MJB Flexible Coupling - Jaw - type (Bushing)

WEB Selection Tool | WEB CAD Download | High torque | Vibration absorption | Electrical Insulation

Structure

● Bushing type

MJB ➡ P.154

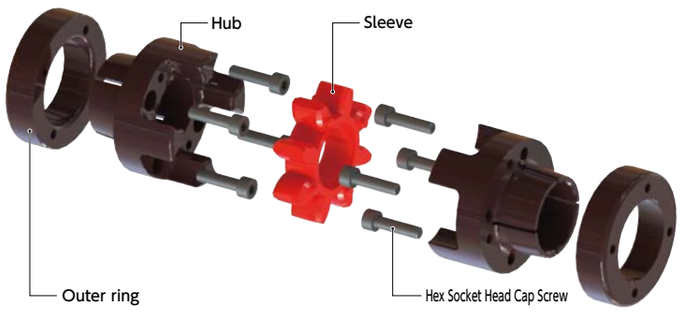
● Sleeve

Outside diameter ϕ40

Tight Fit　　Easy Fit

Outside diameter ϕ55 -ϕ95

Tight Fit　　Easy Fit



● Material/Finish

RoHS Compliant

	MJB
Hub	S45C Ferrosoferric oxide film
Outer ring	S45C Ferrosoferric oxide film
Sleeve	Polyurethane
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

● 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.788	Cleanroom Wash & Packaging ➡ P.792	Change to Stainless Steel Screw ➡ P.790
Please feel free to contact us	Not Available	Not Available

● Applicable motors

	Tight fit	Easy Fit
Servomotor	◎	○
Stepping Motor	◎	◎
General-purpose motor	◎	◎

◎: Excellent ○: Very good

● Property

	Tight fit	Easy Fit
High torque	◎	◎
Allowable Misalignment	○	○
Vibration absorption	◎	◎
Electrical insulation	◎	◎
Assembling	○	◎
Allowable operating temperature	−20℃ to 60℃	−20℃ to 60℃

◎: Excellent ○: Very good

- This is a jaw type flexible coupling.
- This superior high torque transmission is the most appropriate for the spindle of a machine tool.
- Excellent flexibility allows eccentricity, and angular misalignment and 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 can raise the gain of a servomotor, tight fit 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	BL	WH	RD	GR
Easy Fit	EBL	EWH	ERD	EGR

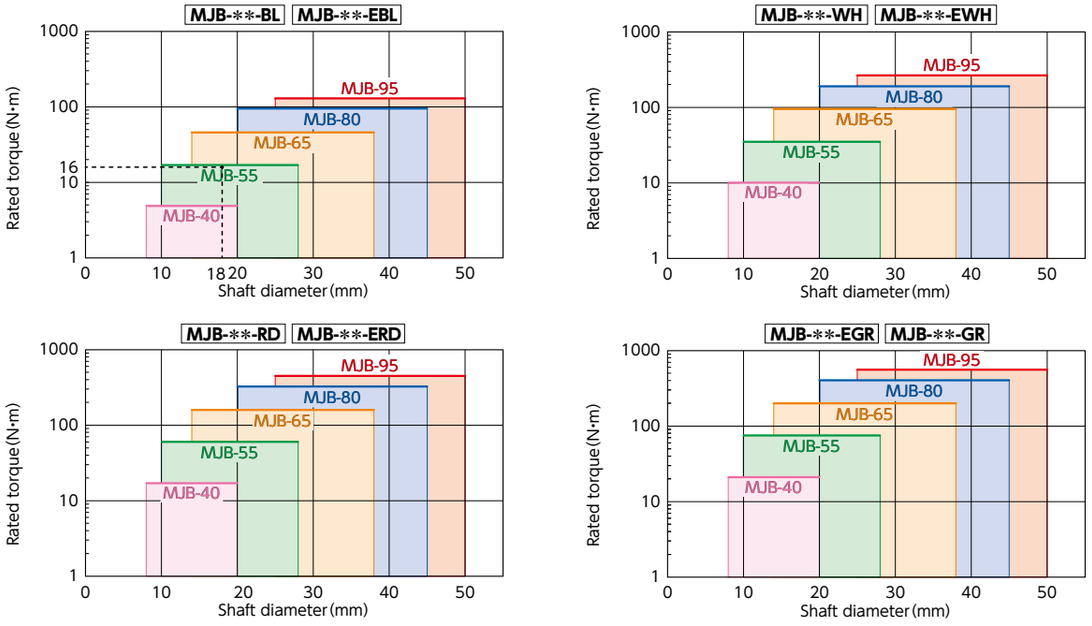
Small ← Rated torque and max. torque → Large

Large ← Allowable Misalignment → Small

Selection

● Selection based on shaft diameter and rated torque

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



● Selection example

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

Additional Keyway at Shaft Hole ➡ P.788	Cleanroom Wash & Packaging ➡ P.792	Change to Stainless Steel Screw ➡ P.790
Please feel free to contact us	Not Available	Not Available

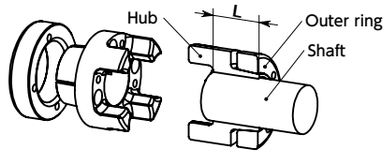
● Mounting / Removing

● Mounting

①Clean up the fitting surfaces of hub, outer ring and shaft.

②Apply light oil thinly on the surfaces. Avoid molybdenum base oil as it reduces the fastening power seriously.

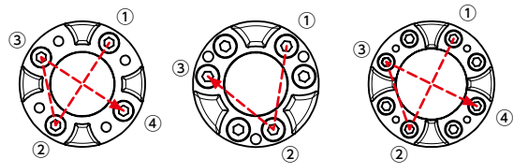
③Insert the shaft to the dimension L. ➡ **Table 1**



④Tighten the hexagon socket head bolts with 50% of the tightening torque in **Table 1**, each for once, following the sequence in **Fig.1**

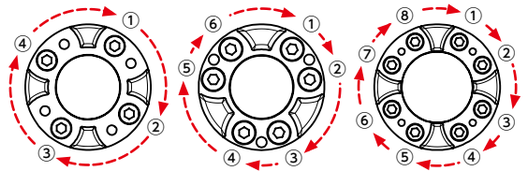
⑤In the same sequence as in④, tighten the hexagon socket head bolts with 100% of the tightening torque in **Table 1**, each for once.

Fig.1 Tighten in diagonal sequence



⑥Tighten all hexagon socket head bolts with the tightening torque in **Table 1**, following the sequence in **Fig.2**

Fig.2 Tighten all bolts



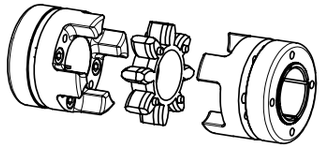
⑦Repeat ⑥until all hexagon socket head bolts get securely fixed.

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

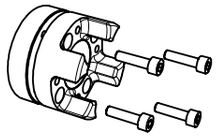
⚠ Use a torque wrench to tighten bolts.

● Removal

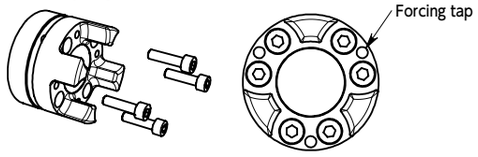
①Disassemble the hub and the sleeve.



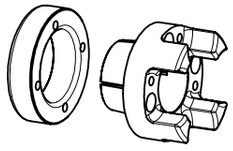
②Confirm that there is no torque or thrust load, then loosen all hexagon socket head bolts completely and remove them.



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



④ Repeating ③ makes the tightening torque will get very small. 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