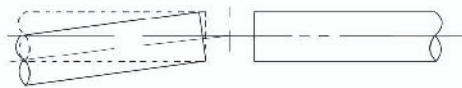# RUBBER  FLEXIBLE

## COUPLING

# RUBBER COUPLING

## ■ Merit and Features

1. Rubber Flex couplings are easy to install and fit. By eliminating most vibration, they also eliminate most noise, improving working conditions and lengthened machine service life. Even under severe conditions they require absolutely no lubrication.
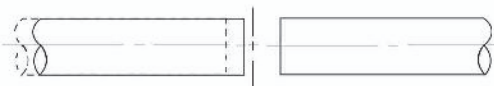2. Declination.



a. Allowable declination of both shaft ($\Delta \theta$) is 6° for any diameter.
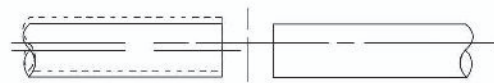
b. Eccentricity.
Allowable eccentricity of both ($\Delta$h) is 0.1% of outside diameter for any size shaft.

c. Clearance Error (End play).
Allowable clearance error of both shaft ($\Delta$d) is 2% of outside diameter for coupling of any size.

3. Since RF coupling are highly elastic, they have improved shock damping to absorb vibration better.
4. As a result, shaft rotation is quieter and vibration almost totally eliminated and shaft rotational torque and torsion angle of coupling become almost completely proportional.
5. They simplifies design especially in case where shaft vibration could pose particular problems.

## ■ Application

1. The place where shock and vibration are serious.
2. The place where angular misalignment is serious.
3. The place where you need electric insulation.
4. The place where you have difficulty in supplying lubricant.
5. The place where you have difficulty in checking and repairing.
6. When you want to protect the important related parts.

## ■ Selection Method of Size

$Jac$ - R F - 1 0 0

→ Size
→ Kinds of Coupling
→ $Jac$ Coupling
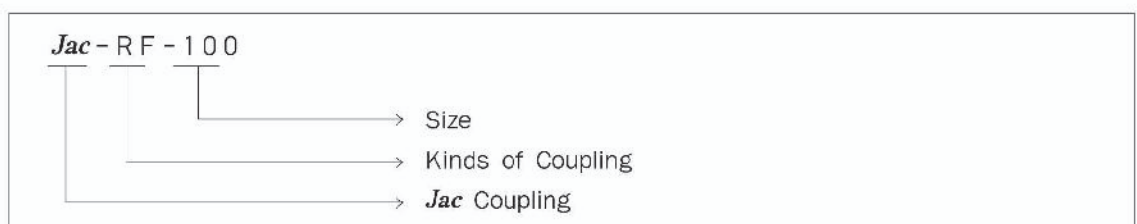
1. Obtain the Torque.
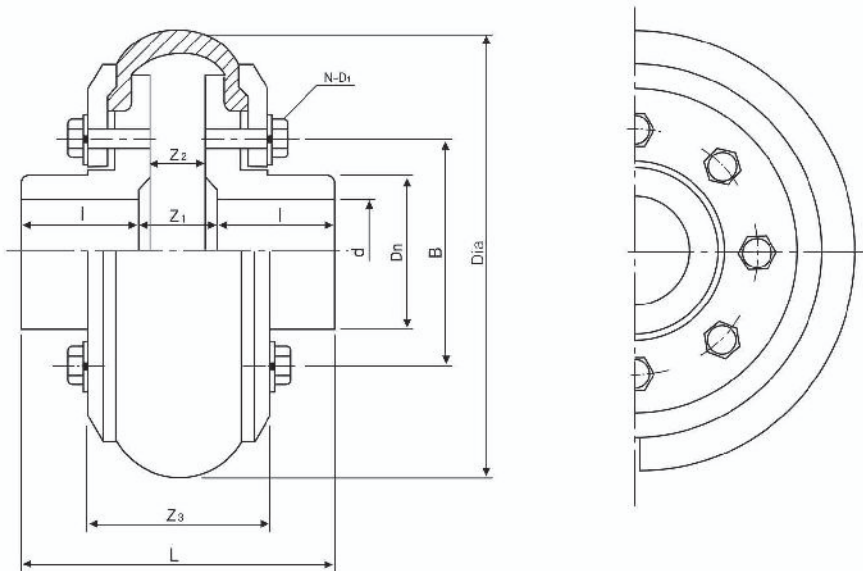
$$T = 973.5 \times \frac{KW}{N} \times K$$

$$T = 716 \times \frac{HP}{N} \times K$$

T = Using Torque(kg · m)

KW(HP) = Transmitted load Service factor.

2. If the tolerable max Shaft dia(mash) indicated by the table is smaller than the required shaft dia, select the next large dia, and the tolerable revolution number of the selected coupling must also be cheked.

## ■ Dimensions



| Size Dia(mm) | Torque Rating (kgf · m) | Max. Speed (r.p.m) | Bore | | Dimensions(mm) | | | | | | | | Weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | Dn | L | l | $Z_1$ | $Z_2$ | $Z_3$ | B | N- $D_1$ | |
| RF100 | 3 | 4,000 | 10 | 22 | 36 | 66 | 26 | 14 | 10 | 40 | 54 | 2×6-M6 | 1.21 |
| RF135 | 8 | 4,000 | 16 | 30 | 48 | 90 | 35 | 20 | 14 | 53 | 70 | 2×6-M8 | 2.87 |
| RF180 | 15 | 3,000 | 23 | 35 | 64 | 120 | 46 | 28 | 20 | 70 | 95 | 2×6-M10 | 6.38 |
| RF210 | 30 | 3,000 | 28 | 50 | 76 | 143 | 54 | 35 | 27 | 83 | 110 | 2×8-M10 | 9.40 |
| RF265 | 75 | 2,000 | 33 | 60 | 95 | 178 | 67 | 44 | 32 | 105 | 140 | 2×8-M12 | 19 |
| RF310 | 125 | 2,000 | 36 | 70 | 112 | 208 | 75 | 58 | 36 | 121 | 165 | 2×8-M12 | 31 |
| RF400 | 275 | 1,600 | 40 | 85 | 145 | 270 | 100 | 70 | 44 | 153 | 210 | 2×8-M16 | 70 |
| RF450 | 500 | 1,250 | 55 | 100 | 165 | 300 | 110 | 80 | 50 | 171 | 240 | 2×8-M20 | 101 |
| RF550 | 1,000 | 1,000 | 90 | 130 | 200 | 365 | 130 | 105 | 53 | 196 | 280 | 2×8-M24 | 170 |
| RF700 | 2,000 | 800 | 100 | 160 | 255 | 460 | 165 | 130 | 70 | 256 | 364 | 2×8-M30 | 358 |

## ■ How to Connect

1. Install flanges over the ends of both shafts, making sure they lock tightly with the keys. To make later installation steps easier, do not tighten bolts securing pressure ring more than three turns.
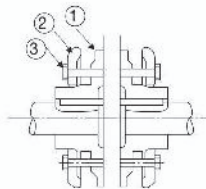
2. Adjust coupling clearance to the specified tolerance. Setting is determined by referring to Z values shown in Tables 1. For long service life, it is important that the Z value is maintained as uniformly as possible around the entire circumference.
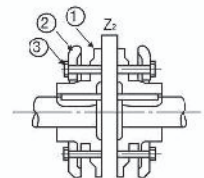
3. The rubber is cut at one point on its circumference and a gap should be left when installing as shown in Fig 3 and as determined in table 1 according to size.
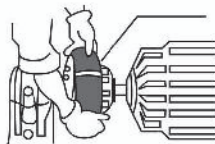
4. Prior to tightening the rubber should be secured by wrapping a fiber rope or cloth around its circumference to hold it in place as shown in Fig. Rubber and flanges should contact each other as uniformly as possible around the entire circumference. To align, tab the rubber with a plastic hammer or other instrument which will not cause abrasions or damage.
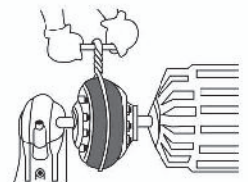
5. Tighten pressure ring with bolts. Tighten bolts in a crisscross pattern for uniform compression of the rubber.

![](Jac coupling logo)
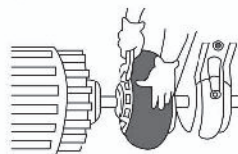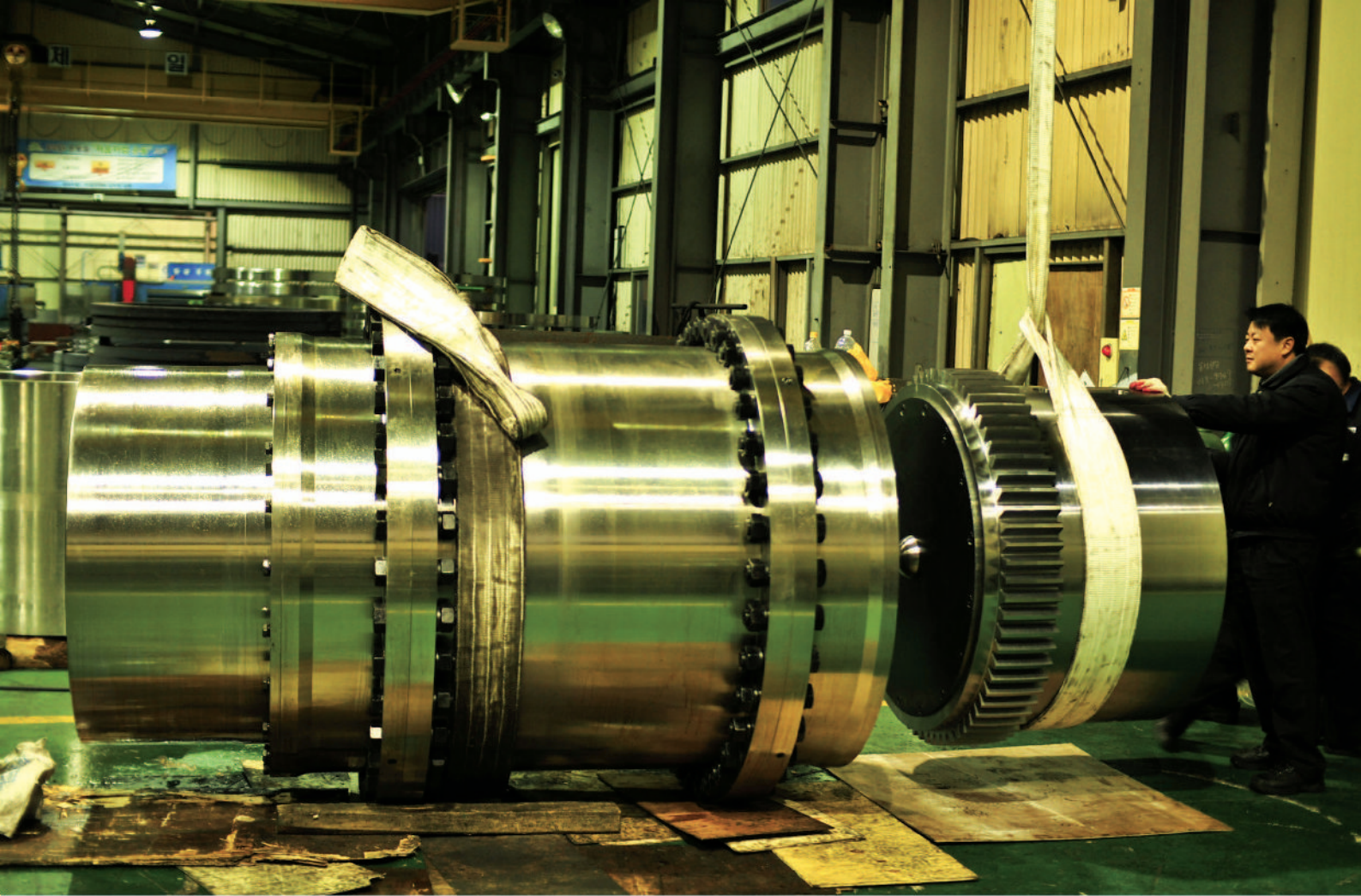
**Jac coupling**

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