

# COUPLINGS

## Masterflex

Flexible Drive Shaft *Any Length*

With any flexible shaft assembly there are four main criteria to selecting the most appropriate assembly for your application :-

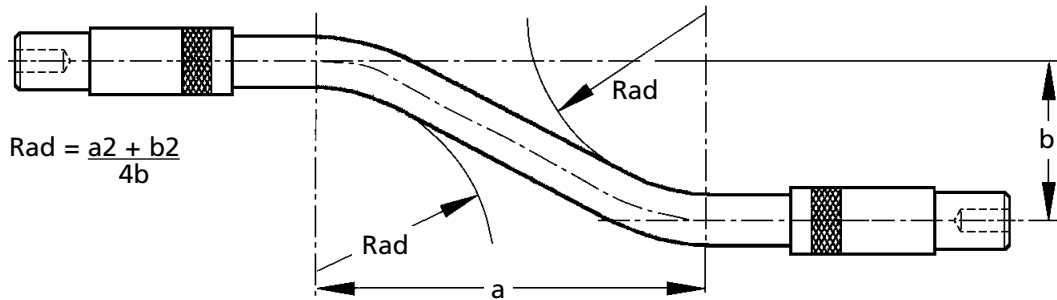
**Direction of rotation; flexibility required; speed (rpm); torque rating.**

If the above four criteria suffice, it is also worth considering other factors and influences such as the amount of bends, duty cycle, torsional deflection required (or maximum allowable) and environment.

### Flexibility

The flexible core has a layer of grease for lubrication in operations of continuous usage eg. an 8 hour day. We recommend you regrease and check the flexible centre every 3 months. The knurled ends unscrew to allow the shaft to come out. Re-seal after inspection

Spare flexible centres can be purchased to replace broken or worn examples.



### Speed:

When considering the speed of the shaft use the maximum rotational speed (rpm) in making your selection. If the speed is less than 200 rpm, or the duty cycle is low and the speed is less than 1000 rpm, then a bi-directional shaft may be selected (**B Type**) if preferred - usually where higher torsional rigidity is required.

### Torque:

Use the following formula to estimate the running torque for your application. Consideration must also be given to the stall and start-up torque. Use the lowest running speed to determine the torque!

$$\text{Torque (Nm)} = \frac{P(\text{kW}) \times 9550}{\text{rpm}}$$

### Direction of Rotation

Direction of rotation is determined by viewing the shaft from behind the driving end towards the driven end. Rotation is either Clockwise (**C**), Anti-clockwise (**A**) or Bi-directional (**B**). It is important to correctly identify the direction of rotation as uni-directional shafts are manufactured to suit the selected direction.