

Technical Guidance



Bolt Tightening Sequence

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Bolt Tightening Sequence

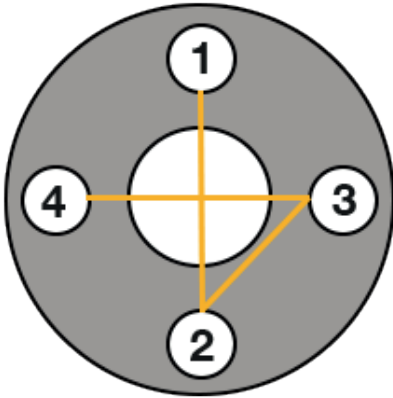
To achieve a new flange connection that is leak-free, there are a number of different things to consider, one such being the bolt tightening procedure during installation.

All components must be selected to achieve the desired seal and must be suitable for the system media, temperature and pressures. With consideration given to the flange material themselves and any risk of the effects of corrosion.

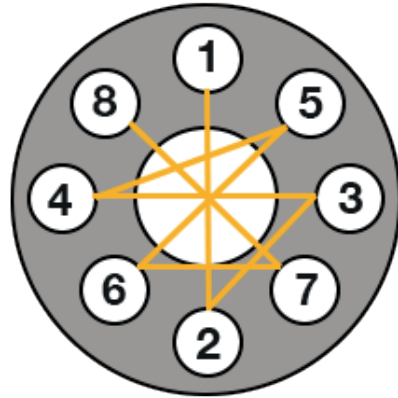
Installation

1. Make sure the flange face is clean and free from any defects (burrs, dents etc.)
2. Bolts must be inspected for damage and corrosion, and either cleaned or replaced.
3. If lubrication is to be used then this must be applied to the full length of the threads and the adjacent surface of the nuts and washer.
4. Check for flange alignment.
5. Ensure the gasket is not damaged prior to installation and when installed is properly centred on the flange. **DO NOT RESUSE GASKETS.**
6. Ensure the bolt lengths allow for a minimum of 2-3 threads protruding beyond the top of the nut when tightened.
7. Bolts must be tightened according to the below sequence options
 - a. Assemble bolts hand tight (maximum 30% of final tightening torque) as per below cross pattern sequences.
 - b. Tighten the bolts to take up pressure on the gasket (maximum 60% of final tightening torque) as per below cross pattern sequences.
 - c. Tighten the bolts to fully tight (100% of the final tightening torque) as per below cross pattern sequences.
 - d. Check all bolts are fully tight, this can be done as per cross pattern sequence or in a circular pattern.

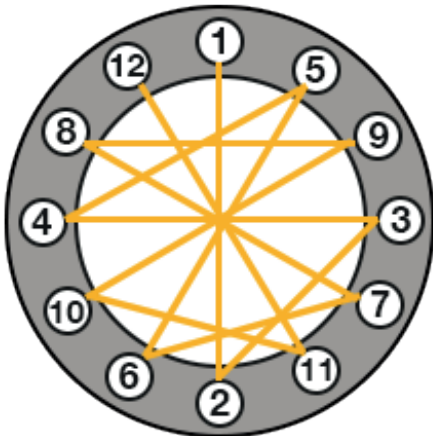
4 BOLTS



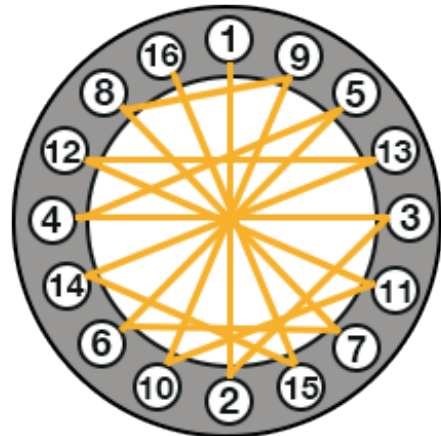
8 BOLTS



12 BOLTS



16 BOLTS



20 BOLTS



24 BOLTS





About Albion Valves (UK) Ltd

Albion has been supplying valves and fittings to the building services and industrial markets for the past 40 years.

Albion was created with the sole purpose of providing quality products at an affordable price. With a growing reputation for quality and reliability, Albion is now an established brand providing the industry with a trusted alternative to premium-priced products.

Our commitment to setting the highest standards in all areas of our business means, if you're looking for quality, service, delivery and choice — you'll find it's all at Albion.

Quality

Whatever you need, you can rest assured that if it comes from Albion it has been designed and manufactured to deliver optimum performance and is accredited with the necessary approvals. Our in-house quality department are always on hand too!

Service

We pride ourselves on our customer service – we have even won awards for it! Our cradle to grave approach means you will never be on your own!

Delivery

We know that time is money, and when a priority project depends on a part you can trust Albion to deliver – next day for all orders placed before 4:00PM.

Choice

We may have started out with a single brass ball valve, but our range has grown substantially since and we now consider ourselves to be a 'One Stop Shop' with our comprehensive range. It is becoming more and more apparent to the industry, that it really is all at Albion.