

<b>Doc ID</b> 58573742	<b>Custodian</b> Senior Principal Engineer, WT, Engineering	<b>Approved</b> Head of Engineering
<b>Version Date</b> 4/12/2023	<b>Accountabilities Framework</b> Level 1 – Acquire Infrastructure Assets Level 2 – Design Assets	<b>Stakeholders</b> Operations
<b>Next Review Date</b> 30/11/2026		



## 1 Purpose

The purpose of this specification is to describe the requirements for chlorine valve keys used at Water Corporation sites where chlorine drums or cylinders are connected for use.

## 2 Scope

This specification applies to valve keys used at Water Corporation chlorine facilities and is mandatory.

## 3 Definitions

**ESD**                      Emergency Shut-off Device

## 4 References

AS/NZS 2927:2019 - The Storage and Handling of Liquefied Chlorine Gas

Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 WA

Multi Chlorine Spanner: <https://nexus.watercorporation.com.au/otcs/cs.exe/app/nodes/58573779>

Chlorine Valve Key Drawing: EO28-091-016-01A

## 5 Specification

The **Chlorine Valve Key** is a standard designed tool for use by authorised personnel for the opening and closing of chlorine drum and cylinder spindle valves. The **Chlorine Valve Key** has a tapered cut out section to assist with locating the spindle valve and ensures a good fit.

- The **Chlorine Valve Key** is used for further opening and closing the spinal valve on chlorine drums and cylinders after the initial opening of the chlorine container spindle valve with the **Multi Chlorine Spanner** (see note).
- For chlorine cylinders the **Chlorine Valve Key** should be left on the connected online and standby cylinder spindle valves except where there is an ESD installed.
- For chlorine drums on a GAS withdrawal system the **Chlorine Valve Key** should be left on the connected online and standby drums top spindle valve except where there is an ESD installed.
- For chlorine drums on a LIQUID withdrawal system where there is a requirement for an ESD to be installed the **Chlorine Valve Key** should be left on the connected online and standby drums Auxiliary spindle valve (pigtail isolation valve).

**NOTE:** The initial opening of a new chlorine drum or cylinder should be conducted using the standard **Multi Chlorine Spanner**, which has a unique twisted feature and is angled to allow the authorised person to apply reasonable force to open the valve.

A dimensioned drawing of the standard chlorine valve key has been developed: EO28-091-016-01A

The following companies are aware of the Water Corporations standard design of this valve key:

- Nix Sheetmetal Engineering

Document Revision History	
26 Feb 2002	Document developed by RB & reviewed by NH
7 May 2007	Document reviewed by RB & NH
17 Sept 2008	Document placed in Aqua PM# 1081431
3 Aug 2010	Document placed in Cordoc format by SZ
25 Aug 2010	Document reviewed by RB & NH
10 Oct 2013	Document reviewed by SZ & NH
17 Oct 2017	Document reviewed by SZ & NH Sec4 and Sec5: minor updates
31 Oct 2020	Document reviewed by SZ & NH Minor formatting update
4 Dec 2023	Document reviewed by SZ & NH