

TruDesign Ball Valves



Designed and made in New Zealand TRUDESIGN Certified Ball Valves are specifically designed for use in marine applications above and below the water line.

Certified to ISO 9093-2021* by the International Marine Certification Institute (IMCI, Belgium) when fitted to TRUDESIGN Skin Fittings (Thru Hulls).

1" to 3" sizes comply with ABYC H-27 load standards. (See website).

Type approved by Bureau Veritas to ISO 9093-2021. (Standard Ball Valves 3/4" to 3").

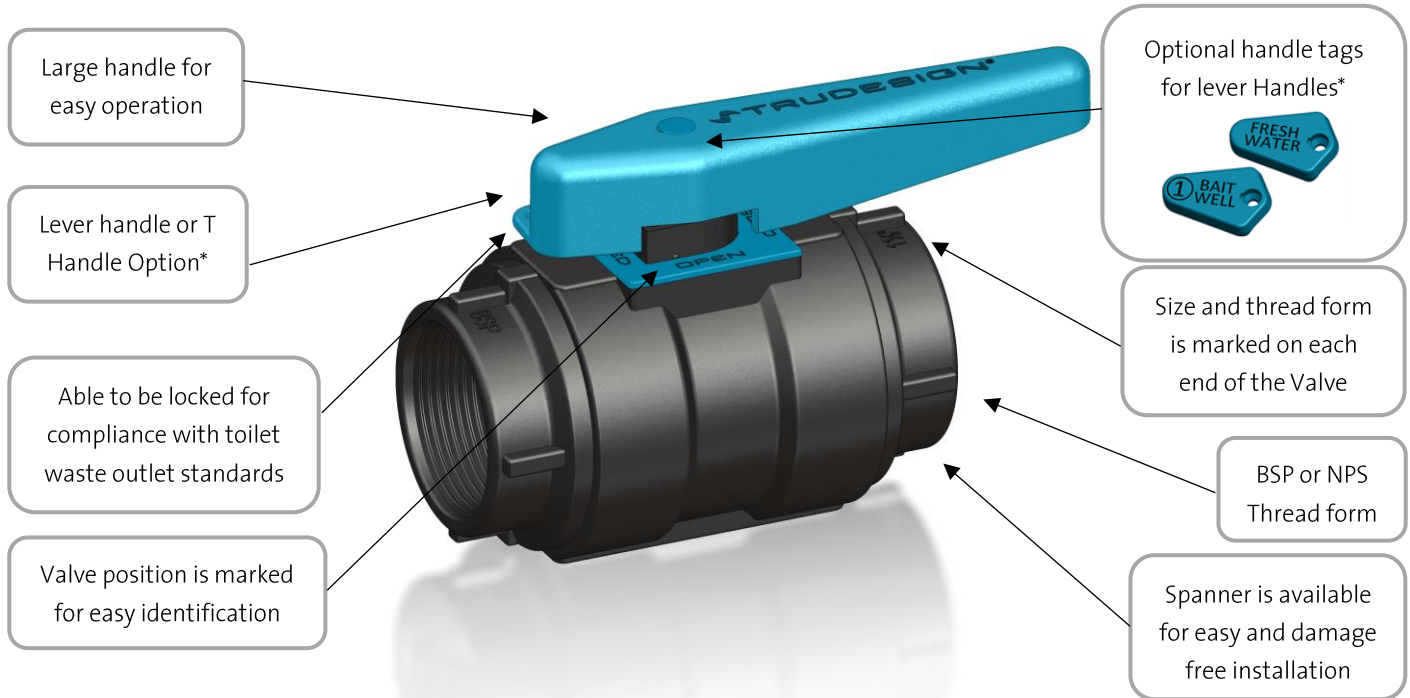
Key Features:

- Standard Ball Valve Range includes 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" and 3".
- Compact Ball Valve Range 3/4" and 1/2" models.
- 6:1 weight savings over Bronze.
- Manufactured from a glass-reinforced Nylon composite – High strength, tough and light weight.
- Immune to corrosion & electrolysis – No corrosion or 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.
- Locking feature allows the valve to be locked in the closed position to comply with toilet waste outlet regulations.
- Large operating range – Suitable for all marine conditions from -40°C to +110°C
- Available in both BSP and NPS thread forms.
- Can be used in Engine Rooms
- "T" Handle or "Lever" Handle options**
- Handle Identification Tags are available to easily identify Ball Valve Function**
- U.V resistant – No degradation from the sun's ultraviolet rays.
- 100% leak tested before leaving factory.

**Does not apply to 1/2" standard ball valve or 1/2" Compact ball valve. The 3/4" Compact Ball Valve is under ISO test.*

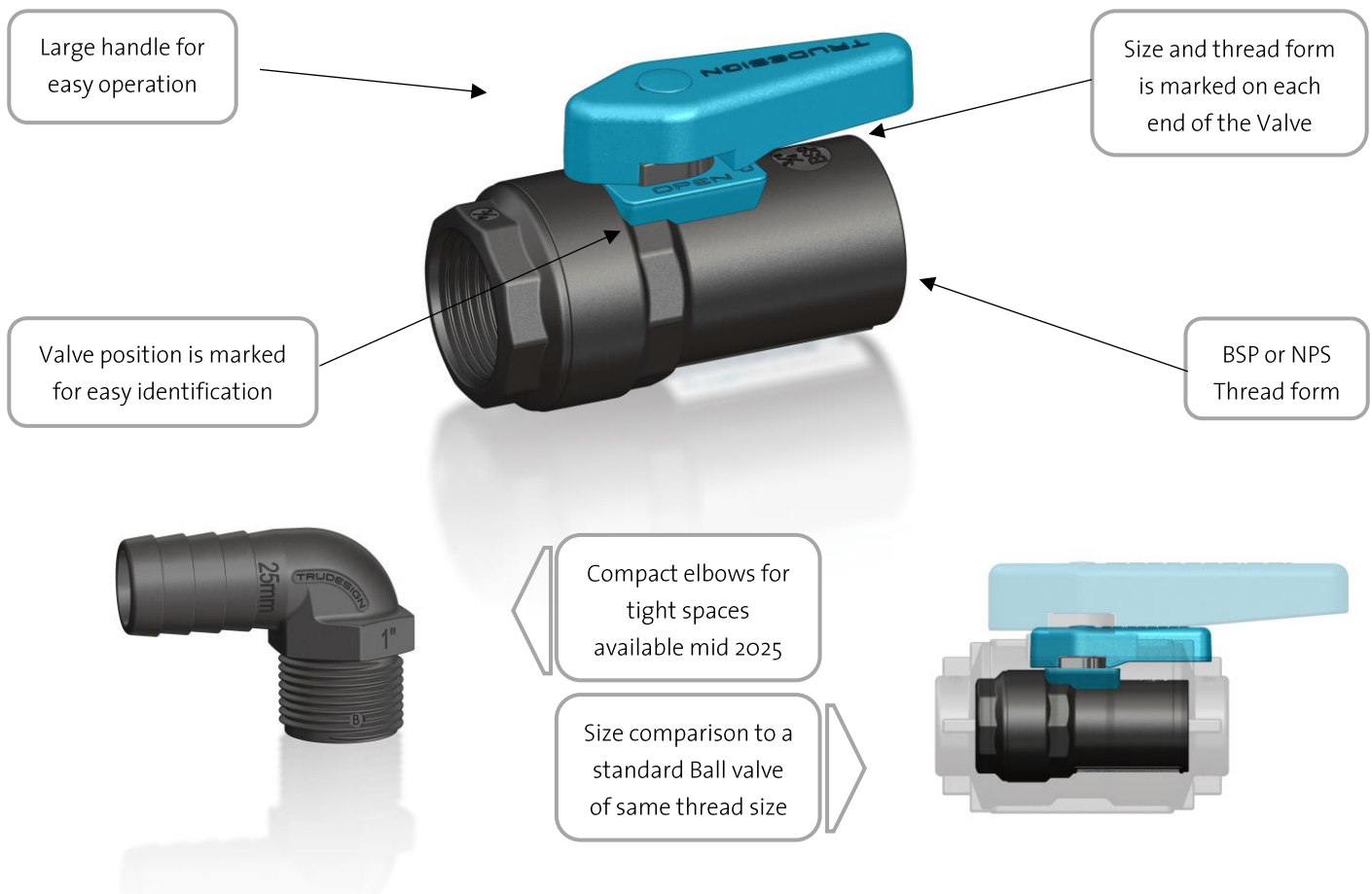
***Does not apply to 3" or Compact Ball Valve range*

Key Features Standard Ball Valve



**Does not apply to 3" or Compact Ball Valve range*

Key Features Compact Ball Valve - 1/2" and 3/4"



Part Numbers

Ball Valves – Standard - Lever Handle						
Part Numbers					Description	
BSP			NPS			
TAGGED	NON PKG Barcode 942100712 + XXXX	PKG	PKG Barcode 942100712 + XXXX	TAGGED		
90471		90548	1045	90647		Ball Valve ½”
90276		90549	1061	90648		Ball Valve ¾”
90242		90550	1078	90649		Ball Valve 1”
90240		90551	1085	90650		Ball Valve 1 ¼”
90235		90552	1092	90651		Ball Valve 1 ½”
90472		90553	1108	90652		Ball Valve 2”
91157	4819					Ball Valve 3” with Tag
Ball Valves – Standard - T Handle						
Part Numbers					Description	
BSP			NPS			
TAGGED	PKG		TAGGED	PKG		
91145					Ball Valve ½” T Handle	
91140					Ball Valve ¾” T Handle	
91141					Ball Valve 1” T Handle	
91142					Ball Valve 1 ¼” T Handle	
91143					Ball Valve 1 ½” T Handle	
91143					Ball Valve 2” T Handle	
Ball Valves - Compact						
Part Numbers					Description	
BSP			NPS			
TAGGED	PKG	PKG Barcode 942100712 + XXXX	TAGGED	PKG		
91370	91371	5465	91379		Ball Valve ½” Compact	
91368	91369	5458	91377		Ball Valve ¾” Compact	

*PKG product is supplied in branded bags

Weights				
Standard Ball Valve				
Size	½", ¾", 1"	1¼", 1½"	2"	3"
Weight (g/oz)	300 g / 10.6 oz	450 g / 15.9 oz	700 g / 24.7 oz	1,510 g / 53.3 oz
Compact Ball Valve				
Size	½", ¾"			
Weight (g/oz)	50 g / 1.5 oz			

Part Numbers Continued

Handles				
Part Numbers			Description	
NON PKG	PKG			
91155			Ball Valve Replacement Lever Handle Small 25-19-13mm	 
91156			Ball Valve Replacement Lever Handle Large 50-38-32mm	
91290			Ball Valve Replacement Lever Handle 3"	
91038			Ball Valve Replacement 'T' Handle Small 25-19-13mm	 
91040			Ball Valve Replacement 'T' Handle Large 50-38-32mm	
91374			Ball Valve Replacement Lever Handle CMPT	
Spanners / Wrenches (Standard Ball Valves)				
Part Numbers			Description	
NON PKG	PKG	PKG Barcode 942100712 + XXXX		
	90476	0446	Spanner / Wrench Ball Valve 1/2"	
	90477	0439	Spanner / Wrench Ball Valve 3/4" & 1"	
	90478	0422	Spanner / Wrench Ball Valve 1 1/4" & 1 1/2"	
	90479	0415	Spanner / Wrench Ball Valve 2"	
	91365		Spanner / Wrench Ball Valve 3" Aluminium	

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Installation:

Ensure the skin fitting (Thru Hull) and ball valve location enables full operation of the valve handle. See also our info sheet on TRUDESIGN skin fitting installation.

Screw Ball Valve onto the skin fitting (Thru Hull) using the correct Ball Valve Spanner (available from TRUDESIGN), or another appropriate tool. Tighten 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: The connecting threads on each end of the Ball Valves are a parallel thread form. 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 in some cases be only a few turns.

Thread Sealing

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

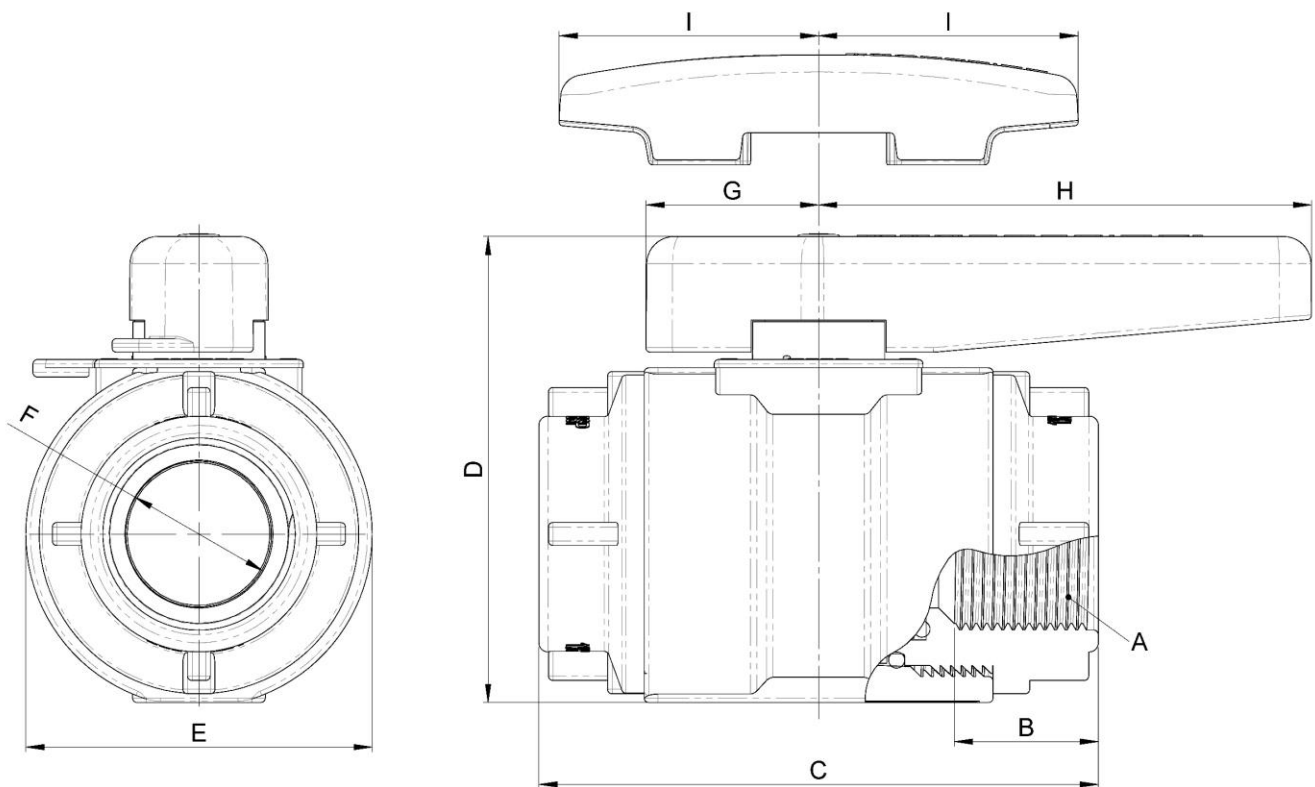


Dimensions – Ball Valves Standard

A	B		C		D		E		F		Lever Handle				T-Handle	
Size	Length		Length		Height		Width		Minimum Internal Ø		G		H		I	
½"	25mm	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"
1¼"	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"
1½"	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"
3"	46mm	1 4/5"	205mm	8"	180mm	7"	153mm	6"	75mm	3"	50mm	2"	160mm	6 2/7"	-	-

Dimensions – Ball Valves Compact

A	B		C		D		E		F		Lever Handle				T-Handle	
Size	Length		Length		Height		Width		Minimum Internal Ø		G		H		I	
½"	22mm	7/8"	74mm	2 9/10"	54mm	2 1/8"	39mm	1 1/2"	15mm	3/5"	18mm	5/7"	45mm	1 7/9"	-	-
¾"	22mm	7/8"	74mm	2 9/10"	54mm	2 1/8"	39mm	1 1/2"	15mm	3/5"	18mm	5/7"	45mm	1 7/9"	-	-



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