

HYDRA REGULATOR SET

Hydra Regulator CE Approved And EN250-A Certified

The Hydra regulator is suitable for cold water and more extreme diving, as well as warmer water and less intensive dives. The Hydra is supplied with regulator case and computer case, and it's available with a DIN or A-clamp connection. See below for the regulator's specification.

First stage

The Hydra regulator's environmentally sealed first stage is designed for the diver who wants the best characteristics even in extreme conditions. The internal mechanism of the first stage has twin protected from saltwater and moisture; the internal black diaphragm allows high performance with high reliability and completely separates the "heart" of the regulator from the external environment, while the outer silicone diaphragm allows the exact transmission of external pressure to the internal mechanism, without the use of complicated equipment or special fluids.

Manufactured from a single piece of brass, then subjected to an electro-galvanic process, the system is based on a balanced diaphragm regulator that gives an intermediate pressure that is always constant, regardless of tank pressure or depth. The air passes through a piston, the movement of which is controlled by a diaphragm. The piston receives equal pressure from both sides, allowing the output pressure to be independent from the cylinder pressure.

The internal component parts are made from chrome/nickel coated brass, the springs from stainless steel and the seals from nitrile rubbers. Particular attention was paid to the separation diaphragm by making it from a special rubber resistant to low temperatures. The air inlet is protected by a conical sintered filter that blocks impurities and debris that may be present in the valve and in the cylinder.

The first stage is fitted with four low pressure ports (3/8" x 24 UNF thread) and two high pressure ports (7/16" x 20 UNF thread).

Second stage

The second stage case is made from a synthetic resin, which is highly resistant to impacts and abrasion, and it is not attacked by UV rays and chemical agents. The diaphragm, the exhaust valve and the poppet seat are made from silicone. The other inner components are made from chrome-plated brass and stainless steel. The mouthpiece is hypoallergenic silicone. The second stage is connected to one of the low pressure (LP) ports on the first stage through a flexible LP hose with high flow performance.

The venturi lever (+/- lever) on the second stage adjusts the direction of the nozzle in the second stage that releases air to be breathed by the diver. In the "-" position, the nozzle faces towards the diaphragm at the front of the second stage. This setting is usually favoured in normal diving conditions (pre-dive). In the "+" position, the nozzle faces towards the diver's mouth, making for an easier breathe in more extreme conditions and/or deeper dives. The venturi lever can be adjusted between these two settings.

Emergency auxiliary second stage (octopus)

The octopus has the same technical specifications and materials as the standard second stage. The only differences are in the colour of the shield and hose, which are yellow, especially designed for easy identification in an emergency. The octopus's hose is 1m long for quick access.



Second stage



DIN converter supplied as standard, option for Aclamp upon request



Octopus



Regulator case and computer safe (dive computer not included)



NORTHERN DIVER

ND STOCK CODE // **REGS**

ND STOCK CODE // **REG-HYDRA-DIN**