



# Installation Guides

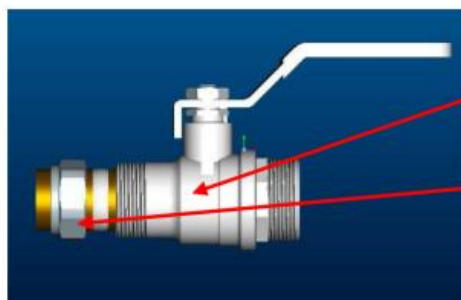
## Installation: Compression Ended Valves

When installing compression ended ball valves to copper tube:

- Use the correct tools and the correct sized spanner
- Cut the copper tube to length, ensure the ends are square and free of burrs and slide the compression fittings onto the copper tube, ensuring the compression nut and olive are present
- Hold the valve securely – DO NOT grip the valve body joint
- NEVER drive torque through the main body joint
- Compression nuts are hand tightened initially then further tightened whilst holding the valve securely and using the correct sized spanner tighten up the compression nut to achieve a secure connection, as a guide we suggest the following number of turns:

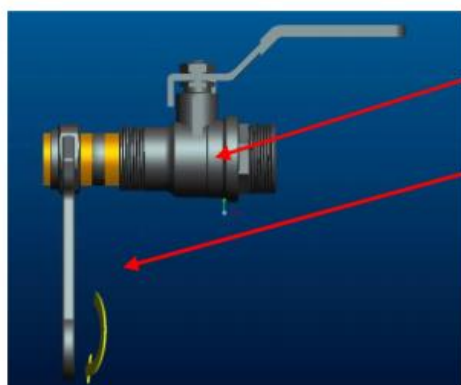
15mm	22mm	28mm	35mm	42mm	54mm
Between $\frac{3}{4}$ and $1 \frac{1}{4}$ Turns					

The figures shown are for guidance purposes only and actual on site conditions will dictate the actual number of turns required.



Hold valve securely here by hand

Hand tighten the compression nut and olive



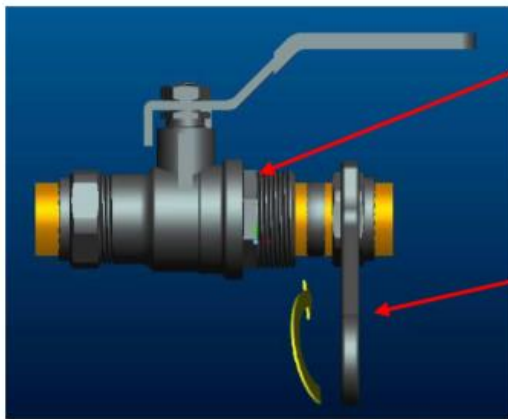
Hold valve securely here by hand

Using the correct sized spanner tighten up the compression nut to form a seal.



Hold valve securely here

Hand tighten the compression nut and olive



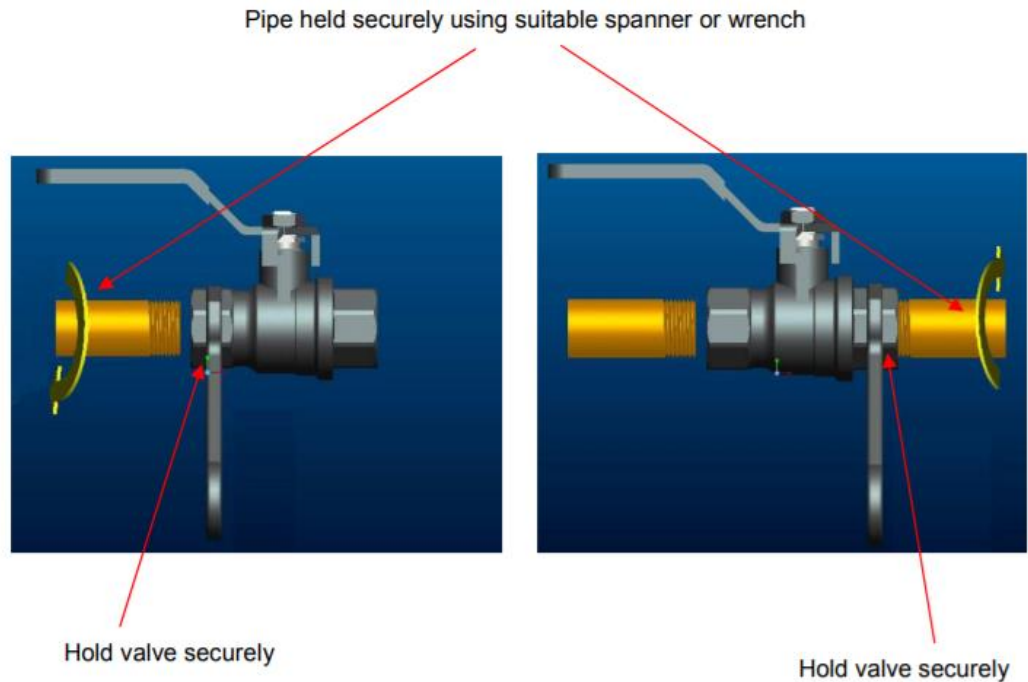
Hold valve securely here

Using the correct sized spanner tighten up the compression nut to form a seal.

### Installation: Screwed Ended Valves

When installing screwed ended ball valves to copper tube:

- Use the correct tools and correct sized spanner
- Grip and hold the valve securely – see below – DO NOT grip the valve body joint
- NEVER drive torque through the main body joint
- Hold the valve as shown in the diagrams below and rotate the pipe work or fitting



Using the correct sized spanner and the following recommended turns should create a secure connection:

$\frac{1}{4}'' \sim 1 \frac{1}{2}''$	2''	$2 \frac{1}{2}'' \sim 4''$
1 $\frac{1}{2}$ Turns	2 Turns	2 $\frac{1}{2}$ Turns

The figures shown are for guidance only and actual on site conditions will dictate the actual number of turns required.

#### Further Notes:

Valves must be adequately supported, also AVOID undue pipeline strains being placed upon the valve body and/or joints, the pipe work MUST also be supported, otherwise the performance of the valve and/or the joints will be impaired and/or fail.

Ensure that the pipe work to which the valve is connected is checked for general cleanliness and to ensure that there is no debris present.

Valves SHOULD NOT be subjected to misuse, e.g. careless handling, allowing debris to enter the valve through the end ports, lack of cleaning both valve and system before operation and excessive force during lever operation.

The life of any valve is dependent on many factors, for instance the application and the frequency of use to name but a few. Compatibility of both the system and the valves being considered for use must be fully investigated.

To avoid or minimise premature failure or non-operability it's necessary to take into account the media being transported through the system and at what pressures and temperatures. It is recommended that a system should be flushed to remove any debris deposits and chemically cleaned as appropriate to eliminate contamination.