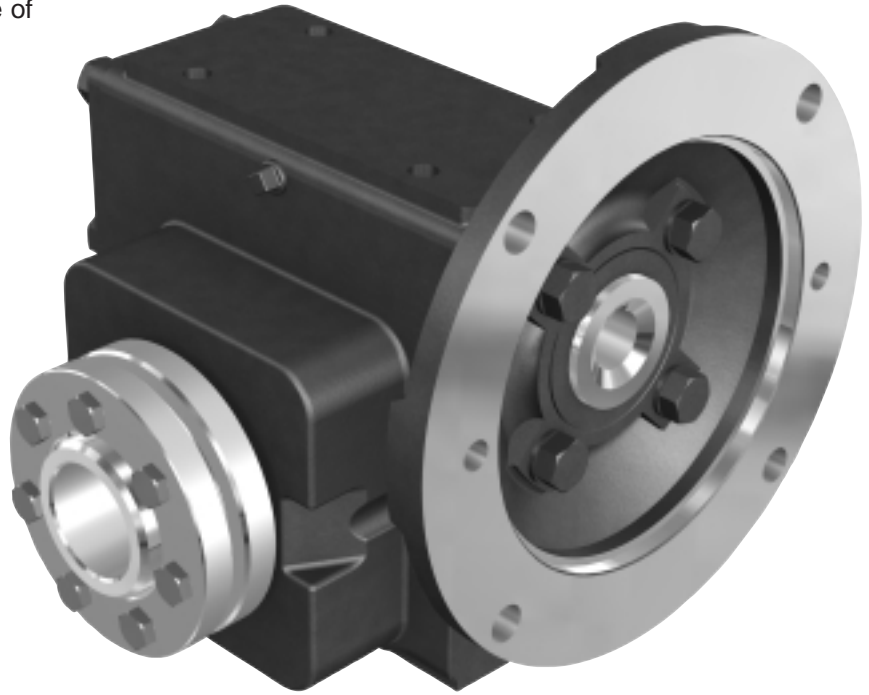


# Shaft Locking Devices

## SHRINK DISK

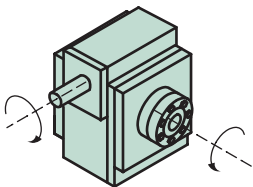
SE Encore hollow output shaft worm gear speed reducers can be equipped with a wide range of shrink disc mounting systems. Shrink disc mounting systems provide a high strength keyless connection between the reducer output shaft and the driven machine shaft. They convert the mechanical/axial force of the bolts to a compressive force, tightening the reducer hollow shaft onto the driven shaft. This “shrinking” creates a “zero” backlash frictional connection between the reducer and the driven shaft that eliminates stress concentrations, coupling backlash, and vulnerability of fatigue failure that is inherent in a keyed connection. Shrink disc mounting systems simplify installation and removal because the high level of surface contact greatly reduces the possibility of fretting corrosion. Additionally, they provide a superior level of torque transmission over a traditional keyed interface. They can be supplied with a key or keyway, mounting directly to the driven shaft, using B-LOC® or another brand.



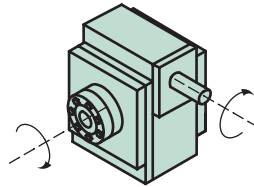
SE ENCORE WITH SHRINK DISK

## AVAILABLE SHAFT ARRANGEMENTS AND RELATIVE SHAFT ROTATIONS

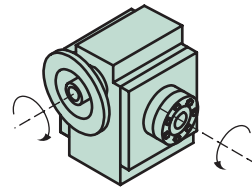
XDSS WITH SHRINK DISK



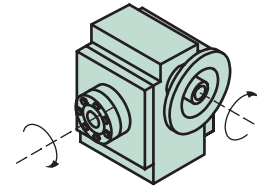
XDSS WITH SHRINK DISK



MDSS WITH SHRINK DISK

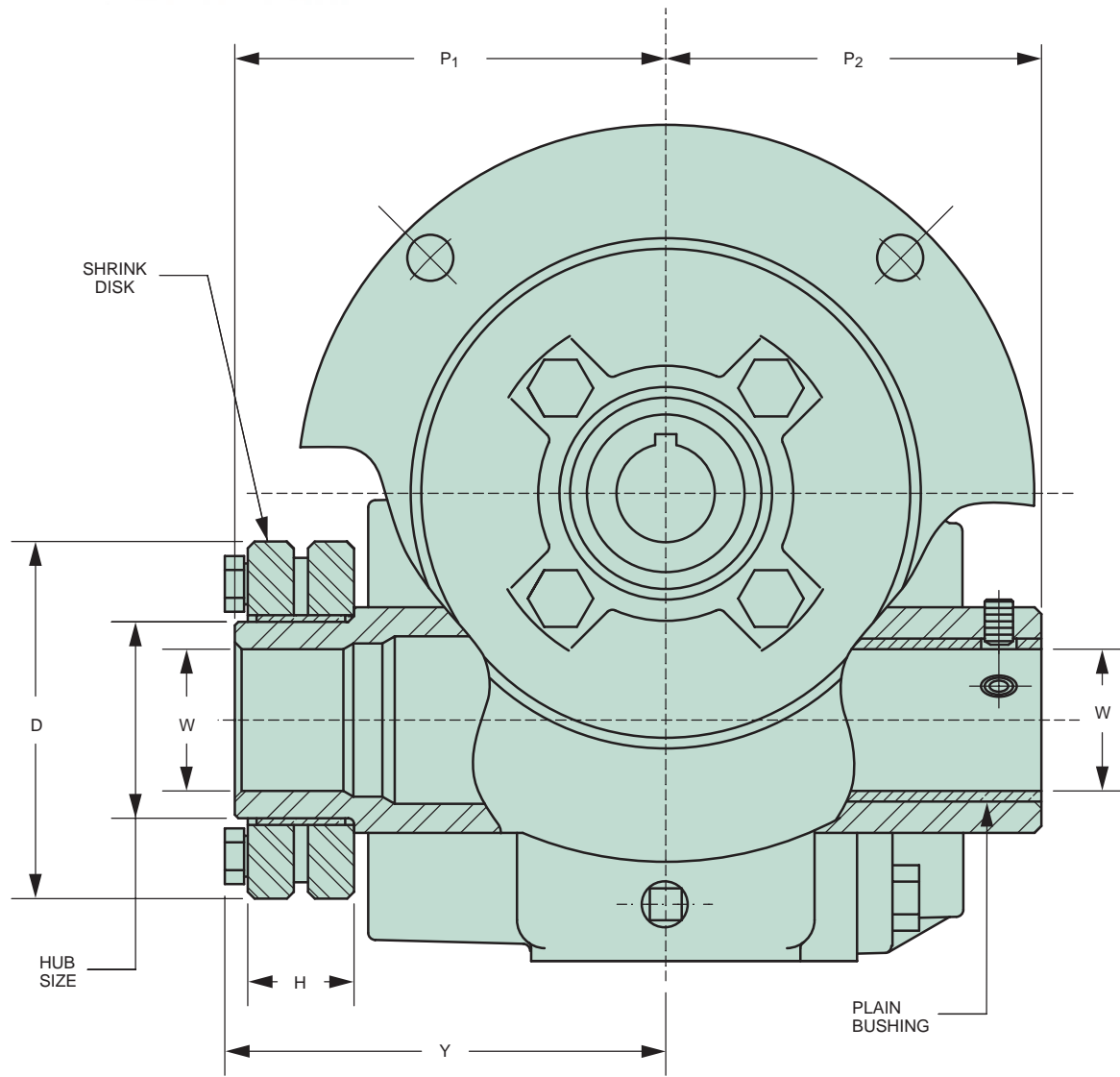


MDSS WITH SHRINK DISK



B-Loc® is a registered trademark of Fenner U.S., Incorporated.

# Shrink Disks



| UNIT SIZE | W<br>STANDARD<br>BORES           | SHRINK<br>DISK<br>W/S P.N. | SD-10<br>SHRINK<br>DISK SIZE | SCREW<br>SIZE | SHAFT<br>HUB SIZE<br>+0.002 | D    | H    | P <sub>1</sub> | P <sub>2</sub> | Y<br>MAX |
|-----------|----------------------------------|----------------------------|------------------------------|---------------|-----------------------------|------|------|----------------|----------------|----------|
| E17       | .750                             | 52209                      | 30-10                        | M5X18         | 1.181                       | 2.36 | .79  | 3.47           | 3.13           | 3.50     |
| E20       | 1.125<br>1.188<br>1.250          | 52210                      | 44-10                        | M6X20         | 1.732                       | 3.15 | .94  | 3.81           | 3.31           | 3.85     |
| E24       | 1.375<br>1.438                   | 52211                      | 50-10                        | M6X22         | 1.969                       | 3.54 | 1.02 | 4.01           | 3.44           | 4.06     |
| E26       | 1.375<br>1.438                   | 52211                      | 50-10                        | M6X22         | 1.969                       | 3.54 | 1.02 | 4.08           | 3.50           | 4.12     |
| E30       | 1.500<br>1.625<br>1.688<br>1.750 | 52213                      | 55-10                        | M6X25         | 2.165                       | 3.94 | 1.14 | 4.38           | 3.69           | 4.24     |
| E35       | 1.875<br>1.938<br>2.000          | 52214                      | 68-10                        | M6X25         | 2.677                       | 4.53 | 1.14 | 4.78           | 4.13           | 4.80     |
| E43       | 2.438<br>2.500                   | 52215                      | 80-10                        | M8X25         | 3.150                       | 5.71 | 1.22 | 5.12           | 4.38           | 5.20     |

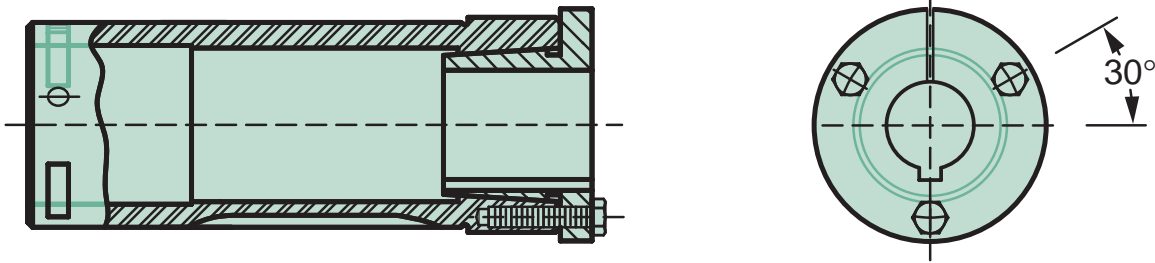
Modified



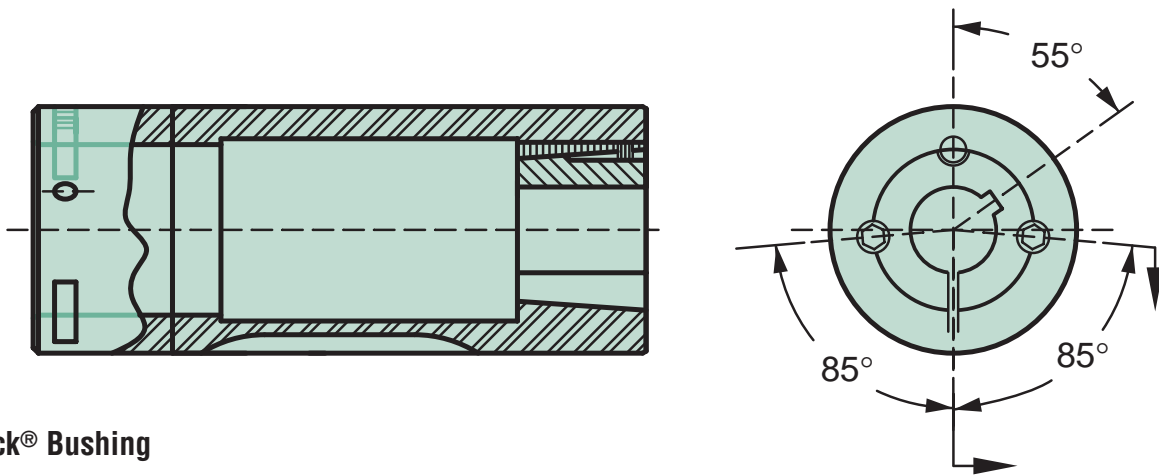
# Tapered and TAPER-LOCK® Bushings

Two common types of tapered bushings are QD® and Taper-Lock®. Both use tapered wedging to lock onto the shaft. The main difference is that QD bushings have a flange around the outside diameter, while taper lock bushings have straight sides on the outside diameter.

QD bushings are flanged with an internal keyway and are completely split, allowing easy assembly & disassembly. The tapered surface improves grip and minimizes axial movement. Taper-Lock bushings, with their straight sides, use an internal hex head cap screw to drive the bushing into the bore of the hollow shaft.



QD® Type (Quick Disconnect) Bushing



Taper-Lock® Bushing

Modified