

Monocarrier[®]

Ultra-Large Lead, Low Noise MCM series

MOTION & CONTROL[™]
NSK

RoHS
compliant

Achieves Extremely High speed of 2500 mm/sec.

Suitable for Semiconductor and LCD Manufacturing Equipment

NEW



■ Features

1. High Speed Travel

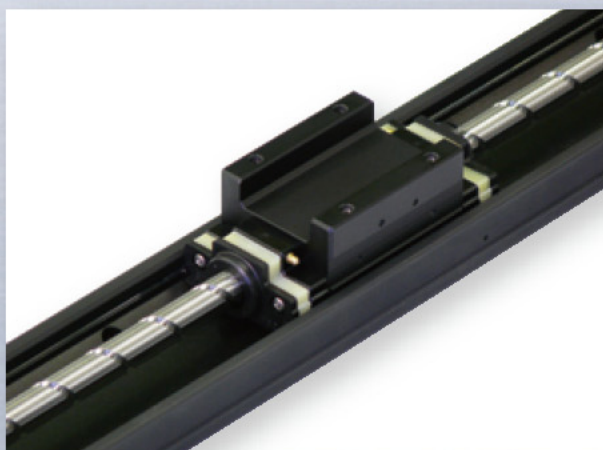
2.5 times faster than conventional Monocarriers,
from 1000 mm/s into 2500 mm/s

2. Low Noise

New ball recirculation system allows quiet operation

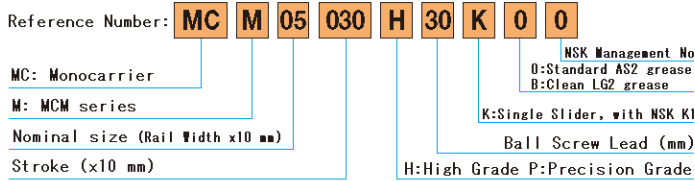
3. Low Particle Generation

By adopting large 30mm lead screw,
rotation speed is 2/3 and particle generation is 1/4

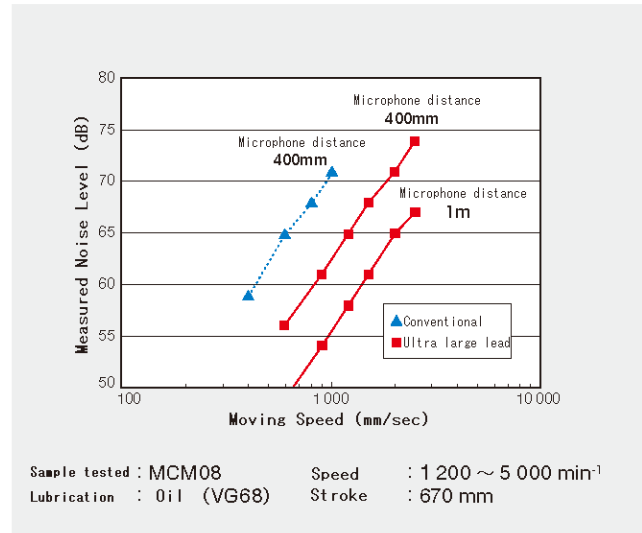


Monocarrier® Ultra-Large Lead, Low noise MCM series

Reference Number



Noise Level (Relation between Speed and Noise)



Stroke

Stroke	Nominal Size		
	MCM05	MCM08	MCM10
300	○		
400	○	○	
500	○	○	○
600	○	○	○
700		○	○
800			○

○ Indicates short-term delivery items. Please consult NSK for special stroke.

Specifications

Nominal Size	Lead l (mm)	Shaft dia. d (mm)	Basic Dynamic Load Rating (N)				Basic Static Load Rating (N)		Support Unit Load Limit (N)	Maximum Speed (mm/s)
			Ball Screw C_a	Linear Guide C	Support Unit C_a	Rated Running Distance L_a (km)	Ball Screw C_{0a}	Linear Guide C_0		
MCM05	30	$\phi 12$	3 260	8 600	6 550	30	5 400	10 900	2 730	2 500
MCM08	30	$\phi 15$	5 070	16 930	7 100	30	8 730	22 800	3 040	2 500
MCM10	30	$\phi 20$	11 700	23 200	7 600	30	22 700	29 400	3 380	2 500

- Notes ● Basic Dynamic and Static Load Rating is for one slider.
 ● Linear guide C is defined as a radial load, enabling 90% running normal without fatigue, for a distance which is defined by 1,000,000 rotations of a ball screw.
 ● Ball screw C_a is defined as constant continuous load, enabling 90% running normal without fatigue, to rotate 1,000,000 rotations.
 ● C_{0a} and C_0 is a load, which creates total permanent deformation on the ball and raceway, to be 0.01% of the ball diameter.

Accuracy Grade

Accuracy Grade	High Grade (H)			Precision Grade (P)			
	Repeatability	Running Parallelism (Vertical)	Backlash	Repeatability	Positioning Accuracy	Running Parallelism (Vertical)	Backlash
~ 400	±10	16	20 or less	±3	25	10	3 or less
~ 600		20			12		
~ 700		23			15		
~ 800		23			15		

Accessories

Cover units, Sensor units, Motor mounting brackets are available as standard accessories. For special options, please consult NSK

www.nsk.com

For more information about NSK products, please contact;