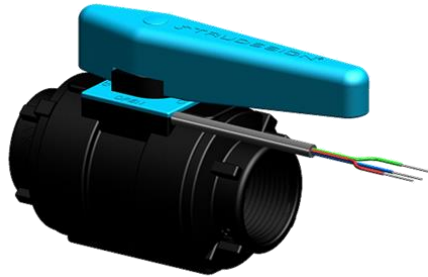


## Position Monitored Ball Valves



TRUDESIGN™ Certified Ball Valves are specifically designed for use in marine applications above and below the water line.

### Features:

- Allows remote monitoring of up to four Ball Valves (per seacock display panel) in the open or closed position.
- Can be wired into or part of an engine or generator start “interlock” to ensure they don’t start without cooling water available.
- Manufactured from a glass-reinforced Nylon composite – High strength, tough and light weight.
- Immune to corrosion & electrolysis – No corrosion breakages, increased safety.
- Electrically non-conductive. No electrical bonding.
- Suitable for use on all hull types - aluminium, steel, wood or FRP.
- The ball and sealing rings utilise a PTFE polymer to ensure a smooth action and minimal fouling of the internal ball.
- Can be “locked” in the closed position to comply with toilet waste outlet regulations. US Coast Guard Regulation 33 CFR 159.7 and ISO Standard 8099 for locking of toilet waste outlets
- Large operating temperature range – From -40°C to +110°C ( for Ball Valve only)
- Available in both BSP and NPS thread forms
- U.V resistant – Will not degrade or discolour from the sun’s ultraviolet rays.
- 100% leak tested before leaving factory.

### Compliance

**ISO 9093-2021 Small craft** -TRUDESIGN Skin Fittings and Ball Valves comply with ISO 9093:2021 and certified by the International Marine Certification Institute (IMCI).

For sizes ¾” through to 3”

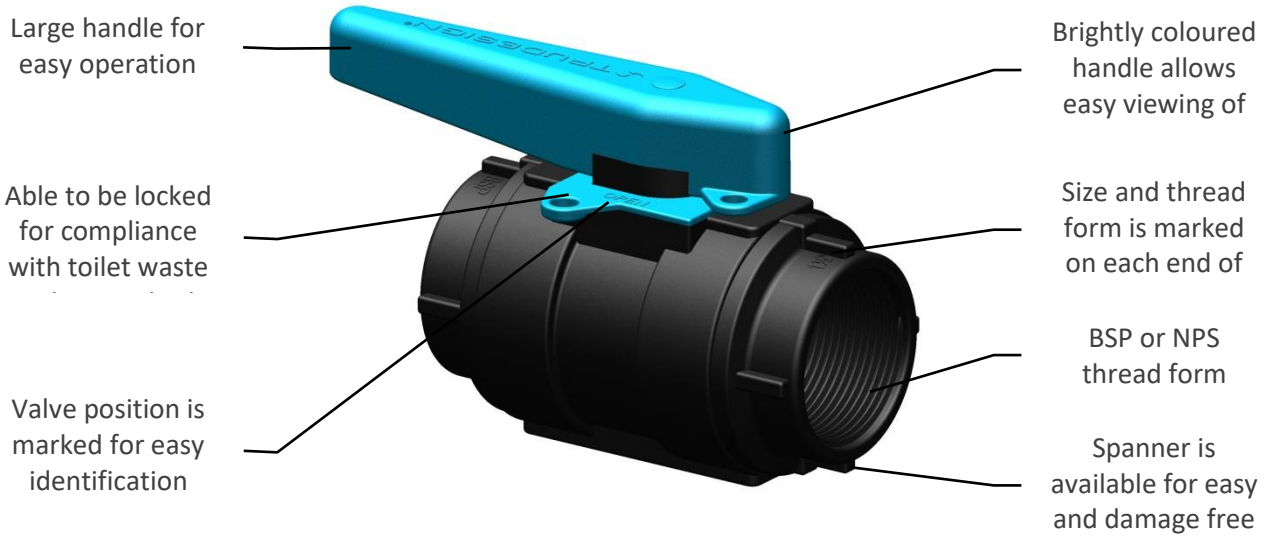
Excludes the ½” size.

**American ABYC H-27 – 500lb static load test** - TRUDESIGN Skin Fittings and Ball Valves meet the American ABYC H-27 – 500lb static load test; Seacocks, Thru-Hull Fittings, and Drain Plugs – independently verified by IMANNA Laboratory Inc.

For sizes 1¼” through to 3” the ABYC Collar it is **not** a requirement to meet this static load test. TruDesign ABYC Load Bearing Collar is required for the size ¾ and 1” to meet this static load test.

The ½” does not meet the 500lb static load test with or without the ABYC collar

## Features Continued



## Models

Internal diameter	BSP Thread	
	Part #	Description
19mm [ $\frac{3}{4}$ "]	90473	Ball Valve Position Monitored $\frac{1}{2}$ " BSP
	90277	Ball Valve Position Monitored $\frac{3}{4}$ " BSP
	90243	Ball Valve Position Monitored 1" BSP
32mm [ $1\frac{1}{4}$ "]	90239	Ball Valve Position Monitored $1\frac{1}{4}$ " BSP
	90236	Ball Valve Position Monitored $1\frac{1}{2}$ " BSP
52mm [2"]	90474	Ball Valve Position Monitored 2" BSP

Internal diameter	NPS Thread	
	Part #	Description
19mm [ $\frac{3}{4}$ "]	91219	Ball Valve Position Monitored $\frac{1}{2}$ " NPS
	91220	Ball Valve Position Monitored $\frac{3}{4}$ " NPS
	91221	Ball Valve Position Monitored 1" NPS
32mm [ $1\frac{1}{4}$ "]	91222	Ball Valve Position Monitored $1\frac{1}{4}$ " NPS
	91223	Ball Valve Position Monitored $1\frac{1}{2}$ " NPS
52mm [2"]	91224	Ball Valve Position Monitored 2" NPS

*Ball Valves are supplied with spanner and installation instructions*

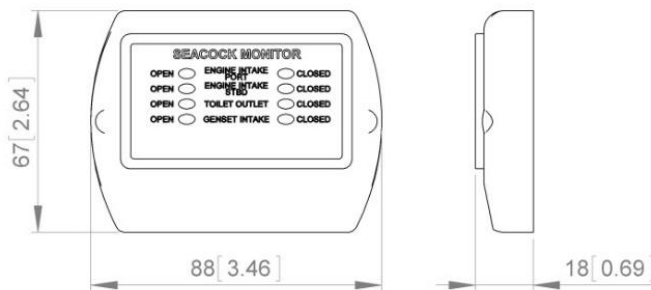
## Weight

Internal Diameter	Thread Size	Weight (g)	Weight (oz)
19mm [ $\frac{3}{4}$ "]	$\frac{1}{2}$ ", $\frac{3}{4}$ ", 1"	350	12.3
32mm [ $1\frac{1}{4}$ "]	$1\frac{1}{4}$ ", $1\frac{1}{2}$ "	500	17.6
52mm [2"]	2"	750	26.4
90412 Panel Display Ball Valve		230	8.1

## Display Panel

- The Ball Valve Display Panel is supplied with the following.
  - Installation instructions
  - 2 x hook-up wire with connector – 2.5m (8.2')
  - Mounting screws and covers.
  - Sticker Sheet with the following options

AIRCON INTAKE	ENGINE INTAKE	HOLDING TANK OUTLET PORT	TOILET INTAKE STABD
BAIT TANK INTAKE	ENGINE INTAKE PORT	HOLDING TANK OUTLET STBD	TOILET OUTLET
BLACK WATER OUTLET	ENGINE INTAKE STBD	SALTWATER WASH INTAKE	TOILET OUTLET AFT
BLACK WATER OUTLET AFT	GENSET INTAKE	TOILET INTAKE	TOILET OUTLET FWD
BLACK WATER OUTLET FWD	HOLDING TANK OUTLET	TOILET INTAKE AFT	TOILET OUTLET PORT
BLACK WATER OUTLET PORT	HOLDING TANK OUTLET AFT	TOILET INTAKE FWD	TOILET OUTLET STBD
BLACK WATER OUTLET STBD	HOLDING TANK OUTLET FWD	TOILET INTAKE PORT	WATERMAKER INTAKE



Part #	Description
90412	Panel Display Ball Valve

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



**BLACK** = Valve closed  
**RED** = Supply (10-32V) 520mAh MAX  
**GREEN** = Valve open

## Thread Sealing

For Thread Sealing Instruction go to our Technical Information Sheet on the TruDesign Website – Scan QR Code



## Replacement “T” and “Lever” Handles

Part #	Description
91038	Replacement “T” handle Small – 25mm,19mm,13mm (1”, ¾”, ½”)
91040	Replacement 'T' Handle Large – 50mm-38mm-32mm (2”, 1½”, 1¼”)
91155	Replacement <b>Lever</b> Handle Small 25mm-19mm-13mm (1”, ¾”, ½”)
91156	Replacement <b>Lever</b> Handle Large 50mm-38mm-32mm (2”, 1½”, 1¼”)



## Ball Valve Spanner

90476	Spanner / Wrench Ball Valve ½” PKG
90477	Spanner / Wrench Ball Valve ¾” & 1” PKG
90478	Spanner / Wrench Ball Valve 1¼” & 1½” PKG
90479	Spanner / Wrench Ball Valve 2” PKG

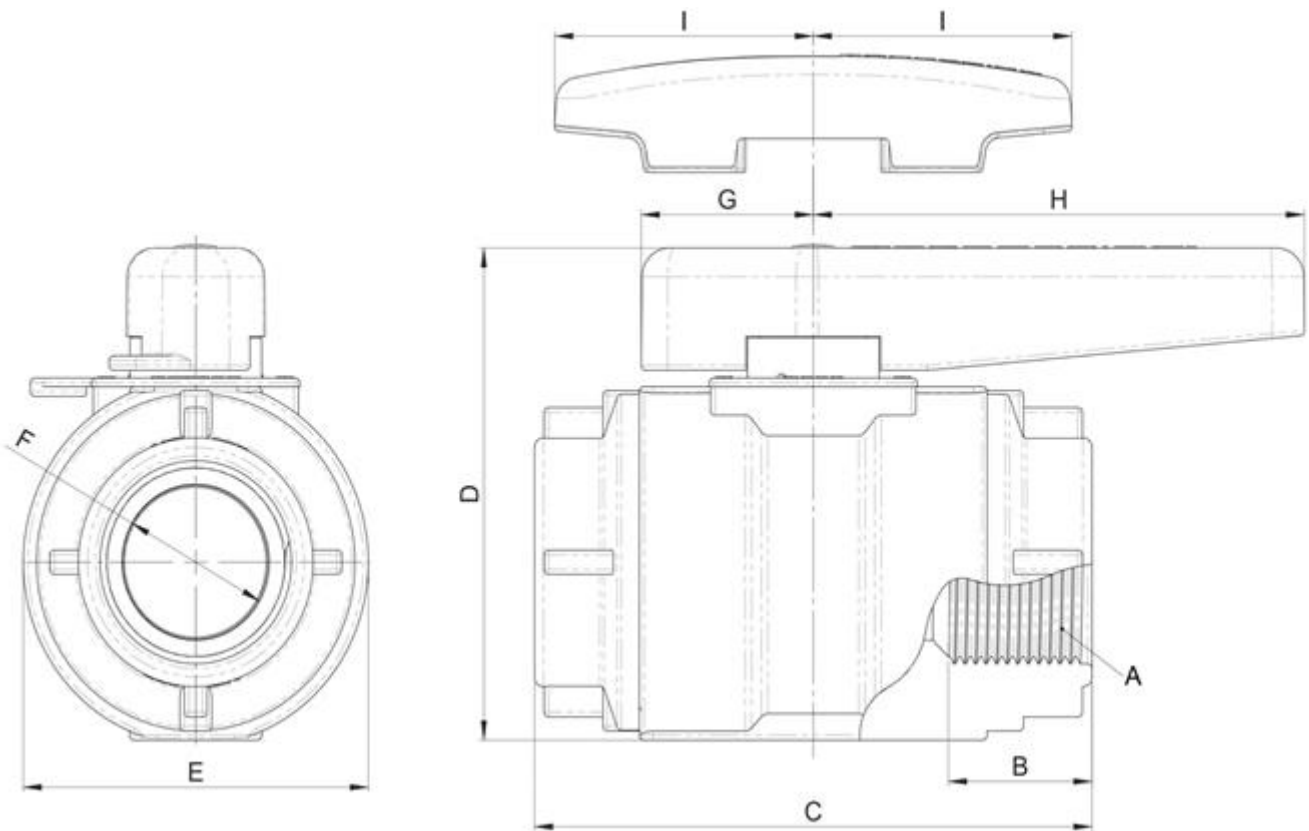


**Ball Valve Handle Tag** – Identification Tags are available that easily fit onto the Lever Handles. See Separate Product Information Sheet.



## Dimensions

A	B		C		D		E		F		Lever Handle			T-Handle		
	Size	Length		Length		Height		Width		Minimum Internal Ø		G		H		I
½"	25	1	102mm	4	88mm	3 4/9"	61mm	2 3/8"	20mm	3/4"	32mm	1 1/4"	93mm	3 2/3"	50mm	2
¾"	22mm	6/7"	102mm	4	88mm	3 4/9"	61mm	2 3/8"	20mm	3/4"	32mm	1 1/4"	93mm	3 2/3"	50mm	2
1"	22mm	6/7"	102mm	4	88mm	3 4/9"	61mm	2 3/8"	20mm	3/4"	32mm	1 1/4"	93mm	3 2/3"	50mm	2
1 ¼"	32mm	1 1/4"	122mm	4 4/5"	102mm	4	76mm	3	32mm	1 1/4"	38mm	1 1/2"	108mm	4 1/4"	57mm	2 1/4"
1 ½"	32mm	1 1/4"	122mm	4 4/5"	102mm	4	76mm	3	32mm	1 1/4"	38mm	1 1/2"	108mm	4 1/4"	57mm	2 1/4"
2"	32mm	1 1/4"	141mm	3	124mm	4 6/7"	99mm	3 7/8"	48mm	1 8/9"	38mm	1 1/2"	108mm	4 1/4"	57mm	2 1/4"



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