

FLEXIBLE SHAFT COUPLERS

What is this ?



This product is a **flexible shaft coupling**, also commonly known as a **beam coupling**.

Here's a detailed breakdown of its key features and function:

- **Function:** Its primary purpose is to connect two shafts together, transmitting rotational motion and torque from one shaft to the other.
- **Flexibility:** The defining feature of this type of coupling is its "flexible" nature. The slots or "beams" cut into the single piece of material allow it to flex and compensate for minor shaft misalignments, including:
 - **Angular misalignment:** When the shafts are not perfectly parallel.
 - **Parallel misalignment:** When the shafts are offset from each other.
 - **Axial misalignment:** When the shafts move slightly in and out along their axis.
- **Construction:** It is a single-piece component, often machined from a solid block of aluminum or stainless steel. This monolithic design eliminates the need for separate hubs and flexible elements, making it simple and lightweight.
- **Common Applications:** Flexible shaft couplings are widely used in applications that require high precision and low inertia. They are a staple in:
 - CNC machines
 - 3D printers
 - Robotics
 - Servo and stepper motor systems
 - Encoders and other measurement devices

Eliminate vibration and shaft misalignment.

The key to smooth, high-precision motion for your robotics and CNC projects