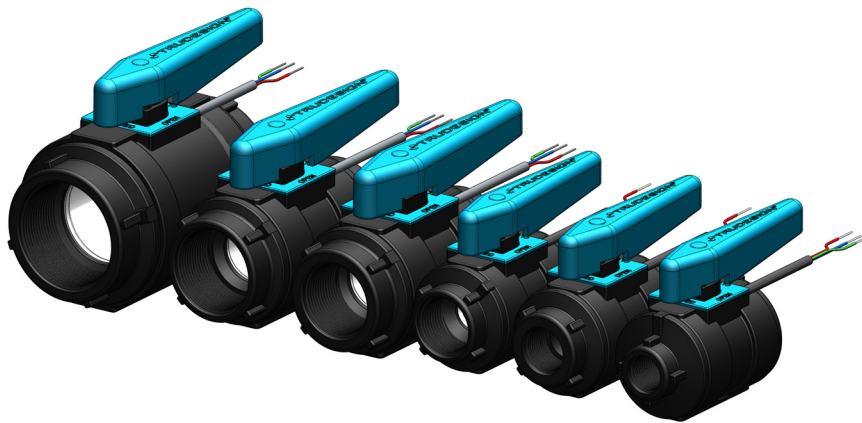


POSITION MONITORED BALL VALVE

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 and monitoring inlet and outlet water requirements.

Position Monitoring allows remote monitoring of Ball Valve Position. The Position Monitoring circuit can also be used as part of an engine or generator start interlock to ensure these don't start without cooling water available.



The body of the Ball Valve is manufactured in a 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.

MODELS

Part #	Description
19mm ID	
90473	Ball Valve Position Monitored ½" BSP
90277	Ball Valve Position Monitored ¾" BSP
90243	Ball Valve Position Monitored 1" BSP
32mm ID	
90239	Ball Valve Position Monitored 1¼" BSP
90236	Ball Valve Position Monitored 1½" BSP
52mm ID	
90474	Ball Valve Position Monitored 2" BSP
90412	Panel Display Ball Valve



STANDARDS

Tru Design Position Monitored 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.



KEY FEATURES

Feature :	
Manufactured from a glass reinforced nylon composite	High strength and light weight.
Compatible with all hull types	Can be used on aluminum, steel, wood or FRP hulls.
Immune to corrosion and electrolysis	Long life with no concerns over decreased performance due to corrosion.
Chemical resistant	Impervious to diesel, petrol and antifouling paints.
UV resistant	These fittings will not break down with ultraviolet light or discolour from the sun.
High quality surface finish	Will not discolour with green film as similar bronze fittings do.
IMCI approved to the ISO 9093-2 Standard.	Suitable for connection to similarly approved through hull skin fittings such as the IMCI approved Tru-Design Skin Fitting range.
Ball and seal rings molded in a PTFE filled polymer.	Ensures a smooth operation, and long life.
Brightly coloured handle.	Allows for easy viewing of seacock position, "open" or "closed".
Quality control.	Each Ball Valve is leak tested prior to leaving the Tru-Design premises.
Large operating temperature range.	Suitable for all marine environments, from -40°C to +80°C
Spanner supplied	A custom fitted spanner greatly simplifies fitting, and stops the damage caused by pipe wrenches.
Remote indication of seacock position	No need to obtain visual access to sea cocks mounted in places difficult to access.
Engine ignition interlock	Helps to avoid possible engine overheating caused by accidental or inadvertent water intake closure.
Allow monitoring from accessible location.	Helps alert user or owner that seacock is not open for discharge avoiding possible outlet pipe explosion.
Remote indication of multiple seacock positions.	Saves time when leaving a vessel, no need access bilges to check seacock status.

SPECIFICATIONS

The connecting threads on each end of our ball valves are BSP (British Standard Pipe) and are parallel. 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 rather than 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.

The Position Monitoring function switches state when the Ball Valve is in the open position.

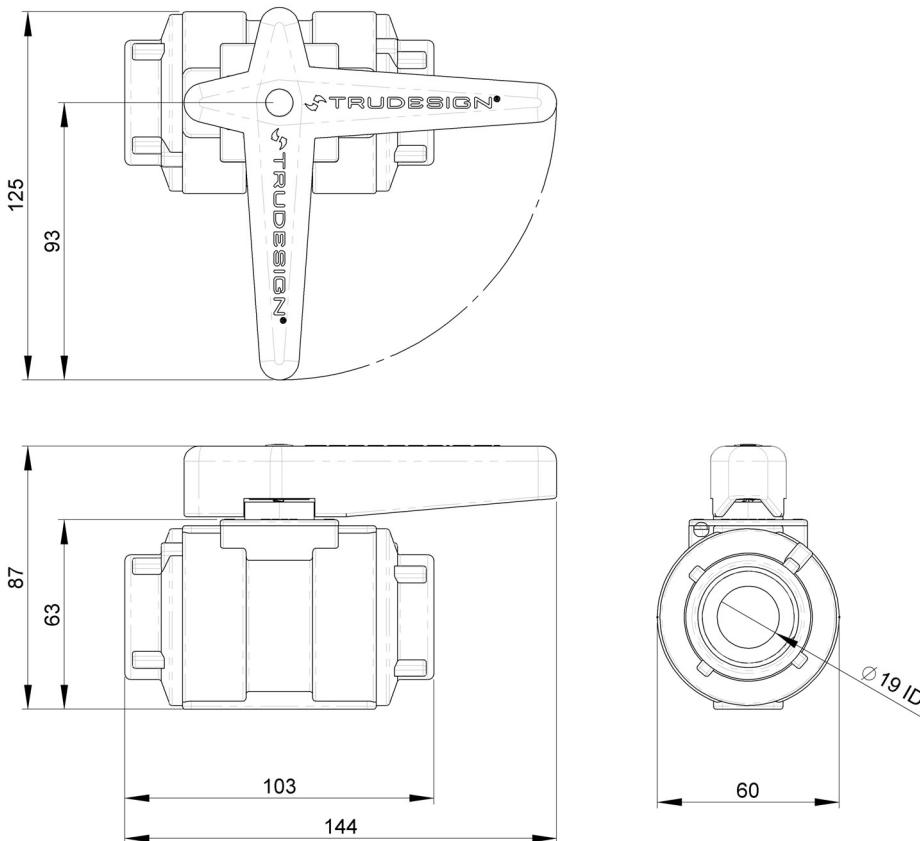


Maximum switching current – 500mA

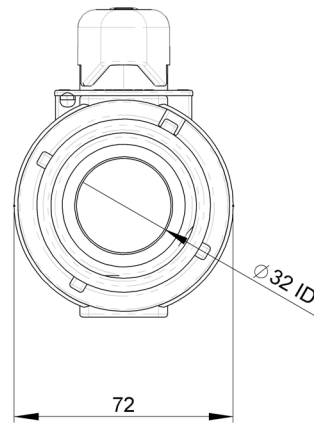
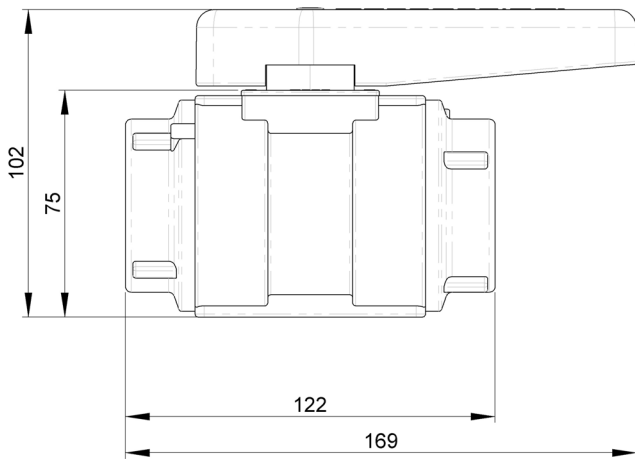
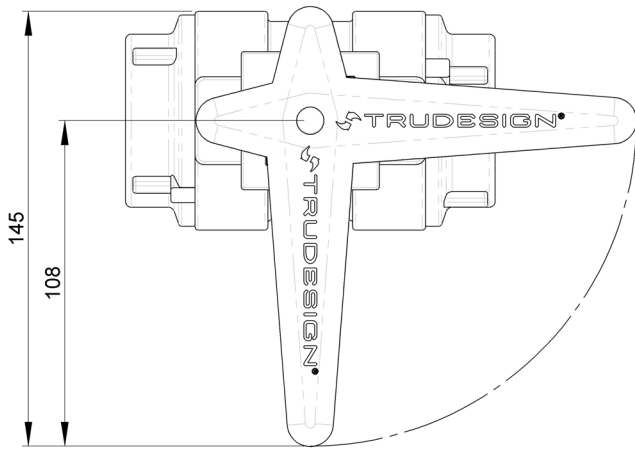
DIMENSIONS

All dimensions in mm.
All dimensions nominal.

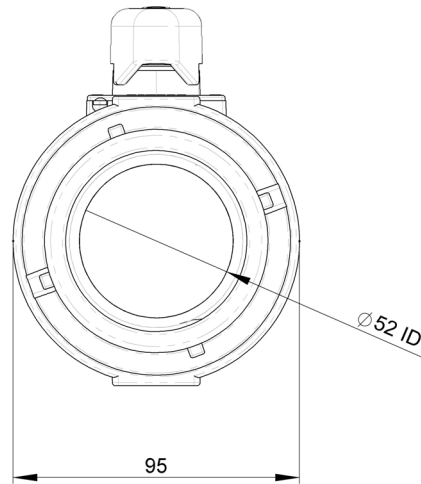
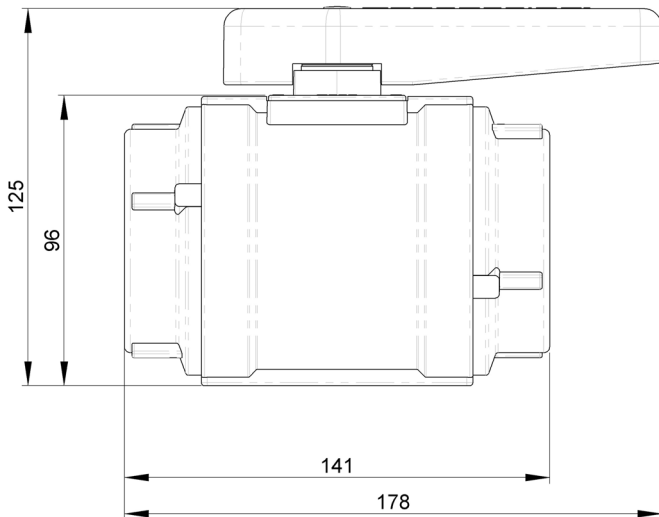
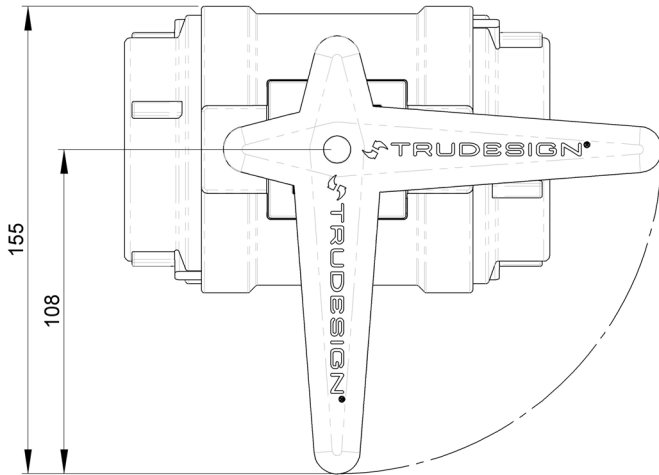
19mm – 1/2" BSP, 3/4" BSP, 1" BSP



32mm – 1¼" BSP, 1½" BSP



52mm – 2" BSP



INSTALLATION

Full wiring instructions are supplied with the Position Monitored Ball Valve.

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 Ball Valve Spanner (supplied) 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.

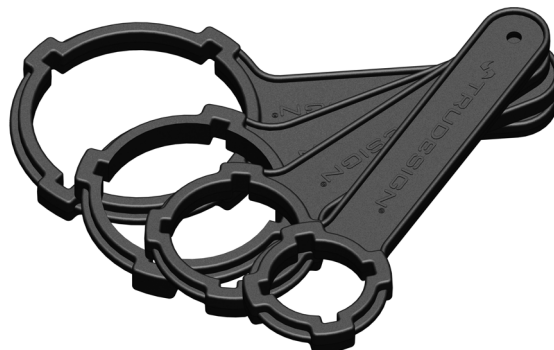
SERVICING

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.

The spanner can often be misplaced, so when changing plumbing layouts etc, a new spanner can be supplied.

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



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