

# MSX Flexible Couplings - Slit Type

Zero Backlash High Rigidity

## Structure

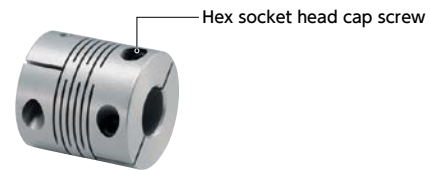
### Set Screw Type

**MSX** → P.xxxx



### Clamping Type

**MSX-C** → P.xxxx



### Applicable motors

	MSX
Servomotor	○
Stepping Motor	○
General-purpose Motor	●

○: Excellent ●: Available

### Property

	MSX
Zero Backlash	○
High Torque	○
High Torsional Stiffness	○

○: Excellent ○: Very good

- This is a metal spring coupling with single-piece construction. A slit is inserted into a cylindrical material.
- It has an extremely high torsional stiffness and low moment of inertia.
- Extra super duralumin (A7075) featuring the highest strength among aluminum alloy is adopted.
- A plate spring formed by a slit allows eccentricity, angular misalignment, and end-play to be accepted.

### Application

Actuator / High precision XY stage / Index table

### Material/Finish



	MSX / MSX-C
Main Body	A7075 Anodized
Hex Socket Set Screw	SCM435 Ferrosferric Oxide Film (Black)
Hex Socket Head Cap Screw	SCM435 Ferrosferric Oxide Film (Black)

### Part number specification

**MSX-19C-5-6**

Product Code    Size    Bore Diameter

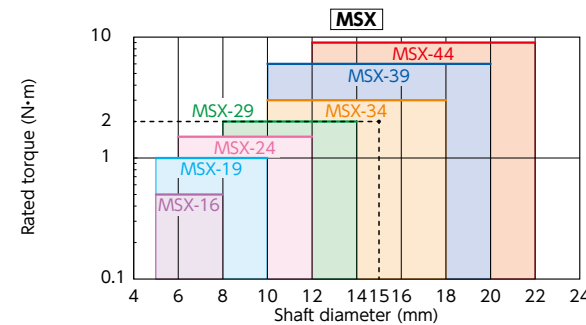
Please refer to dimensional table for part number specification.



## Selection

### Selection Based on Shaft Diameter and Rated Torque

The area bounded by the shaft diameter and rated torque indicates the selection size.



### Selection Example

In case of selected parameters of shaft diameter of  $\phi$  15 and load torque of 2 N·m, the selected size is

**MSX-34** or **MSX-34C**.

### Selection Based on the Rated Output of the Servomotor

Rated Output (W)	Servomotor Specifications*1			Selection Size	
	Diameter of Motor Shaft (mm)	Rated Torque (N·m)	Instantaneous Max. Torque (N·m)	MSX Set Screw Type	MSX-C Clamping Type
10	5 - 6	0.032	0.096	MSX-16	MSX-16C
20	5 - 6	0.064	0.19	MSX-16	MSX-16C
30	5 - 7	0.096	0.29	MSX-19	MSX-19C
50	6 - 8	0.16	0.48	MSX-19	MSX-19C
100	8	0.32	0.95	MSX-19	MSX-19C
200	9 - 14	0.64	1.9	MSX-29	MSX-34C
400	14	1.3	3.8	MSX-39	MSX-39C
750	16 - 19	2.4	7.2	MSX-44	MSX-44C

\*1: Motor specifications are based on general values. For details, see the motor manufacturer's catalogs. This is the size for cases where devices such as reduction gears are not used.

Additional Keyway at Shaft Hole → P.xxxx    Cleanroom Wash & Packaging → P.xxxx    Change to Stainless Steel Screw → P.xxxx  
 Bore additional modification only/ Add'l charge    Please combine with Stainless Steel Screw Alteration Service    Available / Add'l charge