BALL VALVE

Designed and made in New Zealand for use in marine applications above and below the water line, our Ball Valves are IMCI approved to ISO standard 9093-2, and are ideal for controlling inlet and outlet water requirements.

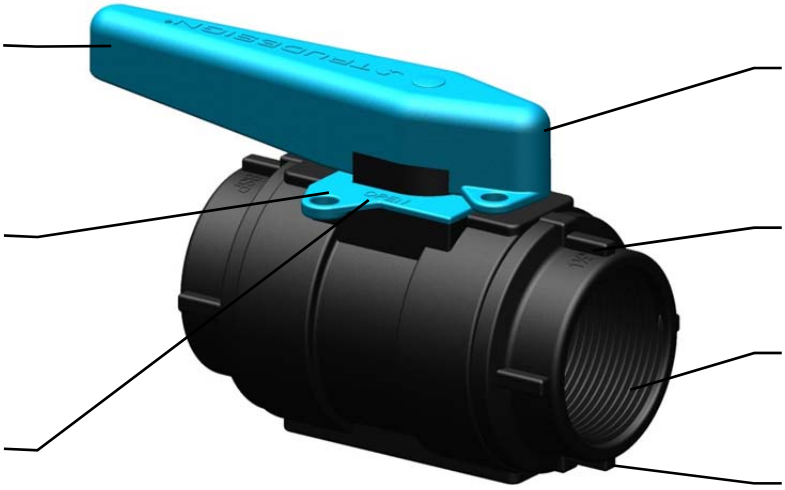
The body of the Ball Valve is manufactured in glass reinforced nylon composite with high impact and tensile strength resulting in a light weight unit, free from corrosion and electrolysis issues. The ball and sealing rings utilise a PTFE polymer to ensure a smooth action, and continuous ease of operation over many years. The Ball Valve is available in both BSP and NPS thread forms and can be locked in the closed position for use on toilet waste outlets.

MODELS

Internal diameter	BSP Thread		NPS Thread	
	Part #	Description	Part #	Description
19mm [¾"]	90471	Ball Valve ½" BSP	90647	Ball Valve ½" NPS
	90548	Ball Valve ½" BSP PKG	90659	Ball Valve ½" NPS PKG
	90276	Ball Valve ¾" BSP	90648	Ball Valve ¾" NPS
	90549	Ball Valve ¾" BSP PKG	90660	Ball Valve ¾" NPS PKG
	90242	Ball Valve 1" BSP	90649	Ball Valve 1" NPS
	90550	Ball Valve 1" BSP PKG	90661	Ball Valve 1" NPS PKG
32mm [1¼"]	90240	Ball Valve 1¼" BSP	90650	Ball Valve 1¼" NPS
	90551	Ball Valve 1¼" BSP PKG	90662	Ball Valve 1¼" NPS PKG
	90235	Ball Valve 1½" BSP	90651	Ball Valve 1½" NPS
	90552	Ball Valve 1½" BSP PKG	90663	Ball Valve 1½" NPS PKG
52mm [2"]	90472	Ball Valve 2" BSP	90652	Ball Valve 2" NPS
	90553	Ball Valve 2" BSP PKG	90664	Ball Valve 2" NPS PKG

** PKG denotes product is packaged in a plastic bag with header card. Other product is packaged loose.*

KEY FEATURES



Glass reinforced nylon composite construction

- Light weight and high strength
- Corrosion resistance
  - Long life
  - Minimal maintenance
  - No corrosion deposits to remove
- Electrically non conductive
  - No electrical bonding
  - Suitable for use on all hull types - aluminium, steel, wood or FRP hulls
- UV resistant
  - Will not break down in the sun
- Chemical resistant
  - Impervious to diesel, petrol, oil and antifouling paints
- Large operating temperature range
  - -40° to 80°C (-40° to 176°F)

PTFE enhanced sealing and sliding elements

- Reduced friction for easy operation
- Reduction in blockages due to fouling

High quality

- Quality materials from accredited suppliers
- Standards approved through IMCI to ISO standard 9093-2
- Every Ball Valve is leak tested during manufacture

STANDARDS

Tru-Design Ball Valves are certified by the International Marine Certification Institute (IMCI) to meet;

> *ISO 9093-2 Small craft -- Seacocks and through-hull fittings -- Part 2: Non-metallic*

In meeting ISO 9093-2, our Ball Valves have been tested with a 155kg load hanging off a hose fitting while connected to our Skin Fitting as shown.

The locking feature allows the Ball Valve to comply with US Coast Guard Regulation 33 CFR 159.7 and ISO Standard 8099 for locking of toilet waste outlets.

SPECIFICATIONS

The connecting threads on each end of the Ball Valves are a parallel thread form. These parallel threads are designed so that thread tape is wound onto a male skin fitting or tail then screwed into the ball valve. The advantage of parallel threads over tapered is that there is maximum engagement between the mating threads providing a strong and watertight seal.

Mixing parallel and tapered threads can cause strength and sealing problems as the engagement can frequently be only a few turns.

Ball Valves are available in;

- BSP (British Standard Pipe)
- NPS (National Pipe Straight)

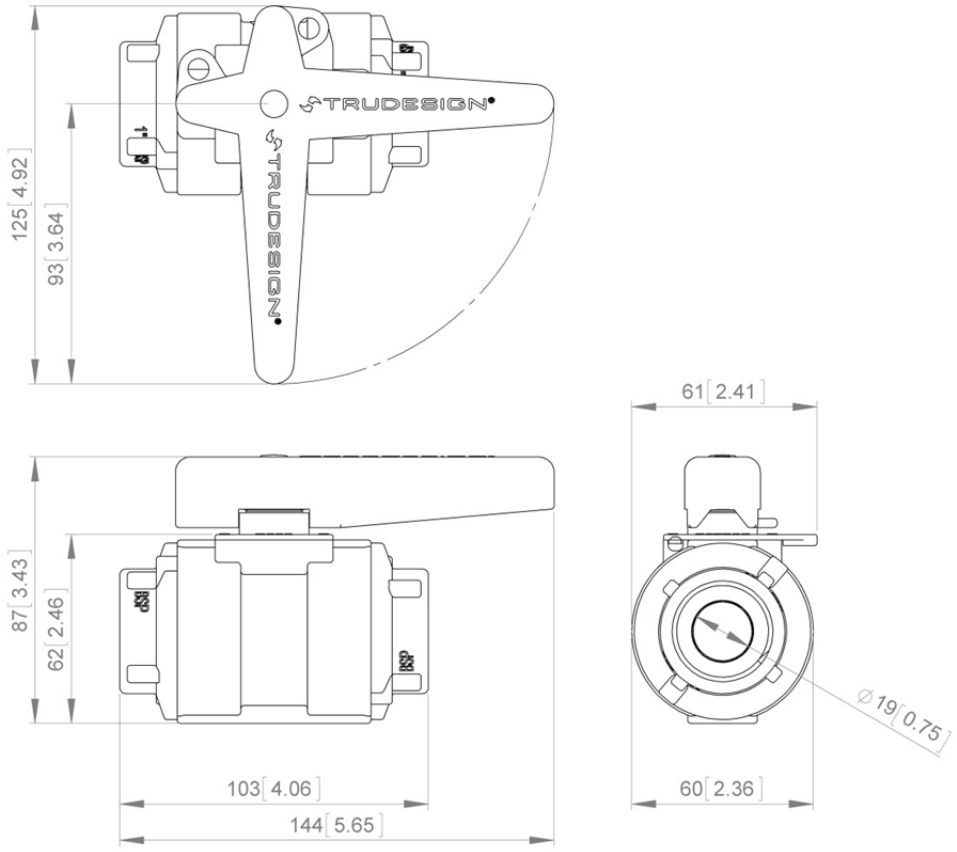
WEIGHT

Internal Diameter	Thread Size	Weight (g)	Weight (oz)
19mm [¾"]	½", ¾", 1"	300	10.6
32mm [1¼"]	1¼", 1½"	450	15.9
52mm [2"]	2"	700	24.7

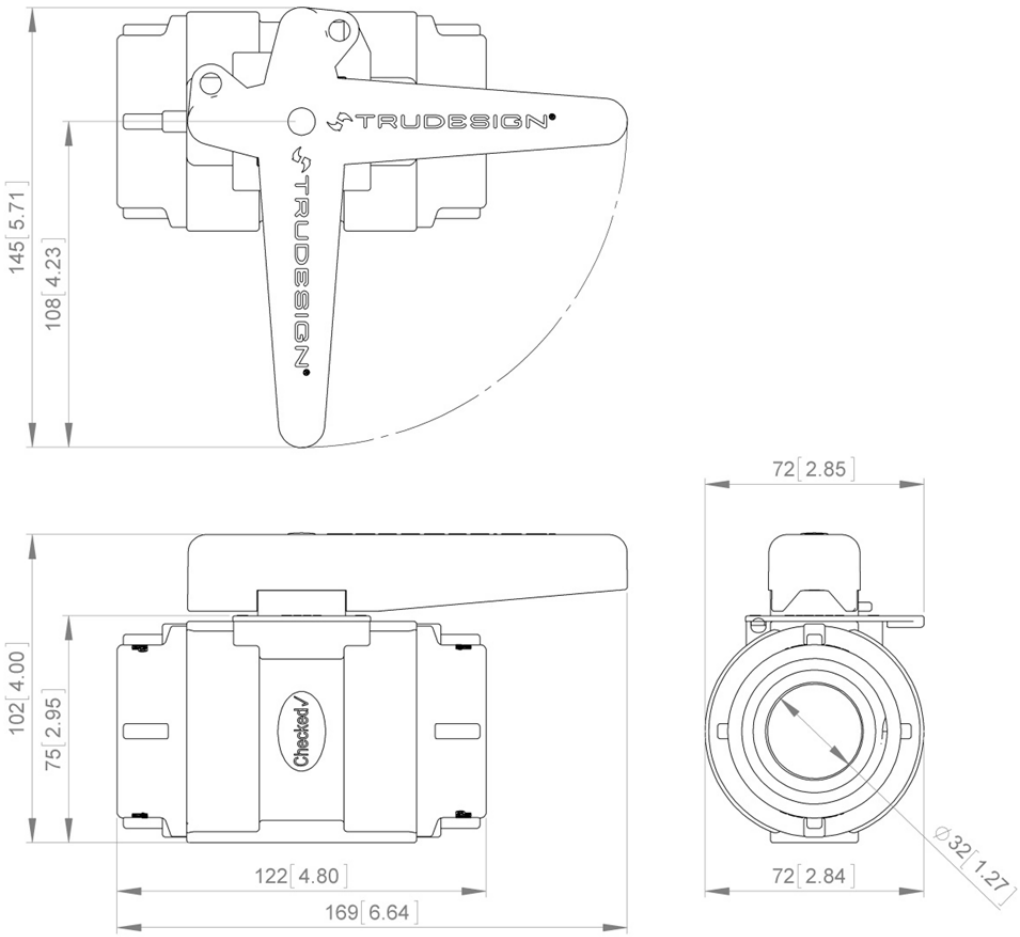
DIMENSIONS

All dimensions nominal.

19mm [¾"] ID ½" BSP, ¾" BSP, 1" BSP
½" NPS, ¾" NPS, 1" NPS

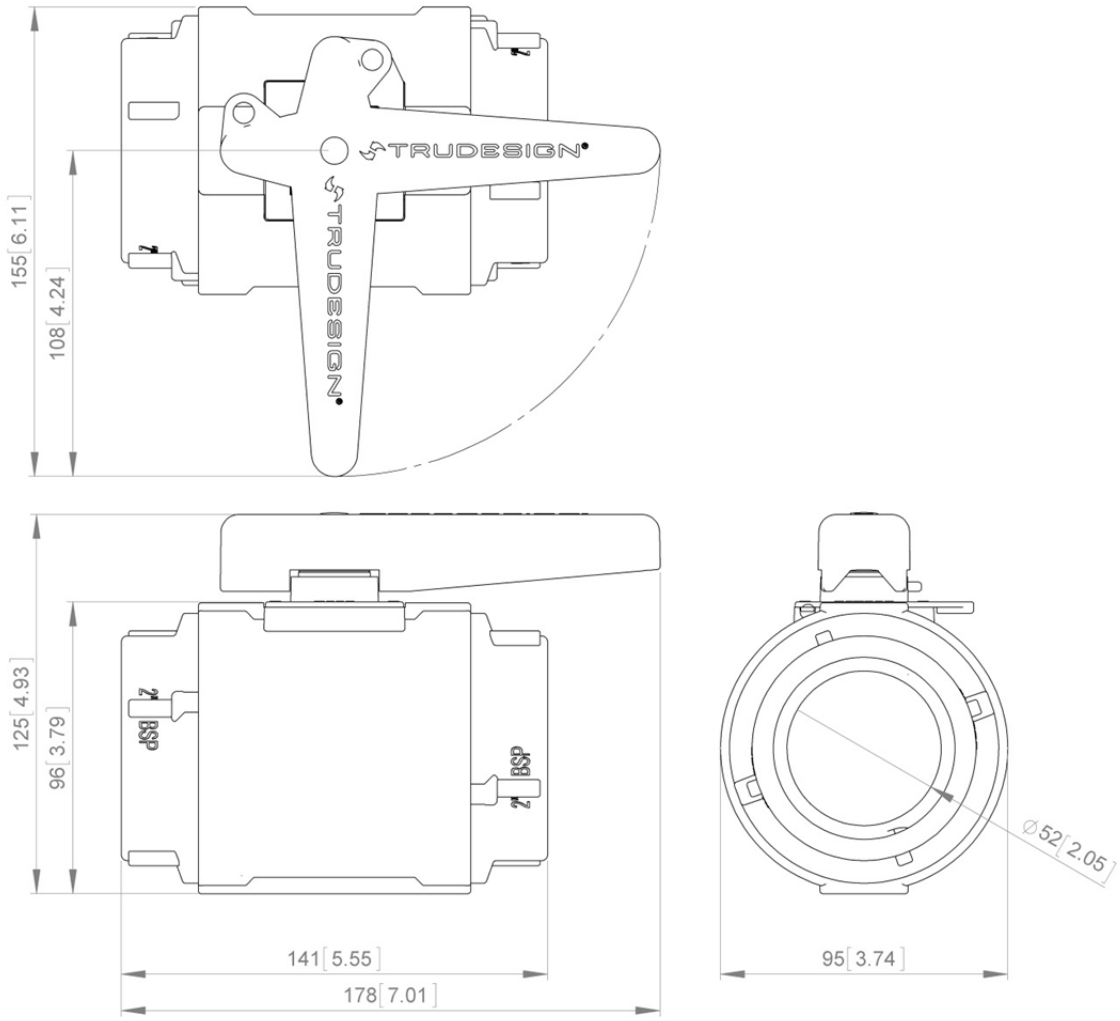


32mm [1¼"] ID 1¼" BSP, 1½" BSP
1¼" NPS, 1½" NPS



52mm [2”] ID 2” BSP

2” NPS



INSTALLATION

If the valve is to be assembled to a skin fitting, ensure that the position of the skin fitting is such that it will be in a protected area, but readily accessible.

Ensure threads of mating fittings have a parallel thread and it is clean and undamaged.

Apply sealing tape to the thread of the Skin Fitting or Tail.

Screw ball valve onto the mating fitting using the correct Ball Valve Spanner (available from Tru-Design), or other appropriate tool.

Tighten any attached fittings to a maximum of 16Nm (12ft/lbs).

Check that the final position of the Ball Valve is such that it allows full movement of the handle from the open to closed position, and that it is clear of objects which may cause inadvertent operation.

NOTE - It is recommended that the padlock is not fitted to the exposed tag in the open position. There is a risk that in an emergency situation the seacock cannot be closed easily.

Part #	Description
90476	Spanner Ball Valve ½”
90477	Spanner Ball Valve ¾” & 1”
90478	Spanner Ball Valve 1¼” & 1½”
90479	Spanner Ball Valve 2”

SERVICING

As composite Ball Valves are immune to corrosion, minimal servicing is required.

The Ball Valve should be operated at regular intervals to ensure barnacles etc do not block the operation of the valve.