



Leaffield
Marine

Air valves for inflatable structures





RIBS & INFLATABLE BOATS

Leaffield Marine valves are ideal for all RIBs and inflatable boats for use in all environments

Our valves are designed and built for high performance and reliability in a marine environment, including 100% leak testing.

We design and manufacture a range of valves for fast inflation/ deflation, pressure relief, and transfer.



D7 INFLATION/ DEFLATION VALVE

The D7 valve is designed for use in demanding applications where a compact design is required; such as Military and Commercial RIBs, River Rafts and Inflatable Boats.

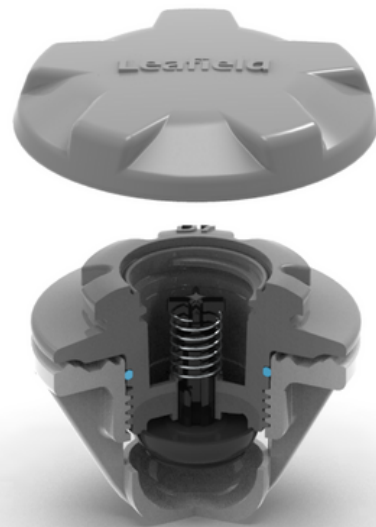
It has a shorter, smoother internal profile, making it ideal for smaller diameter tubes, for example inflatable kayak floors.

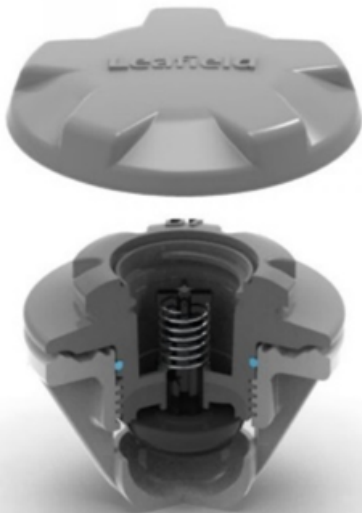


D7 Key attributes and benefits:

- High flow for size.
- Rugged and reliable.
- Low profile at 50mm overall height.
- Smooth, snag free cap.
- 'O' ring seal on the valve core to reduce the risk of lateral leaks in the fabric.

- 100% tested during production.
 - ACETAL (POM) plastic parts give high strength, chemical, ozone and shock resistance.
 - Cap works as a second seal
 - Internal cap strap.
 - Core available in grey or black.
- Caps available in grey, black, white or yellow.
- Company brand can be added to the cap, subject to a minimum quantity and tooling charge.





Leaffield Marine also manufacture a drop stitch compatible D7 valve, fitted with an internal mesh filter. The Leaffield Marine D7 drop stitch valve is specifically designed for use with high pressure drop stitch fabric. It is ideal for inflatable paddleboards, rescue platforms and water park equipment.





PRESSURE RELIEF VALVES

Leaffield Marine design and manufacture several types of pressure relief valves to protect the structure from over inflation due to solar heat, misuse and intentional rapid inflation.

Leaffield Marine have designed various PRVs for different applications. However, The A6 is one of our most popular and suitable for leisure life rafts, RIBs, and river rafts. It is also ideal for any use where compact and reliable valves are critical, for example, on commercial & military inflatable boats.



Stand Up Paddleboarding is quickly becoming one of the most popular water sports. A Leaffield Marine A9 Pressure Relief valve can help you to regulate the air pressure in your board and ensure that it does not become overinflated.

The A9 is specifically designed for use with high pressure products, or those made with drop stitch materials. It has internal and external mesh filters to stop drop stitch threads, sand and debris causing leaks in your paddleboard.



A9 PRESSURE RELIEF VALVE

The A9 is a compact and robust PRV, perfect for uses where reliability and smaller size are critical.

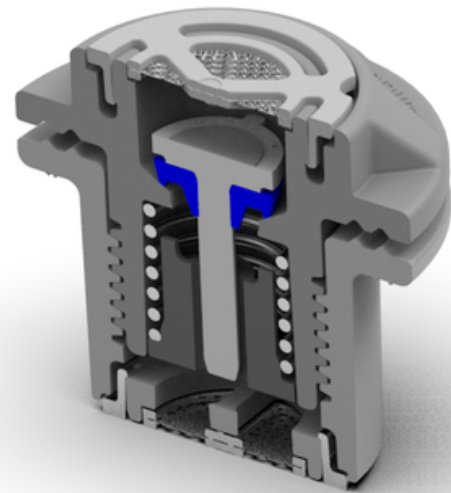
The design makes it suitable for a wide range of high-pressure applications, such as paddle boards, leisure, military, or commercial inflatable boats that use drop stitch fabric.

A9 Key attributes and benefits:

- Compact size – 46mm diameter
- Designed for use with drop stitch fabrics up to 45psi
- A wide range of pressure settings from 10 to 45 psi
- Internal and external filters to stop drop stitch threads, sand and debris causing leaks



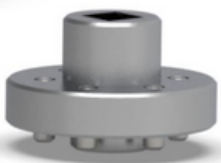
- Fast installation with clamp fitting – no welding or adhesive required
- Operational temperature from -30°C to +65°C
- No routine maintenance required



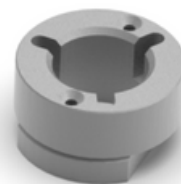
A9 PRESSURE SELECTION CHART

Colour	Pressure		Max Crack		Min Reseat	
	Psi	Bar	Psi	Bar	Psi	Bar
Violet	10	0.69	10	0.69	7.5	0.517
Pink	15	1.03	15	1.03	12	0.83
Yellow	20	1.38	20	1.38	16	1.10
Blue	25	1.72	25	1.72	20	1.38
Brown	30	2.07	30	2.07	24	1.66
White	35	2.41	35	2.41	29	2.00
Orange	40	2.76	40	2.76	33	2.28
Red	45	3.10	45	3.10	37	2.55

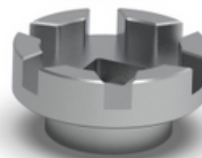
PRV TOOLING SELECTION



A6 spanners
(top & bottom)



A9 spanners
(top & bottom)



Tool kit spanner for use with
A6, A9, C7, & D7

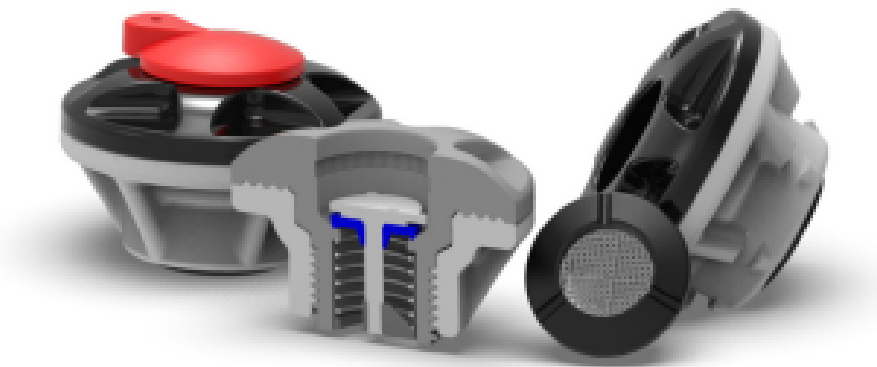
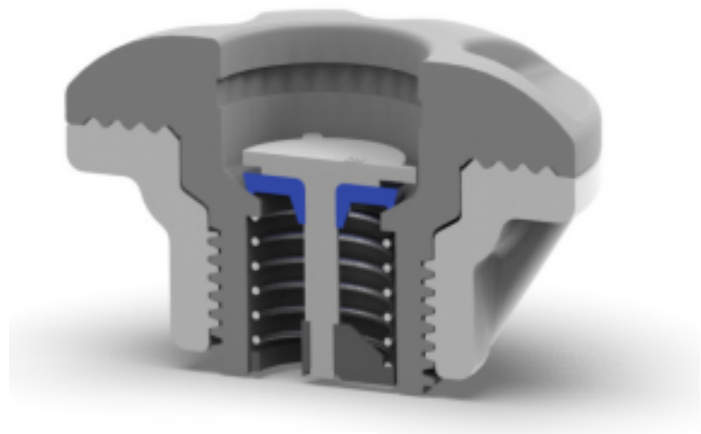
A6 PRESSURE RELIEF VALVE

The A6 Pressure Relief Valve is ideal for any application where compactness and reliability are critical. The opening and closing pressures are accurately pre-set and repeatable.

A6 Key attributes and benefits:

- Protects the structure from over inflation and excess pressure due to solar heat.
- Approved to ISO 9650 and ISO 15738 as a transfer valve.
- Type Approval Certificate available on request
- Smooth, low profile.
- Materials have high UV resistance.
- 100% tested for opening and closing pressures.
- Rapid installation with clamp fitting.
- Operating temperature: -30°C to +65 °C.

- The valve is available in grey, black or white.
- Filter caps are available to stop debris entering the valve
- A secondary seal plug is available for test purposes (prevents pressure relief function from working)



A6 PRESSURE SELECTION CHART

Colour Code	Nominal Pressure		Max Opening		Minimum Sealing	
	Psi	bar	Psi	bar	Psi	bar
Violet	0.5	0.03	0.62	0.04	0.36	0.02
Grey	1.0	0.06	1.2	0.08	0.73	0.05
Pink	1.3	0.09	1.63	0.11	1.16	0.08
Yellow	1.75	0.12	2.13	0.15	1.48	0.10
Blue	2.0	0.13	2.46	0.17	1.7	0.12
Brown	2.5	0.17	3.07	0.21	2.16	0.15
White	2.75	0.19	3.4	0.23	2.35	0.16
Orange	3.25	0.22	4.3	0.30	3.0	0.21
Red	4.0	0.27	5.0	0.34	3.47	0.24
Black	5.5	0.37	6.32	0.44	4.95	0.34
Green	6.0	0.41	7.51	0.52	5.24	0.36
Green/White	7.0	0.48	8.16	0.56	6.25	0.43
Green/Blue	8.25	0.56	9.7	0.67	6.86	0.47
Blue/Brown	9.0	0.62	10.0	0.7	7.5	0.52
White/Orange	10.0	0.68	11.0	0.76	8.5	0.62
Red/Yellow	12.5	0.86	14.0	0.97	11.0	0.76
Red/Green	16.0	1.10	17.5	1.21	14.5	1.00
Blue/Yellow	17.0	1.17	18.75	1.29	15.5	1.07
Silver	20.0	1.37	22.0	1.38	17.0	1.17

MILITARY & DEFENCE



Leaffield Marine's products and systems are commonly used in the manufacture and design of military and defence devices. In applications such as these, reliability and efficiency are crucial. That is why our valves are made using only the best materials to ensure they are robust and leak proof.



At Leaffield Marine, we place enormous emphasis on the reliability and durability of our valves.

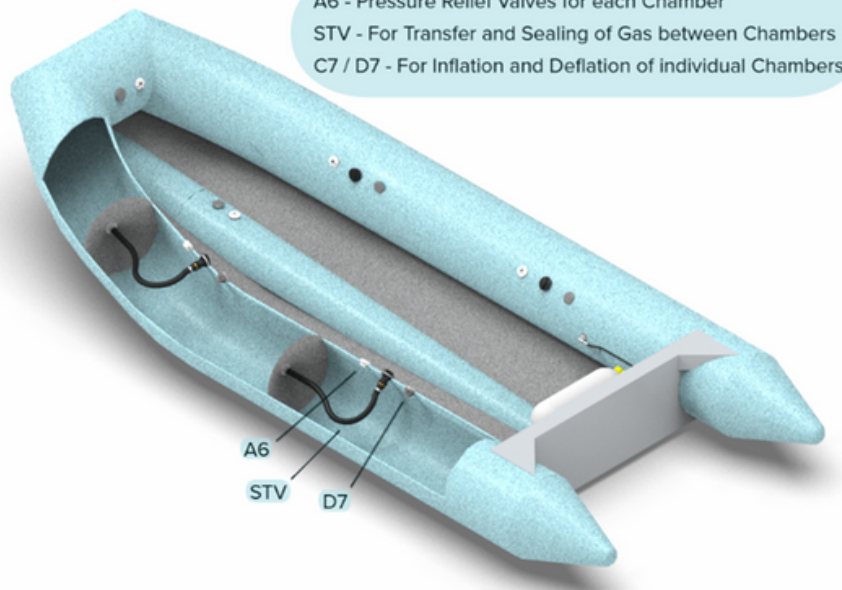
Our products are extensively tested during the design implementation stage to ensure the reliability, endurance, and robustness of their design.

Each of our inflation valves and pressure relief valves are individually pressure tested. They are rigorously subjected to salt spray, UV, Sand & Aluminium Oxide wear & function tests, to ensure the integrity of the products on which they are used.

Our products are designed and tested for use in the most extreme situations and are used in countless military applications around the world. Many have been issued with NATO stock numbers.

Tel: +44 (0)1225 899550 Email: sales@leaffieldmarine.co.uk

THE SWITCHABLE TRANSFER VALVE



The Leaffield Switchable Transfer Valve is a patented and maintenance free valve used in many diverse scenarios including, Heli-drop, underwater CRRC applications, rapid deployment, and search and rescue around the world.



The valve is opened to allow air or gas to transfer between chambers of an inflatable structure with limited pressure drop, ensuring rapid inflation. Following inflation, the valves can be closed to ensure the integrity of the structure is not compromised.

The STV is also useful during deflation of a structure. If one chamber is vented to deflate the structure, the other chambers will also discharge through the same point, simplifying the deflation process and enabling the air / gas to be pumped out of a single point .

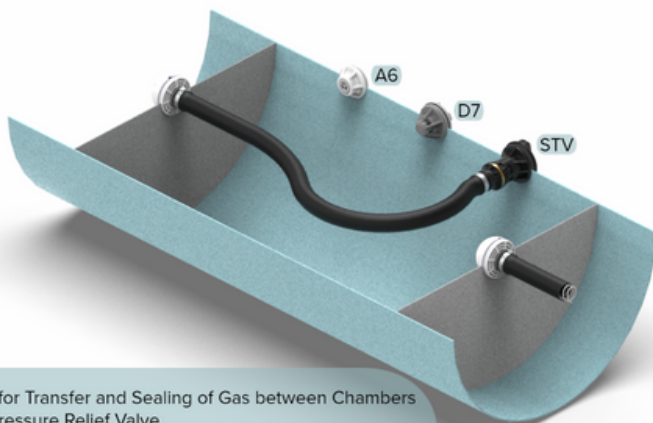
This valve allows for the fast and efficient inflation and deflation of an inflatable structure. As well as being more convenient, this can be an essential piece of kit in an emergency or military operation as it allows for rapid deployment of a vessel.

THE SWITCHABLE TRANSFER VALVE

The patented Switchable Transfer Valve (STV), provides an internal link between adjoining chambers of an inflatable boat. This creates a single point of inflation. It can be easily opened and closed to connect the chambers by rotating a control switch, fitted on the outside of the tube in a position to suit the user.

The opposite end of the STV hose locates onto the internal baffle of the boat tube, using our Snap Fit Connector.

The Valve assembly is flexible to help reduce the packed size of the deflated boat.



STV - for Transfer and Sealing of Gas between Chambers
A6 - Pressure Relief Valve
C7/D7 - For Inflation and Deflation of Individual Chambers

- Intercommunicating valve linking adjoining tubes or chambers.
- Provides a single point inflation for all chambers of the structure.
- A quarter turn, to switch from open to closed.
- Clear open/closed markings – visual and by touch.
- High flow between chambers during inflation and deflation – 24mm diameter aperture between chambers.

- Maintenance free
- High tolerance to debris.
- Robust and leak tight.
- Operational temperature range of -30°C to $+65^{\circ}\text{C}$.
- Clamps into fabric of chamber and internal baffle.
- Suitable for a wide range of fabrics





SELF-RIGHTING BAGS

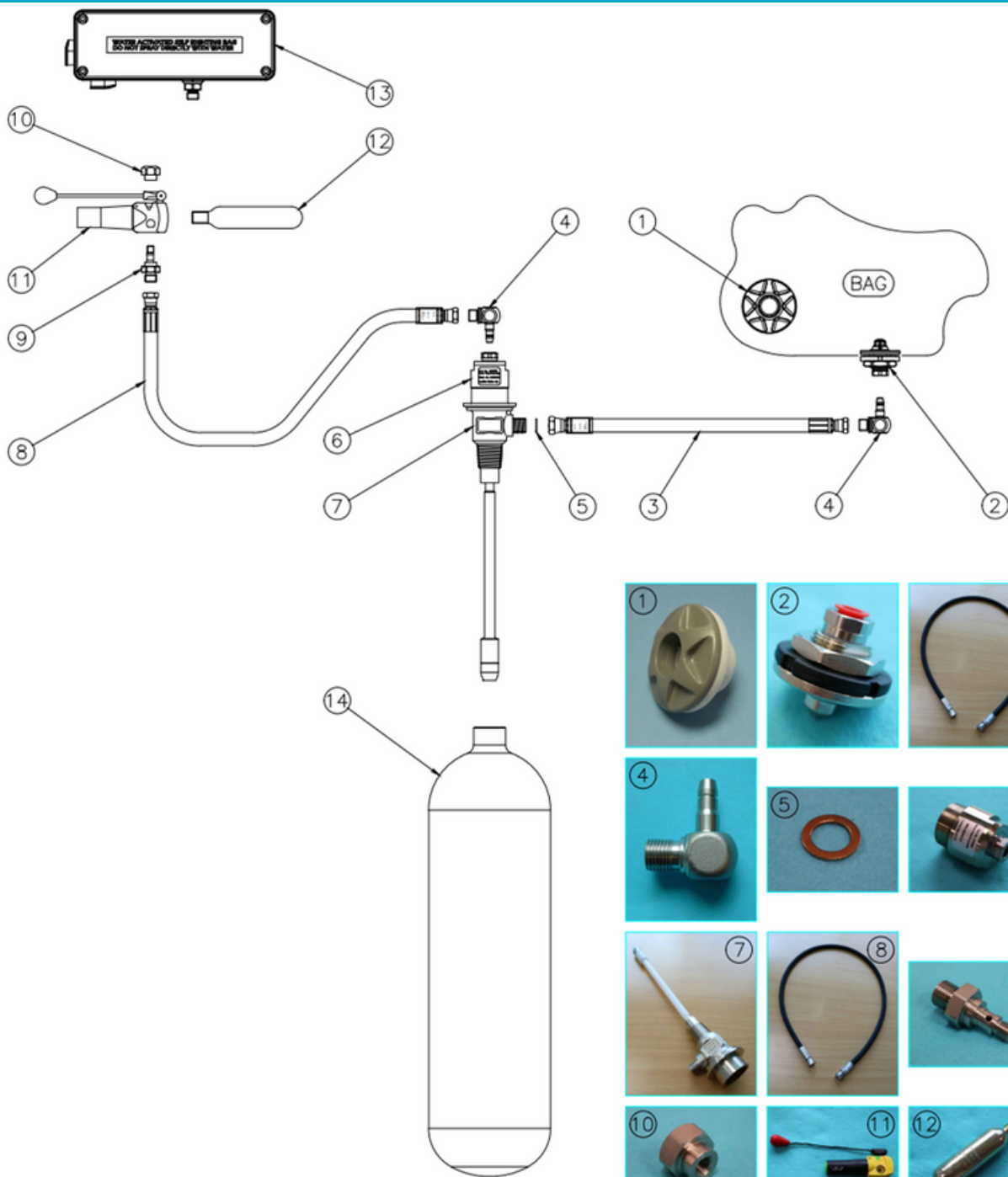
Self-Righting Bags are an important safety option for boats and RIBs at risk of capsizing whilst in use. Leaffield Marine can offer a wide range of products to designers and manufacturers of Self-Righting systems, and which are proven in marine use on life-rafts and other inflatable craft. These are used widely on SOLAS type Rescue Boats.

These systems can offer automatic deployment to ensure that if boat capsizes, it can be righted again as quickly as possible, reducing the threat to life.

For more in-depth information on our self-righting systems, contact us today.



SELF-RIGHTING BAG SYSTEM



ITEMS LIST

ITEM No.	DESCRIPTION	PART No.	QUANTITY	
1	A6 PRESSURE RELIEF VALVE ASSEMBLY	A6 SERIES	2	
2	GVT INLET VALVE ASSEMBLY (PLATED) - 2.8mm JETS PURPLE CODE	03250V12.8	1	
3	1/4" HOSE ASSEMBLY - (1/4" BSPF CONICAL TO 3/8" BSPF FLAT FACE) (STAINLESS STEEL FITTINGS)	11532 SERIES	1	
4	ROTATIONAL FITTING - ELBOW (1/4" BSP TO QUICK FIT CONNECTOR)	18804	2	
5	WASHER - SEALING (COPPER)	88000748	1	
6	SERVO OPERATING HEAD ASSEMBLY - THREAD MOUNT	1205005	1	
7	CYLINDER VALVE ASSEMBLY - CV5 250 BAR c/w PENETRATOR & DIAPHRAGM ASSEMBLIES	D912205	1	
8	1/4" HOSE ASSEMBLY - (1/4" BSPF CONICAL TO 1/4" BSPF CONICAL) (STAINLESS STEEL FITTINGS)	11529 SERIES	1	
9	LIFE JACKET INFLATOR ADAPTOR	18839	1	
10	LIFE JACKET INFLATOR NUT	18840	1	
11	MK5 OPERATING MECHANISM (INCORPORATING WATER SENSING CARTRIDGE)	88600000	1	
12	CYLINDER - 38 GRAM	22800013	1	
13	AUTO INFLATION SYSTEM ENCLOSURE ASSEMBLY	1808091	1	OPTIONAL
14	SEAMLESS STEEL CYLINDER - 6.7 LITRE CAPACITY CO ²	22800007	1	



SELF RIGHTING BAG SYSTEM
GVT & 1/4" HOSE
AUTO INFLATION - WATER ACTIVATED

JANUARY 2019

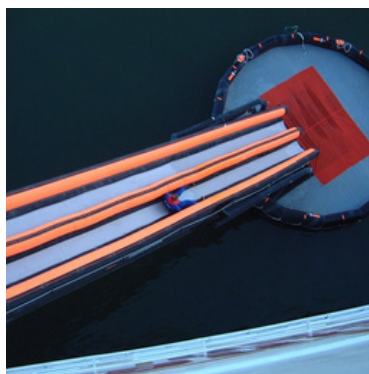
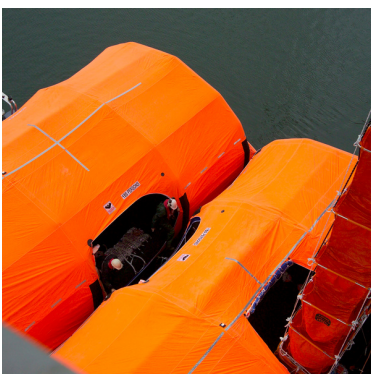
MARINE RESCUE AND LIFE-SAVING EQUIPMENT



The Leaffield Marine range of products has been developed to meet the extreme requirements imposed by the commercial marine environment. That is why they are frequently seen on life rafts, evacuation systems, and rescue boats. They are well proven, with over 450,000 life raft systems manufactured since 1992 and are used by world leading manufacturers on SOLAS life-rafts.

Products are approved to ISO 15738 for use in commercial life-rafts, ensuring a high level of performance and reliability.

We configure our wide range of products to suit your life-raft design and are happy to discuss your specific needs with you.



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INFLATABLE TENTS & STRUCTURES

The Leaffield Marine range of valves are ideal for a wide variety of inflatable structures. These include tent awnings, emergency shelters, decontamination tents, promotional inflatables, lifting bags, rescue platforms, water park equipment, gym mats, walls, crash barriers, oil booms and even art installations!

Although we are well-known for our valves for inflatable boats and life rafts, we work with many unique companies to find optimum air valve solutions.

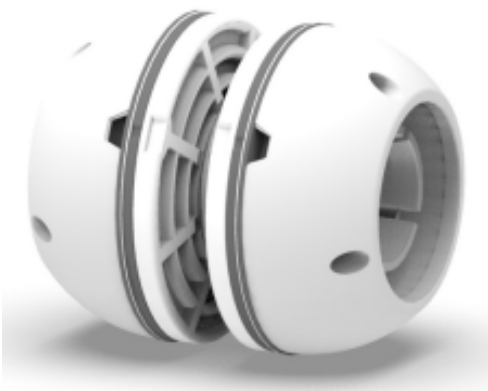
Leaffield Marine are focused on designing safe and reliable products. Many companies use our valves and systems in lifesaving scenarios. Our valves for inflatable tents are popular with manufacturers of emergency inflatable shelters and decontamination tents due to their rapid inflation times and long-term reliability.



SNAP FIT CONNECTOR ASSEMBLY

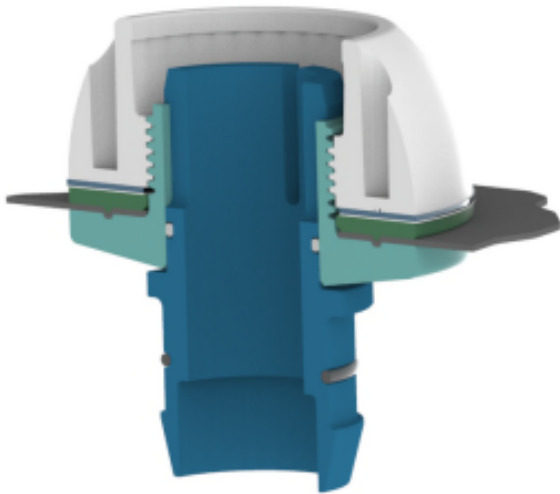
Snap fit connectors allow inflatable shelters to be constructed rapidly. They connect adjoining chambers of an inflatable tent. This, in effect, creates a single modular structure, with one point of inflation and deflation. As a result, inflation becomes far more simple and much faster.

A snap fit connector assembly provides a high flow rate between chambers. It clamps onto the fabric to create a leakproof and robust fit. This method is compatible with a wide range of fabrics, tubes, and chambers.



SNAP FIT CONNECTOR ASSEMBLY

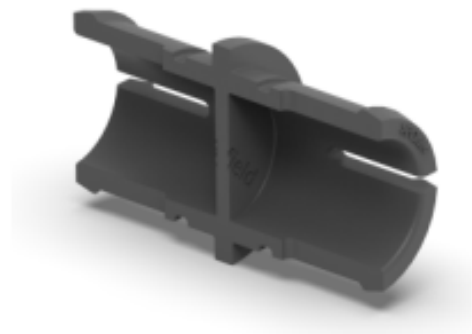
The Snap Fit Connector allows connections to be made between adjoining inflatable chambers, for example tent and boat chambers.



Snap Fit Connector Key attributes:

- Allows high gas flow between chambers.
- No routine maintenance required.
- Robust and leak tight.
- Clamps into a wide range of fabrics.
- Accessories are available to blank off chamber connections or to allow inflation of separate chambers.

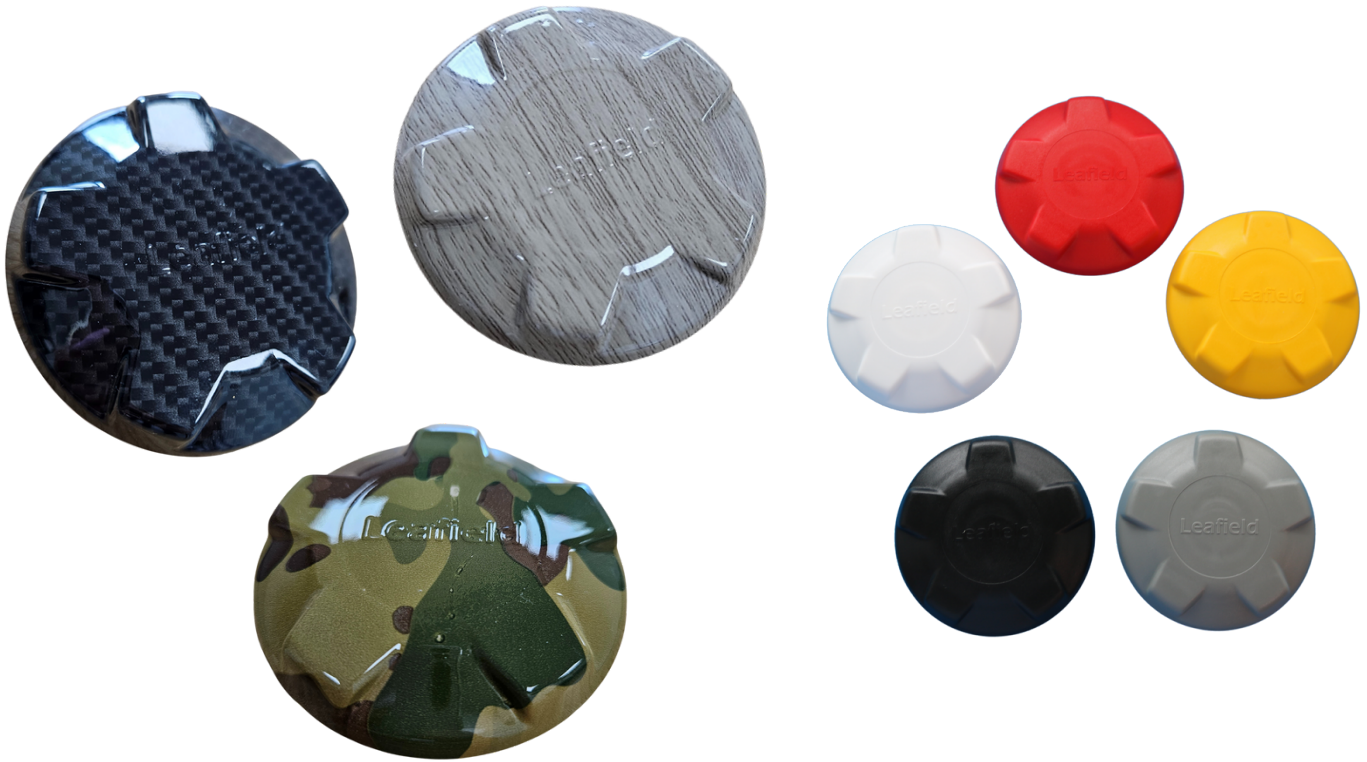
Blanking Tube: Part Number: 1502006
For Assembly including Blanking Tube
and Body: 1408002



Blanking Plug: Part Number: 1005003
For Assembly including Blanking Plug
and Body: 1211002



LEAFIELD MARINE'S CUSTOMISATION OPTIONS



The sleek valves from Leaffield Marine are available in several flat moulded colours as well as our prestige custom cap collection which includes camouflage and carbon effect caps as well as designs of your choice. As a result, you can be assured that the valve will match your product design and maintain a sleek low-profile.

Our valve caps can be custom-made to feature company branding. We can include your logo or company name and will work with you to create a design that you're happy with. This option is subject to minimum order requirements.

If there is something specific you are looking for get in touch today and find out how we can help!



Leaffield Marine

Leaffield Marine is based in the UK, in the heart of the Wiltshire countryside, with in-house design and production.

We first started designing and producing valves for inflatable boats in 1965. Since then, our range of products has grown to include specialist inflation systems and air valves for many inflatable structures including commercial, leisure and military applications, supplying many of the world leaders in these markets.

At Leaffield Marine, we are renowned for our engineering strength and work closely with customers in the product design phase to ensure our products fully satisfy our customers' needs. This is particularly important for many of our technical and specialist products such as our gas inflation systems for life rafts.



We are ISO 9001:2015 registered company with many of our products also approved to SOLAS (ISO:15738), PE(S)R and PED standards.

Leaffield Marine has been accredited with Approved Exporter Status as governed by UK HM Revenue and Customs. This opens the way for simpler trading between Leaffield Marine and countries entered into Free Trade Agreements.

WHAT OUR CUSTOMERS SAY

"I go rafting to be in the moment, so I don't want to think about my gear. Thankfully, I never have to think about my Leaffield valves."

- Member of the NRS Team

Gemini have been using the tried and tested Leaffield Valves in our commercial & professional RIBS for many years and will continue to do so.

- Gemini Marine Team

For more than 25 years, we have been Leaffield's US distributor.

Their expertise in design, manufacturing and customer service is second to none. Great support, timely deliveries and cutting edge engineering, we are proud to team up with them.

- River Gear Team

We've always been very happy with the quality of Leaffield's products for use in our oil booms. The service they offer has always been great and they consistently fulfil orders on time to meet our project requirements.

- Vikoma International Team

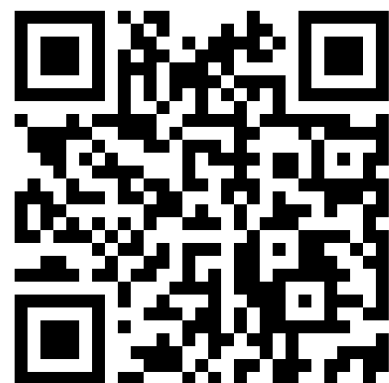
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