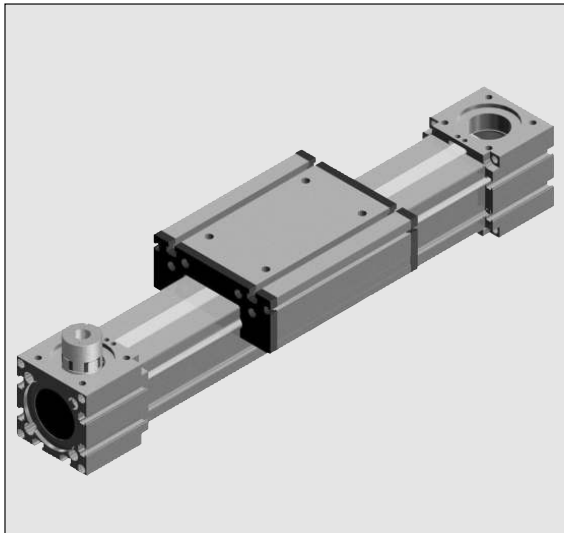


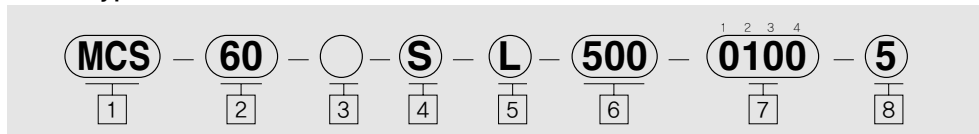
MCS 60, 80, 100



Features

- Vibration-resistant belt driving module
- Combination of the best quality components
- Upgraded timing belt
- Easy maintenance
- Responding to various customer requirements

Order type



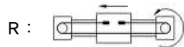
1 TYPE

2 Type number
60, 80, 100

3 Block type
Non-symbol : Standard
D : Upper/Lower block

4 Slider type
S : Standard slider
T : Standard slider + Roller 2
H : Standard slider + Roller 4

5 Belt attaching location

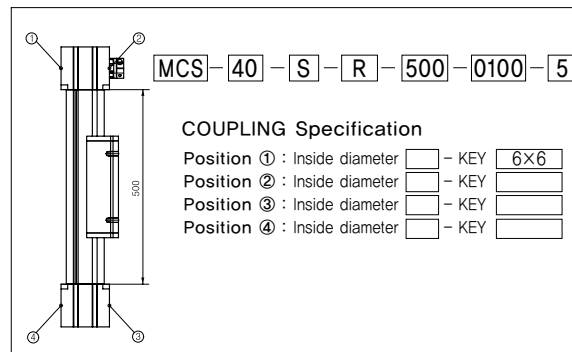


6 Rail length(mm)

7 Coupling attachment type
0 : STANDARD
1 : COUPLING TYPE

8 Quantity

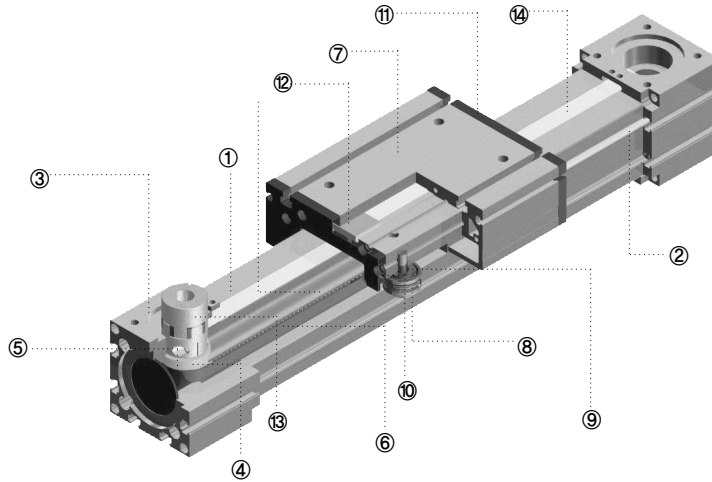
► Ordering of Module



► Accessory

- Motor (Name of company :) MSK (Sensor Bracket)
- (Model name :) Photo Sensor
- (Power : (kw)) Proximity Sensor
- Reducer MBK (Mounting block)
- Pulley Reducer Quantity : EA
- Other (Name of company :) Urethane stopper
- (Model name :)
- (Reduction gear ratio :)

MCS Series Specifications



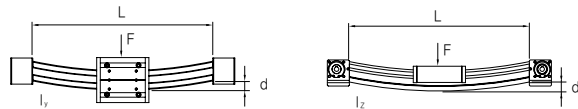
► Specification of Components

No	Component name		Material	No	Component name	Material
1	Rail		Aluminum alloy	8	Track roller	Bearing steel
2	Product No.	Shaft	Bearing steel	9	Flat washer	-
	60	Ø10				
	80	Ø12				
	100	Ø16				
3	Pulley box		Aluminum alloy	10	Wiper	FELT
4	Bearing		-	11	Sealing	EP
5	Timing pulley		High carbon steel	12	Belt clip	Carbon steel
6	Timing belt		Urethane	13	Coupling	Aluminum alloy
7	Slider		Aluminum alloy	14	Steel cover	Stainless

► Performance sheet

repeating accuracy	±0.05mm
Straightness of rail	0.35mm/m
Parallelism between shafts	±0.02mm/m
Tolerance of length	±0.5mm

► Max. deflection of rail



*Formula for deflection of rail is the same to the whole dimension.

$$d = \frac{F \times L^3}{192 \times E \times I}$$

E : Young's modulus, aluminum -

70,000N/mm²

d : deflection [mm]

F : load [N]

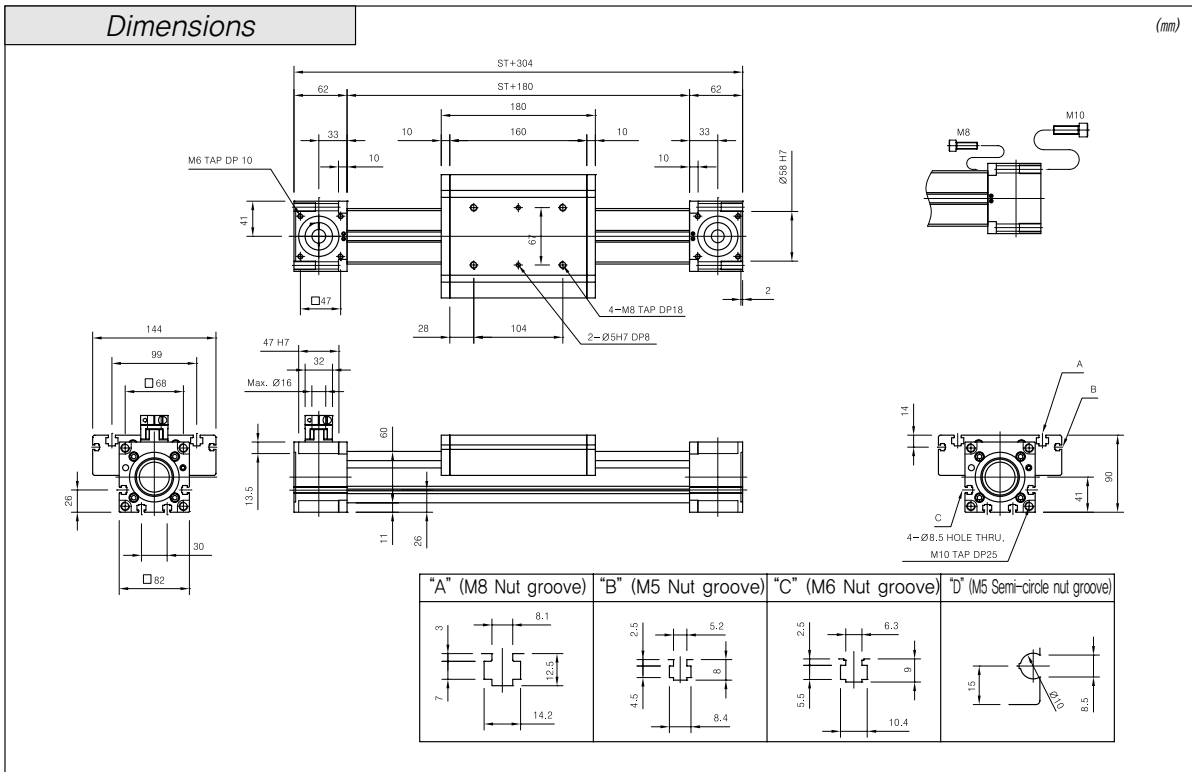
L : free length [mm]

I : 2nd nd moment of area [mm⁴]

► Timing belt dimension and Rail size

Model No.	Length	Belt type	Belt width	Material of velt
60	4000	RPP5	25	Polyurethane With Steel cord
80	5000	RPP5	25	
100	6000	RPP8	30	

MCS 60

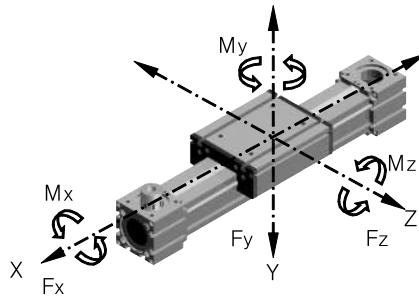


* Rails that exceed Max. rail length without joint also available on customer's request.

► Technical data

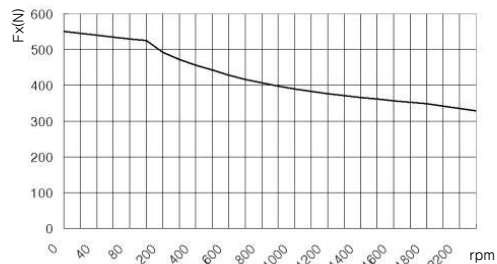
- Speed Max. 3%
- Acceleration Max. 20%
- Pulley P. C. D. 25.46mm
- Stroke per revolution ≈80mm/rev.
- No-load torque 0.65Nm
- 2nd moment of area $I_y=6.8 \times 10^6 \text{mm}^4$
 $I_z=7.0 \times 10^6 \text{mm}^4$
- Weights
Basic weight with zero stroke 5.1kg
Weight/100mm stroke 0.5kg

► Forces and moments



Slider Type	Forces/Torques	Fx (N)	Fy (N)	Fz (N)	Mx (Nm)	My (Nm)	Mz (Nm)
MCS60	STATIC	Max.550	1500	2700	57	120	86
	DYNAMIC		990	1800	33	95	66

* Having bigger value in case of selecting slider special specification (T,H)



*Fx depends on speed, see respective chart.

MCS 80



Dimensions

(mm)

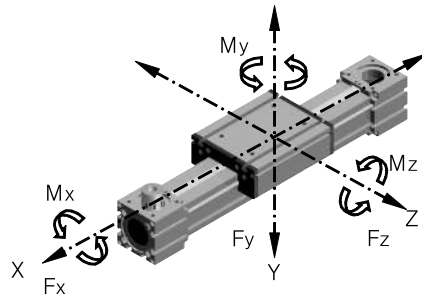
"A" (M8 Nut groove)	"B" (M5 Nut groove)	"C" (M8 Nut groove)	"D" (M6 Semi-circle nut groove)

* Rails that exceed Max. rail length without joint also available on customer's request.

► Technical data

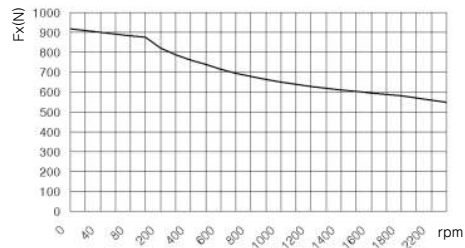
- Speed Max. 4%
- Acceleration Max. 20%
- Pulley P. C. D. 41.38mm
- Stroke per revolution ≈130mm/rev.
- No-load torque 0.65Nm
- 2nd moment of area $I_y=23.8 \times 10^6 \text{mm}^4$
 $I_x=24.5 \times 10^6 \text{mm}^4$
- Weights
- Basic weight with zero stroke 13.2kg
- Weight/100mm stroke 1.2kg

► Forces and moments



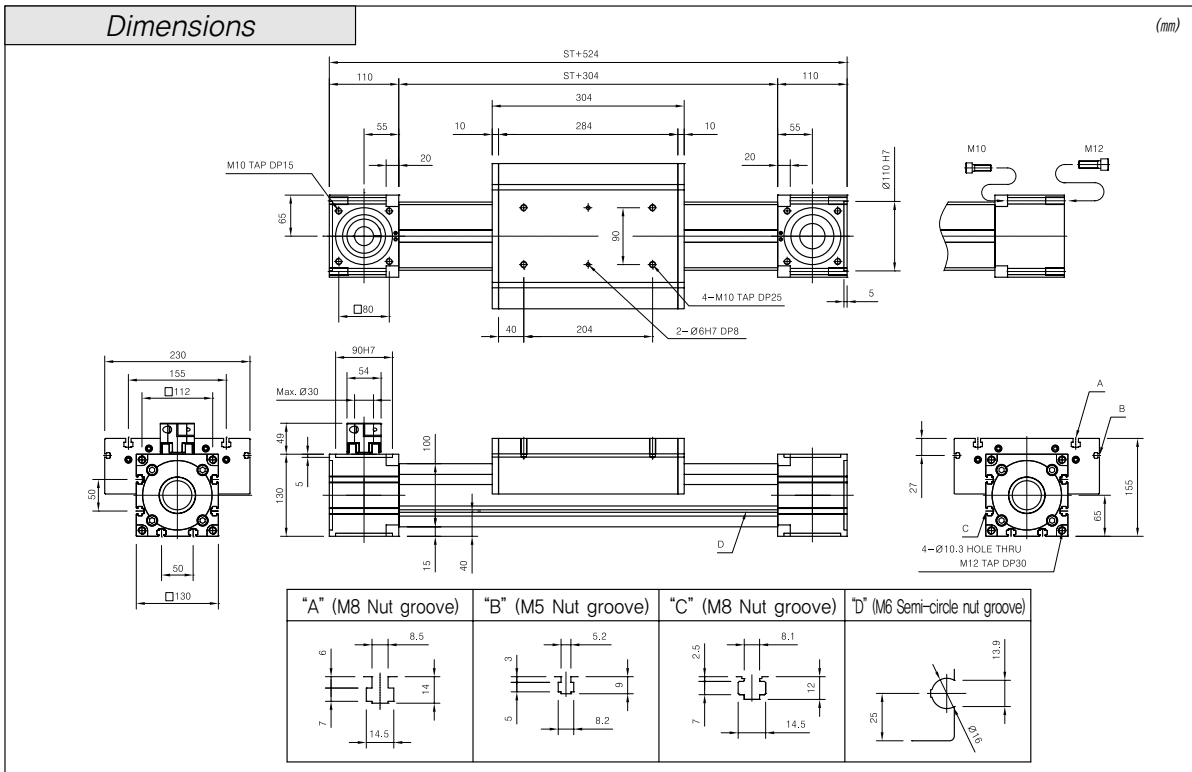
Slider Type	Forces/Torques	F _x (N)	F _y (N)	F _z (N)	M _x (Nm)	M _y (Nm)	M _z (Nm)
MCS80	STATIC	Max.910	1500	2700	80	140	100
	DYNAMIC		990	1800	50	110	75

* Having bigger value in case of selecting slider special specification (T,H)



* F_x depends on speed, see respective chart.

MCS 100

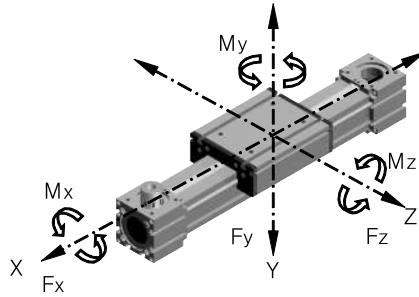


* Rails that exceed Max. rail length without joint also available on customer's request.

► Technical data

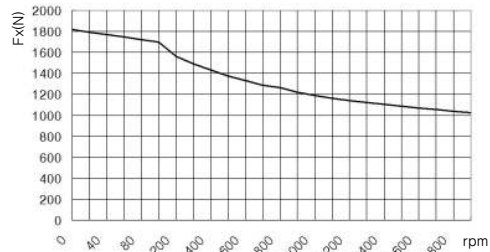
- Speed Max. 5%
- Acceleration Max. 20%
- Pulley P. C. D. 50.93mm
- Stroke per revolution ≈160mm/rev.
- No-load torque 1.2Nm
- 2nd moment of area $I_x=58.4 \times 10^6 \text{mm}^4$
 $I_z=61.9 \times 10^6 \text{mm}^4$
- Weights
Basic weight with zero stroke 29.0kg
Weight/100mm stroke 1.8kg

► Forces and moments



Slider Type	Forces/Torques	Fx (N)	Fy (N)	Fz (N)	Mx (Nm)	My (Nm)	Mz (Nm)
MCS100	STATIC	Max.1800	3300	7200	280	690	380
	DYNAMIC		2000	5800	200	470	250

* Having bigger value in case of selecting slider special specification (T,H)

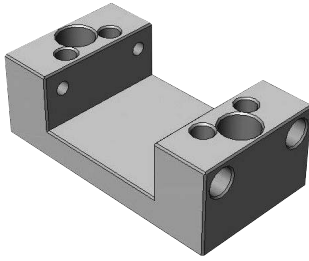


* Fx depends on speed, see respective chart.

MOUNTING BLOCK



Mounting block



- Mounting block for M and Q series
- A component for firm mounting with attaching at linear module
- High precision and strength guaranteed by one-bodied processing of aluminum alloy material
- Possible for additionally attaching along with linear module lengths

