

SureGrip™ Valve Couplings

Introduction:

Flowserve SureGrip valve couplings eliminate deadband between actuators and valves (See Figure 1). Proprietary tolerances and a unique clamping mechanism assure optimal performance on critical valve control applications. Suggested applications include high performance rotary control valves, v-ported plug and ball valves, and any automated valve using Flowserve's XL90 High Performance or Logix Digital Positioners.

Materials of Construction

SureGrip couplings feature 300 series stainless steel bodies, powder-coated steel clamp rings and stainless steel fasteners. All stainless steel options are available.



Figure 1

Installation Instructions

1. Install mounting bracket to actuator using included fasteners. Tighten fasteners finger-tight only at this time as illustrated in Figure 2.
2. Loosen clamp ring screws and remove clamp from coupling body.



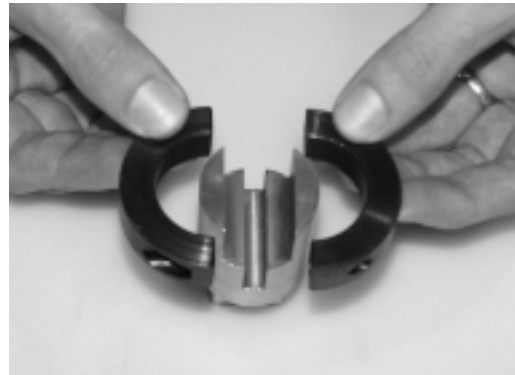
Figure 2

3. Insert SureGrip coupling body into actuator shaft. Supporting actuator shaft at opposite end, gently tap SureGrip coupling into actuator pinion using a rubber mallet (See Figure 3). Continue tapping until coupling shoulder rests on actuator shaft. SureGrip's design will allow it to self-align as it is driven in place.

NOTE: Depending on actuator tolerances, SureGrip may slip into shaft. This is acceptable as long as there is no noticeable rotary play.

**Figure 3**

4. Making sure actuator rotation matches desired valve rotation, place actuator, bracket and coupling assembly onto valve, aligning coupling with valve shaft. Insert fasteners included in mounting kit, securing bracket to valve. Tighten fasteners finger-tight only at this time.
5. Coat clamp ring fasteners with removable thread sealant (such as Loctite 242) and install clamp ring on coupling body (See Figure 4). The clamp ring's bottom surface should be flush with coupling's bottom surface. Make sure clamp ring is aligned to coupling flats as shown. Tighten fasteners just enough to keep ring from slipping at this time.
6. Stroke actuator/valve assembly several times, aligning actuator shaft, coupling, and valve shaft. Tighten clamp ring fasteners to lock coupling on valve shaft.
7. Stroke actuator/valve assembly several more times; then tighten all bracket fasteners.
8. Stroke actuator/valve assembly to assure no binding exists in the coupling. If binding is detected, loosen all fasteners and repeat steps 6 through 8.

**Figure 4**