

# C-2 MCM Series

## C-2-1 MCM Series Reference Number Coding

[Body]  
 Reference number : **MC M 08 040 H 10 K 0 0**  
 Monocarrier  
 M type: MCM Series  
 Nominal size (rail width, Unit: 10 mm)  
 Stroke (Unit: 10 mm)  
 Accuracy grade (H, High grade; P, Precision grade)

NSK management number  
 Grease specification: O (standard AS2)  
 Clean grease specification: B (LG2)  
 Slider specification K: Single slider  
 (See page C9) D: Double slider  
 Ball screw lead (mm)

[With Option part]  
 Reference number : **MC E 08 040 H 10 K 0 0 K 0 0 0**  
 E: With MCM option part  
 NSK management number  
 Sensor unit  
 Cover unit  
 Motor bracket

Note : Optional components are available separately.

**Table 1 Sensor unit (See page C37)**

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

xx: Reference number  
 Note: Sensor rail is not included in a sensor unit. If you require the rail, please request separately. (See page C38 to 40.)

**Table 2 Cover unit (See page C41 - 42)**

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

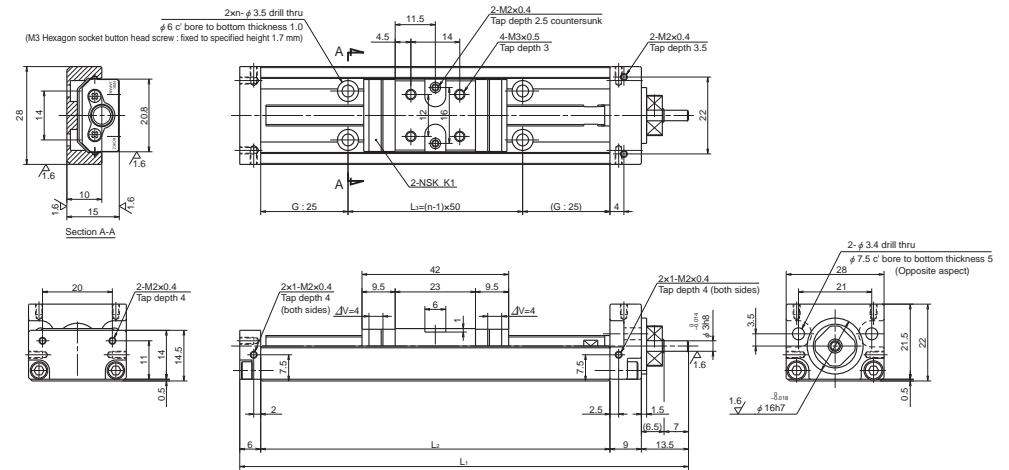
xxxx: Reference number and stroke number  
 \*: Monocarrier ".02" is only used for MCM03  
 Note: When a sensor unit is used, the full cover unit cannot be used.

**Table 3 The reference number of motor bracket (See page C43 - 58)**

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	—

## C-2-2 MCM Series Dimension Table of Standard Products

### MCM02



Dimension of MCM02 (Single slider)

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

Note: Items not marked are available from standard stock.

Monocarrier dynamic torque specification (N · cm)

Ball screw lead (mm)	High grade		Precision
	1	0.1 - 1.3	
2	0.1 - 1.3		0.2 - 1.6

- Notes:
- 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] × 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	φ 6	340 (High grade)	4910	615	1	555 (High grade)	2120	490
		405 (Precision)				615 (Precision)		
2	φ 6	340 (High grade)	3900	615	2	555 (High grade)	2120	490
		405 (Precision)				615 (Precision)		

Basic static moment load of linear guide

Slider	Basic static moment load (N · m)		
	Rolling $M_{R0}$	Pitching $M_{P0}$	Yawing $M_{Y0}$
Single	24	8	8