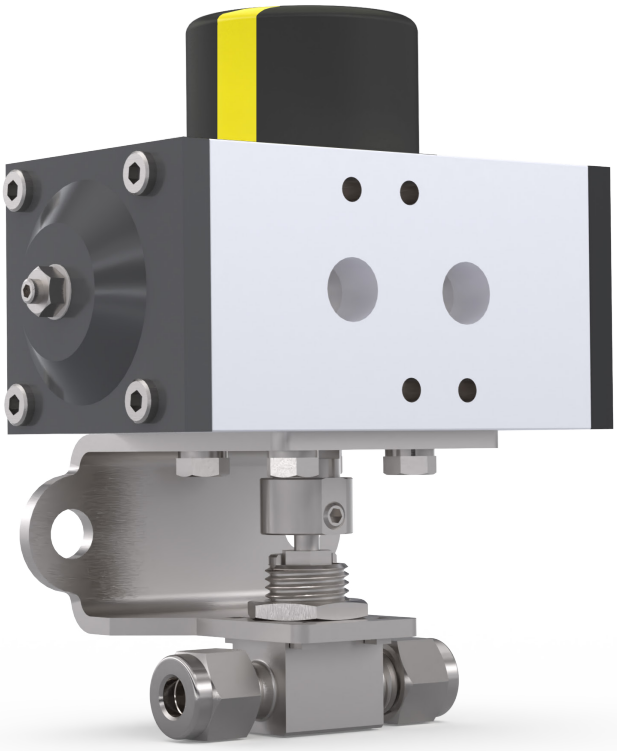
Ball Valve Mounting Bracket Kit Installation Instructions

This document shows how to install an ISO 5211 dimensionally compliant mounting bracket and coupling to the following FloLok ball valves:

- EB series (all)
- FB valves (all)
- TB series (all)



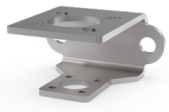
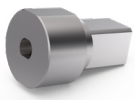
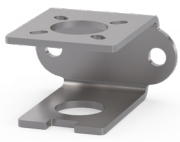
The valve shown is a EB series ball valve

WARNING
Before removing any installed valve you must:
- **Depressurize the system**
- **Cycle the valve**
- **Purge the valve**

CAUTION
You must verify the desired flow patterns after these assembly steps are completed.

CAUTION
Actuated assemblies must be properly aligned and supported. Improper alignment or inadequate support of the actuated assembly may result in leakage or premature valve failure.

Bracket Kit Contents

Mounting Bracket	Coupling	Coupling Set Screw	Lock Washers	Hex Head Cap Screws	Mounting Bracket (TB Only)	Retaining Bracket (TB Only)
						

Tool Requirements

Open-End Extension	
Hex Bit or Wrench	
	
Torque Wrench	 capable of applying up to 400 in.·lb (45.2 N·m, 46 cm·kg)

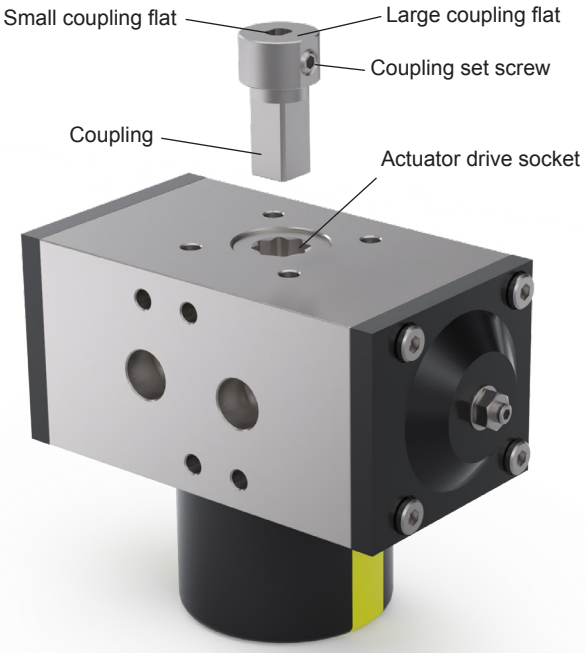
Valve Series/Size	Panel Nut	Coupling Set Screw	Handle Set Screw
	Open-End Extension	Hex Bit	Hex Wrench
EB41G, EB42G	3/4 in.	5/64 in.	5/64 in.
EB43G	1 in.	3/32 in.	3/32 in.
EB44G	1 1/4 in.	1/8 in.	1/8 in.
EB45G	1 5/8 in.	5/32 in.	5/32 in.
FB36	1 in.	3/32 in.	3/32 in.
FB38	1 5/8 in.	5/32 in.	5/32 in.
TB83	1 1/8 in.	3/32 in.	3/32 in.

ISO 5211 Flange Size	Hex Head Cap Screw Size	
	Metric	Fractional
F03, F04	8 mm	5/16 in.
F05	10 mm	7/16 in.
F07	13 mm	1/2 in.

Actuator Preparation

EB Series FB Series	Align the coupling flats to match valve stem flats so the coupling set screw will contact the larger stem flat. (See Valve Preparation.)
TB Series	Align the coupling set screw with the valve stem hole. (See valve preperation)

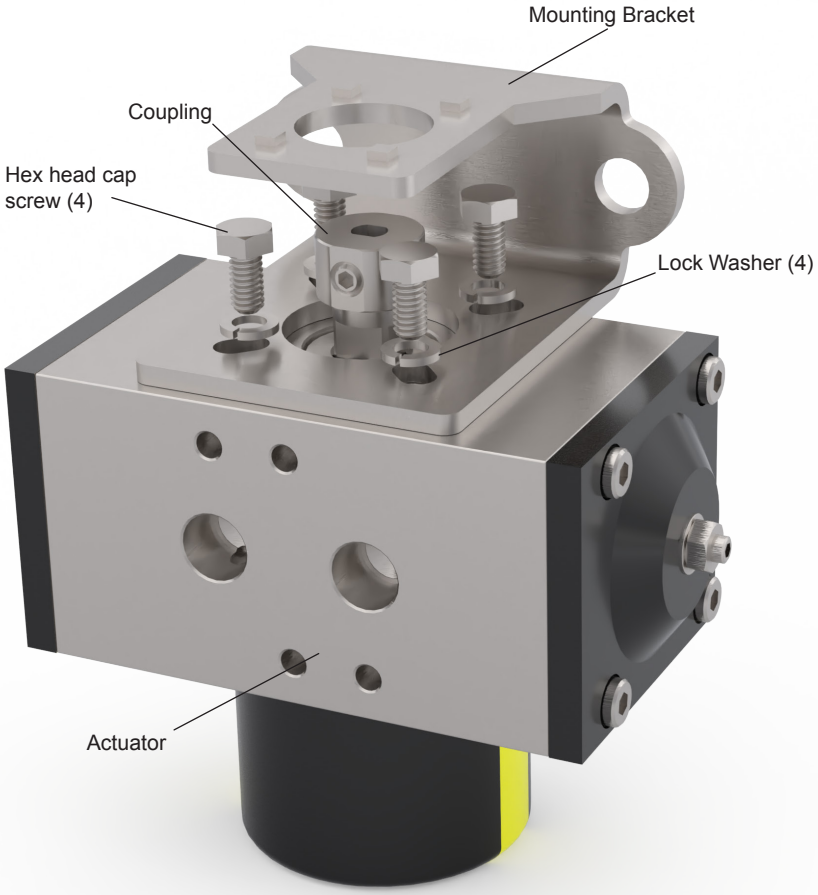
Note: Coupling orientation shown is an example. The valve flow pattern will determine actual coupling orientation.



1. Orient the coupling in the desired position and insert into the actuator drive socket. Verify the **coupling** is in the proper position to maintain desired flow pattern.

2. Place **mounting bracket** on the actuator and attach the **mounting bracket** to the actuator with (4) **Lock washers** and (4) **Hex head cap screws.** Tighten screws to the torque shown below.

ISO 5211 Flange Size	Torque Required		
	in.·lb	N·m	cm·kg
F03, F04	40	4.5	46
F05	75	8.5	86
F07	125	14.1	144

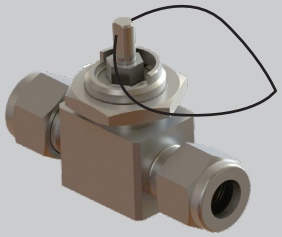


Valve Preparation

1. Put valve in the desired position. Loosen set screw and remove handle from valve.
2. Verify the orientation of the stem flats / hole for insertion into coupling. Visually check valve port(s).

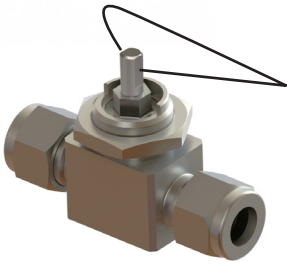
2-way valves in open position

- EB series
- FB series



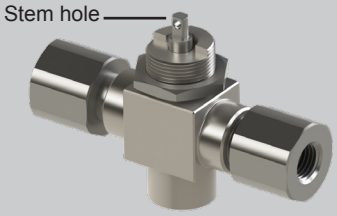
2-way valves in closed position

- EB series
- FB series



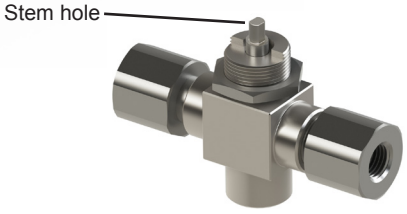
2-way valve in open position

•TB series



2-way valve in closed position

• TB series

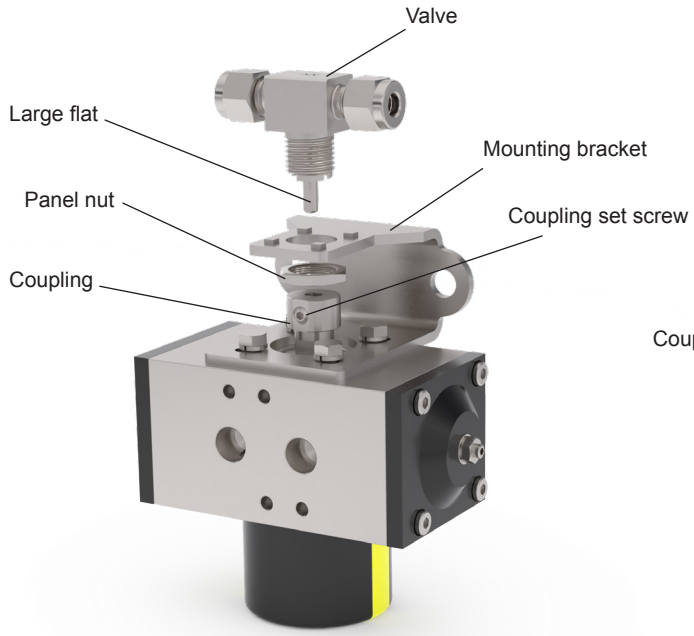


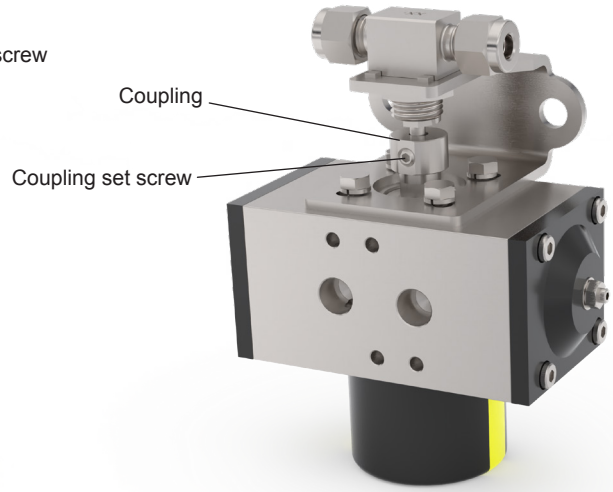
Mounting Instructions

1. Unthread the panel nut from the valve.
2. Place panel nut over the coupling.
3. Insert the valve through the mounting bracket, panel nut, and coupling. Loosen coupling set screw if necessary.
4. Verify desired flow pattern.
5. Thread the panel nut onto the valve and tighten to the torque shown in table.
6. **EB series and FB series:** Slide coupling down to fully engage stem flats. No flat should be visible when fully engaged.
   TB series: Slide the coupling down to engage the stem flats. Align set screw with set screw recess.
7. Tighten the coupling set screw to the torque shown in the table.
8. Test for proper valve operation by applying air pressure as specified by the actuator manufacturer.

Valve Series/Size	Torque Required		
	in.·lb	N·m	cm·kg
EB41G, EB42G	50	5.7	58
EB43G	150	17	173
EB44G	250	28.3	288
EB45G	400	45.2	461
FB36	150	17	173
FB38	400	45.2	461
TB83	100	11.3	115

Valve Series/Size	Torque Required		
	in.·lb	N·m	cm·kg
EB41G, EB42G	40	4.5	46
EB43G	100	11.3	115
EB44G	100	11.3	115
EB45G	200	22.6	230
FB36	100	11.3	115
FB38	200	22.6	230
TB83	15	1.7	17





TB Only