

C-3 MCH Series

C-3-1 MCH Series Reference Number Coding

[Body]

Reference number : **MC H 06 040 H 10 K (B0)** ※1

Monocarrier

H Type: MCH Series

L Type: MCH Series low profile rail (only for 06 size)

Nominal size (rail width, Unit: 10mm)

Stroke (Unit: 10mm)

Accuracy grade (H, High grade; P, Precision grade).

Special specification

Grease specification: B (LG2)(See page C19)

Slider specification K: Single slider (See page C10) D: Double slider

Ball screw lead (mm)

※1 : These two code fields shall be added when non-standard grease is used. The coding of an MCH Monocarrier with standard grease shall have 12 characters as shown above.

[With Option part]

Reference number : **MC S 06 040 H 10 K 0 0 K 0 0 0**

S : With MCH optional components

R : With MCL optional components

NSK management number

Sensor unit

Cover unit

Intermediate plate for motor bracket

Note : Optional components are available separately.

Table 1 Sensor unit (See page C71)

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

xx: Reference number
 Note: Sensor rail is not included in a sensor unit. If you require the rail, please request separately. (See page C71 to 72.)

Table 2 Cover unit (See page C73 – 75)

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

xxxxx: Reference number and stroke number

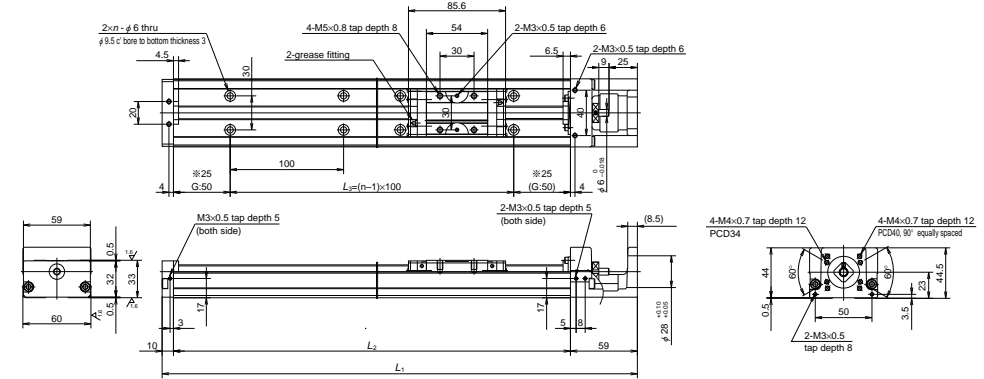
Table 3 Intermediate plate for motor bracket (See page C77 – 80)

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

C-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 × 10 ⁶ (kg · m ²)	Mass (kg)
				L ₁	L ₂	L ₃	n		
☆※MCL06005H05K	50	53	5	219	150	100	2	2.38	1.0
☆※MCL06005H10K		(65)	10					3.45	
☆ MCL06010H05K	100	103	5	269	200	100	2	3.17	1.3
☆ MCL06010H10K		(115)	10					4.12	
☆ MCL06020H05K	200	203	5	369	300	200	3	4.51	1.9
☆ MCL06020H10K		(215)	10					5.46	
☆ MCL06030H10K	300	303	10	469	400	300	4	6.80	2.6
☆ MCL06030H20K		(315)	20					10.6	
☆ MCL06040H10K	400	403	10	569	500	400	5	8.13	3.2
☆ MCL06040H20K		(415)	20					11.9	
☆ MCL06050H10K	500	503	10	669	600	500	6	9.47	3.9
☆ MCL06050H20K		(515)	20					13.3	

- Notes: 1. Items not marked are available from standard stock.
 2. Items marked with ☆ are designated as "quick delivery item" upon request.
 3. Dimension of G is 25 instead of 50 for those marked with ※.

Monocarrier dynamic torque specification (N · cm)

Ball screw lead (mm)	Ball screw lead (mm)	
	5	1.0 – 4.8
	10	1.1 – 5.8
20	1.6 – 7.9	

- Notes:
 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	φ 12	3000 (High grade)	22800	4400	5	5410 (High grade)	10900	1450
		3760 (Precision)				6310 (Precision)		
10		1930 (High grade)	18100		10	3160 (High grade)		
		2260 (Precision)			20	3780 (Precision)		
20		1930 (High grade)	14400			3160 (High grade)		
		2260 (Precision)				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