

# Torque Limiters

## Challenge Torque Limiter

Prevent Machine Damage and Eliminate Costly Down Time.

The Challenge Torque limiter is a mechanical protective device that limits the transmitted torque in a drive system by slipping when the torque demand exceeds a preset value. This excessive torque is normally a result of shock loads, overloads, or machine jams. The torque limiter automatically re-engages when the overload is removed. No manual re-setting is required. Challenge Torque Limiters prevent machine damage, thus eliminating costly downtime.

Challenge Torque Limiters utilize spring loaded friction discs for their operation and slip torque is preset by adjustment of the spring force using the adjustment nut or bolts.

Challenge Torque Limiters can be used with platewheel sprockets, gears, sheaves, or flange plates as the center member. This center member is clamped between two friction discs.

Because the Challenge Torque Limiter ratings are realistic and consistent with optimum spring loads, they permit longer slip time, maintain re-engagement at preset torque and provide long lasting machine protection. This is an important advantage over the shear-pin mechanism which only serves as a one-shot remedy.



### Sizes 50-1 and 50-2

- Single Nut Adjustment
- Lock Washer to prevent the nut from loosening



### Sizes 65-1 and 65-2 Sizes 89-1 and 89-2

- Single Nut Adjustment
- Lock Washer to prevent the nut from loosening



### Sizes 127-1 and 127-2 Sizes 178-1 and 178-2

- Three Bolts Adjustment
- Torque preset by the three bolts (an adjustment nut to fix a pilot plate in place)

## Designation

**89 - 1**

Number of spring discs  
Size