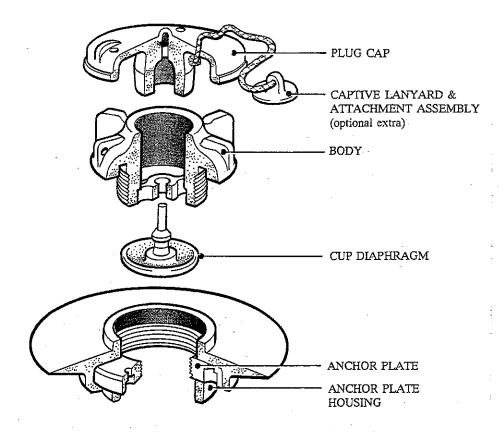
Introduction

Special valves have been developed for use on inflatable boats, pontoons and large structures which may need deflating rapidly. The use of modern materials has produced a simple, effective and corrosion free, low profile valve.



In operation, the cup diaphragm deflects to inflate and then immediately closes, preventing loss of pressure. Any subsequent increase in pressure in the structure results in a wiping action between the cup diaphragm and the valve body, which cleans the sealing surfaces and ensures a positive seal. The plug cap is a protective cover and secondary air barrier.

Deflation is achieved by unscrewing the valve body, leaving a 35mm diameter orifice. Typical deflation times for an A5 valve used to relieve a 0.28m³ buoyancy chamber are:

from 14kPa to 7kPA 2 seconds
from 7kPa to 2kPA 4 seconds
from 2kPa to atmospheric pressure* 10 seconds

16 seconds

* complete collapse of the chamber will depend on the weight, stiffness and temperature of the proofed fabric.

Full installation instructions are given on the installation drawing.

The valve is rugged and requires no routine maintenance.

Two types of A5 inflation/rapid deflation valves are available:

Standard Version

For general use on boats and other inflatable structures.

Version with Reduced Crack Pressure

A version developed for use in boats where topping up with bellows is specified. The contact pressure between the cup diaphragm and the valve body has been reduced, thus lowering the crack pressure. A groove has been formed in the bore of the valve body to locate the bellows end fitting more securely.

Full installation information is given on the installation drawing.

The valve is rugged and requires no routine maintenance.

Materials

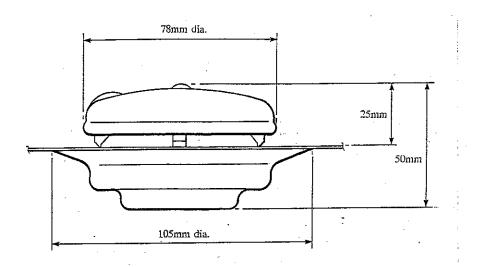
Plug cap : Neoprene

Body : Acetal copolymer Cup diaphragm : Natural rubber

Anchor plate : Glass filled nylon
Anchor plate housing : Natural rubber or

Neoprene

Dimensions



Ordering details

When ordering, specify valve type, version and anchor plate housing material, e.g. A5 inflation/rapid deflation valve, reduced crack pressure, rubber.

Accessories (see accessories section)

Bellows end fittings - for topping up.

Manometer and vacuum probes – for monitoring pressures during manufacture and for deflation and vacuum packing.

Captive lanyard and attachment assembly.