C Face connections are great for compact drive arrangements and simple installation when connecting motors to clutches, clutch brakes or brakes, however there are some issues that can cause serious problems. With a C Face connection the motor shaft typically slides into a hollow quill in the brake or clutch brake. A key and keyway are used to prevent rotation between the shaft and quill. This means that the fit must be loose enough for simple installation or removal.

The problem is with a clutch brake there is a torque reversal for every start and stop. When connecting this type of application it is typically recommended that a tight fit between components is provided to provide holding power around the shaft and eliminating transferring the torque exclusively through the key.

To solve this problem Force Control Industries, Inc. designed the Long coupled C Face for the Posidyne C Face Clutch Brakes. This design allows an extended shaft on both the motor and clutch brake input rather than a quill. This way a coupling can be used with press fit or shrink fit hubs on the shaft providing a 360 degree connecting and reducing the load on the key. The longer housing with C Face connection allows room for the extended shaft on the clutch brake and the coupling.

Although this makes the drive package longer, the reduced shaft damage, and significantly longer life quickly justifies the space used.

When designing high cycle applications (Posidyne clutch brakes can cycle continuously up to 300 cycles per minute) contact our sales engineers for assistance selecting the proper clutch brake drive package that will provide years of trouble free service.