

# Ball Valve

## Key Properties

- PNI 6 operating performance
- UV Stabilised glass filled nylon body
- ½" to 2" sizes with double ended female BSP inlets, male x female BSP threads
- Meets AS/NZS 4020 standard for drinking water
- Handle rotates 90° between open and closed position
- Purple handled versions are available for recycled water applications
- Easy grip, non-slip handle
- Compact size
- Manufactured for over 20 years
- Australian made
- 25 year warranty\*

## Features & Benefits

- Proven dependable design for many years of trouble free operation and features a 25 year Warranty\*
- Designed and manufactured in Australia to survive the tough Australian conditions
- Fully UV stabilised materials to resist degradation from the sun
- Meets AS/NZS 4020 so can be used on tanks for drinking water
- Compact size for easy installation in restricted spaces
- Designed to have a smooth flow path when male end connectors and threaded fittings are used
- Corrosion and impact resistant materials for a long field life
- Dual o-rings located on spindle for superior sealing performance

\*Refer to Philmac Terms and Conditions



# Ball Valve

## System Design Considerations

**Threads:** All threads are BSP (Whitworth form).

**Maximum Operating Pressure:** 1600 kPa (232psi) or 16 bar.

**Sealing threads:** Philmac recommends sealing threads with PTFE tape. Other approved sealants for plastic materials can be used providing the sealant does not enter the valve where it may cause damage.

**Operating temperature:** The ball valve is 1600kPa rated at 20°C.

**Weathering:** All plastic materials used contain pigments to provide excellent protection against degradation from ultra-violet (UV) radiation.

### Ball Valves - Blue Handle - Female

Part Number	Description
95500100	1/2" Female Ball Valve
95500200	3/4" Female Ball Valve
95500300	1" Female Ball Valve
95500400	1 1/4" Female Ball Valve
95500500	1 1/2" Female Ball Valve
95500600	2" Female Ball Valve

### Ball Valves - Blue Handle - Male x Female

Part Number	Description
95510100	1/2" Male x Female Ball Valve
95510200	3/4" Male x Female Ball Valve
95510300	1" Male x Female Ball Valve
95510400	1 1/4" Male x Female Ball Valve
95510500	1 1/2" Male x Female Ball Valve
95510600	2" Male x Female Ball Valve

### Ball Valves - Purple Handle (Recycled Water)

Part Number	Description
98510200	3/4" Ball Valve
98510300	1" Ball Valve
98510500	1 1/2" Ball Valve
98510600	2" Ball Valve

### Ball Valve Spare Part Kits

Part Number	Description
90590200	Service Kit for 1/2" & 3/4" Ball Valve
90590300	Service Kit for 1" Ball Valve
90590400	Service Kit for 1 1/4" Ball Valve
90590500	Service Kit for 1 1/2" Ball Valve
90590600	Service Kit for 2" Ball Valve

Service kits include two end cap o-rings, two seal o-rings two seal rings and a ball.

## High Flow

In independent testing (conducted by The University of South Australia), we replicated a typical trough filling scenario. Using a 2" ball valve and 2" rural pipe and working within the manufacturers maximum recommended water velocity; we found the Philmac Ball Valve did not restrict flow to the trough.

### Pressure loss<sup>Δ</sup> (kPa)

Flow Rate (L/s)	Inlet Size					
	1/2" (DN15)	3/4" (DN20)	1" (DN25)	1 1/4" (DN32)	1 1/2" (DN40)	2" (DN50)
0.5	5	5	7	*	*	*
1	14	14	10	*	*	*
1.5	-	-	11	*	*	*
2	-	-	-	6	*	*
2.5	-	-	-	8	*	*
3	-	-	-	11	5	*
4	-	-	-	-	8	*
5	-	-	-	-	13	*
6	-	-	-	-	-	6
7	-	-	-	-	-	8
8	-	-	-	-	-	10

\* Denotes pressure loss too small to accurately measure but can be assumed to be 5 kPa or less.

Δ The maximum headloss figures shown for each valve size are published based on pipe velocities above the pipe manufacturers general recommendation of 1.5 m/s and some cases around 3 m/s. It is assumed the pipe size is matched to the ball valve size.

