (N \cdot cm)		
Ball screw lead (mm)	1	0.2~1.7
	2	

Basic load rating

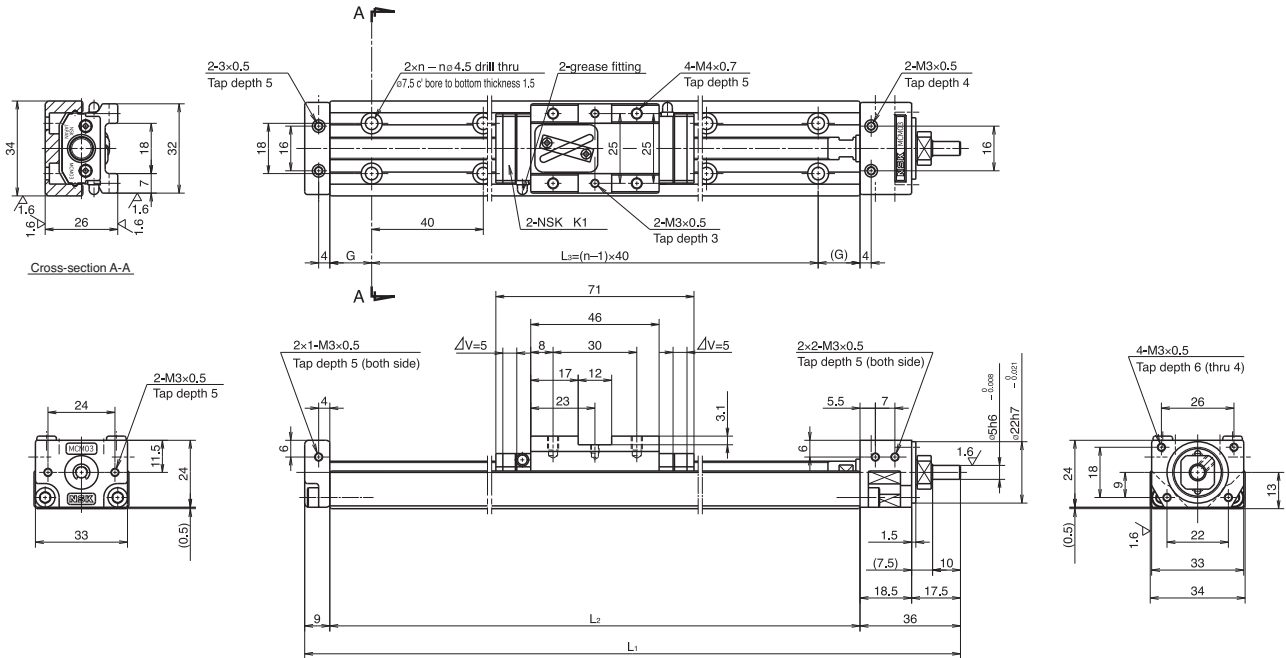
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
1	$\varnothing 6$	735	10900	2670	1	1230	4900	1040
2		735	8650		2			

Basic static moment load of linear guide

Slider	Basic static moment load (N \cdot m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	68	28	28

MCM03
Ball screw lead 10 and 12

Accuracy grade: High grade (H)



Dimension of MCM03 (Single slider)

ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)				No. of mounting hole n	Inertia $\times 10^{-5}$ (kg m ²)	Mass (kg)
				L ₁	L ₂	G	L ₃			
MCM03010H10K00 MCM03010H12K00	100	119 (129)	10 12	235	190	15	160	5	0.092 0.109	0.7
★ MCM03015H10K00 ★ MCM03015H12K00	150	169 (179)	10 12	285	240	20	200	6	0.105 0.122	0.8
MCM03020H10K00 ★ MCM03020H12K00	200	219 (229)	10 12	335	290	25	240	7	0.118 0.135	0.9
★ MCM03025H10K00 ★ MCM03025H12K00	250	269 (279)	10 12	385	340	30	280	8	0.131 0.147	1.0

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N • cm)		
Ball screw lead (mm)	10	0.3~3.0
	12	

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.
4. Stroke limit = stroke + (9.5[margin] × 2)

Basic load rating

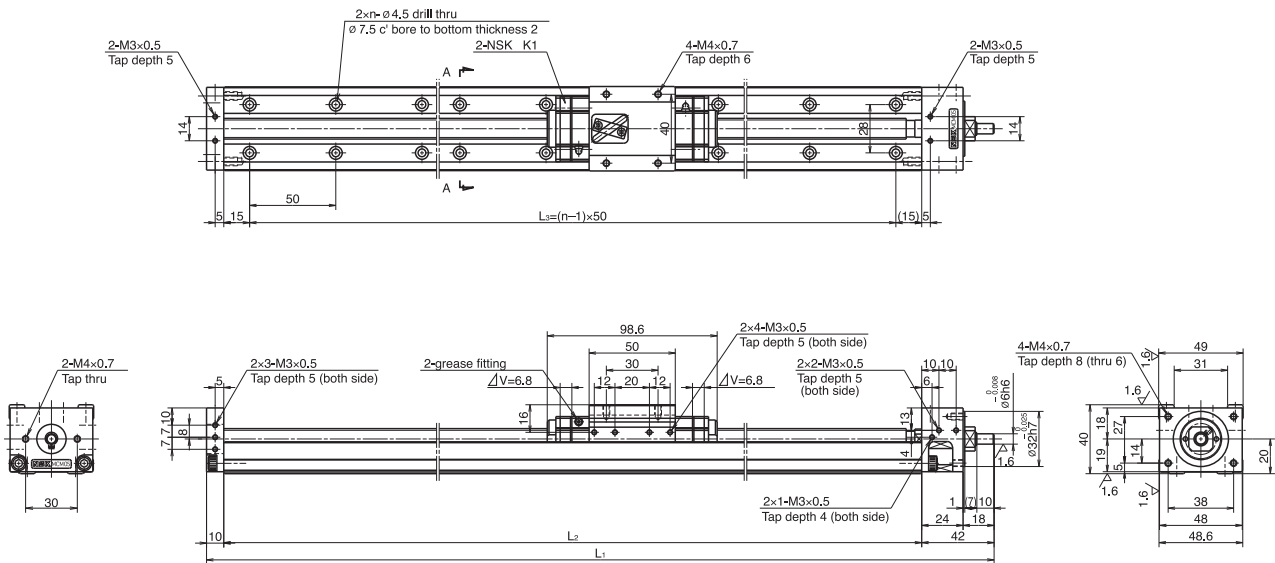
Lead	Shaft dia	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C _a	linear guides C	Support unit C _a	Rated running distance L _a (km)	Ball screw C _{0a}	Linear guides C ₀	
10	ø8	1230	6250	2670	10	1690	6620	1040
12		1230	5880		12			

Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	Rolling M _{RO}	Pitching M _{PO}	Yawing M _{YO}
Single	92	51	51

MCM05

Accuracy grade: High grade (H)



Dimension of MCM05 (Single slider)

ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)			No. of mounting hole n	Inertia $\times 10^{-4}$ (kg m ²)	Mass (kg)
				L ₁	L ₂	L ₃			
MCM05005H05K00	50	80	5	232	180	150	4	0.025	1.4
MCM05005H10K00		(95)	10						
MCM05010H05K00	100	130	5	282	230	200	5	0.031	1.6
MCM05010H10K00		(145)	10						
★ MCM05015H05K00	150	180	5	332	280	250	6	0.036	1.8
MCM05015H10K00		(195)	10						
MCM05020H05K00	200	230	5	382	330	300	7	0.042	2.0
MCM05020H10K00		(245)	10						
MCM05025H10K00	250	280 (295)	10	432	380	350	8	0.057	2.2
MCM05030H10K00	300	330	10	482	430	400	9	0.063	2.3
MCM05030H20K00		(345)	20						
MCM05040H10K00	400	430	10	582	530	500	11	0.074	2.7
MCM05040H20K00		(445)	20						
MCM05050H10K00	500	530	10	682	630	600	13	0.085	3.1
MCM05050H20K00		(545)	20						
MCM05060H10K00	600	630	10	782	730	700	15	0.096	3.5
MCM05060H20K00		(645)	20						

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N • cm)		
Ball screw lead (mm)	5	1.0~4.8
	10	1.1~5.8
	20	1.6~7.9

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.
4. Stroke limit = stroke + (15[margin] x 2)

Basic load rating

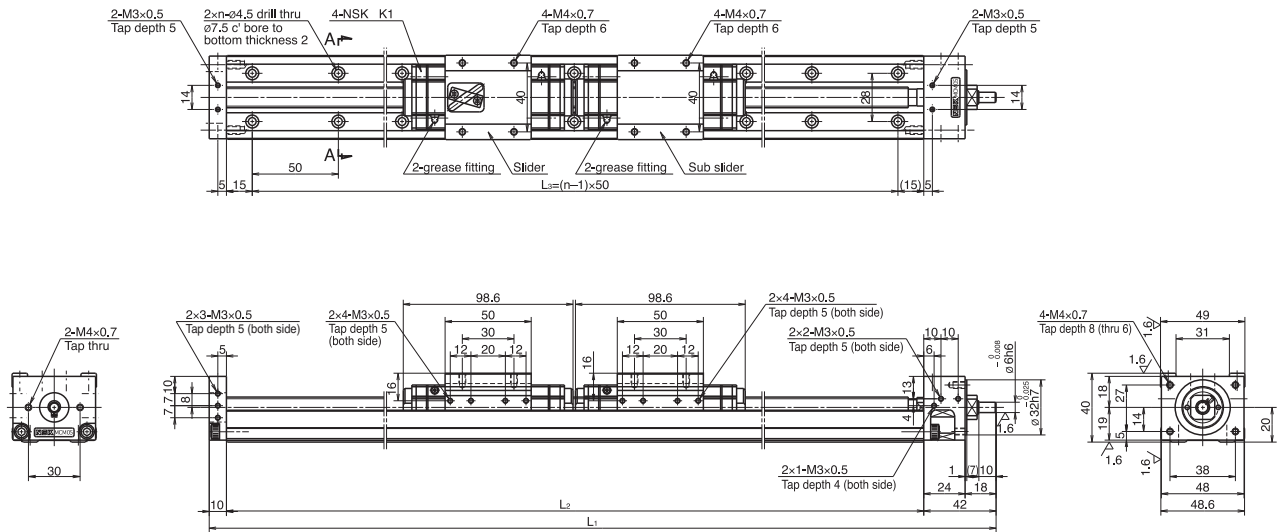
Lead ℓ (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	$\phi 12$	3760	15600	4400	5	6310	10900	1450
10		2260	12400		10	3780		
20		2260	9850		20	3780		

Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	229	89	89

MCM05 (Double slider)

Accuracy grade: High grade (H)



Dimension of MCM05 (Double slider)

ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)			No. of mounting hole n	Inertia $\times 10^{-4}$ (kg m ²)	Mass (kg)
				L ₁	L ₂	L ₃			
★ MCM05006H10D00	60	83 (110)	10	332	280	250	6	0.058	2.3
★ MCM05011H10D00	110	133 (160)	10	382	330	300	7	0.064	2.5
★ MCM05016H10D00	160	183 (210)	10	432	380	350	8	0.070	2.7
★ MCM05021H10D00	210	233 (260)	10	482	430	400	9	0.075	2.8
★ MCM05021H20D00		20	0.151						
★ MCM05031H10D00	310	333 (360)	10	582	530	500	11	0.086	3.2
★ MCM05031H20D00		20	0.162						
★ MCM05041H10D00	410	433 (460)	10	682	630	600	13	0.098	3.6
★ MCM05041H20D00		20	0.174						
★ MCM05051H10D00	510	533 (560)	10	782	730	700	15	0.109	4.2
★ MCM05051H20D00		20	0.185						

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N • cm)		
Ball screw lead (mm)	10	1.5~7.6
	20	2.3~11.8

- Frictional resistance of NSK K1 is included in the dynamic torque in the table.
- Grease is packed into ball screw, linear guide parts and support unit.
- Consult NSK for life estimates under large moment loads.
- Stroke limit = stroke + (11.4[margin] × 2)

Basic load rating

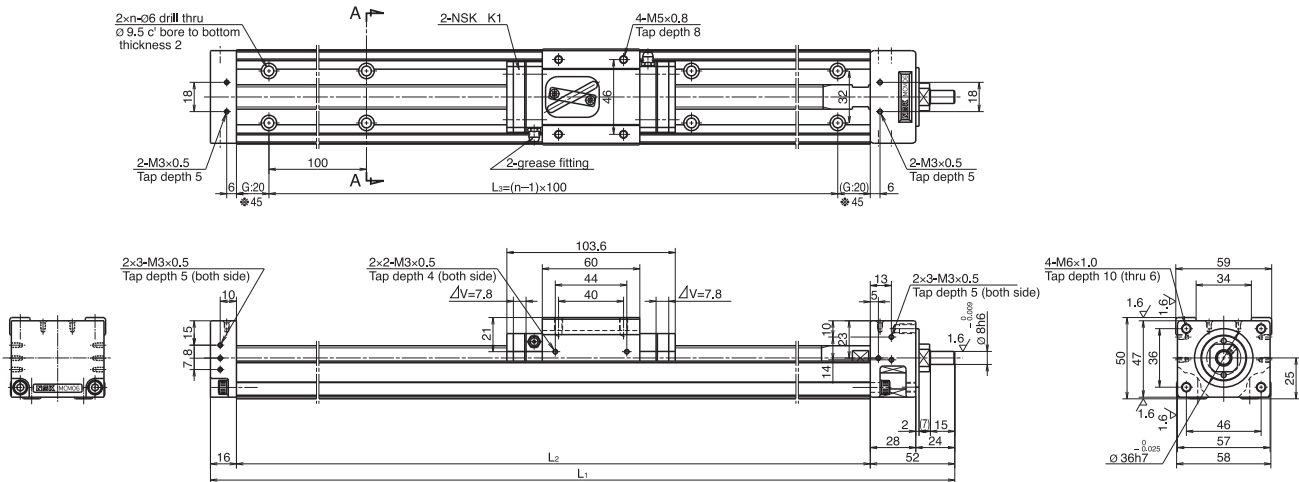
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	ø12	3760	15600	4400	5	6310	10900	1450
10		2260	12400		10	3780		
20		2260	9850		20	3780		

Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Double	455	765	765

MCM06

Accuracy grade: High grade (H)



Dimension of MCM06 (Single slider)

ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)			No. of mounting hole n	Inertia $\times 10^{-4}$ (kg \cdot m ²)	Mass (kg)
				L ₁	L ₂	L ₃			
❖MCM06005H05K00	50	85	5	258	190	100	2	0.083	2.7
★❖MCM06005H10K00			10						
MCM06010H05K00	100	135	5	308	240	200	3	0.103	3.0
MCM06010H10K00			10						
MCM06020H05K00	200	235	5	408	340	300	4	0.142	3.8
MCM06020H10K00			10						
MCM06030H05K00	300	335	5	508	440	400	5	0.180	4.5
MCM06030H10K00			10					0.150	
MCM06030H20K00			20					0.196	
MCM06040H05K00	400	435	5	608	540	500	6	0.219	5.2
MCM06040H10K00			10					0.180	
MCM06040H20K00			20					0.225	
★ MCM06050H05K00	500	535	5	708	640	600	7	0.258	6.0
MCM06050H10K00			10					0.209	
MCM06050H20K00			20					0.255	
★ MCM06060H10K00	600	635	10	808	740	700	8	0.239	6.7
★ MCM06060H20K00			20					0.284	
MCM06070H10K00	700	735	10	908	840	800	9	0.268	7.4
MCM06070H20K00			20					0.314	
★ MCM06080H10K00	800	835	10	1008	940	900	10	0.298	8.1
★ MCM06080H20K00			20					0.343	

Dimension G is 45 for those marked with ❖.

Items not marked are available from standard stock. Items marked with ★ are designated as "quick delivery item" upon request.

Ball screw lead (mm)	Torque (N \cdot cm)	
	5	1.9~7.4
	10	2.2~8.6
20	2.8~11.0	

- Frictional resistance of NSK K1 is included in the dynamic torque in the table.
- Grease is packed into ball screw, linear guide parts and support unit.
- Consult NSK for life estimates under large moment loads.
- Stroke limit = stroke + (17.5[margin] \times 2)

Basic load rating

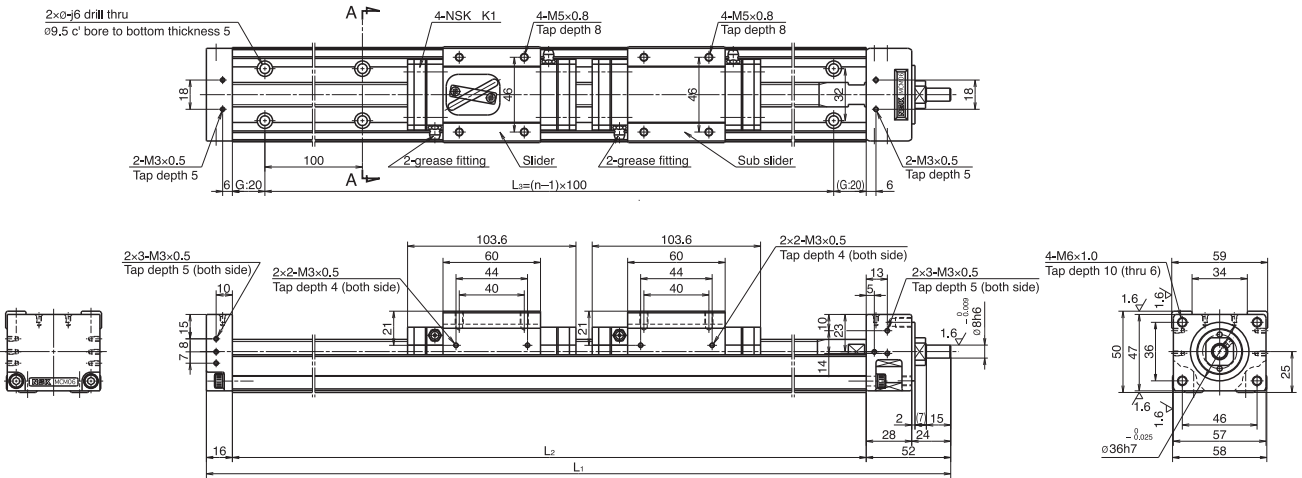
Lead	Shaft dia	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	$\phi 16$	7310	25200	6550	5	13500	17000	2730
10	$\phi 15$	7060	20000		10	12700		
20		4560	15900		20	7750		

Basic static moment load of linear guide

Slider	Basic static moment load (N \cdot m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	415	174	174

MCM06 (Double slider)

Accuracy grade: High grade (H)



Dimension of MCM06 (Double slider)

ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)			No. of mounting hole n	Inertia $\times 10^{-4}$ (kg · m ²)	Mass (kg)
				L1	L2	L3			
★ MCM06011H05D00	110	133 (164)	5	408	340	300	4	0.145	4.4
★ MCM06011H10D00			10					0.136	
★ MCM06021H05D00	210	233 (264)	5	508	440	400	5	0.184	5.1
★ MCM06021H10D00			10					0.166	
★ MCM06021H20D00			20					0.257	
★ MCM06031H05D00			5					0.223	
★ MCM06031H10D00	310	333 (364)	10	608	540	500	6	0.195	5.8
★ MCM06031H20D00			20					0.286	
★ MCM06041H05D00			5					0.262	
★ MCM06041H10D00	410	433 (464)	10	708	640	600	7	0.224	6.6
★ MCM06041H20D00			20					0.316	
★ MCM06051H10D00			10					0.254	
★ MCM06051H20D00	510	533 (564)	20	808	740	700	8	0.345	7.3
★ MCM06061H10D00			10					0.283	
★ MCM06061H20D00	610	633 (664)	20	908	840	800	9	0.375	8.0
★ MCM06071H10D00			10					0.313	
★ MCM06071H20D00			20					0.404	

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Ball screw lead (mm)	5	2.3~8.5
	10	2.7~10.9
20	4.0~15.9	

- Frictional resistance of NSK K1 is included in the dynamic torque in the table.
- Grease is packed into ball screw, linear guide parts and support unit.
- Consult NSK for life estimates under large moment loads.
- Stroke limit = stroke + (11.4[margin] × 2)

Basic load rating

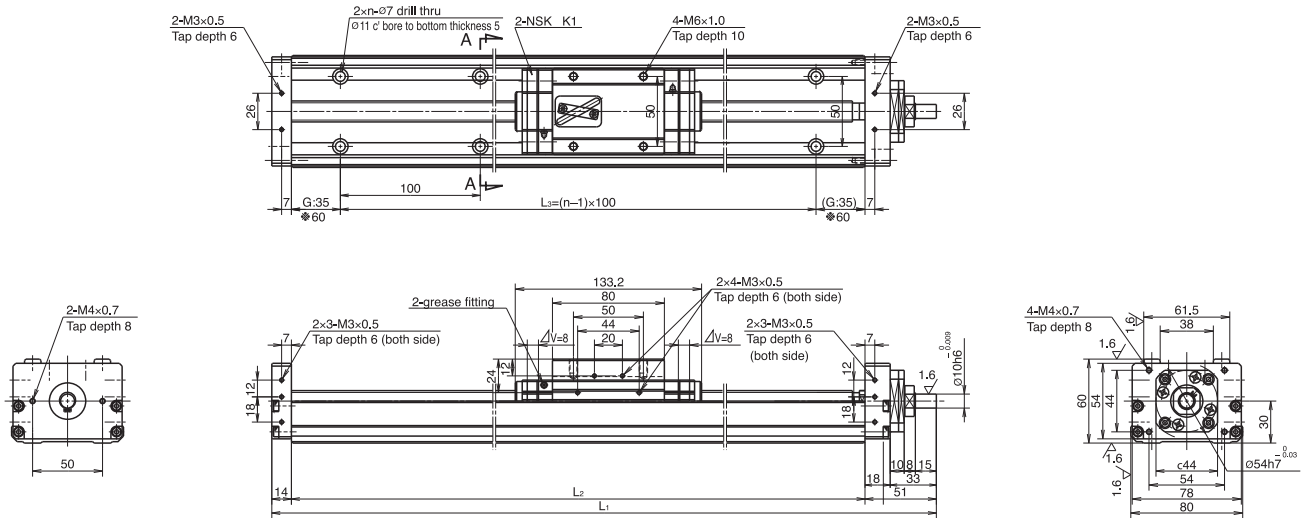
Lead	Shaft dia	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	$\phi 16$	7310	25200	6550	5	13500	17000	2730
10	$\phi 15$	7060	20000		10	12700		
20		4560	15900		20	7750		

Basic static moment load of linear guide

Slider	Basic static moment load (N · m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Double	825	1220	1220

MCM08

Accuracy grade: High grade (H)



Dimension of MCM08 (Single slider)

ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)			No. of mounting hole	Inertia $\times 10^{-4}$ (kg \cdot m 2)	Mass (kg)
				L ₁	L ₂	L ₃			
★ ❖ MCM08005H05K00	50	85 (101)	5	285	220	100	2	0.101	4.1
★ MCM08010H05K00	100	135	5	335	270	200	3	0.120	4.6
MCM08010H10K00		(151)	10					0.114	
★ ❖ MCM08015H05K00	150	185 (201)	5	385	320	200	3	0.139	5.1
★ MCM08020H05K00	200	235	5	435	370	300	4	0.159	5.5
MCM08020H10K00		(251)	10					0.144	
MCM08030H10K00	300	335	10	535	470	400	5	0.173	6.5
MCM08030H20K00		(351)	20					0.249	
MCM08040H10K00	400	435	10	635	570	500	6	0.203	7.4
MCM08040H20K00		(451)	20					0.279	
MCM08050H10K00	500	535	10	735	670	600	7	0.232	8.4
MCM08050H20K00		(551)	20					0.308	
MCM08060H10K00	600	635	10	835	770	700	8	0.262	9.3
★ MCM08060H20K00		(651)	20					0.338	
★ MCM08070H10K00	700	735	10	935	870	800	9	0.291	10.5
★ MCM08070H20K00		(751)	20					0.367	
★ MCM08080H10K00	800	835	10	1035	970	900	10	0.320	11.2
★ MCM08080H20K00		(851)	20					0.396	

Dimension G is 60 for those marked with ❖.

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N \cdot cm)		
Ball screw lead (mm)	5	1.0~5.9
	10	2.0~7.8
	20	2.5~10.8

- Frictional resistance of NSK K1 is included in the dynamic torque in the table.
- Grease is packed into ball screw, linear guide parts and support unit.
- Consult NSK for life estimates under large moment loads.
- Stroke limit = stroke + (17.5[margin] \times 2)

Basic load rating

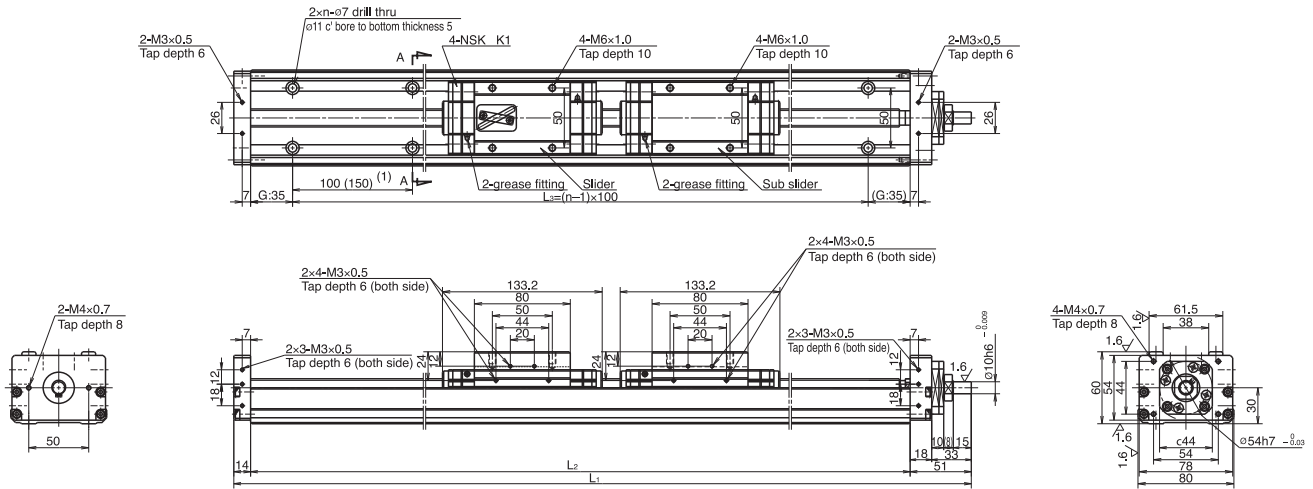
Lead	Shaft dia	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	ø16	7310	30800	7100	5	13500	22800	3040
10	ø15	7060	24400		10	12700		
20		4560	19400		20	7750		

Basic static moment load of linear guide

Slider	Basic static moment load (N \cdot m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	770	300	300

MCM08 (Double slider)

Accuracy grade: High grade (H)



Dimension of MCM08 (Double slider)

ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)			No. of mounting hole n	Inertia $\times 10^{-4}$ (kg \cdot m 2)	Mass (kg)
				L ₁	L ₂	L ₃			
★● MCM08008H10D00	80	104 (136)	10	435	370	300	3	0.169	6.5
★ MCM08018H10D00	180	204 (236)	10	535	470	400	5	0.199	7.5
★ MCM08018H20D00			20					0.351	
★ MCM08028H10D00	280	304 (336)	10	635	570	500	6	0.228	8.4
★ MCM08028H20D00			20					0.380	
★ MCM08038H10D00	380	404 (436)	10	735	670	600	7	0.257	9.4
★ MCM08038H20D00			20					0.409	
★ MCM08048H10D00	480	504 (536)	10	835	770	700	8	0.287	10.3
★ MCM08048H20D00			20					0.439	
★ MCM08058H10D00	580	604 (636)	10	935	870	800	9	0.316	11.5
★ MCM08058H20D00			20					0.468	
★ MCM08068H10D00	680	704 (736)	10	1035	970	900	10	0.346	12.2
★ MCM08068H20D00			20					0.498	

Dimension (1) is 150mm for those marked with ●.

Items not marked are available from standard stock. Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N \cdot cm)			
Ball screw lead (mm)	10	2.5~10.8	
	20	4.0~17.2	

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.
4. Stroke limit = stroke + (11.8[margin] \times 2)

Basic load rating

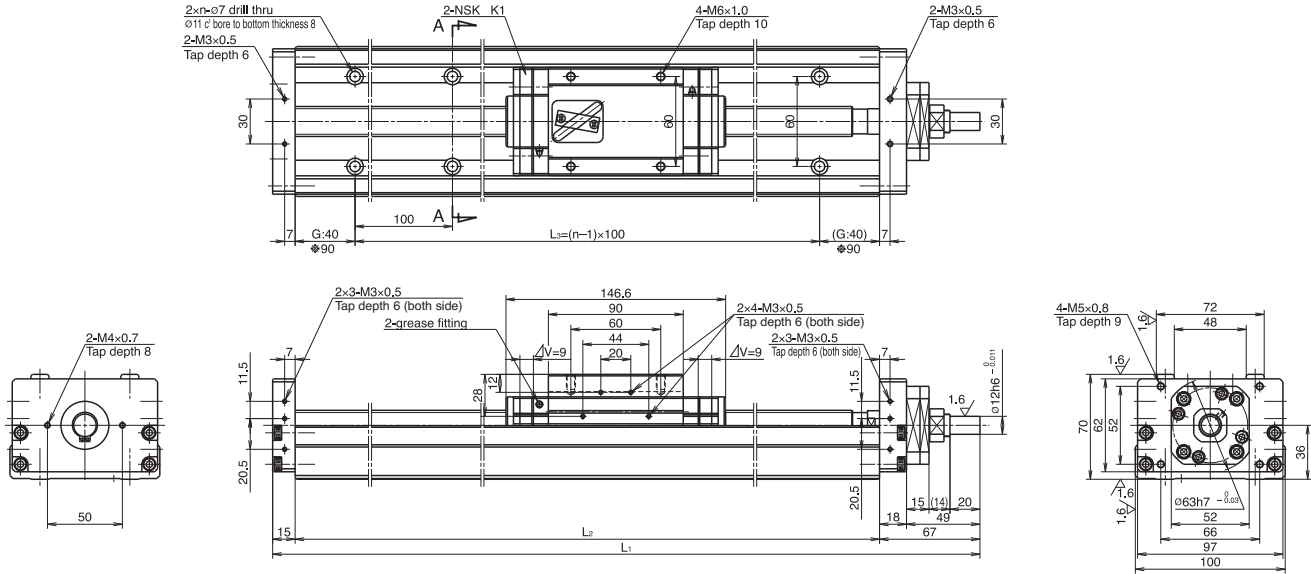
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	ϕ 16	7310	30800	7100	5	13500	22800	3040
10	ϕ 15	7060	24400		10	12700		
20		4560	19400		20	7750		

Basic static moment load of linear guide

Slider	Basic static moment load (N \cdot m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Double	1540	2050	2050

MCM10

Accuracy grade: High grade (H)



Dimension of MCM10 (Single slider)

ΔV is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)			No. of mounting hole n	Inertia $\times 10^{-4}$ (kg \cdot m 2)	Mass (kg)
				L ₁	L ₂	L ₃			
MCM10020H10K00	200	230 (251)	10	462	380	300	4	0.425	9.5
MCM10030H10K00	300	330 (351)	10	562	480	400	5	0.519	11.2
MCM10030H20K00			20					0.633	
MCM10040H10K00	400	430 (451)	10	662	580	500	6	0.612	13.0
MCM10040H20K00			20					0.726	
★ MCM10050H10K00	500	530 (551)	10	762	680	600	7	0.706	14.6
★ MCM10050H20K00			20					0.820	
MCM10060H10K00	600	630 (651)	10	862	780	700	8	0.800	16.3
★ MCM10060H20K00			20					0.914	
★ MCM10070H10K00	700	730 (751)	10	962	880	800	9	0.893	18.0
★ MCM10070H20K00			20					1.007	
MCM10080H10K00	800	830 (851)	10	1062	980	900	10	0.987	19.7
★ MCM10080H20K00			20					1.101	
★ MCM10090H10K00	900	930 (951)	10	1162	1080	1000	11	1.081	21.4
★ MCM10090H20K00			20					1.195	
★❖ MCM10100H10K00	1000	1030 (1051)	10	1262	1180	1000	11	1.174	23.1
★❖ MCM10100H20K00			20					1.288	

Dimension G is 90 for those marked with ❖.

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N \cdot cm)		
Ball screw lead (mm)	10	2.7~10.8
	20	3.1~12.7

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.
4. Stroke limit = stroke + (15[margin] \times 2)

Basic load rating

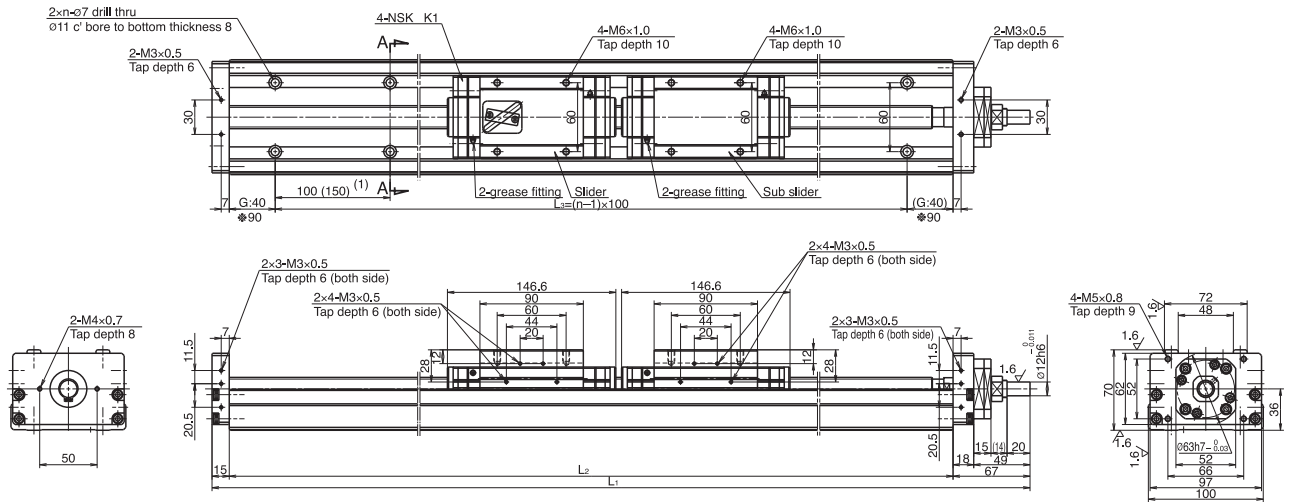
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
10	φ20	10900	33500	7600	10	21700	29400	3380
20		7060	26600		20	12700		

Basic static moment load of linear guide

Slider	Basic static moment load (N \cdot m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	1170	425	425

MCM10 (Double slider)

Accuracy grade: High grade (H)



Dimension of MCM10 (Double slider)

ΔL is thickness of NSK K1

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)			No. of mounting hole n	Inertia $\times 10^{-4}$ (kg \cdot m 2)	Mass (kg)
				L ₁	L ₂	L ₃			
★●MCM10007H10D00	70	86 (122)	10	462	380	300	3	0.463	11.0
★ MCM10017H10D00	170	186	10	562	480	400	5	0.557	12.7
★ MCM10017H20D00		(222)	20					0.785	
★ MCM10027H10D00	270	286	10	662	580	500	6	0.650	13.4
★ MCM10027H20D00		(322)	20					0.878	
★ MCM10037H10D00	370	386	10	762	680	600	7	0.744	15.1
★ MCM10037H20D00		(422)	20					0.972	
★ MCM10047H10D00	470	486	10	862	780	700	8	0.838	17.8
★ MCM10047H20D00		(522)	20					1.066	
★ MCM10057H10D00	570	586	10	962	880	800	9	0.931	19.5
★ MCM10057H20D00		(622)	20					1.159	
★ MCM10067H10D00	670	686	10	1062	980	900	10	1.025	21.2
★ MCM10067H20D00		(722)	20					1.253	
★ MCM10087H10D00	870	886	10	1262	1180	1000	11	1.212	23.6
★ MCM10087H20D00		(922)	20					1.440	

Dimension G is 90 for those marked with ❖.

Items not marked are available from standard stock.

Dimension (1) is 150mm for those marked with ●.

Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N \cdot cm)		
Ball screw lead (mm)	10	4.2~15.6
	20	5.0~19.6

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.
4. Stroke limit = stroke + (8.4[margin] \times 2)

Basic load rating

Lead	Shaft dia	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
10	$\varnothing 20$	10900	33500	7600	10	21700	29400	3380
20		7060	26600		20	12700		

Basic static moment load of linear guide

Slider	Basic static moment load (N \cdot m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Double	2340	2940	2940

1.3 Optional components

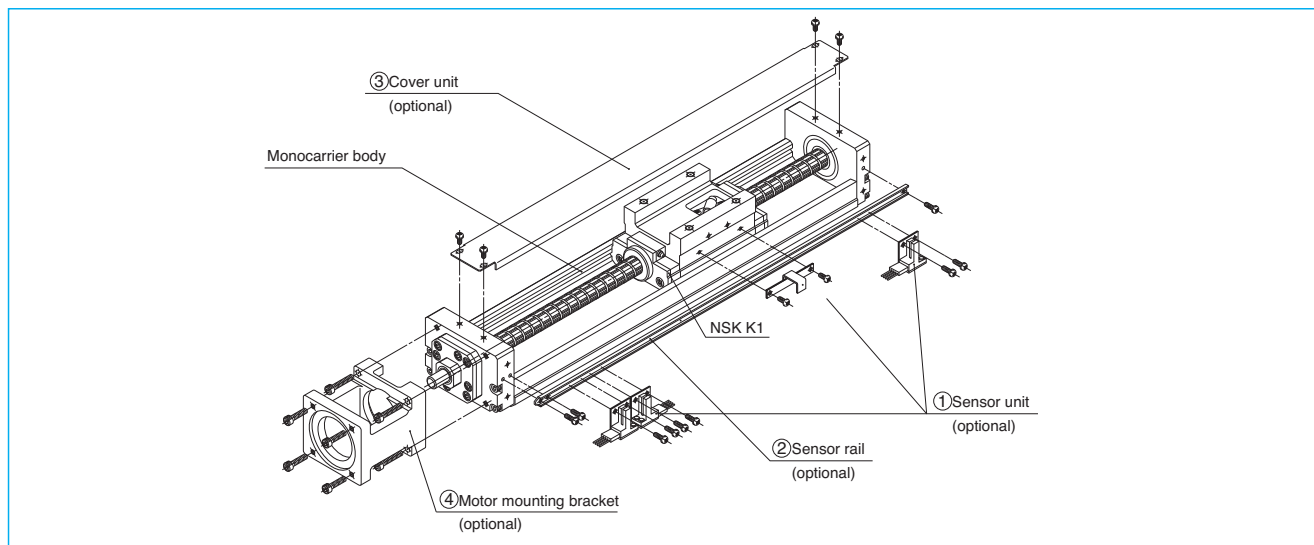


Fig.1-3 Assembly Optional components for MCM10 (example)

1 Sensor unit : Sensors, sensor mounting parts and a sensor dog are available in a set.

❖ When you used a sensor unit, the full cover unit cannot be used.

2 Sensor rail : Rail for sensor mounting is available.

3 Cover unit : Top cover or full cover (included top cover and side cover) is available.

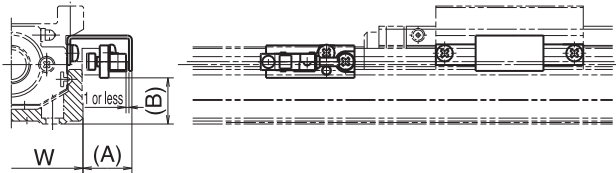
4 Motor bracket for motor mounting : Prepared for each motor maker.

☆ We assemble optional components upon request.

2.3 MCM Series Option Part

2.3.1 Sensor Unit

● Proximity switch



(Example of assembly)

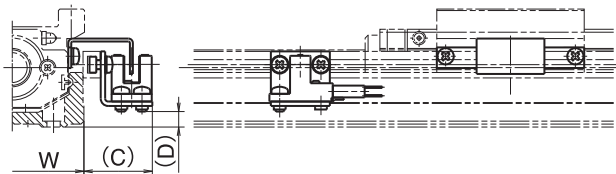
Type	Reference number			Dimension (A) (mm)	Dimension (B) (mm)	Body width W (mm)
MCM02	MC-SR02-00	MC-SR02-01	MC-SR02-02	17	2	28
MCM03	MC-SR03-10	MC-SR03-11	MC-SR03-12	17	3	34
MCM05	MC-SR05-10	MC-SR05-11	MC-SR05-12	17	15	48.6
MCM06	MC-SR06-10	MC-SR06-11	MC-SR06-12	17	19	58
MCM08	MC-SR08-10	MC-SR08-11	MC-SR08-12	16	27	80
MCM10	MC-SR10-10	MC-SR10-11	MC-SR10-12	16	35	100
quantity	Proximity switch (a-contact)	—	3	1	E2S-W13(OMRON Corp.)	
	Proximity switch (b-contact)	3	—	2	E2S-W14(OMRON Corp.)	

*See page C19 for specification of proximity switch

A sensor unit consists of sensors, a sensor dog and sensor mounring parts.

You require an optional spacer plate when you use a cover unit or a sensor unit for an MCM03 with the lead of 1 or 2 mm. (Refer to page C39.)

● Photo sensor



(Example of assembly)

Type	Reference number	Dimension (C) (mm)	Dimension (D) (mm)	Body width W (mm)	Remarks
MCM03	MC-SR03-13	24	0.5	34	EE-SX674(OMRON Corp.) 3 sets (EE-1001 connector attachment)
MCM05	MC-SR05-13	24	5	48.6	
MCM06	MC-SR06-13	24	9	58	
MCM08	MC-SR08-13	23	17	80	
MCM10	MC-SR10-13	22	24	100	

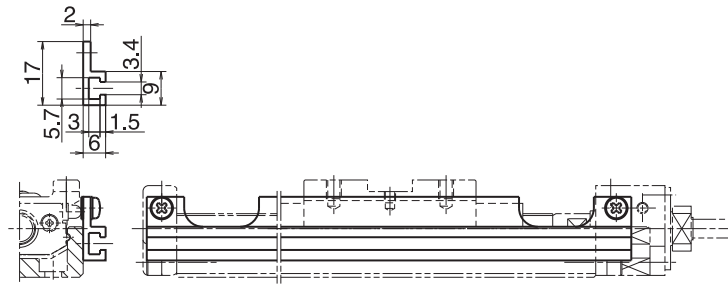
* See page C20 for specification of photo sensor

A sensor unit consists of sensors, a sensor dog and sensor mounring parts.

You require an optional spacer plate when you use a cover unit or a sensor unit for an MCM03 with the lead of 1 or 2 mm. (Refer to page C39.)

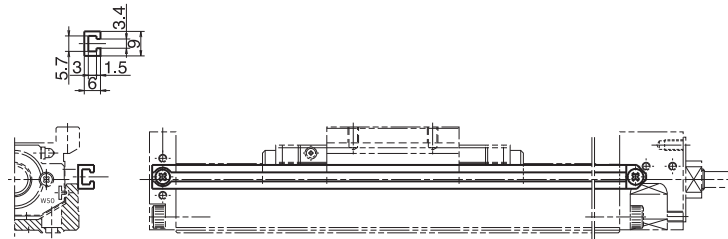
Sensor rail

Sensor rail for MCM03: MC-SRL3- * * * *



(Example of assembly)

Sensor rail for MCM05: MC-SRL5- * * * *



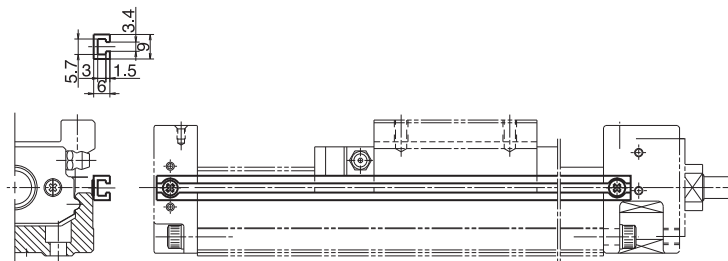
(Example of assembly)

Sensor rail for MCM02: MC-SRL2- * * * *

Sensor rail for MCM06: MC-SRL6- * * * *

Sensor rail for MCM08: MC-SRL8- * * * *

Sensor rail for MCM10: MC-SRL1- * * * *



(Example of assembly)

* * * * is the same as rail dimension L₂

Please place and assemble the seat during the attachment between the sensor rail and the support unit attaching part for MCM03 and MCM06.

Body of MCM Series and Sensor rail combination Table

Table 2-4

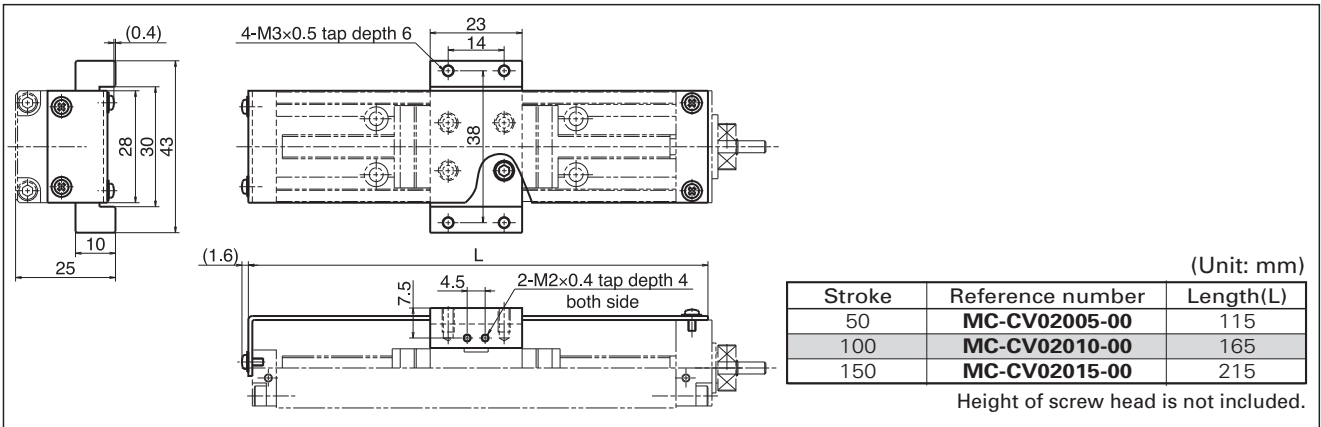
Nominal size	Body length L ₂ (mm)	Reference number	Sensor rail reference number	
MCM02	100	MCM02005H01K MCM02005P01K MCM02005H02K MCM02005P02K	MC-SRL2-0100	
		MCM02010H01K MCM02010P01K MCM02010H02K MCM02010P02K		MC-SRL2-0150
		MCM02015H01K MCM02015P01K MCM02015H02K MCM02015P02K		
MCM03	115	MCM03005P01K00 MCM03005P02K00	MC-SRL3-0115	
	190	MCM03010P01K00 MCM03010P02K00 MCM03010H10K00 MCM03010H12K00	MC-SRL3-0190	
		MCM03015P01K00 MCM03015P02K00 MCM03015H10K00 MCM03015H12K00		MC-SRL3-0240
	290	MCM03020H10K00 MCM03020H12K00	MC-SRL3-0290	
	340	MCM03025H10K00 MCM03025H12K00	MC-SRL3-0340	
MCM05	180	MCM05005H05K00 MCM05005H10K00	MC-SRL5-0180	
	230	MCM05010H05K00 MCM05010H10K00	MC-SRL5-0230	
	280	MCM05015H05K00 MCM05015H10K00 MCM05006H10D00	MC-SRL5-0280	
	330	MCM05020H05K00 MCM05020H10K00 MCM05011H10D00	MC-SRL5-0330	
	380	MCM05025H10K00 MCM05016H10D00	MC-SRL5-0380	
	430	MCM05030H10K00 MCM05030H20K00 MCM05021H10D00 MCM05021H20D00	MC-SRL5-0430	
		MCM05040H10K00 MCM05040H20K00 MCM05031H10D00 MCM05031H20D00		
	530	MCM05050H10K00 MCM05050H20K00 MCM05041H10D00 MCM05041H20D00	MC-SRL5-0530	
	630	MCM05060H10K00 MCM05060H20K00 MCM05051H10D00 MCM05051H20D00	MC-SRL5-0630	
730	MCM05060H10K00 MCM05060H20K00 MCM05051H10D00 MCM05051H20D00	MC-SRL5-0730		

Nominal size	Body length L ₂ (mm)	Reference number	Sensor rail reference number	
MCM06	190	MCM06005H05K00 MCM06005H10K00	MC-SRL6-0190	
		MCM06010H05K00 MCM06010H10K00		
	240	MCM06020H05K00 MCM06020H10K00 MCM06021H05D00 MCM06021H10D00	MC-SRL6-0240	
		MCM06030H05K00 MCM06030H10K00 MCM06030H20K00 MCM06021H05D00 MCM06021H20D00		MC-SRL6-0340
		MCM06040H05K00 MCM06040H10K00 MCM06040H20K00 MCM06031H05D00 MCM06031H10D00 MCM06031H20D00		
	540	MCM06050H05K00 MCM06050H10K00 MCM06050H20K00 MCM06041H05D00 MCM06041H10D00 MCM06041H20D00	MC-SRL6-0540	
		MCM06060H10K00 MCM06060H20K00 MCM06051H10D00 MCM06051H20D00		
	640	MCM06070H10K00 MCM06070H20K00 MCM06061H10D00 MCM06061H20D00	MC-SRL6-0640	
		MCM06080H10K00 MCM06080H20K00 MCM06071H10D00 MCM06071H20D00		
	740	MCM06090H10K00 MCM06090H20K00 MCM06081H10D00 MCM06081H20D00	MC-SRL6-0740	
MCM06100H10K00 MCM06100H20K00 MCM06091H10D00 MCM06091H20D00				
840	MCM06110H10K00 MCM06110H20K00 MCM06101H10D00 MCM06101H20D00	MC-SRL6-0840		
	MCM06120H10K00 MCM06120H20K00 MCM06111H10D00 MCM06111H20D00			
940	MCM06130H10K00 MCM06130H20K00 MCM06121H10D00 MCM06121H20D00	MC-SRL6-0940		
	MCM06140H10K00 MCM06140H20K00 MCM06131H10D00 MCM06131H20D00			

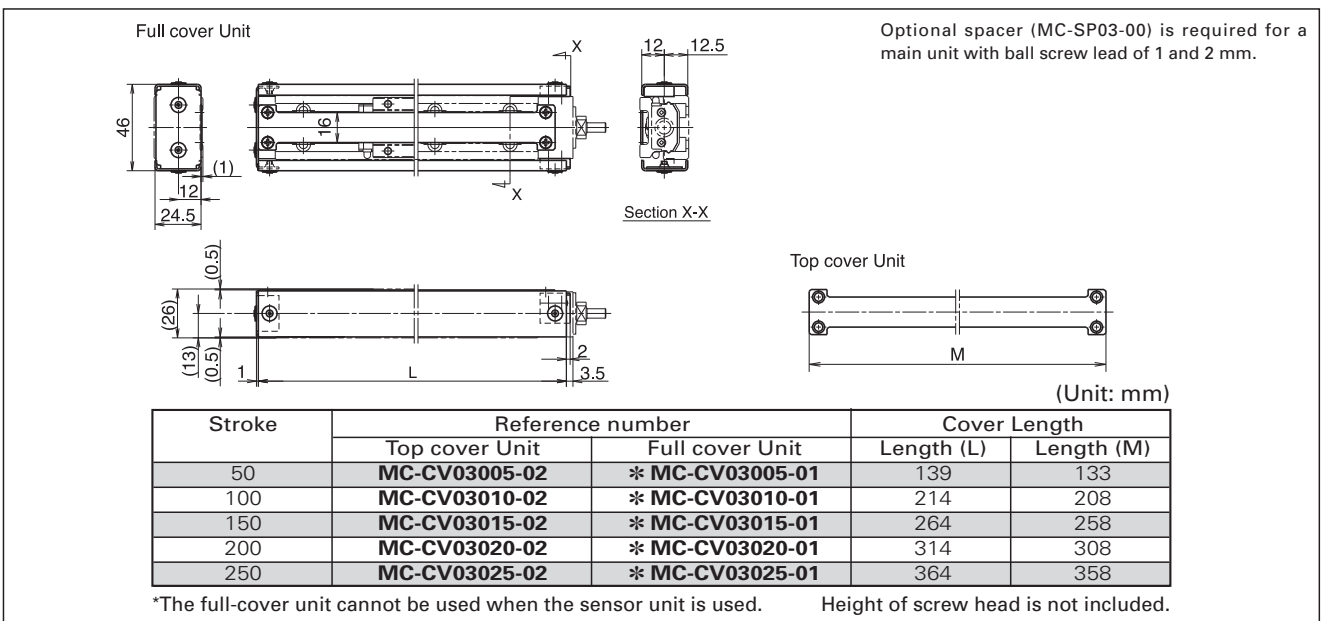
Nominal size	Body length L ₂ (mm)	Reference number	Sensor rail reference number
MCM08	220	MCM08005H05K00	MC-SRL8-0220
	270	MCM08010H05K00	MC-SRL8-0270
		MCM08010H10K00	
	320	MCM08015H05K00	MC-SRL8-0320
	370	MCM08020H05K00	MC-SRL8-0370
		MCM08020H10K00	
		MCM08008H10D00	
	470	MCM08030H10K00	MC-SRL8-0470
		MCM08030H20K00	
		MCM08018H10D00	
MCM08018H20D00			
570	MCM08040H10K00	MC-SRL8-0570	
	MCM08040H20K00		
	MCM08028H10D00 MCM08028H20D00		
670	MCM08050H10K00	MC-SRL8-0670	
	MCM08050H20K00		
	MCM08038H10D00 MCM08038H20D00		
770	MCM08060H10K00	MC-SRL8-0770	
	MCM08060H20K00		
	MCM08048H10D00 MCM08048H20D00		
870	MCM08070H10K00	MC-SRL8-0870	
	MCM08070H20K00		
	MCM08058H10D00 MCM08058H20D00		
970	MCM08080H10K00	MC-SRL8-0970	
	MCM08080H20K00		
	MCM08068H10D00 MCM08068H20D00		
MCM10	380	MCM10020H10K00	MC-SRL1-0380
		MCM10007H10D00	
	480	MCM10030H10K00	MC-SRL1-0480
		MCM10030H20K00	
		MCM10017H10D00 MCM10017H20D00	
	580	MCM10040H10K00	MC-SRL1-0580
		MCM10040H20K00	
		MCM10027H10D00 MCM10027H20D00	
	680	MCM10050H10K00	MC-SRL1-0680
MCM10050H20K00			
MCM10037H10D00 MCM10037H20D00			
780	MCM10060H10K00	MC-SRL1-0780	
	MCM10060H20K00		
	MCM10047H10D00		
	MCM10047H20D00		
880	MCM10070H10K00	MC-SRL1-0880	
	MCM10070H20K00		
	MCM10057H10D00 MCM10057H20D00		
980	MCM10080H10K00	MC-SRL1-0980	
	MCM10080H20K00		
	MCM10067H10D00 MCM10067H20D00		
1080	MCM10090H10K00	MC-SRL1-1080	
	MCM10090H20K00		
1180	MCM10100H10K00	MC-SRL1-1180	
	MCM10100H20K00		
	MCM10087H10D00		
	MCM10087H20D00		

2.3.2 Cover Unit

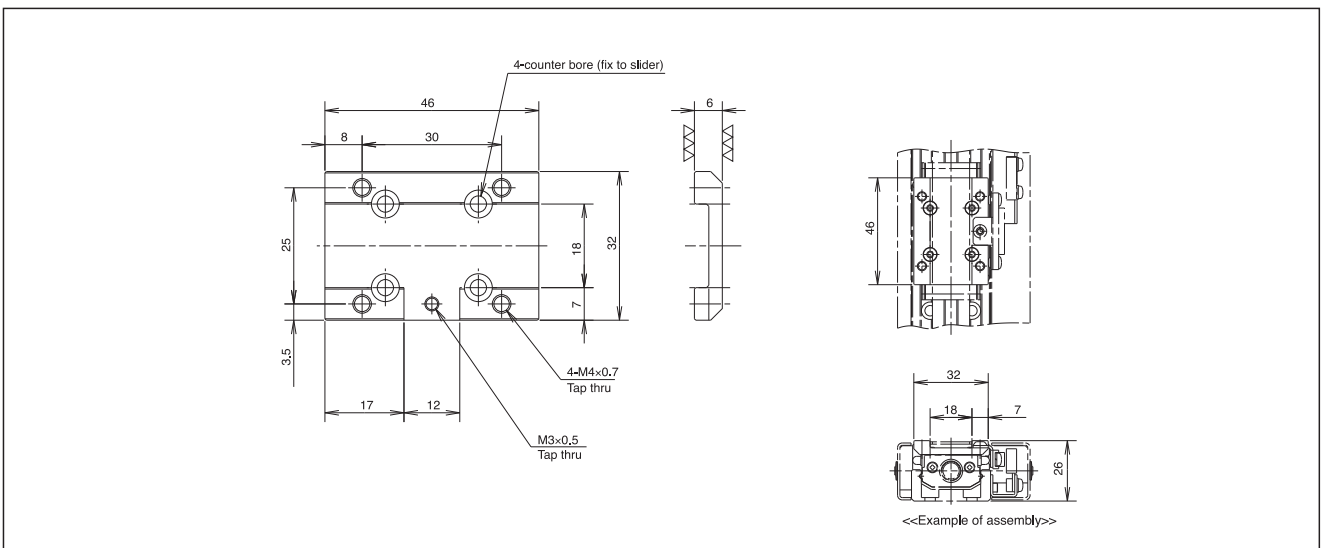
Cover Unit for MCM02



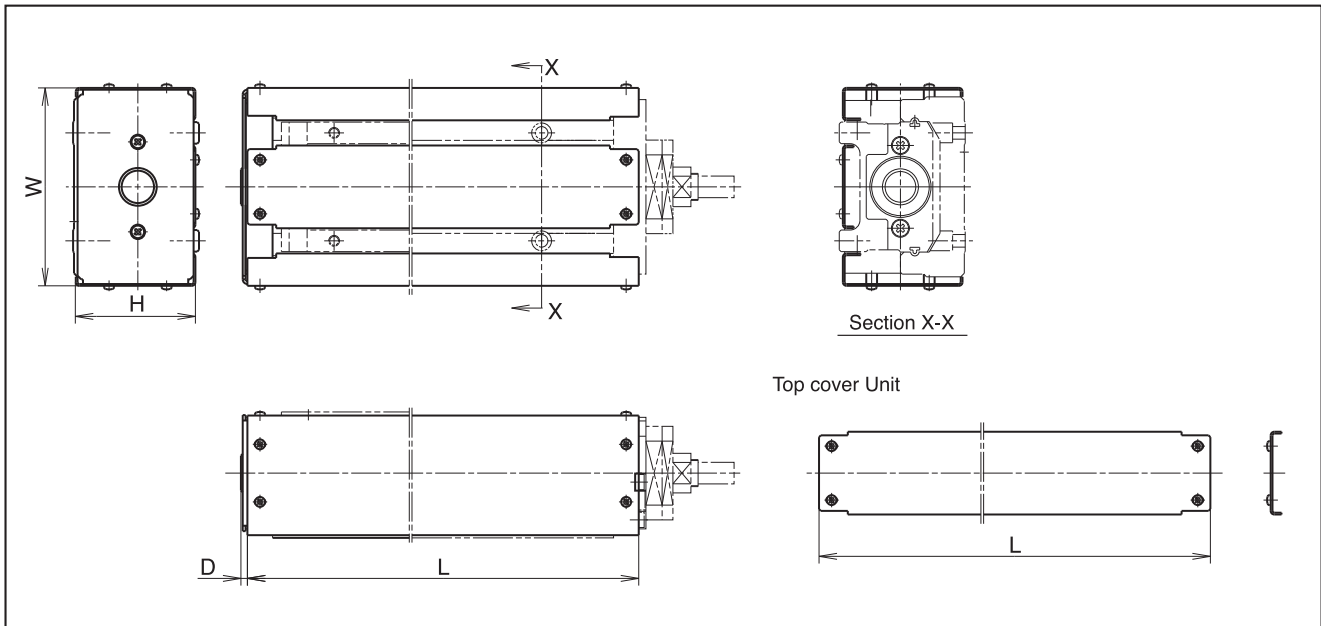
Cover Unit for MCM03



Spacer for MCM03 (Optional) MC-SP03-00 (for ball screw lead 1 and 2 mm)



Cover Unit for MCM05, 06, 08, and 10



(Unit: mm)

Reference number	Stroke		Cover unit Reference number		Cover length			
	Single slider	Double slider	Top cover Unit	Full cover Unit	Length (L)	Height (H)	Width (W)	End part (D)
MCM05	50	—	MC-CV05005-01	MC-CV05005-00	200	38.5	65	2.6
	100	—	MC-CV05010-01	MC-CV05010-00	250			
	150	60	MC-CV05015-01	MC-CV05015-00	300			
	200	110	MC-CV05020-01	MC-CV05020-00	350			
	250	160	MC-CV05025-01	MC-CV05025-00	400			
	300	210	MC-CV05030-01	MC-CV05030-00	450			
	400	310	MC-CV05040-01	MC-CV05040-00	550			
	500	410	MC-CV05050-01	MC-CV05050-00	650			
MCM06	50	—	MC-CV06005-01	MC-CV06005-00	225	48.5	75	
	100	—	MC-CV06010-01	MC-CV06010-00	275			
	200	110	MC-CV06020-01	MC-CV06020-00	375			
	300	210	MC-CV06030-01	MC-CV06030-00	475			
	400	310	MC-CV06040-01	MC-CV06040-00	575			
	500	410	MC-CV06050-01	MC-CV06050-00	675			
	600	510	MC-CV06060-01	MC-CV06060-00	775			
	700	610	MC-CV06070-01	MC-CV06070-00	875			
MCM08	50	—	MC-CV08005-01	MC-CV08005-00	248	56.5	90	2.6
	100	—	MC-CV08010-01	MC-CV08010-00	298			
	200	80	MC-CV08020-01	MC-CV08020-00	398			
	300	180	MC-CV08030-01	MC-CV08030-00	498			
	400	280	MC-CV08040-01	MC-CV08040-00	598			
	500	380	MC-CV08050-01	MC-CV08050-00	698			
	600	480	MC-CV08060-01	MC-CV08060-00	798			
	700	580	MC-CV08070-01	MC-CV08070-00	898			
MCM10	200	70	MC-CV10020-01	MC-CV10020-00	408	66.5	110	2.6
	300	170	MC-CV10030-01	MC-CV10030-00	508			
	400	270	MC-CV10040-01	MC-CV10040-00	608			
	500	370	MC-CV10050-01	MC-CV10050-00	708			
	600	470	MC-CV10060-01	MC-CV10060-00	808			
	700	570	MC-CV10070-01	MC-CV10070-00	908			
	800	670	MC-CV10080-01	MC-CV10080-00	1008			
	900	—	MC-CV10090-01	MC-CV10090-00	1108			
1000	870	MC-CV10100-01	MC-CV10100-00	1208				

Not include height such as screw

The dimensions of cover shown above do not include the head height of fixing machine screws. Add the head of machine screws of approximately 2.5 mm to the outer measurement of a cover unit. Set a margin for mechanical interference with surrounding components.

*When you use a sensor unit, the full-cover unit cannot be used.

2.3.3 Motor Bracket

Motor Bracket for MCM02

Reference number
MC-BK02-128-00

① Motor bracket (A.0)
Black anodized aluminum

② Hexagon socket head cap screw
(M3×0.5, length 10)

4- ϕ 3.5 drill thru
PCD 28, 90° equally spaced

Diameter for coupling
 ϕ 17 or less

Section Z-Z

Note: Be sure to align the centerlines when installing the motor.

Compatible motor	
Maker	Motor models
Yaskawa Electric Corp. (Σ - mini Series)	SGMM-A1(10W) SGMM-A2(20W)

Reference number
MC-BK02-133-00

① Motor bracket (A.0)
Black anodized aluminum

② Hexagon socket head cap screw
(M3×0.5, length 10)

③ Hexagon socket head cap screw
(M2.5×0.45, length 10)

4- ϕ 2.5 drill thru
PCD 33, 90° equally spaced

Diameter for coupling
 ϕ 17 or less

Section Z-Z

Note: Be sure to align the centerlines when installing the motor.

Compatible motor	
Maker	Motor models
Mitsubishi Electric Corp. (Melservo series)	HC-AQ013(10W) HC-AQ023(20W)

Reference number
MC-BK02-223-00

① Motor bracket (A.0)
Black anodized aluminum

② Hexagon socket head cap screw
(M3×0.5, length 10)

③ Hexagon socket head cap screw
(M2.5×0.45, length 10)

4- ϕ 3 drill thru

Diameter for coupling
 ϕ 17 or less

Section Z-Z

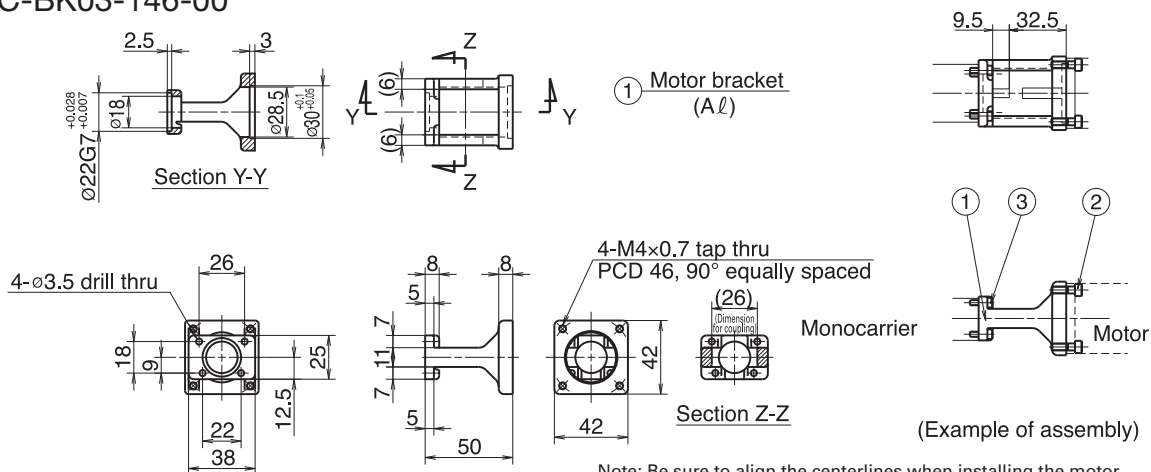
Note: Be sure to align the centerlines when installing the motor.

Compatible motor	
Maker	Motor models
Oriental Motor Co., Ltd.	PMU33/35(5-phase stepping motor) PMC33/35(5-phase stepping motor)

Motor Bracket for MCM03

Reference number

MC-BK03-146-00



- (2) Hexagon socket head cap screw (M4, length 12)
- (3) Hexagon socket head cap screw (M3, length 10)

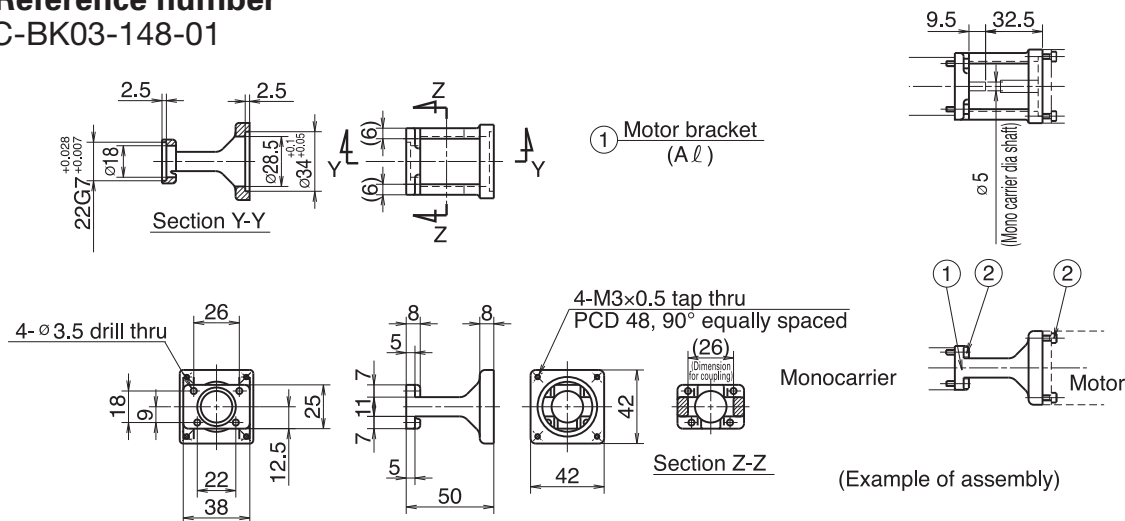
Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Yaskawa Electric Corp.	SGMAH-A3(30W), SGMAH-A5(50W), SGMAH-A5A(50W) SGMAH-01(100W), SGMAH-01A(100W)
Mitsubishi Electric Corp.	HF-KP053(50W), HF-MP053(50W), HC-KFS053(50W), HC-MFS053(50W) HF-KP13(100W), HF-MP13(100W), HC-KFS13(100W), HC-MFS13(100W)
OMRON Corp.	R88M-W03(30W), R88M-W05(50W), R88M-W10(100W)
Sanyo Denki Co., Ltd.	P30B04003(30W), P30B04005(50W), P30B04006(60W), P30B04010(100W)

Motor Bracket for MCM03

Reference number

MC-BK03-148-01



- (2) Hexagon socket head cap screw (M3, length 10)

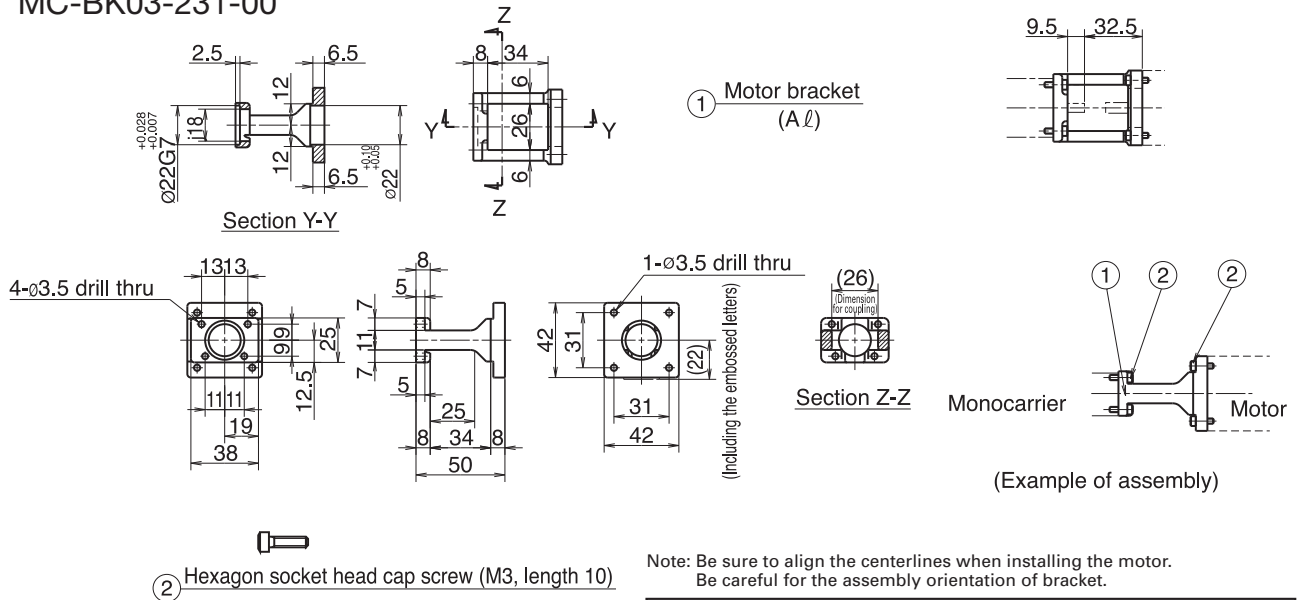
Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	P50B04040(60W), P50B04010(100W)

Motor Bracket for MCM03

■ Reference number

MC-BK03-231-00

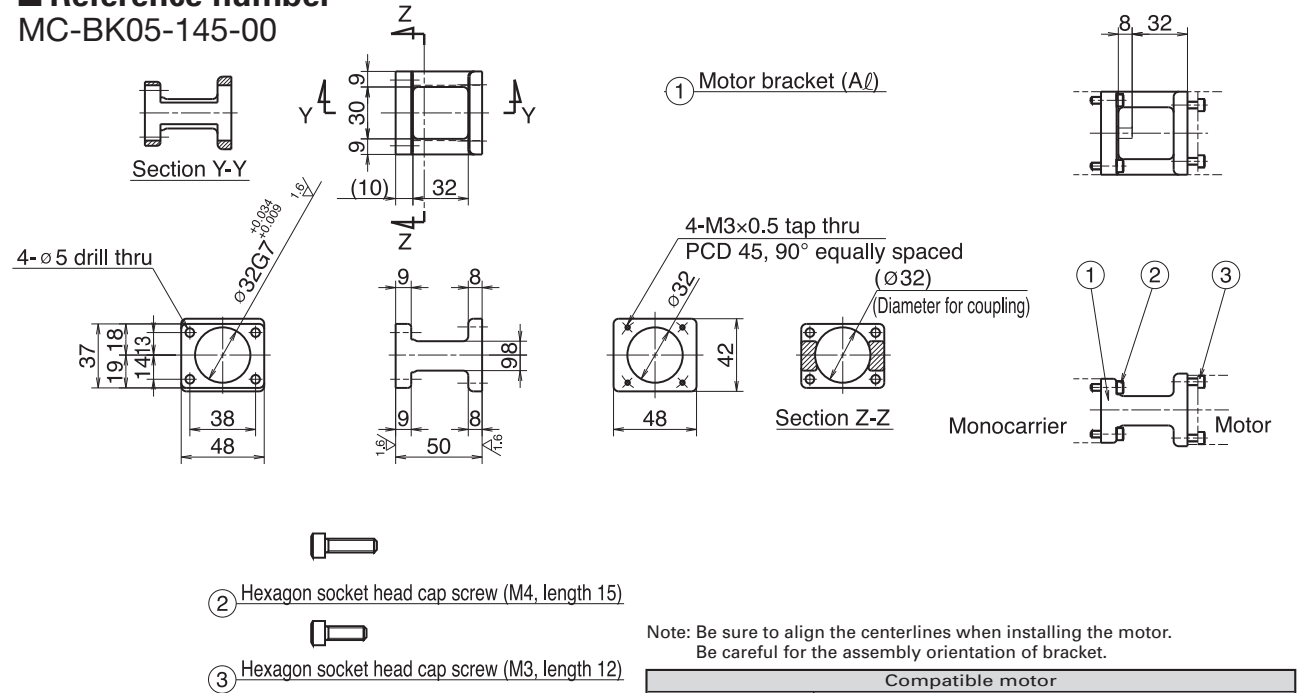


Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	PBM423xxx, 103F55xx
Oriental Motor Co., Ltd.	AS46, ASC46, UPK54x, PK54x, CSK54x, CFK54x UMK24x, CSK24x, PK24x

Motor Bracket for MCM05

■ Reference number

MC-BK05-145-00



Compatible motor	
Maker	Motor models
Matsushita Electric Co., Ltd.	MSMD5A(50W), MSMD01(100W)

Motor Bracket for MCM05

Reference number
MC-BK05-146-00

① Motor bracket (Aℓ)

4-M4×0.7 tap thru
PCD 46, 90° equally spaced
($\phi 32$)
(Diameter for coupling)

Section Z-Z

Monocarrier Motor

Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Yaskawa Electric Corp.	SGMAH-A3(30W), SGMAH-A5(50W), SGMAS-A5A(50W), SGMAH-01(100W), SGMAS-01A(100W)
Mitsubishi Electric Corp.	HF-KP053(50W), HF-MP053(50W), HC-KFS053(50W), HC-MFS053(50W), HF-KP13(100W), HF-MP13(100W), HC-KFS13(100W), HC-MFS13(100W)
OMRON Corp.	R88M-W03(30W), R88M-W05(50W), R88M-W10(100W)
Sanyo Denki Co., Ltd.	P30B04003(30W), P30B04005(50W), P30B04006(60W), P30B04010(100W)

② Hexagon socket head cap screw (M4, length 15)

③ Hexagon socket head cap screw (M4, length 12)

Motor Bracket for MCM05

Reference number
MC-BK05-148-00

① Motor bracket (Aℓ)

4-M3×0.5 tap thru
PCD 48, 90° equally spaced
($\phi 32$)
(Diameter for coupling)

Section Z-Z

Monocarrier Motor

Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Matsushita Electric Co., Ltd.	MAMA01(100W)

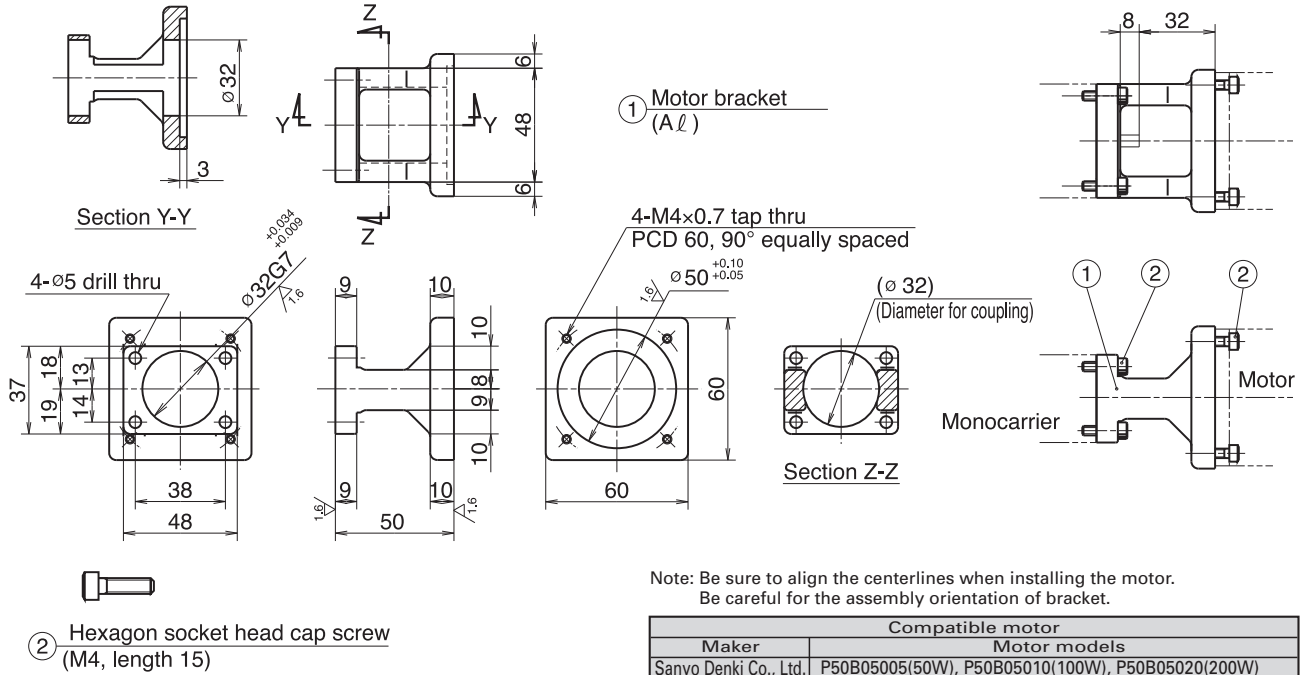
② Hexagon socket head cap screw (M4, length 15)

③ Hexagon socket head cap screw (M3, length 12)

Motor Bracket for MCM05

■ Reference number

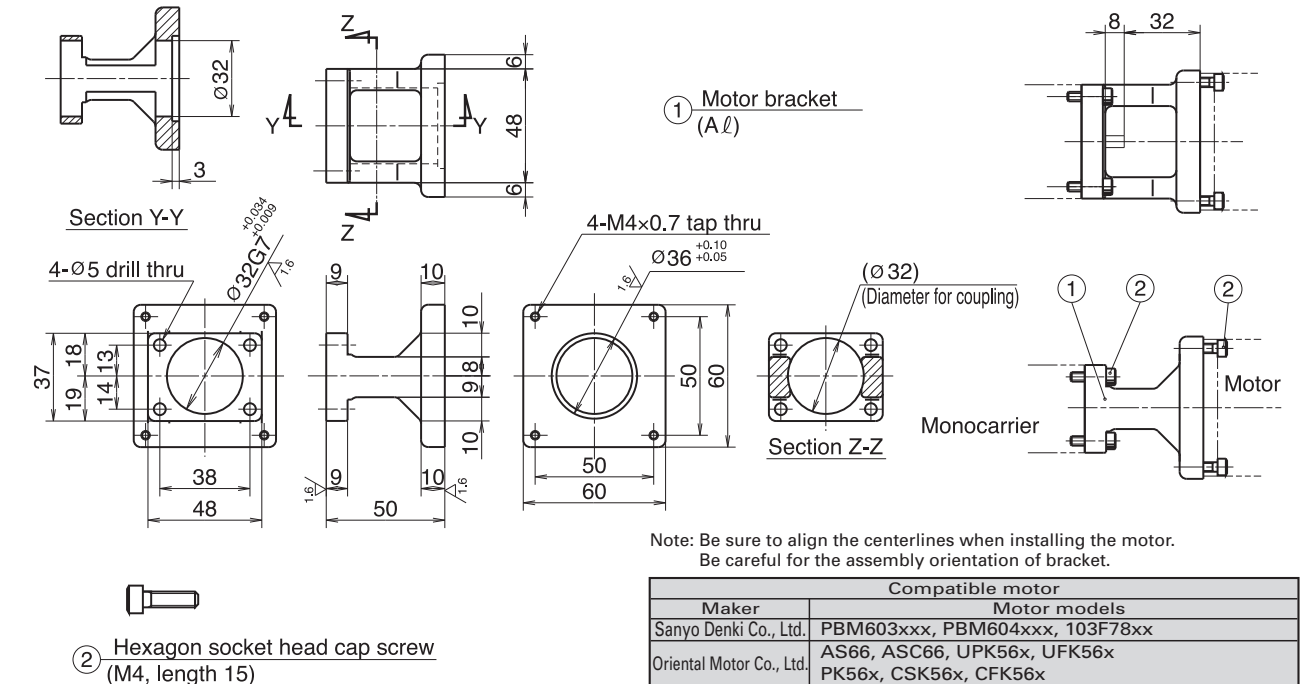
MC-BK05-160-00



Motor Bracket for MCM05

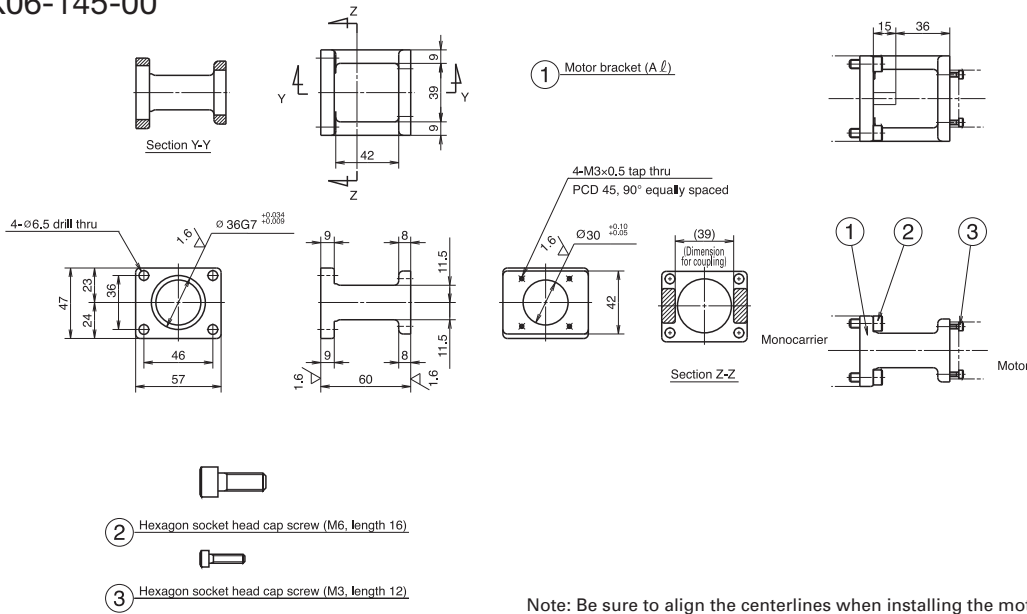
■ Reference number

MC-BK05-250-00



Motor Bracket for MCM06

Reference number
MC-BK06-145-00

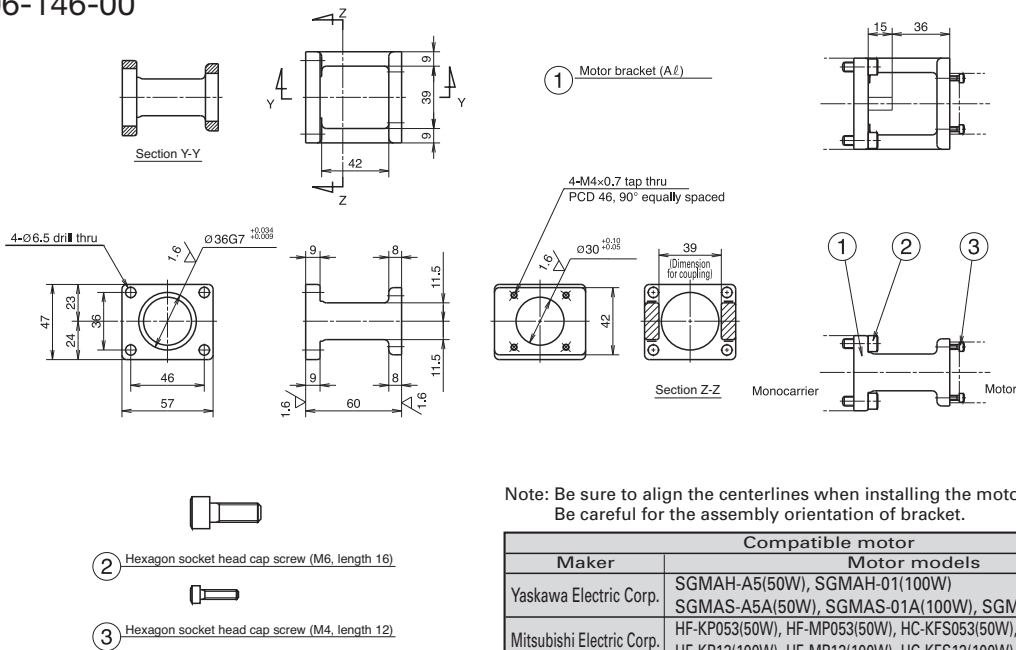


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Matsushita Electric Industrial Co., Ltd.	MSMD5A(50W), MSMD01(100W)

Motor Bracket for MCM06

Reference number
MC-BK06-146-00

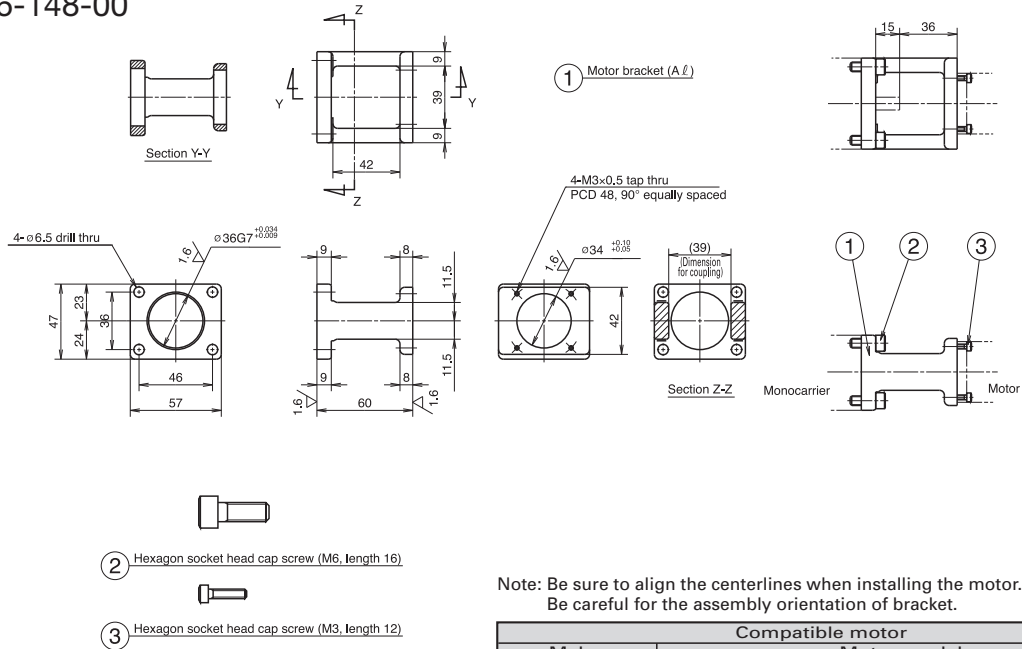


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Yaskawa Electric Corp.	SGMAH-A5(50W), SGMAH-01(100W) SGMAS-A5A(50W), SGMAS-01A(100W), SGMAS-C2A(150W)
Mitsubishi Electric Corp.	HF-KP053(50W), HF-MP053(50W), HC-KFS053(50W), HC-MFS053(50W) HF-KP13(100W), HF-MP13(100W), HC-KFS13(100W), HC-MFS13(100W)
OMRON Corp.	R88M-W03(30W), R88M-W05(50W), R88M-W10(100W)
Sanyo Denki Co., Ltd.	P30B04003(30W), P30B04005(50W), P30B04006(60W), P30B04010(100W)

Motor Bracket for MCM06

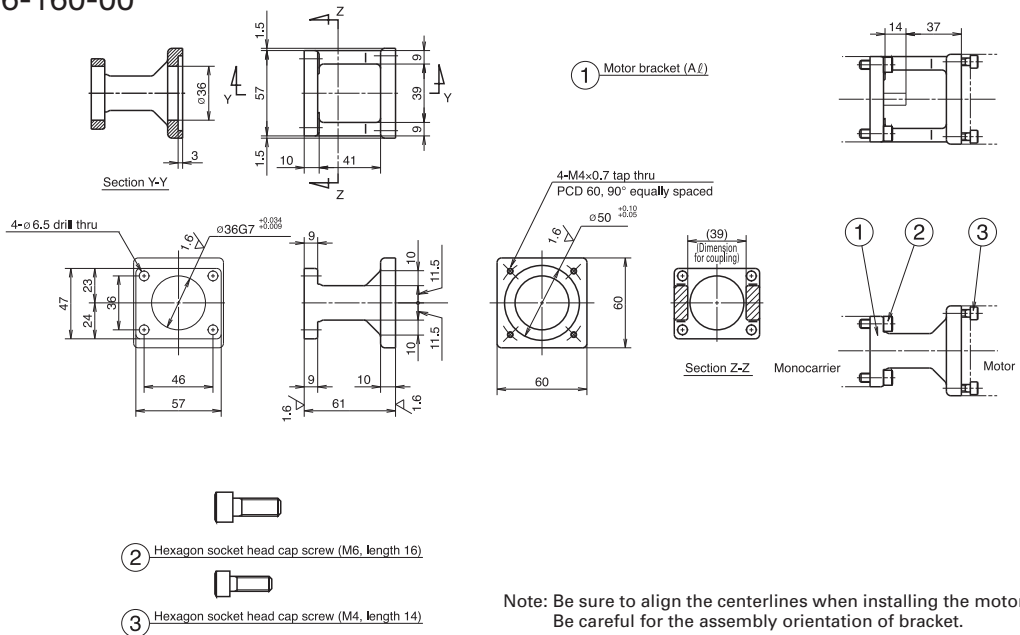
■ Reference number
MC-BK06-148-00



Compatible motor	
Maker	Motor models
Matsushita Electric Co., Ltd.	MAMA01(100W)
Sanyo Denki Co., Ltd.	P50B04040(60W), P50B04010(100W)

Motor Bracket for MCM06

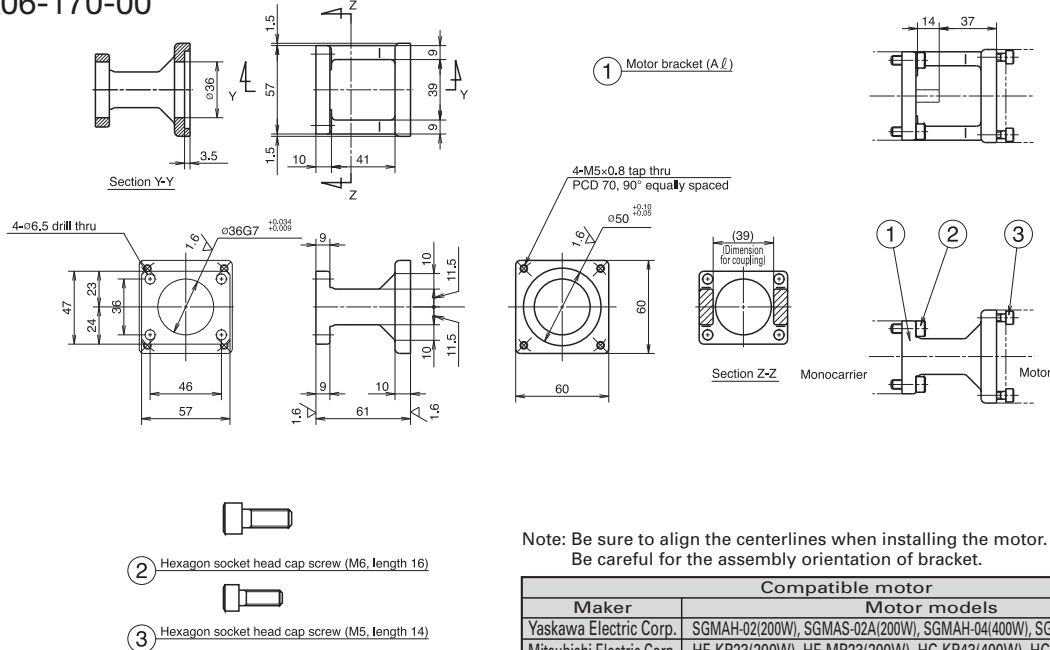
■ Reference number
MC-BK06-160-00



Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	P50B05005(50W), P50B05010(100W), P50B05020(200W)

Motor Bracket for MCM06

Reference number MC-BK06-170-00

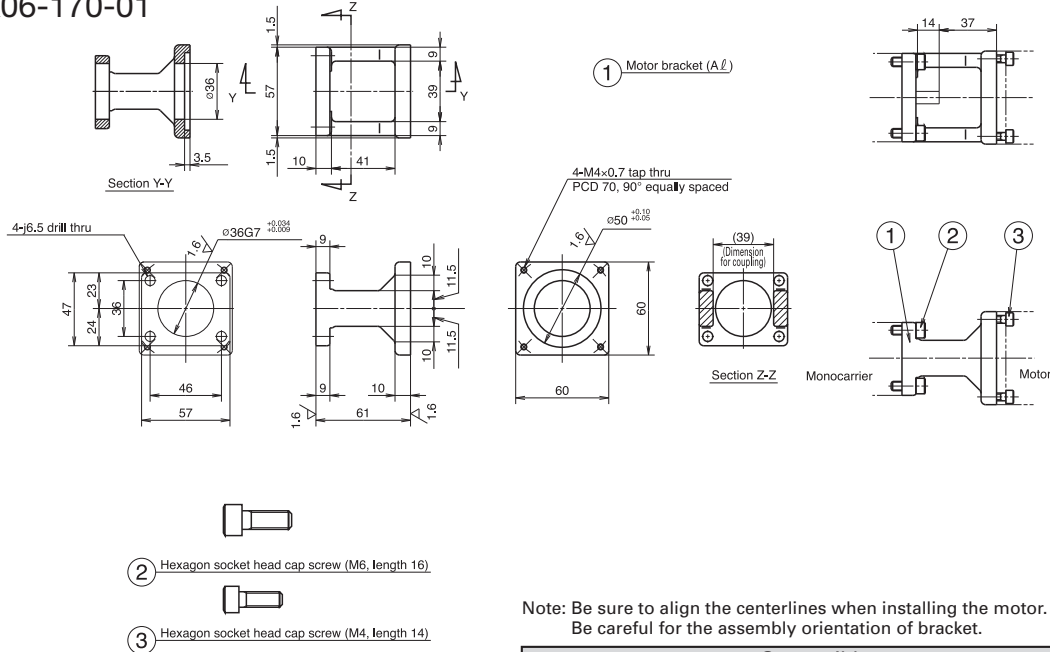


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Yaskawa Electric Corp.	SGMAH-02(200W), SGMAS-02A(200W), SGMAM-04(400W), SGMAS-04A(400W)
Mitsubishi Electric Corp.	HF-KP23(200W), HF-MP23(200W), HC-KP43(400W), HC-MP43(400W)
OMRON Corp.	R88M-W20(200W), R88M-W40(400W)
Sanyo Denki Co., Ltd.	P30B06020(200W), P30B06040(400W)

Motor Bracket for MCM06

Reference number MC-BK06-170-01

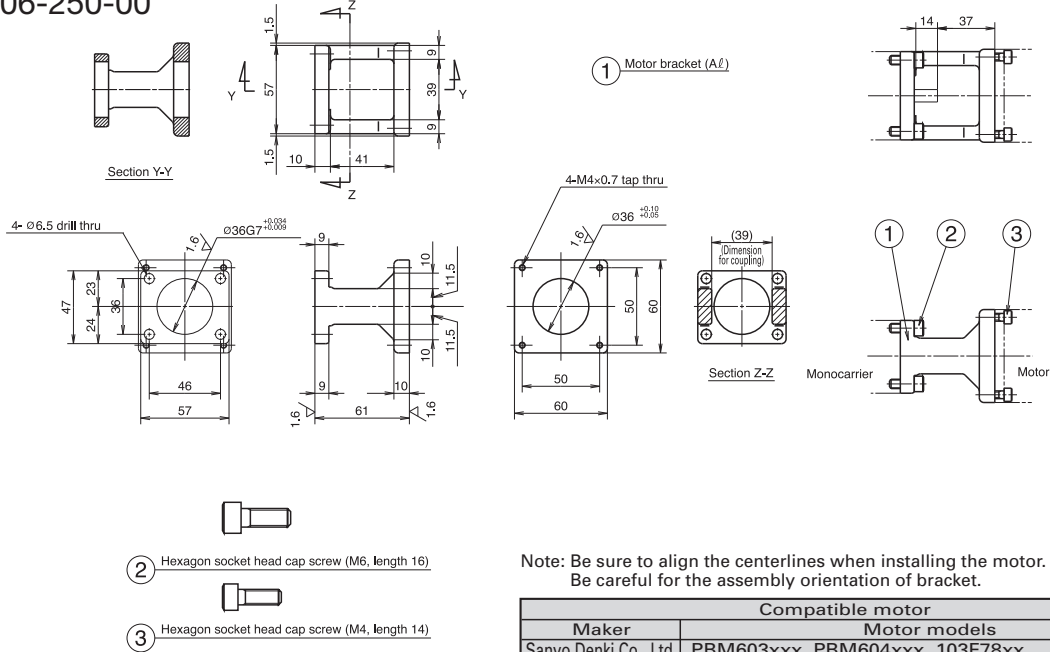


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Matsushita Electric Industrial Co., Ltd.	MSMD02(200W), MAMA02(200W), MSMD04(400W), MAMA04(400W)

Motor Bracket for MCM06

Reference number
MC-BK06-250-00

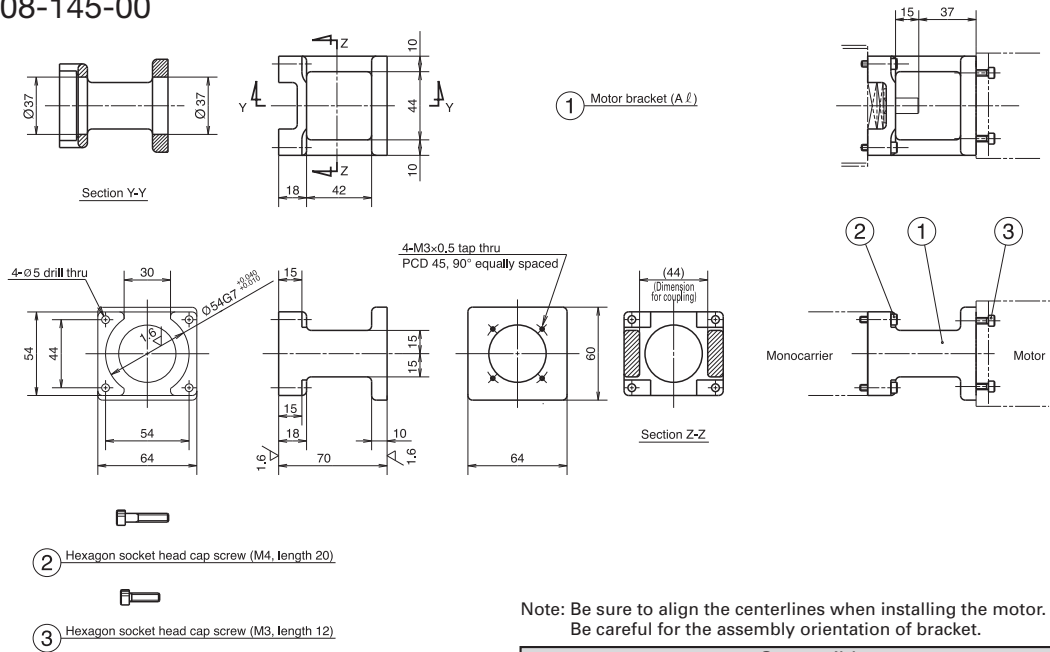


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	PBM603xxx, PBM604xxx, 103F78xx
Oriental Motor Co., Ltd.	AS66, ASC66, UPK56x, PK56x, CSK56x CFK56x, UMK56x, UFK56x

Motor Bracket for MCM08

Reference number
MC-BK08-145-00

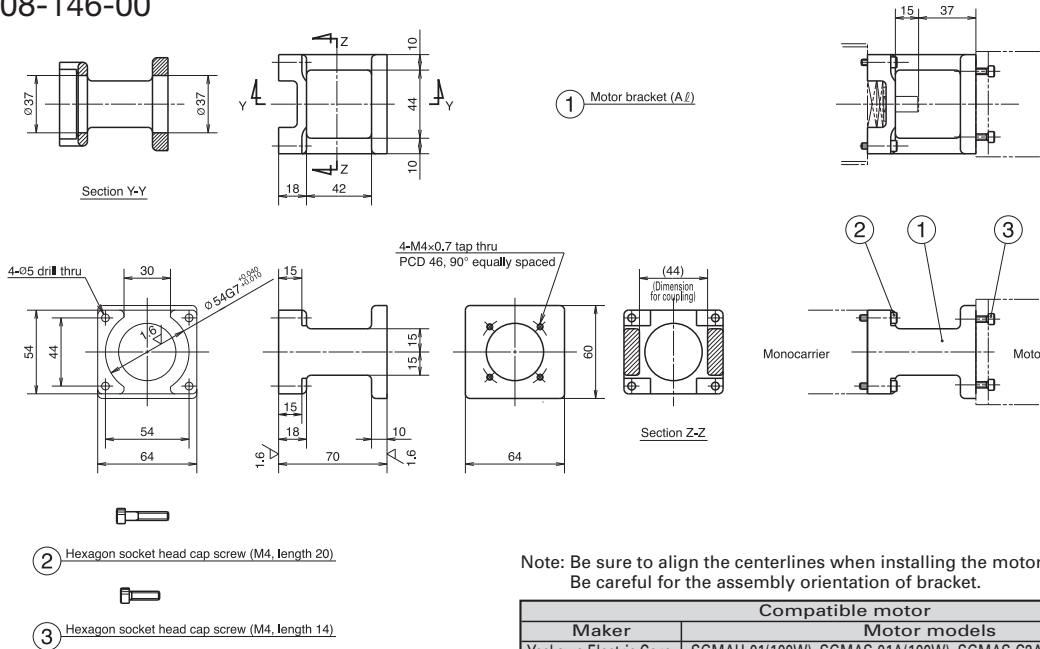


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Matsushita Electric Industrial Co., Ltd.	MSMD01(100W)

Motor Bracket for MCM08

Reference number MC-BK08-146-00

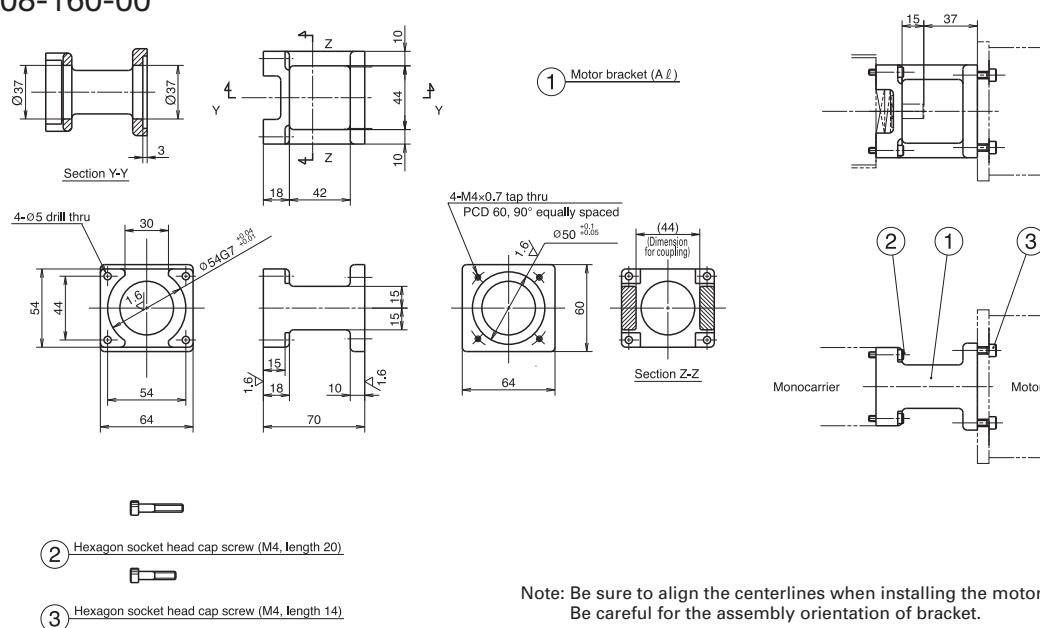


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Yaskawa Electric Corp.	SGMAH-01(100W), SGMAS-01A(100W), SGMAS-C2A(150W)
Mitsubishi Electric Corp.	HF-KP13(100W), HF-MP13(100W), HC-KFS13(100W), HC-MFS13(100W)
Sanyo Denki Co., Ltd.	P30B04003(30W), P30B04005(50W), P30B04006(60W), P30B04010(100W)

Motor Bracket for MCM08

Reference number MC-BK08-160-00

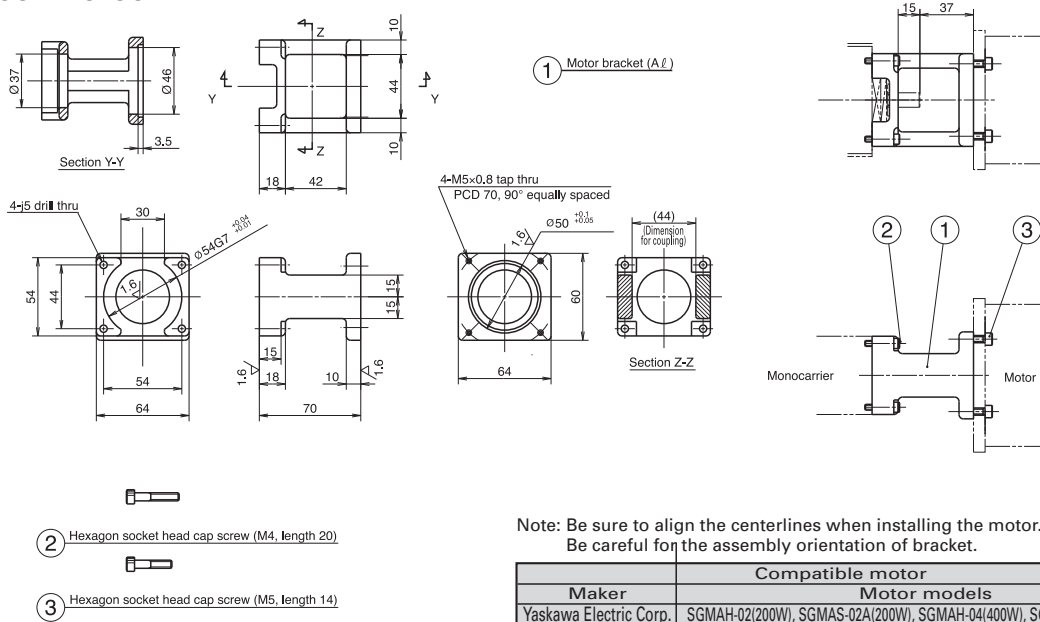


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	P50B05005(50W), P50B05010(100W), P50B05020(200W)

Motor Bracket for MCM08

■ Reference number
MC-BK08-170-00

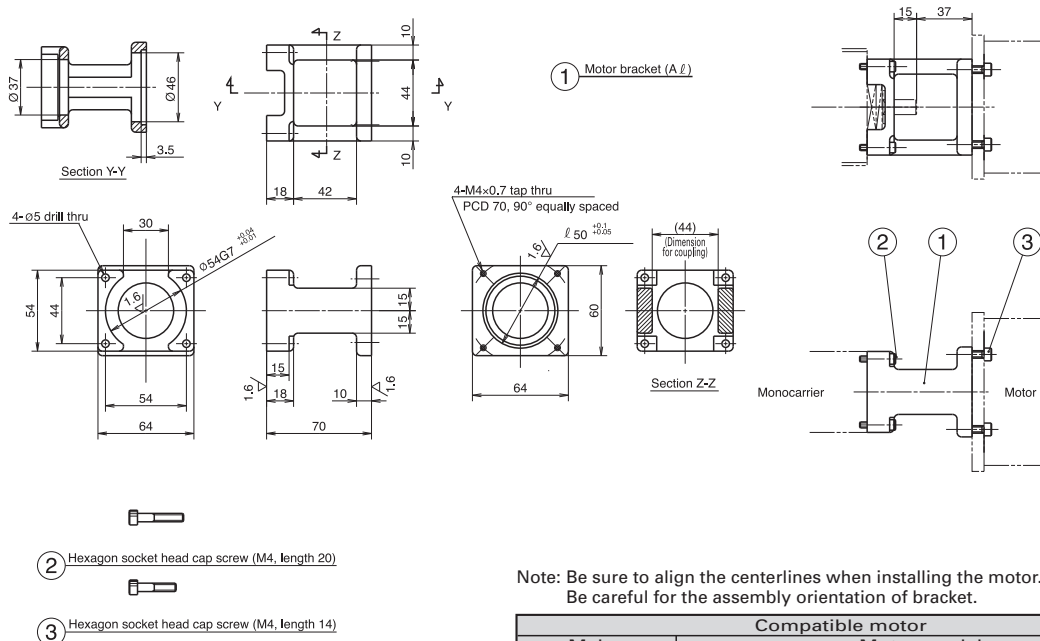


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Maker	Compatible motor Motor models
Yaskawa Electric Corp.	SGMAH-02(200W), SGMAS-02A(200W), SGMAH-04(400W), SGMAS-04A(400W)
Mitsubishi Electric Corp.	HF-KP23(200W), HF-MP23(200W), HF-KP43(400W), HF-MP43(400W)
OMRON Corp.	R88M-W20(200W), R88M-W40(400W)
Sanyo Denki Co., Ltd.	P30B06020(200W), P30B06040(400W)

Motor Bracket for MCM08

■ Reference number
MC-BK08-170-01

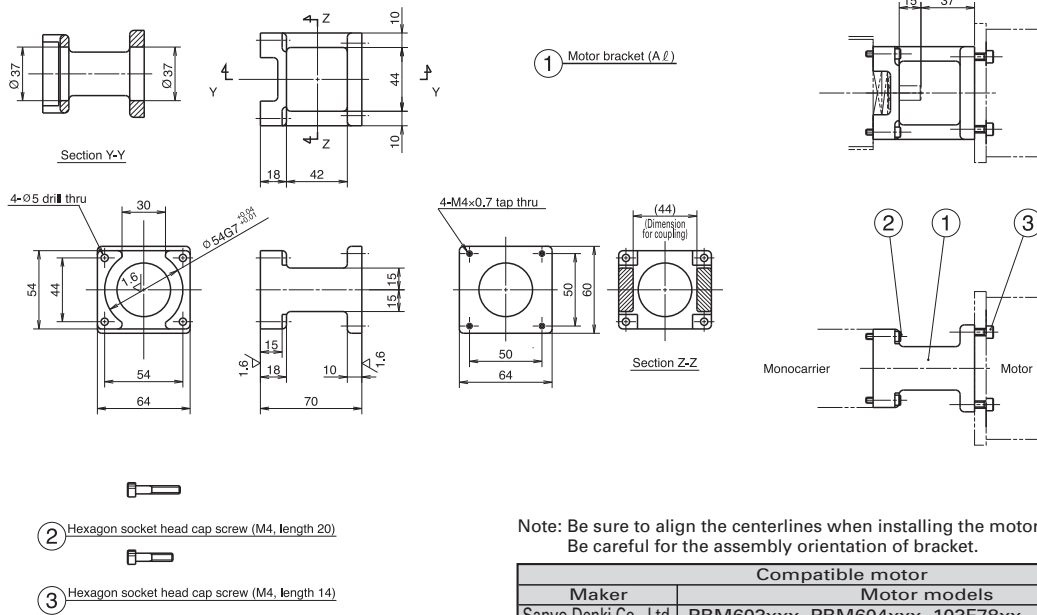


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Maker	Compatible motor Motor models
Matsushita Electric Industrial Co., Ltd.	MSMD02(200W), MAMA02(200W), MSMD04(400W), MAMA04(400W)

Motor Bracket for MCM08

Reference number MC-BK08-250-00

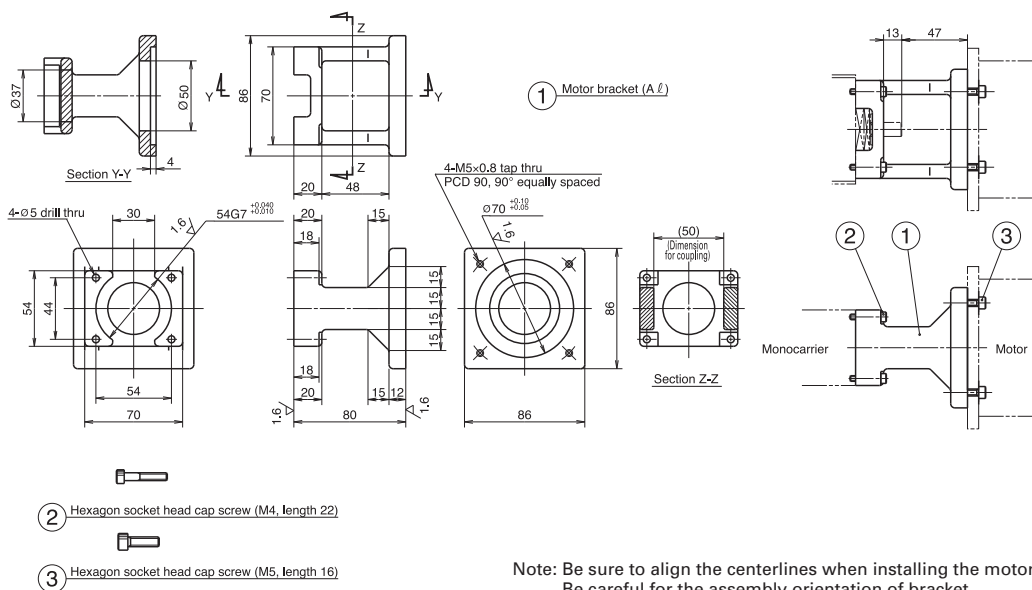


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	PBM603xxx, PBM604xxx, 103F78xx
Oriental Motor Co., Ltd.	AS66, ASC66, UPK56xx, PK56xx, CSK56x CFK56x, UMK56x, UFK56x

Motor Bracket for MCM08

Reference number MC-BK08-190-00

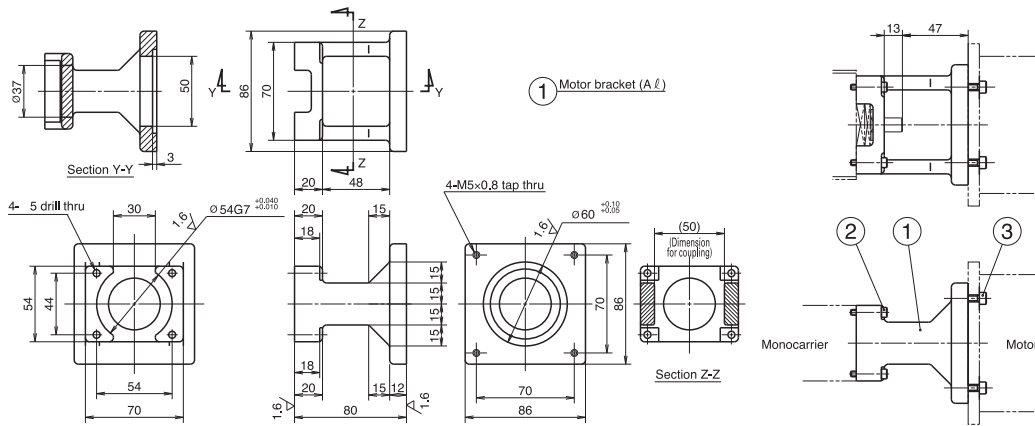


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	P50B07020(200W), P50B07030(300W), P50B07040(400W)

Motor Bracket for MCM08

Reference number
MC-BK08-270-00



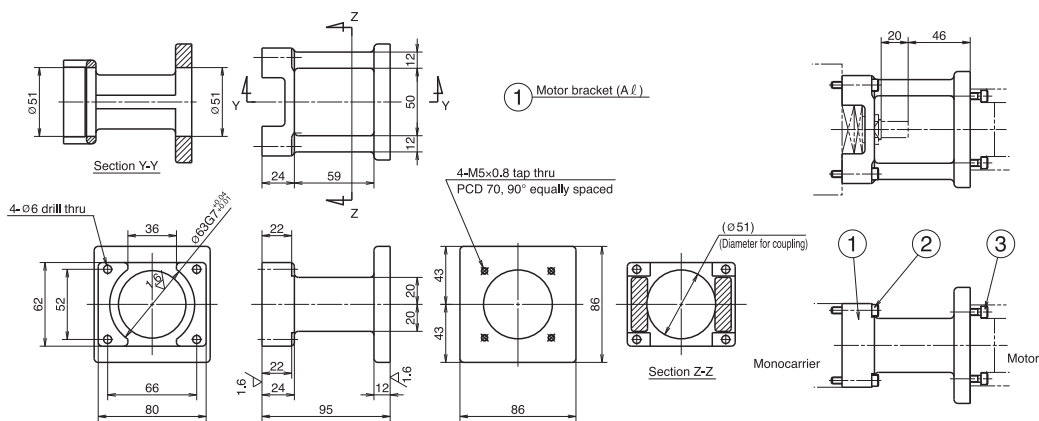
- ② Hexagon socket head cap screw (M4, length 22)
- ③ Hexagon socket head cap screw (M5, length 16)

Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Oriental Motor Co., Ltd.	AS98, ASC98, UPK59x, PK59x
	CSK59x, CFK59x, UMK59x, UFK59x
Sanyo Denki Co., Ltd.	103F85xx

Motor Bracket for MCM10

Reference number
MC-BK10-170-00



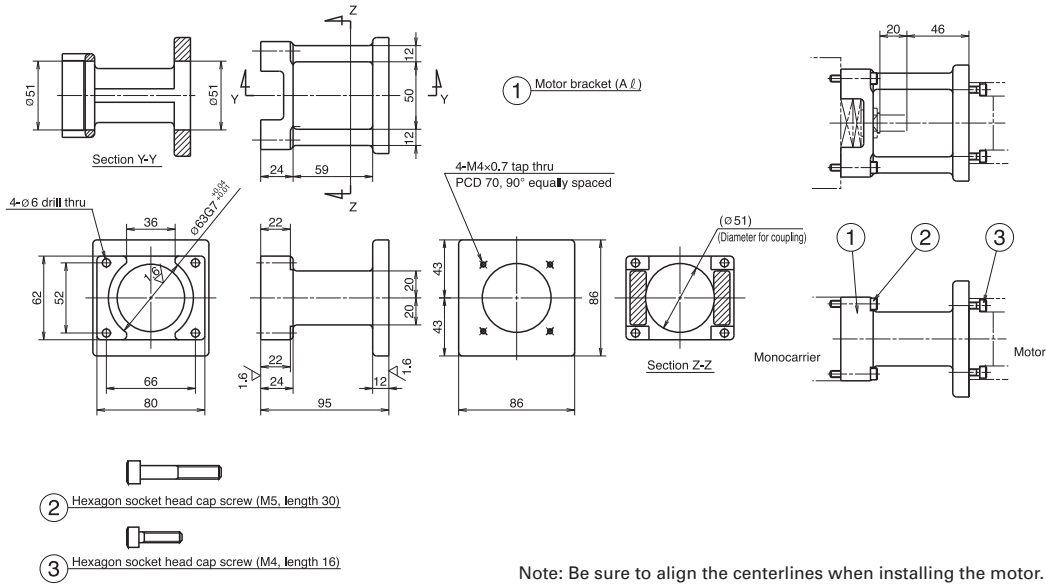
- ② Hexagon socket head cap screw (M5, length 30)
- ③ Hexagon socket head cap screw (M5, length 16)

Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Yaskawa Electric Corp.	SGMAH-02I(200W), SGMAS-02A(200W), SGMAM-04I(400W), SGMAS-04A(400W)
Mitsubishi Electric Corp.	HF-KP23I(200W), HF-MP23I(200W), HF-KP43I(400W), HF-MP43I(400W)
OMRON Corp.	R88M-W20(200W), R88M-W40(400W)
Sanyo Denki Co., Ltd.	P30B06020(200W), P30B06040(400W)

Motor Bracket for MCM10

Reference number MC-BK10-170-01

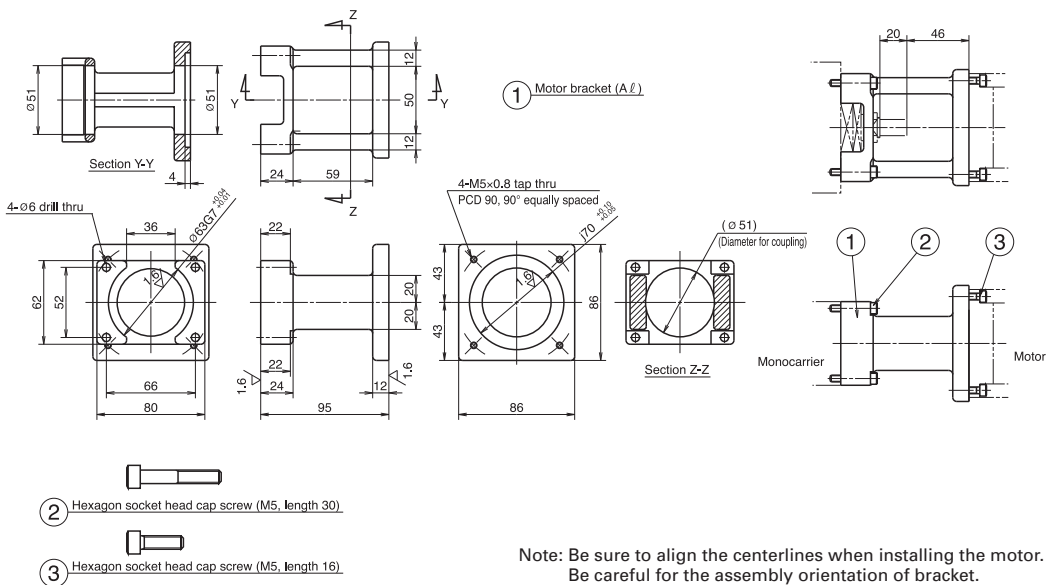


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Matsushita Electric Industrial Co., Ltd.	MSMD02(200W), MAMA02(200W), MSMD04(400W), MAMA04(400W)

Motor Bracket for MCM10

Reference number MC-BK10-190-00

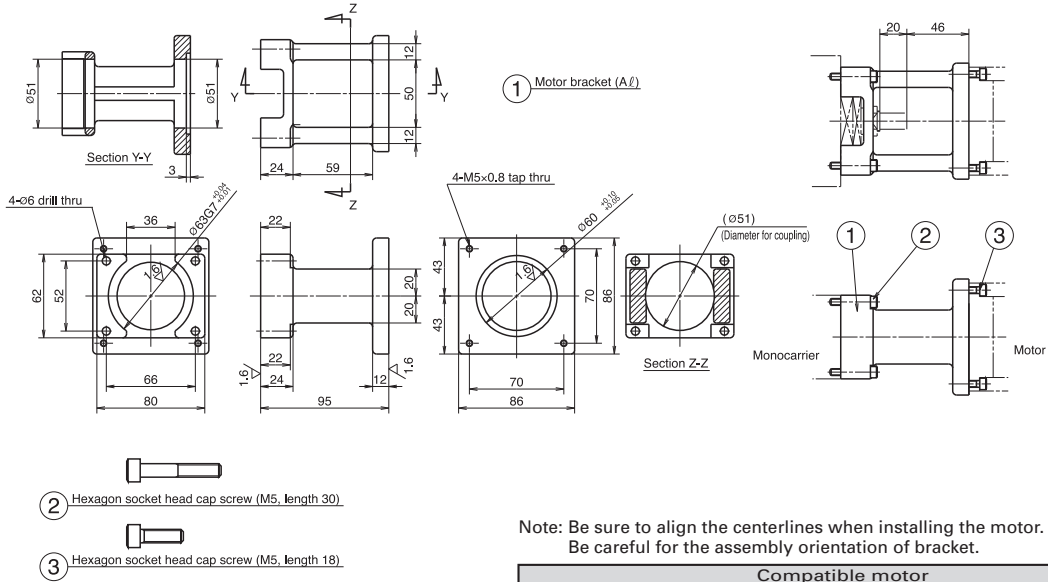


Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Matsushita Electric Industrial Co., Ltd.	MSMD08(750W), MAMA08(750W)
Sanyo Denki Co., Ltd.	P50B07020(200W), P50B07030(300W), P50B07040(400W)

Motor Bracket for MCM10

■ Reference number
MC-BK10-270-00



Note: Be sure to align the centerlines when installing the motor.
Be careful for the assembly orientation of bracket.

Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	103F85xx
Oriental Motor Co., Ltd.	AS98, ASC98, UPK59x, PK59x, CSK59x CFK59x, UMK59x, UFK59x

Availability Motor Table of Motor Bracket for MCM Series

Table 2-5

Nominal size	Reference number code	Motor bracket reference number	Motor manufacturer	Stepping motor model number	Wattage of AC servo motor											
					10	20	30	50	60	100	150	200	300	400	750	
MCM02	1	MC-BK02-128-00	Yaskawa Electric Corp.		SGMM-A1	SGMM-A2										
	2	MC-BK02-133-00	Mitsubishi Electric Corp.		HC-AQ013	HC-AQ023										
	3	MC-BK02-223-00	Oriental Motor Co., Ltd.	PMU33/35 (5-phase) PMC33/35 (5-phase)												
MCM03	1	MC-BK03-146-00	Yaskawa Electric Corp.			SGMAH-A3	SGMAH-A5 SGMAS-A5A		SGMAH-01 SGMAS-01A							
			Mitsubishi Electric Corp.				HF-KP053 HF-MP053 HC-KFS053 HC-MFS053		HF-KP13 HF-MP13 HC-KFS13 HC-MFS13							
			OMRON Corp.			R88M-W03	R88M-W05		R88M-W10							
	2	MC-BK03-148-01	Sanyo Denki Co., Ltd.			P30B04003	P30B04005		P30B04006 P50B04040		P30B04010 P50B04010					
			Sanyo Denki Co., Ltd.	PBM423xxx												
	3	MC-BK03-231-00	Sanyo Denki Co., Ltd.													
Sanyo Denki Co., Ltd.			103F85xx													
Oriental Motor Co., Ltd.			AS46, ASC46 UPK54x, PK54x CSK54x, CFK54x UMK24x, CSK24x PK24x													
MCM05	1	MC-BK05-145-00	Matsushita Electric Industrial Co., Ltd.				MSMD5A		MSMD01							
	2	MC-BK05-146-00	Yaskawa Electric Corp.				SGMAH-A3	SGMAH-A5 SGMAS-A5A		SGMAH-01 SGMAS-01A						
			Mitsubishi Electric Corp.					HF-KP053 HF-MP053 HC-KFS053 HC-MFS053		HF-KP13 HF-MP13 HC-KFS13 HC-MFS13						
			OMRON Corp.			R88M-W03	R88M-W05		R88M-W10							
	3	MC-BK05-148-00	Sanyo Denki Co., Ltd.			P30B04003	P30B04005		P30B04006		P30B04010					
	4	MC-BK05-160-00	Matsushita Electric Industrial Co., Ltd.						MAMA01							
	5	MC-BK05-250-00	Sanyo Denki Co., Ltd.					P50B05005		P50B05010		P50B05020				
			Sanyo Denki Co., Ltd.	PBM603xxx, PBM604xxx												
Oriental Motor Co., Ltd.			AS66, ASC66 UPK56x, UFK56x PK56x, CSK56x, CFK56x													
MCM06	1	MC-BK06-145-00	Matsushita Electric Industrial Co., Ltd.				MSMD5A		MSMD01							
	2	MC-BK06-146-00	Yaskawa Electric Corp.				SGMAH-A5 SGMAS-A5A		SGMAH-01 SGMAS-01A	SGMAS-C2A						
			Mitsubishi Electric Corp.					HF-KP053 HF-MP053 HC-KFS053 HC-MFS053		HF-KP13 HF-MP13 HC-KFS13 HC-MFS13						
			OMRON Corp.			R88M-W03	R88M-W05		R88M-W10							
	3	MC-BK06-148-00	Sanyo Denki Co., Ltd.			P30B04003	P30B04005		P30B04006		P30B04010					
	4	MC-BK06-160-00	Matsushita Electric Industrial Co., Ltd.						P50B04040		P50B04010					
	5	MC-BK06-170-00	Sanyo Denki Co., Ltd.					P50B05005		P50B05010		P50B05020				
			Yaskawa Electric Corp.									SGMAH-02 SGMAS-02A		SGMAH-04 SGMAS-04A		
			Mitsubishi Electric Corp.									HF-KP23 HF-MP23		HF-KP43 HF-MP43		
			OMRON Corp.									R88M-W20		R88M-W40		
Sanyo Denki Co., Ltd.											P30B06020		P30B06040			
6	MC-BK06-170-01	Matsushita Electric Industrial Co., Ltd.							MSMD02 MAMA02		MSMD04 MAMA04					
7	MC-BK06-250-00	Sanyo Denki Co., Ltd.														
		Sanyo Denki Co., Ltd.	PBM603xxx, PBM604xxx													
		Oriental Motor Co., Ltd.	AS66, ASC66 UPK56x, PK56x CSK56x, CFK56x UMK56x, UFK56x													
MCM08	1	MC-BK08-145-00	Matsushita Electric Industrial Co., Ltd.						MSMD01							
	2	MC-BK08-146-00	Yaskawa Electric Corp.							SGMAH-01 SGMAS-01A	SGMAS-C2A					
			Mitsubishi Electric Corp.							HF-KP13 HF-MP13 HC-KFS13 HC-MFS13						
			Sanyo Denki Co., Ltd.			P30B04003	P30B04005	P30B04006	P30B04010							
	3	MC-BK08-160-00	Sanyo Denki Co., Ltd.						P50B05005		P50B05010		P50B05020			
	4	MC-BK08-170-00	Yaskawa Electric Corp.													
			Mitsubishi Electric Corp.										SGMAH-02 SGMAS-02A		SGMAH-04 SGMAS-04A	
			OMRON Corp.										HF-KP23 HF-MP23		HF-KP43 HF-MP43	
	5	MC-BK08-170-01	Matsushita Electric Industrial Co., Ltd.								R88M-W20		R88M-W40			
	6	MC-BK08-190-00	Sanyo Denki Co., Ltd.								P30B06020		P30B06040			
7	MC-BK08-250-00	Sanyo Denki Co., Ltd.									MSMD02 MAMA02		MSMD04 MAMA04			
		Sanyo Denki Co., Ltd.	PBM603xxx, PBM604xxx								P50B07020	P50B07030	P50B07040			
		Oriental Motor Co., Ltd.	AS66, ASC66 UPK56x, PK56x CSK56x, CFK56x UMK56x, UFK56x													
8	MC-BK08-270-00	Sanyo Denki Co., Ltd.														
MCM10	1	MC-BK10-170-00	Yaskawa Electric Corp.													
			Mitsubishi Electric Corp.										SGMAH-02 SGMAS-02A		SGMAH-04 SGMAS-04A	
			OMRON Corp.										HF-KP23 HF-MP23		HF-KP43 HF-MP43	
	2	MC-BK10-170-01	Sanyo Denki Co., Ltd.								R88M-W20		R88M-W40			
3	MC-BK10-190-00	Matsushita Electric Industrial Co., Ltd.								P30B06020		P30B06040				
4	MC-BK10-270-00	Sanyo Denki Co., Ltd.									MSMD02 MAMA02		MSMD04 MAMA04			
		Sanyo Denki Co., Ltd.	103F85xx								P50B07020	P50B07030	P50B07040			
Oriental Motor Co., Ltd.	AS98, ASC98 UPK59x, PK59x CSK59x, CFK59x UMK59x, UFK59x															

MCH Series – Rigid type



3 MCH Series

3.1 MCH Series Reference Number Coding

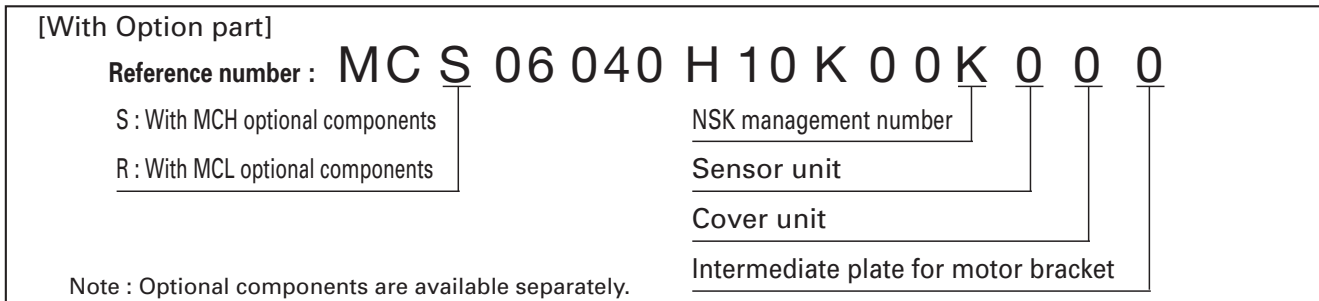
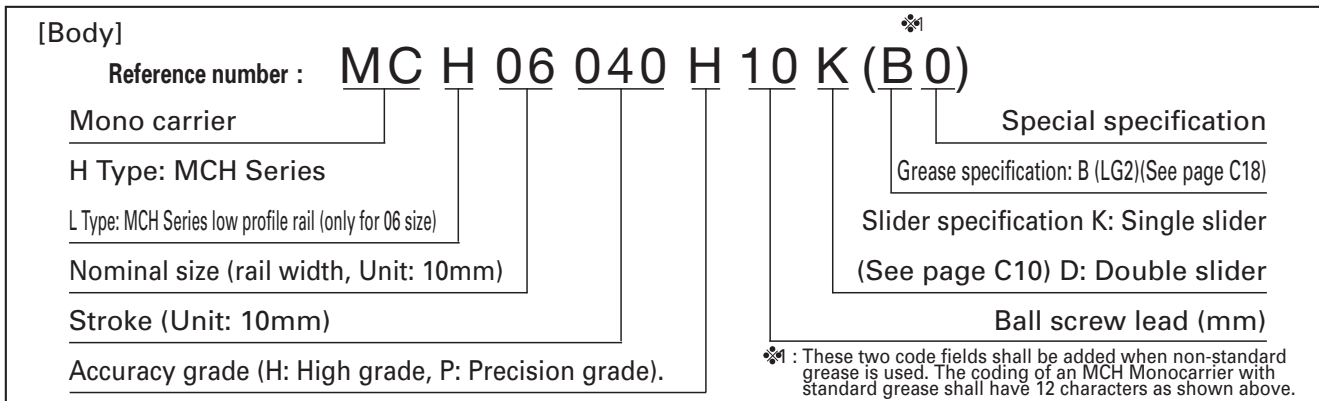


Table 3-1 Sensor unit (See page 156~157)

Reference number code	Specification	Reference number
0	N/A	—
1	Proximity swith (b-contact 3peices)	MC — SRHxx — 10
2	Proximity swith (a-contact 3pieses)	MC — SRHxx — 11
3	Proximity swith (a-contact 1pieses, b-contaact 2pieces)	MC — SRHxx — 12
4	Photo sensor 3pieces	MC — SRHxx — 13

Note xx: Reference number

Table 3-2 Cover unit (See page 158~159)

Reference number code	Specification	Reference number
0	N/A	—
1	For single slider	MC — HVxxxx — 00
	For double slider	MC — HVxxxxD00

Note xxxxx: Reference number and stroke number

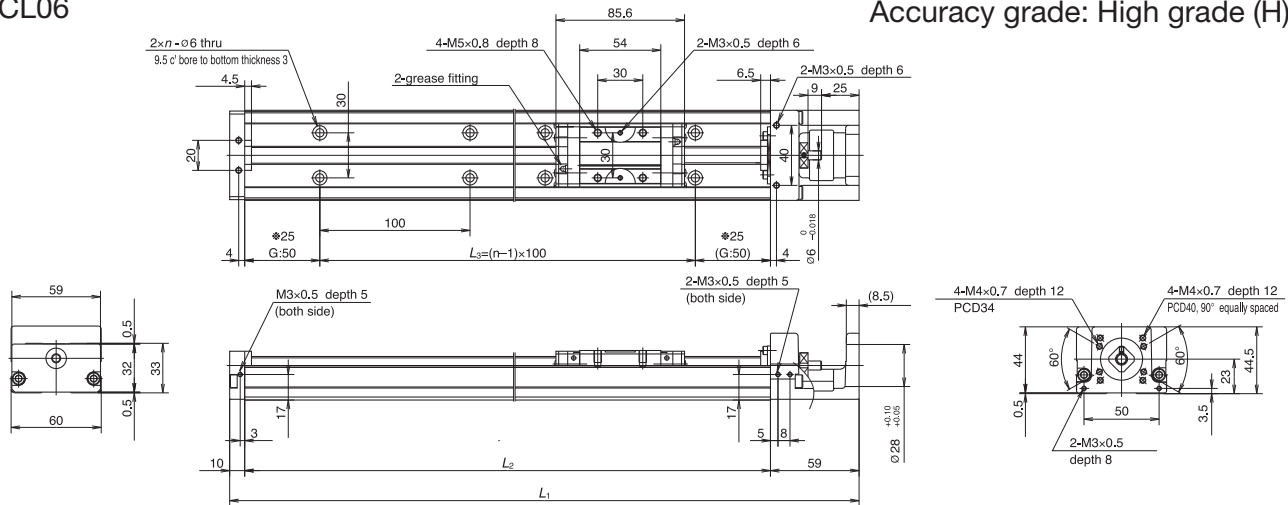
Table 3-3 Intermediate plate for motor bracket (See page 160~163)

Reference number code	Type		
	MCH06 (MCL06)	MCH09	MCH10
0	N/A	N/A	N/A
1	MC-BKH06-145-00	MC-BKH09-145-00	MC-BKH10-170-00
2	MC-BKH06-146-00	MC-BKH09-146-00	MC-BKH10-170-01
3	MC-BKH06-231-00	MC-BKH09-170-00	MC-BKH10-190-00
4	MC-BKH06-250-00	MC-BKH09-170-01	MC-BKH10-190-01
5	—	MC-BKH09-231-00	MC-BKH10-250-00
6	—	MC-BKH09-250-00	MC-BKH10-270-00

3.2 MCH Series dimension table of standard products

MCL06

Accuracy grade: High grade (H)



- The rail of MCL 06 is made lighter than that of MCH 06 by lowering the rail height. The weight ratio between the MCH 06 and MCL 06 is 5 to 4.
- Double slider specification is also available for the MCL 06.
- Combinations of stroke and ball screw lead of the MCL 06 are the same as those of the MCH 06.

Dimension of MCL06 (Single slider)

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)				Inertia $\times 10^{-6}(\text{kg} \cdot \text{m}^2)$	Mass (kg)
				L_1	L_2	L_3	n		
★❖MCL06005H05K	50	53 (65)	5	219	150	100	2	2.38	1.0
★❖MCL06005H10K			10						
★MCL06010H05K	100	103 (115)	5	269	200	100	2	3.17	1.3
★MCL06010H10K			10						
★MCL06020H05K	200	203 (215)	5	369	300	200	3	4.51	1.9
★MCL06020H10K			10						
★MCL06030H10K	300	303 (315)	10	469	400	300	4	6.80	2.6
★MCL06030H20K			20						
★MCL06040H10K	400	403 (415)	10	569	500	400	5	8.13	3.2
★MCL06040H20K			20						
★MCL06050H10K	500	503 (515)	10	669	600	500	6	9.47	3.9
★MCL06050H20K			20						

Dimension of G is 25 instead of 50 for those marked with ❖.

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N • cm)		
Ball screw lead (mm)	5	1.0~4.8
	10	1.1~5.8
	20	1.6~7.9

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.

2. Grease is packed into ball screw, linear guide parts and support unit.

3. Consult NSK for life estimates under large moment loads.

Basic load rating

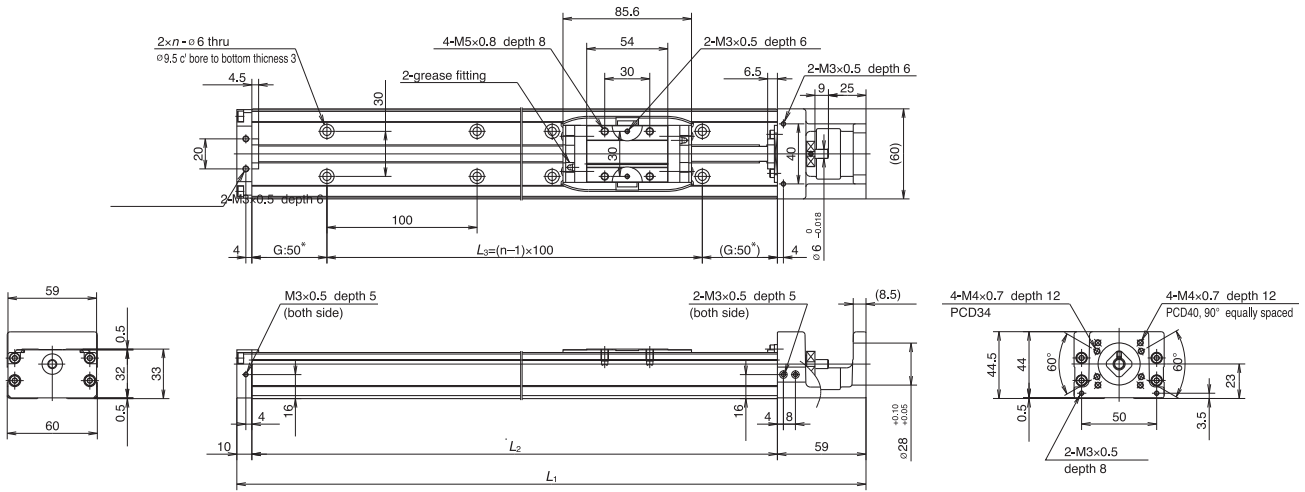
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	ø12	3000 (High grade) 3760 (Precision)	22800	4400	5	5410 (High grade) 6310 (Precision)	10900	1450
10		1930 (High grade) 2260 (Precision)			18100	10		
20		1930 (High grade) 2260 (Precision)	14400		20	3160 (High grade) 3780 (Precision)		

Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	335	133	133

MCH06

Accuracy grade: High grade (H)



Dimension of MCH06 (Single slider)

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)				Inertia $\times 10^{-6}(\text{kg} \cdot \text{m}^2)$	Mass (kg)
				L_1	L_2	L_3	n		
❖ MCH06005H05K	50	53	5	219	150	100	2	2.38	1.8
❖ MCH06005H10K		(65)	10					3.45	
MCH06010H05K	100	103	5	269	200	100	2	3.17	2.2
MCH06010H10K		(115)	10					4.12	
MCH06020H05K	200	203	5	369	300	200	3	4.51	3.0
MCH06020H10K		(215)	10					5.46	
MCH06030H10K	300	303	10	469	400	300	4	6.80	3.7
MCH06030H20K		(315)	20					10.6	
MCH06040H10K	400	403	10	569	500	400	5	8.13	4.5
MCH06040H20K		(415)	20					11.9	
MCH06050H10K	500	503	10	669	600	500	6	9.47	5.2
MCH06050H20K		(515)	20					13.3	

Dimension of G is 25 instead of 50 for those marked with ❖

Items not marked are available from standard stock.

Items marked with I are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N • cm)		
Ball screw lead (mm)	5	1.0~4.8
	10	1.1~5.8
	20	1.6~7.9

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.

Basic load rating

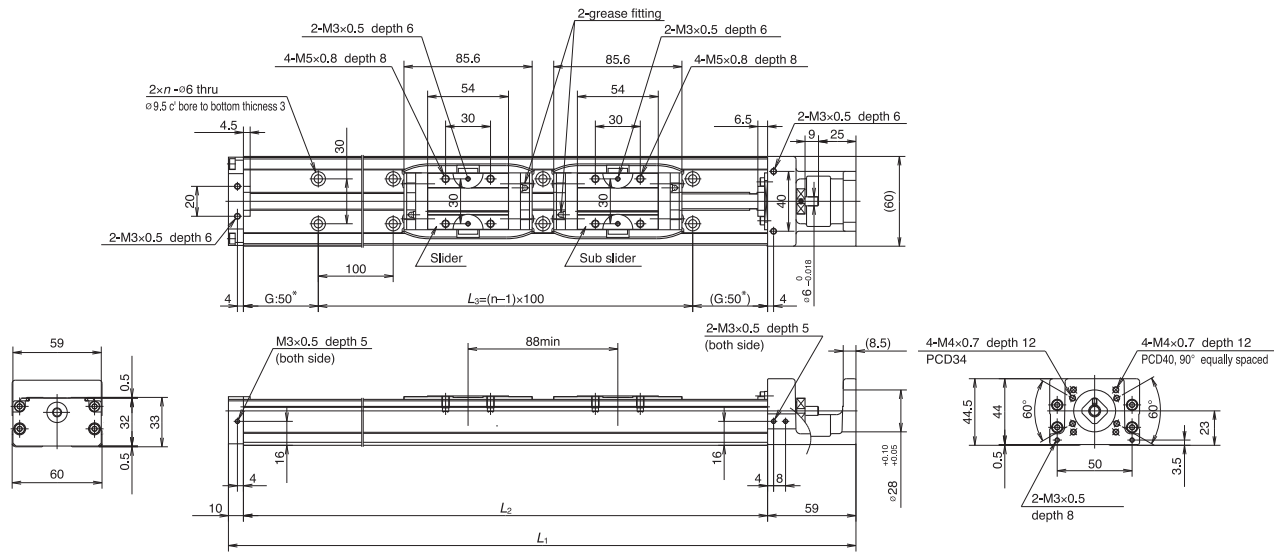
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	ø12	3000 (High grade) 3760 (Precision)	22800	4400	5	5410 (High grade) 6310 (Precision)	16300	1450
10		1930 (High grade) 2260 (Precision)			10	3160 (High grade) 3780 (Precision)		
20		1930 (High grade) 2260 (Precision)			20	3160 (High grade) 3780 (Precision)		

Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	335	133	133

MCH06 (Double slider)

Accuracy grade: High grade (H)



Dimension of MCH06 (Double slider)

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)				Inertia $\times 10^6(\text{kg} \cdot \text{m}^2)$	Mass (kg)
				L_1	L_2	L_3	n		
★ MCH06010H05D	100	115 (139)	5	369	300	200	3	4.82	3.5
★ MCH06010H10D			10					6.72	
★ MCH06020H05D	200	215 (239)	5	469	400	300	4	8.06	4.2
★ MCH06020H10D			10					15.7	
★ MCH06030H05D	300	315 (339)	5	569	500	400	5	9.40	5.0
★ MCH06030H10D			10					17.0	
★ MCH06040H10D	400	415 (439)	10	669	600	500	6	10.7	5.7
★ MCH06040H20D			20					18.3	

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Ball screw lead (mm)	Torque (N • cm)	
	5	1.2~5.2
	10	1.5~9.6
20	2.3~11.8	

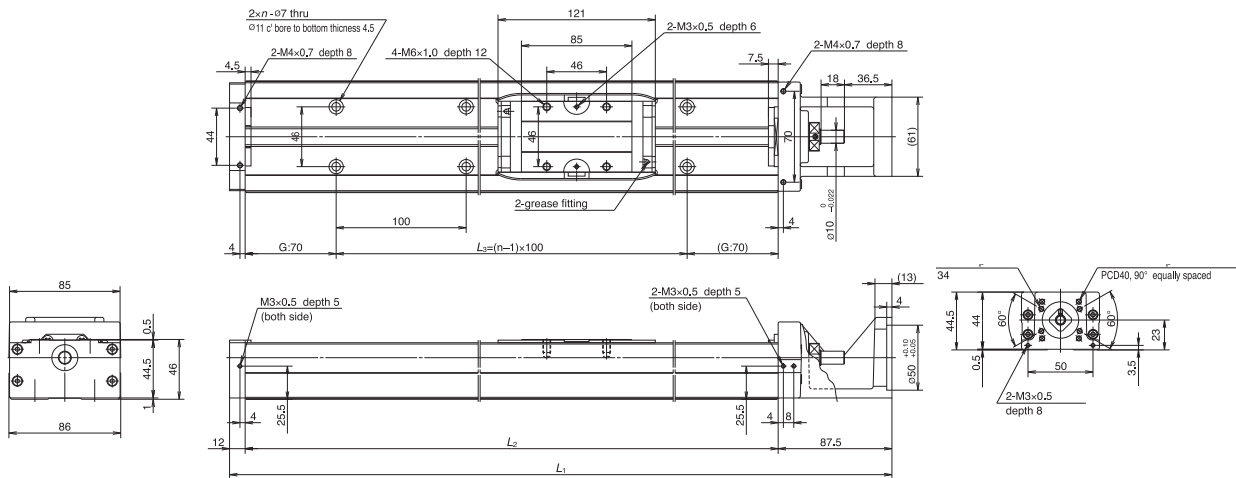
1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.

Basic load rating

Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	$\phi 12$	3000 (High grade) 3760 (Precision)	22800	4400	5	5410 (High grade) 6310 (Precision)	16300	1450
10		1930 (High grade) 2260 (Precision)			18100	10		
20		1930 (High grade) 2260 (Precision)	14400		20	3160 (High grade) 3780 (Precision)		

Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Double	770	730	730



Dimension of MCH09 (Single slider)

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)				Inertia $\times 10^{-6}(\text{kg} \cdot \text{m}^2)$	Mass (kg)
				L_1	L_2	L_3	n		
MCH09020H05K	200	207	5	439.5	340	200	3	12.4	6.5
MCH09020H10K		(221)	10					13.9	
MCH09030H05K	300	307	5	539.5	440	300	4	15.6	8.1
MCH09030H10K		(321)	10					17.1	
MCH09040H05K	400	407	5	639.5	540	400	5	18.8	9.7
MCH09040H10K		(421)	10					20.3	
MCH09050H10K	500	507	10	739.5	640	500	6	23.5	11
MCH09050H20K		(521)	20					29.6	
MCH09060H10K	600	607	10	839.5	740	600	7	26.7	13
MCH09060H20K		(621)	20					32.8	
MCH09080H10K	800	807	10	1 039.5	940	800	9	33.2	16
MCH09080H20K		(821)	20					39.2	

Items not marked are available from standard stock.

Items marked with I are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N • cm)		
Ball screw lead (mm)	5	1.0~5.9
	10	2.0~7.8
	20	2.0~10.8

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.

Basic load rating

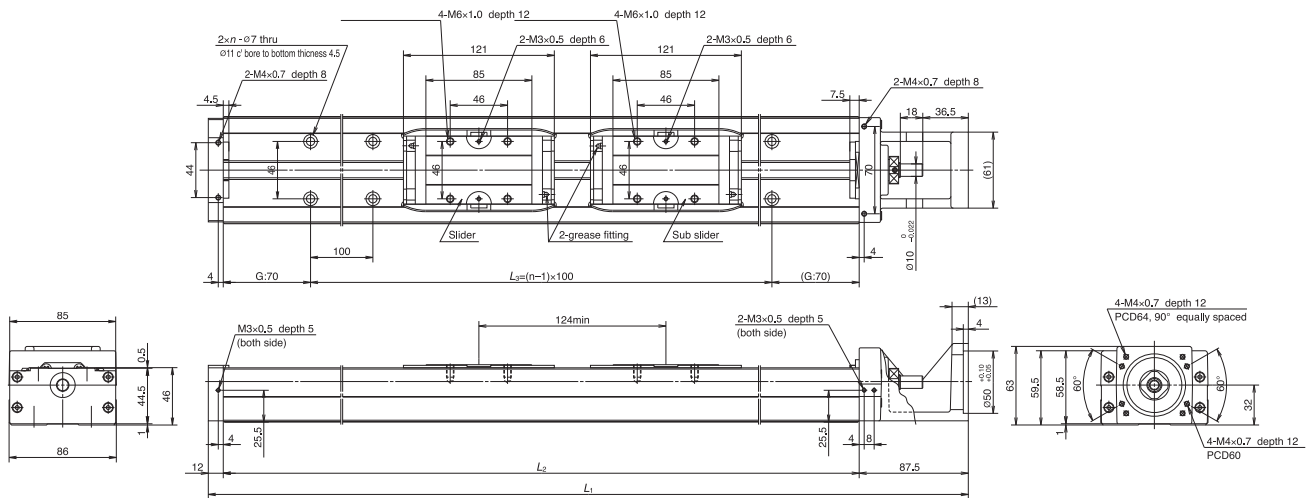
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	Ø15	6820 (High grade) 7100 (Precision)	40600	7100	5	13200 (High grade) 13000 (Precision)	30500	3040
10		5110 (High grade) 7060 (Precision)			10	9290 (High grade) 12700 (Precision)		
20		3290 (High grade) 4560 (Precision)	20		5620 (High grade) 7750 (Precision)			

Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	890	385	385

MCH09 (Double slider)

Accuracy grade: High grade (H)



Dimension of MCH09 (Double slider)

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)				Inertia $\times 10^6(\text{kg} \cdot \text{m}^2)$	Mass (kg)
				L_1	L_2	L_3	n		
★ MCH09015H05D	150	183	5	539.5	440	300	4	16.1	8.9
★ MCH09015H10D		(211)	10					19.2	
★ MCH09025H05D	250	283	5	639.5	540	400	5	19.3	11
★ MCH09025H10D		(311)	10					22.4	
★ MCH09035H05D	350	383	5	739.5	640	500	6	22.5	12
★ MCH09035H10D		(411)	10					25.6	
★ MCH09045H10D	450	483	10	839.5	740	600	7	28.8	14
★ MCH09045H20D		(511)	20					40.9	
★ MCH09065H10D	650	683	10	1 039.5	940	800	9	35.2	17
★ MCH09065H20D		(711)	20					47.3	

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N • cm)		
Ball screw lead (mm)	5	1.5~7.0
	10	2.5~10.8
	20	4.0~17.2

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.

Basic load rating

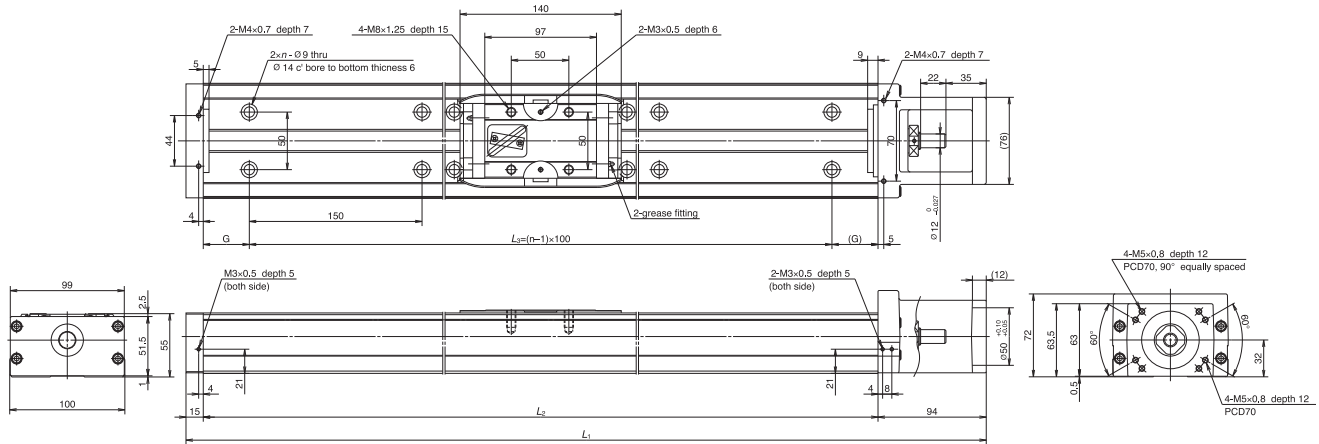
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
5	Ø15	6820 (High grade) 7100 (Precision)	40600	7100	5	13200 (High grade) 13000 (Precision)	30500	3040
10		5110 (High grade) 7060 (Precision)	32200		10	9290 (High grade) 12700 (Precision)		
20		3290 (High grade) 4560 (Precision)	25500		20	5620 (High grade) 7750 (Precision)		

Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Double	1780	2070	2070

MCH10

Accuracy grade: High grade (H)



Dimension of MCH10 (Single slider)

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)					Inertia $\times 10^6(\text{kg} \cdot \text{m}^2)$	Mass (kg)
				L_1	L_2	G	L_3	n		
MCH10040H10K	400	426 (442)	10	689	580	65	450	4	62.4	14
MCH10040H20K			20							
MCH10050H10K	500	526 (542)	10	789	680	40	600	5	74.7	16
MCH10050H20K			20							
MCH10060H10K	600	626 (642)	10	889	780	15	750	6	84.9	19
MCH10060H20K			20							
MCH10070H10K	700	726 (742)	10	989	880	65	750	6	95.1	21
MCH10070H20K			20							
MCH10080H10K	800	826 (842)	10	1 089	980	40	900	7	105	23
MCH10080H20K			20							
MCH10090H20K	900	926(942)	20	1 189	1 080	15	1 050	8	123	25
MCH10100H20K	1 000	1 026(1 042)	20	1 289	1 180	65	1 050	8	133	27
★MCH10110H20K	1 100	1 126(1 142)	20	1 389	1 280	40	1 200	9	143	29
★MCH10120H20K	1 200	1 226(1 242)	20	1 489	1 380	15	1 350	10	154	32

Items not marked are available from standard stock.

Monocarrier dynamic torque specification (N • cm)		
Ball screw lead (mm)	10	2.7~10.8
	20	3.1~12.7

Items marked with ★ are designated as "quick delivery item" upon request.

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.

Basic load rating

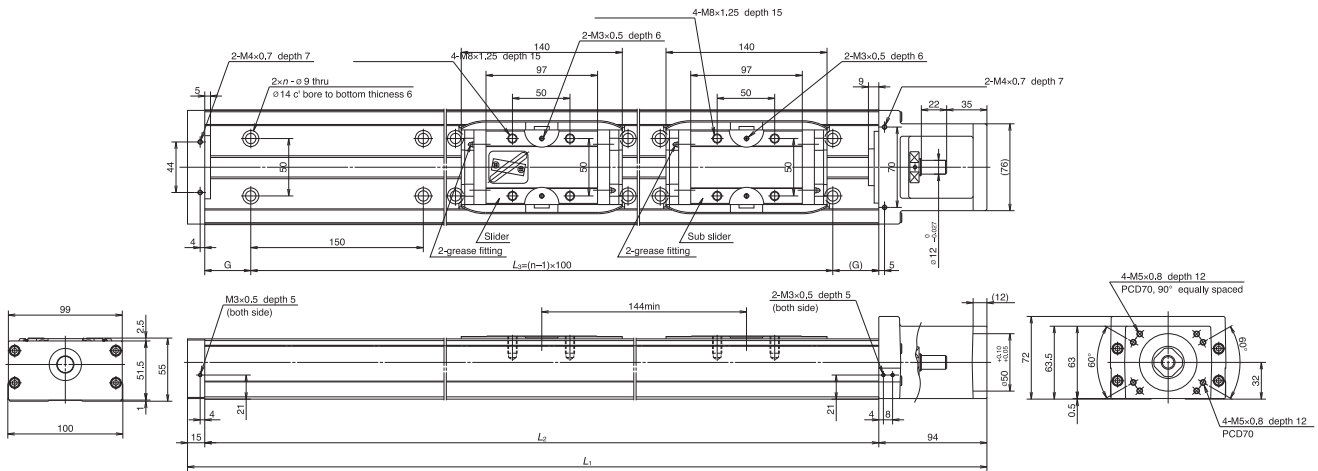
Lead l (mm)	Shaft dia d (mm)	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Ball screw C_{0a}	Linear guides C_0	
10	Ø20	8230 (High grade)	44600	7600	10	17100 (High grade)	42000	3380
		10900 (Precision)				21700 (Precision)		
20	Ø20	5300 (High grade)	35400	7600	20	10300 (High grade)	42000	3380
		7060 (Precision)				12700 (Precision)		

Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	Rolling M_{RO}	Pitching M_{PO}	Yawing M_{YO}
Single	1460	610	610

MCH10 (Double slider)

Accuracy grade: High grade (H)



Dimension of MCH10 (Double slider)

Reference number	Nominal stroke (mm)	Stroke limit(mm) (K1 is not equipped)	Ball screw lead (mm)	Body length (mm)					Inertia ×10 ⁻⁶ (kg • m ²)	Mass (kg)
				L ₁	L ₂	G	L ₃	n		
★MCH10025H10D	250	282	10	689	580	65	450	4	67.1	15
★MCH10025H20D		(314)	20						82.4	
★MCH10035H10D	350	382	10	789	680	40	600	5	77.3	17
★MCH10035H20D		(414)	20						92.5	
★MCH10045H10D	450	482	10	889	780	15	750	6	87.5	20
★MCH10045H20D		(514)	20						103	
★MCH10055H10D	550	582	10	989	880	65	750	6	97.7	22
★MCH10055H20D		(614)	20						113	
★MCH10065H10D	650	682	10	1 089	980	40	900	7	108	24
★MCH10065H20D		(714)	20						123	
★MCH10075H20D	750	782(814)	20	1 189	1 080	15	1 050	8	133	26
★MCH10085H20D	850	882(914)	20	1 289	1 180	65	1 050	8	143	28
★MCH10095H20D	950	982(1 014)	20	1 389	1 280	40	1 200	9	154	30
★MCH10105H20D	1 050	1 082(1 114)	20	1 489	1 380	15	1 350	10	164	33

Items not marked are available from standard stock.

Items marked with ★ are designated as "quick delivery item" upon request.

Monocarrier dynamic torque specification (N • cm)		
Ball screw lead (mm)	10	4.2~15.6
	20	5.0~19.6

1. Frictional resistance of NSK K1 is included in the dynamic torque in the table.
2. Grease is packed into ball screw, linear guide parts and support unit.
3. Consult NSK for life estimates under large moment loads.

Basic load rating

Lead	Shaft dia	Basic dynamic load rating (N)				Basic static load rating (N)		Support unit Load limit (N)
		Ball screw C _a	linear guides C	Support unit C _a	Rated running distance L _a (km)	Ball screw C _{0a}	Linear guides C ₀	
10	ø20	8230 (High grade) 10900 (Precision)	44600	7600	10	17100 (High grade) 21700 (Precision)	42000	3380
20		5300 (High grade) 7060 (Precision)	35400		20	10300 (High grade) 12700 (Precision)		

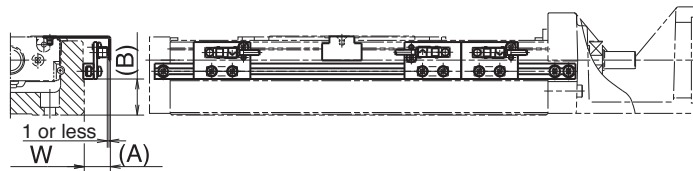
Basic static moment load of linear guide

Slider	Basic static moment load (N • m)		
	RollingM _{RO}	PitchingM _{PO}	YawingM _{YO}
Double	2920	3430	3430

3.3 MCH Series Option Part

3.3.1 Sensor Unit

●Proximity switch

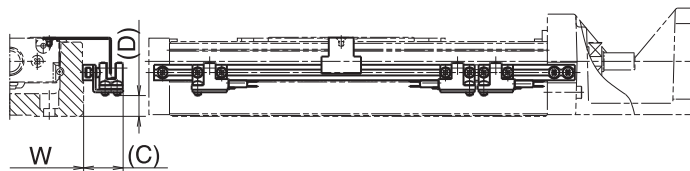


(Example of assembly)

Type	Reference number			Dimension(A) (mm)	Dimension(B) (mm)	Body width W (mm)
MCH06	MC-SRH06-10	MC-SRH06-11	MC-SRH06-12	17	10	60
MCH09	MC-SRH09-10	MC-SRH09-11	MC-SRH09-12	16	21	86
MCH10	MC-SRH10-10	MC-SRH10-11	MC-SRH10-12	16	16	100
quantity	Proximity switch (a-contact)	—	3	1	E2S-W13 (OMRON Corp.)	
	Proximity switch (b-contact)	3	—	2	E2S-W14 (OMRON Corp.)	

*See page C19 for specification of proximity switch. A sensor unit consists of sensors, a sensor dog and sensor mounting parts.

●Photo sensor



(Example of assembly)

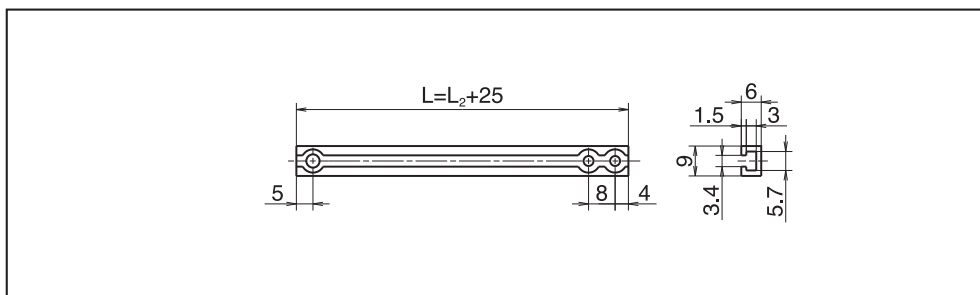
Type	Reference number	Dimension(C) (mm)	Dimension(D) (mm)	Body width W (mm)	Remarks
MCH06	MC-SRH06-13	24	2	60	EE-SX674 (OMRON Corp.) 3 sets (EE-1001 connector attachment)
MCH09	MC-SRH09-13	23	12	86	
MCH10	MC-SRH10-13	22	16	100	

*See page C20 for specification of photo sensor. A sensor unit consists of sensors, a sensor dog and sensor mounting parts.

●Sensor rail

Reference number : MC-SRL- * * * *

● * * * * is the same as rail dimension L2.



Body of MCH Series and Sensor rail combination Table

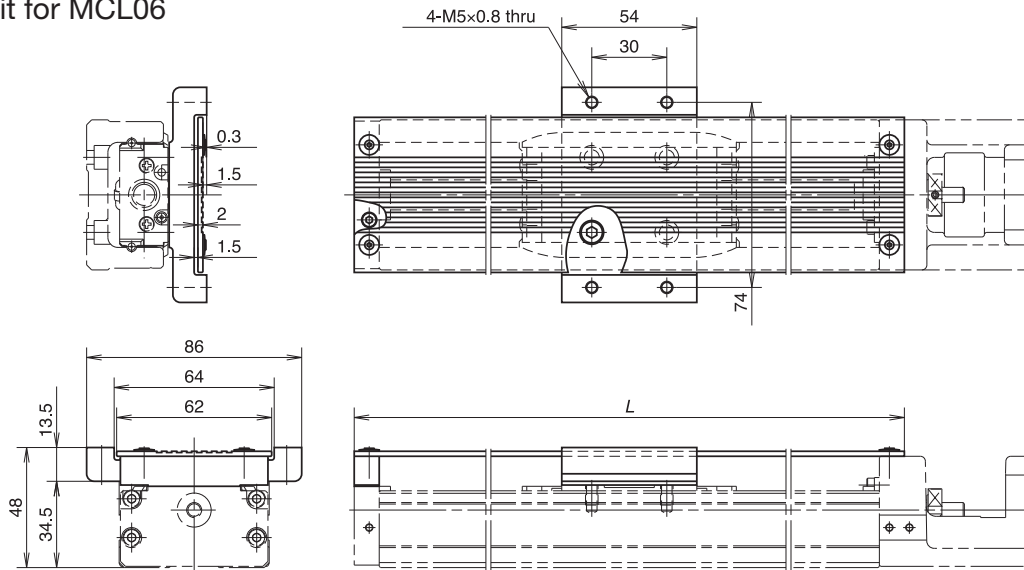
Table 3-4

Nominal size	Body length L ₂ (mm)	Reference number	Sensor rail reference number
MCH06	150	MCH06005H05K MCH06005H10K	MC-SRL-0150
	200	MCH06010H05K MCH06010H10K	MC-SRL-0200
	300	MCH06020H05K MCH06020H10K MCH06010H05D MCH06010H10D	MC-SRL-0300
	400	MCH06030H10K MCH06030H20K MCH06020H05D MCH06020H10D	MC-SRL-0400
	500	MCH06040H10K MCH06040H20K MCH06030H05D MCH06030H10D	MC-SRL-0500
	600	MCH06050H10K MCH06050H20K MCH06040H10D MCH06040H20D	MC-SRL-0600
	MCL06	150	MCL06005H05K MCL06005H10K
200		MCL06010H05K MCL06010H10K	MC-SRL-0200
300		MCL06020H05K MCL06020H10K	MC-SRL-0300
400		MCL06030H10K MCL06030H20K	MC-SRL-0400
500		MCL06040H10K MCL06040H20K	MC-SRL-0500
600		MCL06050H10K MCL06050H20K	MC-SRL-0600
MCH09	340	MCH09020H05K MCH09020H10K	MC-SRL-0340
	440	MCH09030H05K MCH09030H10K MCH09015H05D MCH09015H10D	MC-SRL-0440
	540	MCH09040H05K MCH09040H10K MCH09025H05D MCH09025H10D	MC-SRL-0540
	640	MCH09050H10K MCH09050H20K MCH09035H05D MCH09035H10D	MC-SRL-0640
	740	MCH09060H10K MCH09060H20K MCH09045H10D MCH09045H20D	MC-SRL-0740
	940	MCH09080H10K MCH09080H20K MCH09065H10D MCH09065H20D	MC-SRL-0940

Nominal size	Body length L ₂ (mm)	Reference number	Sensor rail reference number
MCH10	580	MCH10040H10K MCH10025H10D	MC-SRL-0580
	680	MCH10050H10K MCH10050H20K MCH10035H10D MCH10035H20D	MC-SRL-0680
	780	MCH10060H10K MCH10060H20K MCH10045H10D MCH10045H20D	MC-SRL-0780
	880	MCH10070H10K MCH10070H20K MCH10055H10D MCH10055H20D	MC-SRL-0880
	980	MCH10080H10K MCH10080H20K MCH10065H10D MCH10065H20D	MC-SRL-0980
	1080	MCH10090H20K MCH10075H20D	MC-SRL-1080
	1180	MCH10100H20K MCH10085H20D	MC-SRL-1180
	1280	MCH10110H20K MCH10095H20D	MC-SRL-1280
	1380	MCH10120H20K MCH10105H20D	MC-SRL-1380

3.3.2 Cover Unit

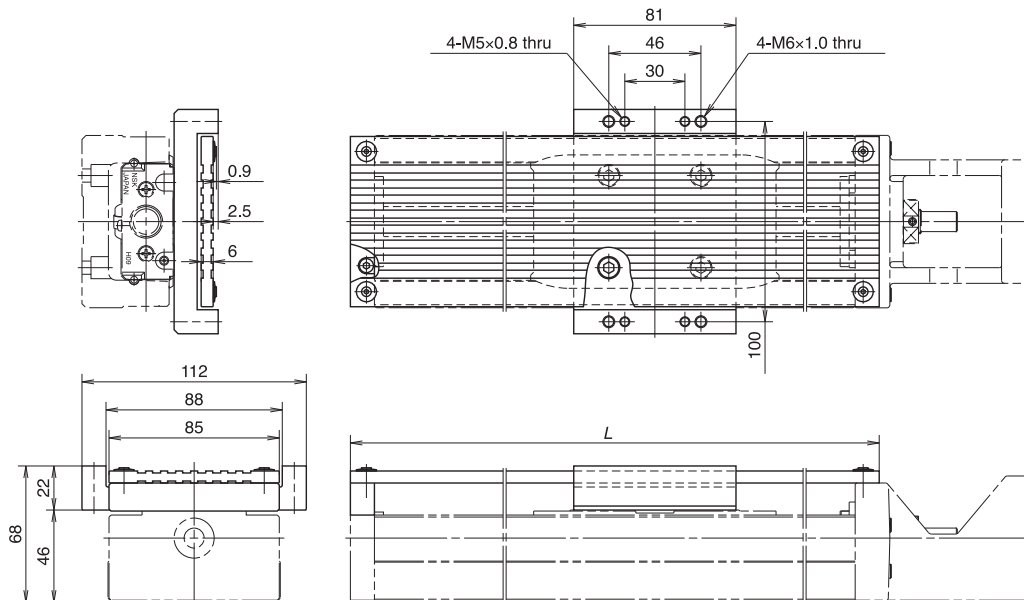
Cover unit for MCH06
Cover unit for MCL06



(Unit: mm)

Single slider		Double slider		Top cover length L
Stroke	Reference number	Stroke	Reference number	
50	MC-HV06005-00	—	—	170
100	MC-HV06010-00	—	—	220
200	MC-HV06020-00	100	MC-HV06010D00	320
300	MC-HV06030-00	200	MC-HV06020D00	420
400	MC-HV06040-00	300	MC-HV06030D00	520
500	MC-HV06050-00	400	MC-HV06040D00	620

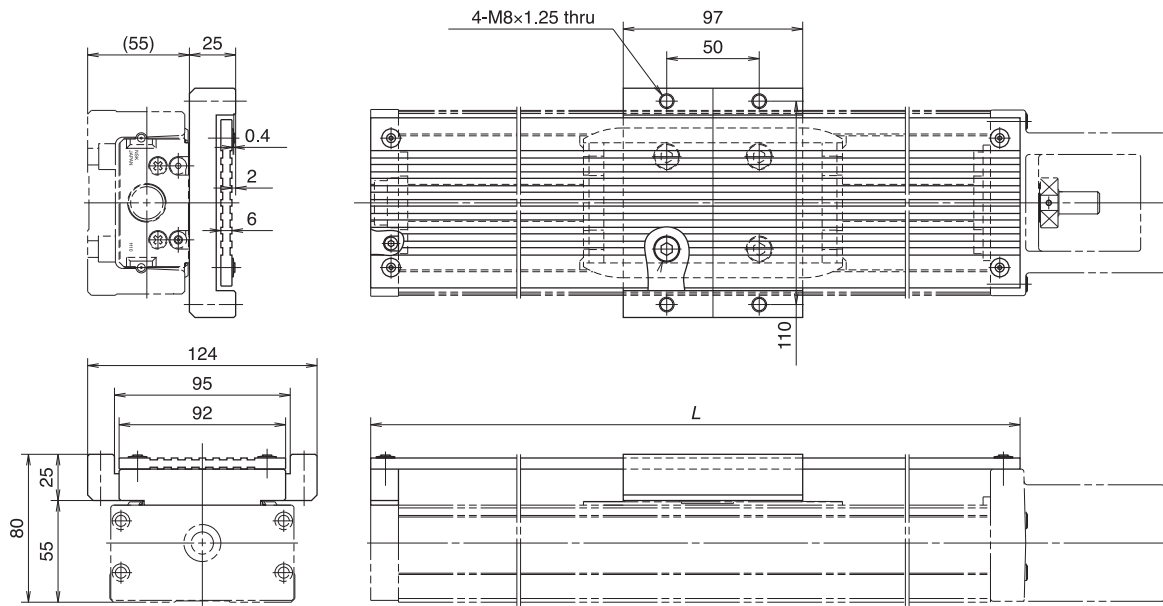
Cover unit for MCH09



(Unit: mm)

Single slider		Double slider		Top cover length L
Stroke	Reference number	Stroke	Reference number	
200	MC-HV09020-00	—	—	364
300	MC-HV09030-00	150	MC-HV09015D00	464
400	MC-HV09040-00	250	MC-HV09025D00	564
500	MC-HV09050-00	350	MC-HV09035D00	664
600	MC-HV09060-00	450	MC-HV09045D00	764
800	MC-HV09080-00	650	MC-HV09065D00	964

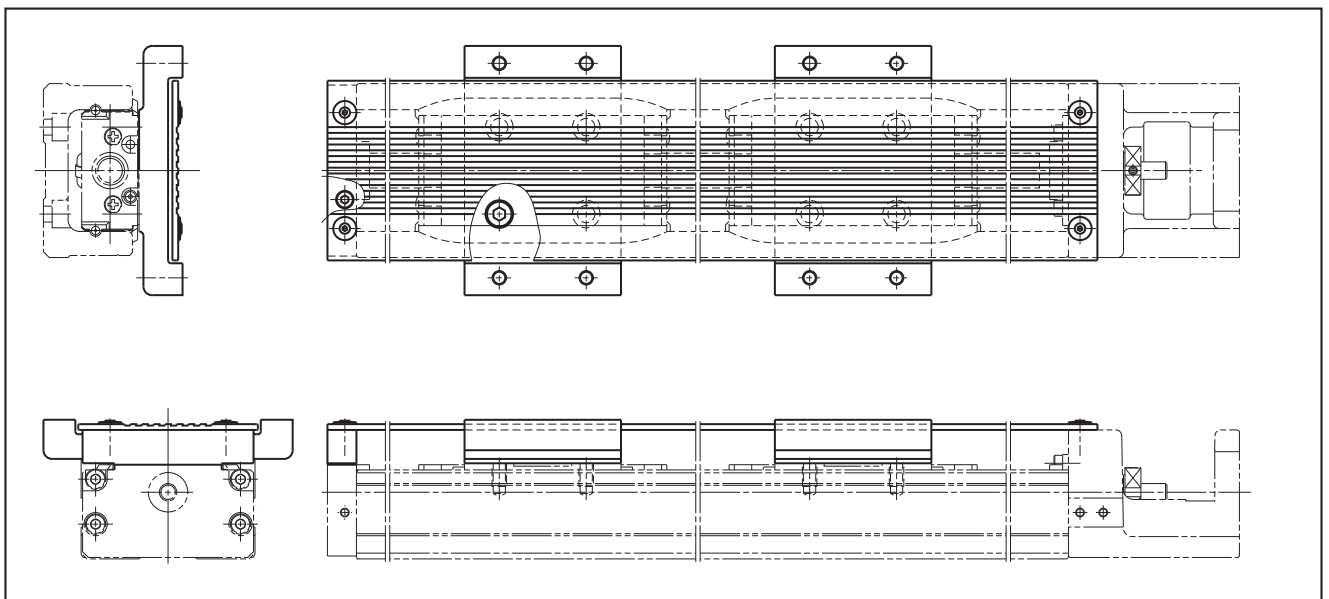
Cover unit for MCH10



(Unit: mm)

Single slider		Double slider		Top cover length L
Stroke	Reference number	Stroke	Reference number	
400	MC-HV10040-00	250	MC-HV10025D00	610
500	MC-HV10050-00	350	MC-HV10035D00	710
600	MC-HV10060-00	450	MC-HV10045D00	810
700	MC-HV10070-00	550	MC-HV10055D00	910
800	MC-HV10080-00	650	MC-HV10065D00	1010
900	MC-HV10090-00	750	MC-HV10075D00	1110
1000	MC-HV10100-00	850	MC-HV10085D00	1210
1100	MC-HV10110-00	950	MC-HV10095D00	1310
1200	MC-HV10120-00	1050	MC-HV10105D00	1410

● Cover unit for double sliders (reference drawing)
Two spacers are attached for the double slider.



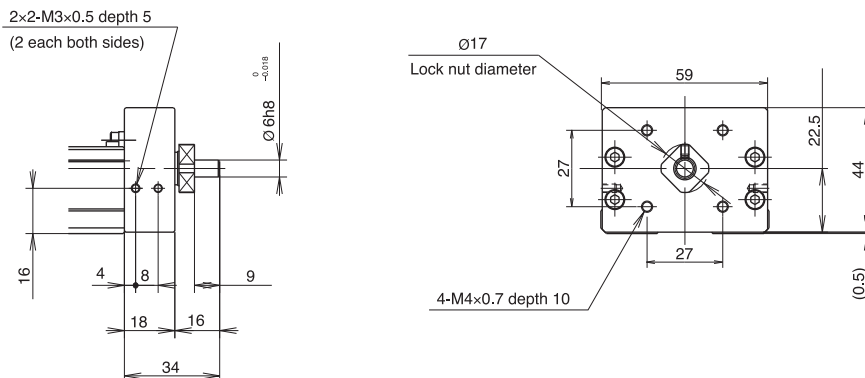
3.3.3 Intermediate Plate For Motor

- Please ask NSK for a motor that is not listed in the compatible motor list.
- In case of motor indirect mount, please consult with NSK.
- Be sure to align the center lines when installing the motor.

Motor Bracket for MCH06 and MCL06

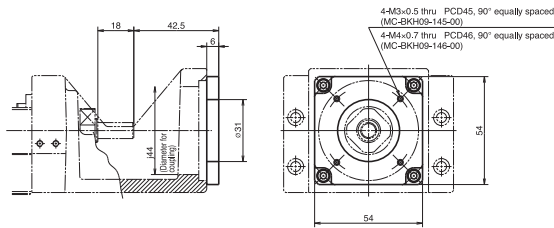
<p>Reference number : MC-BKH06-145-00</p> <table border="1"> <thead> <tr> <th colspan="2">Compatible motor</th> </tr> <tr> <th>Maker</th> <th>Motor models</th> </tr> </thead> <tbody> <tr> <td>Matsushita Electric Industrial Co., Ltd.</td> <td>MSMD5A(50W), MSMD01(100W)</td> </tr> </tbody> </table>	Compatible motor		Maker	Motor models	Matsushita Electric Industrial Co., Ltd.	MSMD5A(50W), MSMD01(100W)	<p>Reference number : MC-BKH06-146-00</p> <table border="1"> <thead> <tr> <th colspan="2">Compatible motor</th> </tr> <tr> <th>Maker</th> <th>Motor models</th> </tr> </thead> <tbody> <tr> <td>Yaskawa Electric Corp.</td> <td>SGMAH-A3(30W), SGMAH-A5(50W), SGMAS-A5A(50W), SGMAH-01(100W), SGMAS-01A(100W)</td> </tr> <tr> <td>Mitsubishi Electric Corp.</td> <td>HF-KP053(50W), HF-MP053(50W), HC-KFS053(50W), HC-MFS053(50W), HF-KP13(100W), HF-MP13(100W), HC-KFS13(100W), HC-MFS13(100W)</td> </tr> <tr> <td>OMRON Corp.</td> <td>R88M-W03(30W), R88M-W05(50W), R88M-W10(100W)</td> </tr> <tr> <td>Sanyo Denki Co., Ltd.</td> <td>P30B04xxx P Series</td> </tr> </tbody> </table>	Compatible motor		Maker	Motor models	Yaskawa Electric Corp.	SGMAH-A3(30W), SGMAH-A5(50W), SGMAS-A5A(50W), SGMAH-01(100W), SGMAS-01A(100W)	Mitsubishi Electric Corp.	HF-KP053(50W), HF-MP053(50W), HC-KFS053(50W), HC-MFS053(50W), HF-KP13(100W), HF-MP13(100W), HC-KFS13(100W), HC-MFS13(100W)	OMRON Corp.	R88M-W03(30W), R88M-W05(50W), R88M-W10(100W)	Sanyo Denki Co., Ltd.	P30B04xxx P Series
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OMRON Corp.	R88M-W03(30W), R88M-W05(50W), R88M-W10(100W)																		
Sanyo Denki Co., Ltd.	P30B04xxx P Series																		
<p>Reference number : MC-BKH06-231-00</p> <table border="1"> <thead> <tr> <th colspan="2">Compatible motor</th> </tr> <tr> <th>Maker</th> <th>Motor models</th> </tr> </thead> <tbody> <tr> <td>Oriental Motor Co., Ltd.</td> <td>AS46, ASC46, UPK54x, PK54x, CSK54x, CFK54x, UMK24x, CSK24x, PK24x</td> </tr> <tr> <td>Sanyo Denki Co., Ltd.</td> <td>PBM423xxx, 103F55xx</td> </tr> </tbody> </table>	Compatible motor		Maker	Motor models	Oriental Motor Co., Ltd.	AS46, ASC46, UPK54x, PK54x, CSK54x, CFK54x, UMK24x, CSK24x, PK24x	Sanyo Denki Co., Ltd.	PBM423xxx, 103F55xx	<p>Reference number : MC-BKH06-250-00</p> <table border="1"> <thead> <tr> <th colspan="2">Compatible motor</th> </tr> <tr> <th>Maker</th> <th>Motor models</th> </tr> </thead> <tbody> <tr> <td>Oriental Motor Co., Ltd.</td> <td>AS66, ASC66, UPK56x, UFK56x, PK56x, CSK56x, CFK56x, MUMS02(200W), MUMS04(400W)</td> </tr> <tr> <td>Sanyo Denki Co., Ltd.</td> <td>PBM603xx, PBM604xx, 103F78xx</td> </tr> </tbody> </table>	Compatible motor		Maker	Motor models	Oriental Motor Co., Ltd.	AS66, ASC66, UPK56x, UFK56x, PK56x, CSK56x, CFK56x, MUMS02(200W), MUMS04(400W)	Sanyo Denki Co., Ltd.	PBM603xx, PBM604xx, 103F78xx		
Compatible motor																			
Maker	Motor models																		
Oriental Motor Co., Ltd.	AS46, ASC46, UPK54x, PK54x, CSK54x, CFK54x, UMK24x, CSK24x, PK24x																		
Sanyo Denki Co., Ltd.	PBM423xxx, 103F55xx																		
Compatible motor																			
Maker	Motor models																		
Oriental Motor Co., Ltd.	AS66, ASC66, UPK56x, UFK56x, PK56x, CSK56x, CFK56x, MUMS02(200W), MUMS04(400W)																		
Sanyo Denki Co., Ltd.	PBM603xx, PBM604xx, 103F78xx																		

Diameter of ball screw shaft end to install a pulley for indirect motor mount of MCH06



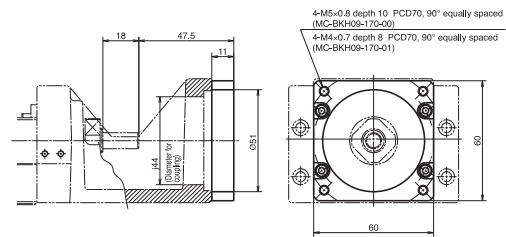
Motor Bracket for MCH09

Reference number : MC-BKH09-145-00
MC-BKH09-146-00



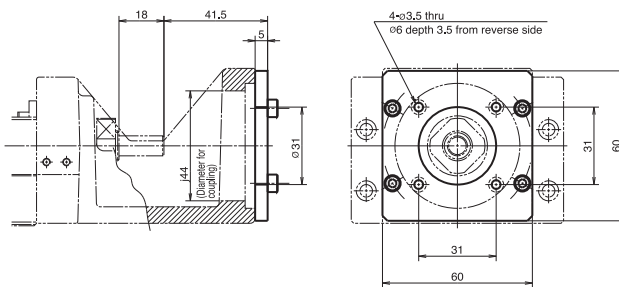
Reference number	Compatible motor	
	Maker	Motor models
MC-BKH09-145-00	Matsushita Electric Industrial Co., Ltd.	MSMD5A(50W), MSMD01(100W)
MC-BKH09-146-00	Yaskawa Electric Corp.	SGMAH-A5(50W), SGMAS-A5A(50W) SGMAH-01(100W), SGMAS-01A(100W)
	Mitsubishi Electric Corp.	HF-KP053(50W), HF-MP05(50W), HC-KFS053(50W) HC-MFS053(50W), HF-KP13(100W), HF-MP13(100W) HC-KFS13(100W), HC-MFS13(100W)
	OMRON Corp.	R88M-W05(50W), R88M-W10(100W)
	Sanyo Denki Co., Ltd.	P30B04xxx P Series

Reference number : MC-BKH09-170-00
MC-BKH09-170-01



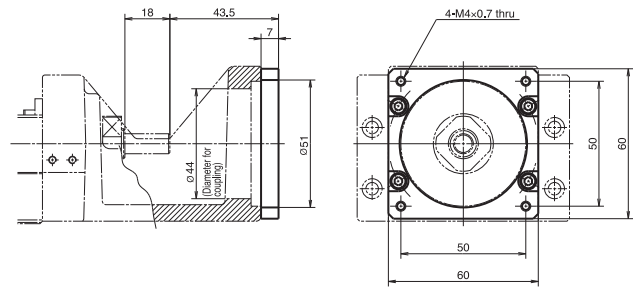
Reference number	Compatible motor	
	Maker	Motor models
MC-BKH09-170-00	Yaskawa Electric Corp.	SGMAH-02(200W), SGMAS-02A(200W) SGMAH-04(400W), SGMAS-04A(400W)
	Mitsubishi Electric Corp.	HF-KP23(200W), HF-MP23(200W) HF-KP43(400W), HF-MP43(400W)
	OMRON Corp.	R88M-W20(200W), R88M-W40(400W)
	Sanyo Denki Co., Ltd.	P30B06xxx P Series
MC-BKH09-170-01	Matsushita Electric Industrial Co., Ltd.	MSMD02(200W), MSMA02(200W) MSMA04(400W), MSMD04(400W)

Reference number : MC-BKH09-231-00



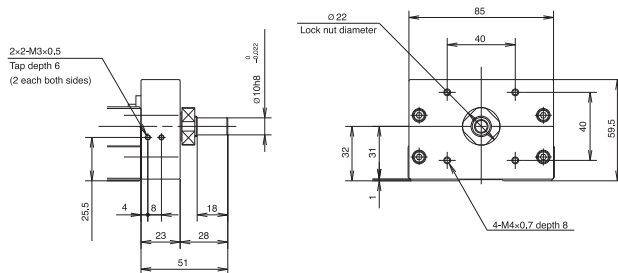
Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	PBM423xxx, 103F55xx
Oriental Motor Co., Ltd.	AS46, ASC46, UPK54x, PK54x, CSK54x, CFK54x UMK24x, CSK24x, PK24x

Reference number : MC-BKH09-250-00



Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	PBM603xx, PBM604xx, 103F78xx
Oriental Motor Co., Ltd.	AS66, ASC66, UPK56x, UFK56x, PK56x CSK56x, CFK56x

Diameter of ball screw shaft end to install a pulley for indirect motor mount of MCH09



MCH Series

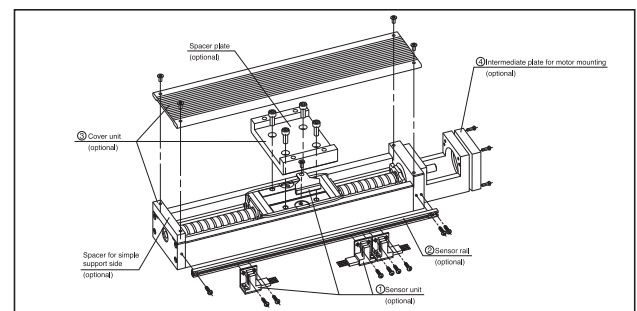
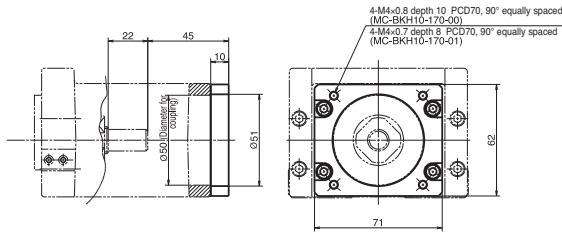


Fig. 1-4 Assembly Optional components for MCH10 (example)
 ① Sensor unit : Sensors, sensor mounting parts and a sensor dog are available in a set.
 ② Sensor rail : Rail for sensor mounting is available.
 ③ Cover unit : Top cover (included spacer plate and spacer for simple support side) is available.
 ④ Intermediate plate for motor mounting : Prepared for each motor maker.
 ☆ We assemble optional components upon request.

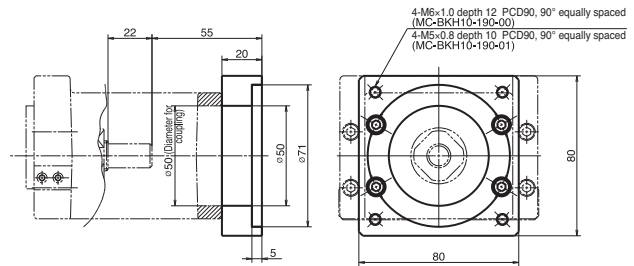
Motor Bracket for MCH10

Reference number : MC-BKH10-170-00
MC-BKH10-170-01



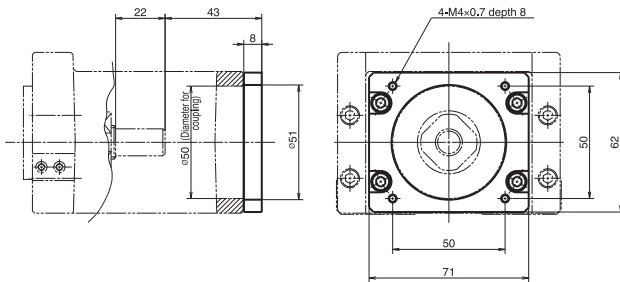
Reference number	Compatible motor	
	Maker	Motor models
MC-BKH10-170-00	Yaskawa Electric Corp.	SGMAH-02(200W), SGMAS-02A(200W) SGMAH-04(400W), SGMAS-04A(400W)
	Mitsubishi Electric Corp.	HF-KP23(200W), HF-MP23(200W) HF-KP43(400W), HF-MP43(400W)
	OMRON Corp.	R88M-W20(200W), R88M-W40(400W)
	Sanyo Denki Co., Ltd.	P30B06xxx P Series
MC-BKH10-170-01	Matsushita Electric Industrial Co., Ltd.	MSMD02(200W), MSMA02(200W) MSMD04(400W), MSMA04(400W)

Reference number : MC-BKH10-190-00
MC-BKH10-190-01



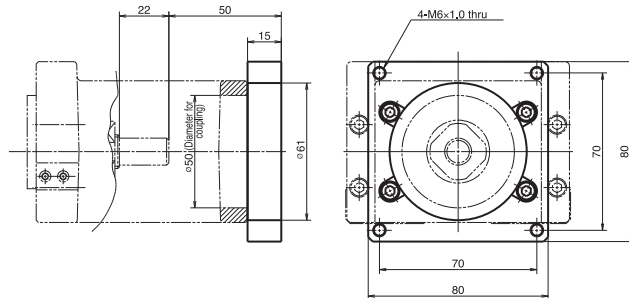
Reference number	Compatible motor	
	Maker	Motor models
MC-BKH10-190-00	Mitsubishi Electric Corp.	HC-KFS73(750W), HC-MFS73(750W) HF-KP73(750W), HF-MP73(750W)
MC-BKH10-190-01	Sanyo Denki Co., Ltd.	P50B07xxx P Series

Reference number : MC-BKH10-250-00



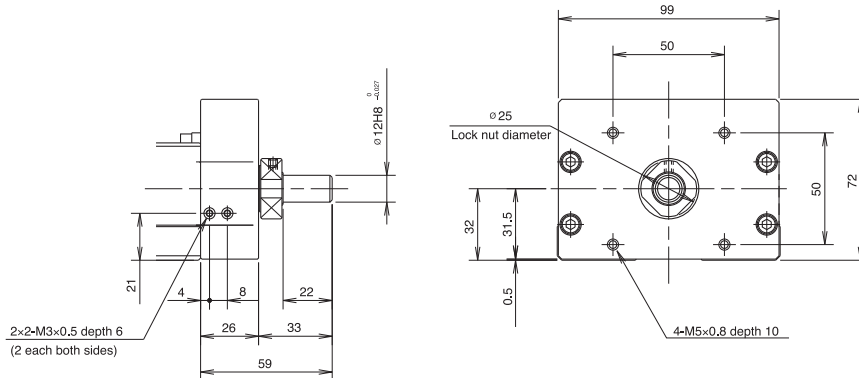
Compatible motor	
Maker	Motor models
Sanyo Denki Co., Ltd.	PBM603xx, PBM604xx, 103F78xx
Oriental Motor Co., Ltd.	AS66, ASC66, UPK56x, PK56x, CSK56x, CFK56x UMK56x, UFK56X

Reference number : MC-BKH10-270-00



Compatible motor	
Maker	Motor models
Oriental Motor Co., Ltd.	AS98, ASC98, UPK59x, PK59x, CSK59x, CFK59x UMK59x, UFK59x

Diameter of ball screw shaft end to install a pulley for indirect motor mount of MCH10



Availability Motor Table of Intermediate Plate for MCH Series

Table 3-5

Nominal size	Reference number code	Motor bracket reference number	Motor manufacturer	Stepping motor model number	Wattage of AC servo motor							
					30	50	100	200	400	750		
MCH06 MCL06	1	MC-BKH06-145-00	Matsushita Electric Industrial Co., Ltd.			MSMD5A	MSMD01					
	2	MC-BKH06-146-00	Yaskawa Electric Corp.		SGMAH-A3	SGMAH-A5 SGMAS-A5A	SGMAH-01 SGMAS-01A					
			Mitsubishi Electric Corp.			HF-KP053 HF-MP053 HC-KFS053 HC-MFS053	HF-KP13 HF-MP13 HC-KFS13 HC-MFS13					
			OMRON Corp.		R88M-W03	R88M-W05	R88M-W10					
			Sanyo Denki Co., Ltd.	P30B04xxx (P Series)								
	3	MC-BKH06-231-00	Sanyo Denki Co., Ltd.	PBM423xxx 103F55xx								
			Oriental Motor Co., Ltd.	AS46, ASC46 UPK54x, PK54x CSK54x, CFK54x UMK24x, CSK24x PK24x								
	4	MC-BKH06-250-00	Sanyo Denki Co., Ltd.	PBM603xx PBM604xx 103F78xx								
			Oriental Motor Co., Ltd.	AS66, ASC66 UPK56x, UFK56x PK56x, CSK56x CFK56x				MUMS02	MUMS04			
	MCH09	1	MC-BKH09-145-00	Matsushita Electric Industrial Co., Ltd.			MSMD5A	MSMD01				
		2	MC-BKH09-146-00	Yaskawa Electric Corp.			SGMAH-A5 SGMAS-A5A	SGMAH-01 SGMAS-01A				
				Mitsubishi Electric Corp.			HF-KP053 HF-MP05 HC-KFS053 HC-MFS053	HF-KP13 HF-MP13 HC-KFS13 HC-MFS13				
OMRON Corp.					R88M-W05	R88M-W10						
Sanyo Denki Co., Ltd.				P30B04xxx (P Series)								
3		MC-BKH09-170-00	Yaskawa Electric Corp.					SGMAH-02 SGMAS-02A	SGMAH-04 SGMAS-04A			
			Mitsubishi Electric Corp.					HF-KP23 HF-MP23	HF-KP43 HF-MP43			
			OMRON Corp.					R88M-W20	R88M-W40			
Sanyo Denki Co., Ltd.		P30B06xxx (P Series)										
4		MC-BKH09-170-01	Matsushita Electric Industrial Co., Ltd.				MSMD02 MSMA02	MSMD04 MSMA04				
5		MC-BKH09-231-00	Sanyo Denki Co., Ltd.	PBM423xxx 103F55xx								
			Oriental Motor Co., Ltd.	AS46, ASC46 UPK54x, PK54x CSK54x, CFK54x UMK24x, CSK24x PK24x								
6	MC-BKH09-250-00	Sanyo Denki Co., Ltd.	PBM603xx PBM604xx 103F78xx									
		Oriental Motor Co., Ltd.	AS66, ASC66 UPK56x, UFK56x PK56x, CSK56x CFK56x									
MCH10	1	MC-BKH10-170-00	Yaskawa Electric Corp.				SGMAH-02 SGMAS-02A	SGMAH-04 SGMAS-04A				
			Mitsubishi Electric Corp.				HF-KP23 HF-MP23	HF-KP43 HF-MP43				
			OMRON Corp.				R88M-W20	R88M-W40				
			Sanyo Denki Co., Ltd.	P30B06xxx (P Series)								
	2	MC-BKH10-170-01	Matsushita Electric Industrial Co., Ltd.				MSMD02 MSMA02	MSMD04 MSMA04				
	3	MC-BKH10-190-00	Mitsubishi Electric Corp.						HC-KFS73 HC-MFS73 HF-KP73 HF-MP73			
4	MC-BKH10-190-01	Sanyo Denki Co., Ltd.	P50B07xxx (P Series)									
		Sanyo Denki Co., Ltd.	PBM603xx PBM604xx 103F78xx									
		Oriental Motor Co., Ltd.	AS66, ASC66 UPK56x, PK56x CSK56x, CFK56x UMK56x, UFK56x									
6	MC-BKH10-270-00	Oriental Motor Co., Ltd.	AS98, ASC98 UPK59x, PK59x CSK59x, CFK59x UMK59x, UFK59x									

