60 Series Ball Valves Mounting Instructions for 4-bolt 62 and 63 Series and 8-bolt S62 and S63 Series Valves to 140 Series Actuators



These instructions do not apply to steel 8-bolt assemblies.

Mounting Bracket Kit Contents





Mounting bracket



Coupling

Mounting bracket 62 Series



screws (2)

Lock-tab washer

Coupling 316 SS hex nut (2) 4-bolt kit



Grade 8 carbon steel bolts (2) 4-bolt kit 62 series: #10-32 \times 1 5/8 in. 63 series #1/4-20 \times 2 1/4 in.



Roll pin Not used

with this

instruction.

316 SS bolts (4) S62 kit #10-32 × 0.605 in.

Actuator Kit Contents



Electric actuator

 $\begin{array}{c} 316 \text{ SS bolts (2)} \\ 4\text{-bolt kit} \\ 62 \text{ series: } \texttt{#10-32} \times \texttt{1} \texttt{5/8 in.} \\ 63 \text{ series } \texttt{\#1/4-20} \times \texttt{2} \texttt{ 1/4 in.} \end{array}$

Tools Required

Tool	Size	Component		
Pliers	-	Lock tab washer		
Hex adapter	9/64 in.	Coupling screws Mounting bracket screws		
Hex Key	5/32 in.	62 series carbon steel bolts		
Wrench	5/16 in.	62 series stainless steel bolts		
R. C.	7/16 in.	63 series bolts		
Socket	5/16 in.	62 series		
	3/8 in.	body bolts		
Crow's foot	7/16 in.	62 series stem nut 63 series body bolts		
	9/16 in.	63 series stem nut		
Torque wrench	Capable of 50 in·lb (5.7 N·m)	Stem nut		
	Capable of 150 in·lb (17.0 N·m)	Body bolts		





Discard

Before removing a valve from the system for service, you must

- depressurize system
- cycle the valve
- purge the valve.

A WARNING

Residual system media may be left in the valve.

Actuated assemblies must be properly aligned and supported. Improper alignment or inadequate support of the actuated assembly may result in shorter valve life.

- ▲ Do not use these actuators on vented ball valves. The drive shaft of these actuators rotates in one direction.
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 m \Lambda$ Not CE marked.

Actuator Preparation

- 1. 3-way only: Verify the position of the paint dot on the actuator shaft. It should be located toward the **conduit connection**.
- 2. Remove the four **mounting bracket screws** from the **actuator**.



3. Place the **mounting bracket** on the **actuator** and turn it until the **wall mount tab** is positioned away from the **front** of the actuator. Reinstall the four **mounting bracket screws** and tighten to 20 to 30 in.·lb (2.3 to 3.4 N·m).



Valve Preparation

- 4. Turn the **handle** to orient the valve in the fully open or fully closed position.
- 5. Remove the parts from the valve as shown. Set aside the **grounding spring**.



6. Remove the **lower stem nut** and place the **lock-tab washer** on the valve stem, tabs facing up.



 Replace the lower stem nut and tighten to 62, S62 series: 25 in.·lb (2.8 N·m)

63, S63 series: 50 in.·lb (5.7 N·m)

Note: It may be necessary to hold the stem stationary with a wrench.

8. Bend the **tabs** of the **lock-tab washer** around the flats of the **lower stem nut**. If the tabs and flats do not line up, tighten the stem nut until they do (1/6 turn maximum).



9. Thread the **grounding spring** over the stem nut until it contacts the **valve body**.



Mounting Instructions

10. For 4-bolt assemblies, loosen all of the **body bolts** and remove the top two.



4-bolt assembly

For 8-bolt assemblies, loosen all of the **body bolts** and remove the top four.

Note: Be careful to maintain **flange-to-body** contact in the 8-bolt assemblies. If seal is broken, the Grafoil® flange seal must be replaced.



- 11. Place the **coupling** on the valve stem with the **cutaway slots** away from the valve. Install the two **coupling screws** into the coupling and tighten finger-tight.
 - Note: It will be necessary to hold the coupling in place until the valve assembly is positioned on the actuator.



- 12. Position the valve in the mounting bracket, aligning the valve body **bolt holes** with those in the mounting bracket, enclosing the actuator roll pin with the coupling cutaway slots.
 - Note: It may be necessary to spread the **bracket arms** slightly to position the valve.



13. 4-bolt assemblies: if the valve is assembled with

Studs - use the 316 SS bolts and hex nuts supplied.

Grade 8 carbon steel bolts (marked on head with six evenly spaced lines) - use the two longer Grade 8 bolts supplied.

304/316 SS bolts (marked on head with B8 or B8M) - use the 316 SS bolts supplied.

Tighten the bolts finger-tight.



8-bolt assemblies:

S62 series - use the 316 SS bolts supplied. S63 series - reinstall the original bolts. Tighten the bolts finger-tight.



14. Verify the grounding spring contacts both the valve body and the coupling after assembly and that the actuator roll pin is enclosed by the coupling cutaway slots. 15. Torque the body bolts in the alphabetical sequence shown, to the value listed in the "1st" column of the table below. Repeat the sequence for the 2nd, 3rd, 4th, and 5th torques.



16. Position the coupling against the roll pin and tighten the cap screws to 40 in. lbs (4.5 N·m).

Note: Keep the coupling as level as possible without it touching the stem nut.



17. Test the product prior to reinstallation in system.

			Torque, in. lb (N·m)				
Series	Body Material	Fastener Material	1st pass	2nd pass	3rd pass	4th pass	5th pass
62	Carbon steel or stainless steel	Carbon steel or stainless steel	5 (0.57)	10 (1.1)	20 (2.3)	40 (4.5)	40 (4.5)
S62	Stainless steel	Stainless steel	5 (0.57)	10 (1.1)	20 (2.3)	40 (4.5)	40 (4.5)
62	Brass	Carbon steel	5 (0.57)	10 (1.1)	20 (2.3)	30 (3.4)	30 (3.4)
63	Carbon steel or stainless steel	Carbon steel or stainless steel	10 (1.1)	20 (2.3)	40 (4.5)	100 (11.3)	100 (11.3)
S63	Stainless steel	Stainless steel	10 (1.1)	20 (2.3)	40 (4.5)	100 (11.3)	100 (11.3)
63	Brass	Carbon steel	10 (1.1)	20 (2.3)	40 (4.5)	60 (6.8)	60 (6.8)