

## SECUMAR Tetra 3D – good turning properties despite heavy clothing

Buoyancy chamber in the form of a tetrahedron releases positive forces

Bernhardt Apparatebau (t/a Secumar) has yet again set new standards with a patented innovation in the field of leisure marine lifejackets. The SECUMAR TETRA 3D lifejacket has excellent turning properties thanks to its specially designed buoyancy chambers that rise up and away from the body. When these chambers become submerged, forces are released which turn the wearer into a safe position where he can breathe freely.

The principle is based on the tetrahedron shape of the inflated buoyancy chamber. The 3D buoyancy chambers are designed in such a way as to not only lie flat across the chest and neck area but in addition two additional triangular buoyancy chambers are inflated at chest level forming a tetrahedron on the chest – stretching into the third dimension.

If you fall forwards into the water, these buoyancy chambers are deeply submerged and function as a long leverarm to offer extra buoyancy to your body when it is face down and quickly turn you over on to a safe position on your back, overcoming any counterforces which arise out of pockets of air being trapped in your clothing, particularly with immersion or dry suits. The TETRA 3D lifejacket, whose design was developed via commercial shipping operations, has a further advantage from this patented buoyancy chamber shape. The optional emergency lifejacket light is positioned on the tip of the tetrahedron, making it about 20 centimetres higher than on conventional buoyancy chambers. As a result, rescuers can detect the man overboard from farther away or in larger waves.

A new type of spray hood is part of the standard equipment on the TETRA 3D, designed to prevent „channelling“ – spray water which is channelled towards the face (as can occur with many other kinds of lifejacket) – and, importantly, reduces heat loss through the head.

SECUMAR has paid particular attention to comfort when worn. Despite its comprehensive accessories, the lifejacket lies flat on the body and offers a great deal of freedom of movement. Tests have shown that you can climb into a life raft with the buoyancy chamber in its inflated state.

The SECUMATC 4001 S inflation device, a detachable washable neck fleece, 3M® retro-reflective strips, lifting becket, whistle, crotch strap loops, lifejacket stowage bag, and a second zip pocket at the front all come as standard on the TETRA 3D. The SECUMAR inspection window enables easy checking on the inflation device status. Putting on the lifejacket is quick and easy thanks to the patented SECUMAR click buckle (rather than the fiddly interlocking system).

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Tetra 3D - in-water



Tetra 3D