C-Ⅲ MCH Series

C-Ⅲ-1 MCH Series Reference Number Coding

[Body]

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

- Mono carrier
- 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 C18)
- 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 3-1 Sensor unit (See page C67~68)

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 C69~70)

Reference number code	Specification	Reference number
0	N/A	—
1	For single slider	MC—HVxxxxx—00
	For double slider	MC—HVxxxxxD00

Note xxxxx: Reference number and stroke number

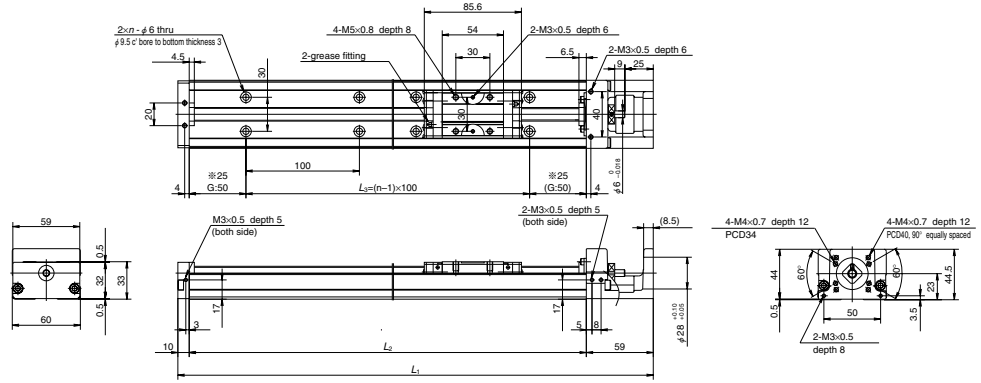
Table 3-3 Intermediate plate for motor bracket (See page C71~74)

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-Ⅲ-2 MCH Series dimension table of standard prodacts

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) L_1	L_2	L_3	n	Inertia $\times10^{-6}$(kg · m^2)	Mass (kg)
★※**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	

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) Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Basic static load rating (N) Ball screw C_{0a}	Linear guides C_0	Support unit Load limit (N)
5	φ12	3000 (High grade) 3760 (Precision)	22800	4400	5	5410 (High grade) 6310 (Precision)	10900	1450
10		1930 (High grade) 2260 (Precision)	18100		10	3160 (High grade) 3780 (Precision)		
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

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