

MJB Flexible Couplings - Jaw Type (Bushing)

High torque Vibration absorption Electrical Insulation

Structure

- Bushing Type
- MJB → P.xxxx



- Sleeve
- Outside diameter $\phi 40$



Tight fit



Easy fit

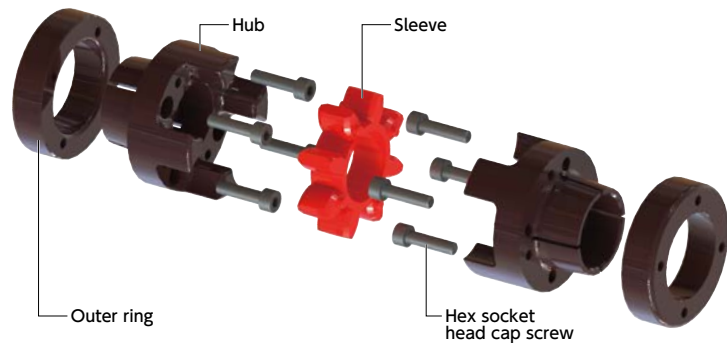
- Outside diameter: $\phi 55 - \phi 95$



Tight fit



Easy fit



Material/Finish



	MJB
Hub	S45C Ferroferric Oxide Film (Black)
Outer Ring	S45C Ferroferric Oxide Film (Black)
Sleeve	Polyurethane
Hex Socket Head Cap Screw	SCM435 Ferroferric Oxide Film (Black)

Part number specification

MJB-55-RD - 10 - 10

Product Code Size Sleeve Type Bore Diameter

Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole → P.xxxx	Cleanroom Wash & Packaging → P.xxxx	Change to Stainless Steel Screw → P.xxxx
Not Available	Not Available	Not Available

Applicable motors

	Tight Fit	Easy Fit
Servomotor	○	●
Stepping Motor	○	○
General-purpose Motor	◎	◎

◎: Excellent ○: Very good ●: Available

Property

	Tight Fit	Easy Fit
High Torque	◎	◎
Allowable Misalignment	○	○
Vibration Absorption	◎	◎
Electrical Insulation	◎	◎
Assembling	○	◎
Allowable Operating Temperature	-20°C to 60°C	-20°C to 60°C

◎: Excellent ○: Very good

- This is a jaw type flexible coupling.
- Excellent for high torque transmission and ideal for machine tool spindles.
- Excellent flexibility. Excellent flexibility allows eccentricity, angular misalignment and twisting vibration to be accepted.
- It has electrical insulation. Resistance value: Not less than 2 MΩ
- There are four types of sleeve hardness. Please select desirable units according to usage conditions including torque and misalignment.
- Since the sleeve's vibration absorption of Tight Fit can raise the gain of a servomotor, this unit can achieve high responsive operation exceeding the Disk coupling.
- Easy fit allows you to assemble and partition the hub and sleeve smoothly. This allows you to reduce the time of assembling the unit and maintenance.

Application

Machine tool / Spindle

Sleeve Type

Sleeve type	Sleeve hardness (JIS)			
	A80	A92	A98	D64
Tight fit				
Easy fit				

Small → Large (Rated torque / Max. torque)
 Large ← Small (Allowable misalignment)



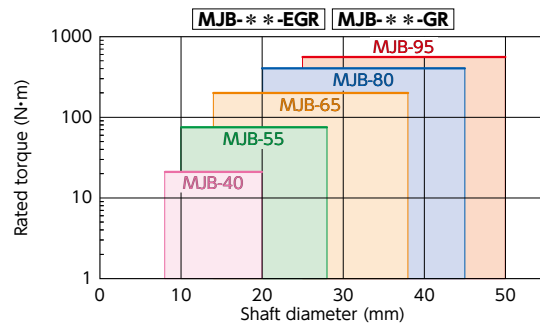
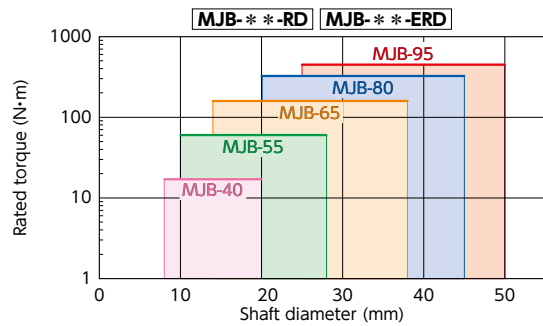
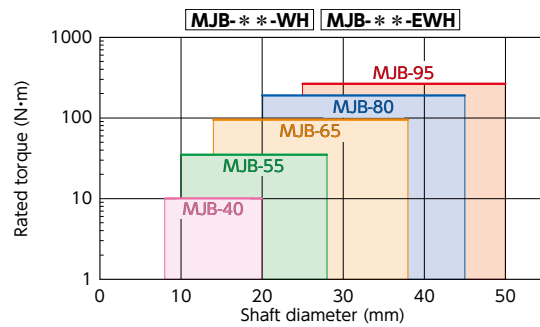
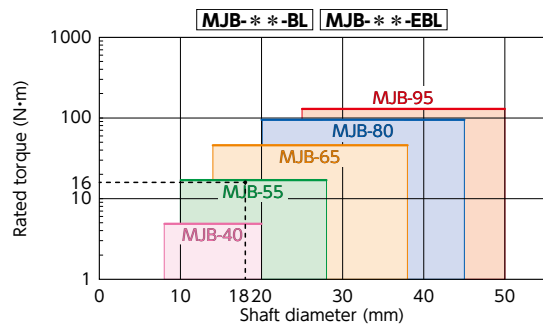
MJB Flexible Couplings - Jaw Type (Bushing)

High torque Vibration absorption Electrical Insulation

Selection

Selection Based on Shaft Diameter and Rated Torque

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



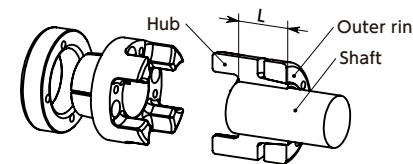
Selection Example

In case of selected parameters of shaft diameter of ϕ 18 and load torque of 16 N·m, the selection size for **MJB-**-BL** **MJB-**-EBL** is **MJB-55-BL** **MJB-55-EBL**

Mounting and Removing

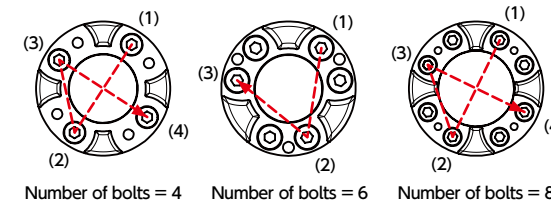
Mounting

- ① Clean up the fitting surfaces of hub, outer ring and shaft.
- ② Apply light oil thinly on the surfaces. However, avoid molybdenum base oil as it seriously reduces the fastening power.
- ③ Insert the shaft to the dimension L. → **Table 1**



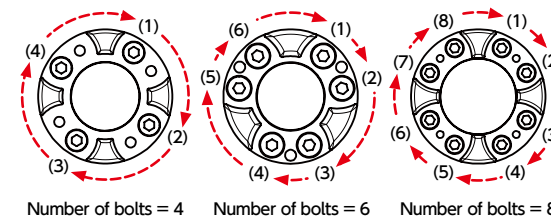
- ④ Tighten the hex socket head bolts with 50% of the tightening torque in **Table 1**, each once, following the sequence in **Fig. 1**.
- ⑤ In the same sequence as in ④, tighten the hex socket head bolts with 100% of the tightening torque in **Table 1**, each once.

Diagram 1 Tighten in diagonal sequence



- ⑥ Tighten all hex socket head cap screws with 100% of the tightening torque in **Table 1**, following the sequence in **Fig. 2**.

Diagram 2 Tighten all bolts



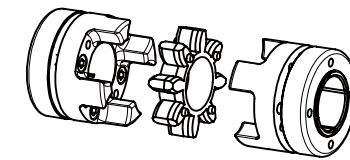
- ⑦ Repeat ⑥ until all hex socket head cap screws are securely fixed.

As a guide, the rotation of a hex socket head screw, when tightened, should be less than 20 degrees.

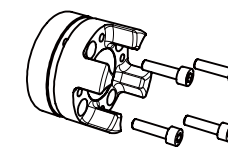
Use a torque wrench to tighten bolts.

Removal

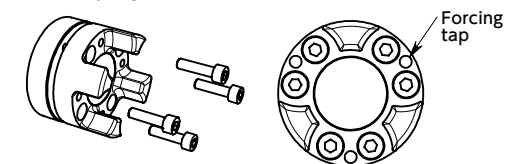
- ① Disassemble the hub and the sleeve.



- ② Confirm that there is no torque or thrust load, then loosen all hex socket head bolts completely and remove them.



- ③ Insert one of the removed bolts in ② to a forcing tap, and tighten little by little, avoiding uneven clamping.



- ④ Repeating ③ will lead to sharply reduced tightening torque.

Remove the coupling from the shaft, as the fastening force from the tapered surface is reduced.

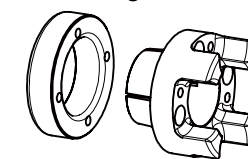


Table 1

Part Number	L	Hex Socket Head Cap Screw		Screw Tightening Torque (N·m)
		Diameter of Thread	Number of Bolts	
MJB-40	25	M4	6	4
MJB-55	30	M5	4	8.5
MJB-65	35	M5	8	8.5
MJB-80	45	M6	8	14
MJB-95	50	M8	8	35