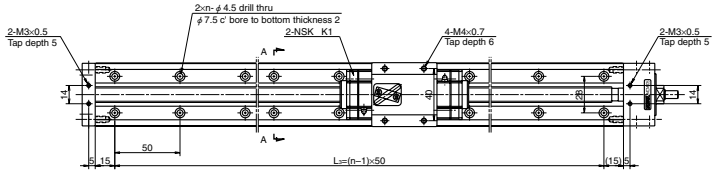
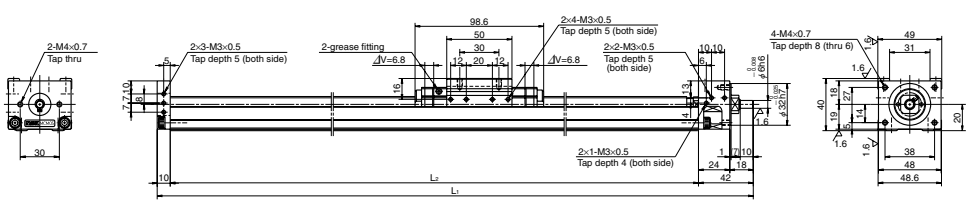
MCM05

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) L_1	L_2	L_3	No. of mounting hole n	Inertia $\times10^{-4}$ (kg · m²)	Mass (kg)
MCM05005H05K00	50	80	5	232	180	150	4	0.025	1.4
MCM05005H10K00		(95)	10					0.035	
MCM05010H05K00	100	130	5	282	230	200	5	0.031	1.6
MCM05010H10K00		(145)	10					0.040	
★ **MCM05015H05K00**	150	180	5	332	280	250	6	0.036	1.8
MCM05015H10K00		(195)	10					0.046	
MCM05020H05K00	200	230	5	382	330	300	7	0.042	2.0
MCM05020H10K00		(245)	10					0.051	
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					0.101	
MCM05040H10K00	400	430	10	582	530	500	11	0.074	2.7
MCM05040H20K00		(445)	20					0.112	
MCM05050H10K00	500	530	10	682	630	600	13	0.085	3.1
MCM05050H20K00		(545)	20					0.123	
MCM05060H10K00	600	630	10	782	730	700	15	0.096	3.5
MCM05060H20K00		(645)	20					0.134	

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] ×2)

Basic load rating

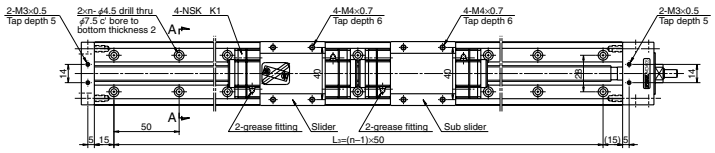
Lead ℓ (mm)	Shaft dia d (mm)	Basic dynamic load rating (N) Ball screw C_a	linear guides C	Support unit C_a	Rated running distance L_a (km)	Basic static load rating (N) Ball screw C_{0a}	Linear guides C_0	Support unit Load limit (N)
5	φ12	3760	15600	4400	5	6310	10900	1450
10		2260	12400		10	3780		
20		2260	9850		20	3780		

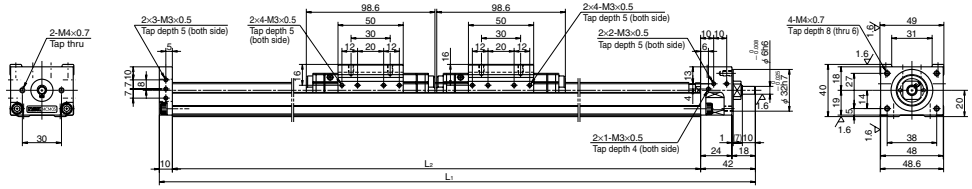
Basic static moment load of linear guide

Slider	Basic static moment load (N · m) RollingM$_{RO}$	PitchingM$_{PO}$	YawingM$_{YO}$
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) L_1	L_2	L_3	No. of mounting hole n	Inertia $\times10^{-4}$ (kg · m²)	Mass (kg)
★**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	10	482	430	400	9	0.075	2.8
★**MCM05021H20D00**		(260)	20					0.151	
★**MCM05031H10D00**	310	333	10	582	530	500	11	0.086	3.2
★**MCM05031H20D00**		(360)	20					0.162	
★**MCM05041H10D00**	410	433	10	682	630	600	13	0.098	3.6
★**MCM05041H20D00**		(460)	20					0.174	
★**MCM05051H10D00**	510	533	10	782	730	700	15	0.109	4.2
★**MCM05051H20D00**		(560)	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

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 + (11.4[margin] ×2)

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	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) RollingM$_{RO}$	PitchingM$_{PO}$	YawingM$_{YO}$
Double	455	765	765