Use of the T10 balanced diaphragm first stage is advised, compared to the piston models, for diving in waters full of suspended particles or dissolved mineral salts, or for use in cold water (with temperatures under 10°C), because all parts of the regulator mechanism are insulated for contact with water.

For diving in extreme conditions we recommend using combinations with the T10SC or the T10 Cromo SC versions equipped with the Seal Chamber (S.C.)

⚠ **WARNING:** *to deal with diving in cold water (temperature <10°C or < 50°F) Cressi-sub recommends use of a tank equipped with a pillar valve with two independent ports outlet, where two complete regulators can be connected.*

⚠ **WARNING:** *adequate technical preparation is necessary to deal with diving in cold water (temperature <10°C or < 50°F). Cressi-sub recommends you carry out this type of diving after taking a specific course given by qualified instructors. It is important not to wet the regulator before use and then expose it to air (which can be well under zero degrees). Do not use the purge button, particularly with the regulator level with Venturi effect in the "dive" position. If possible, keep the regulator in warm surroundings when not in use.*

The Seal Chamber is used to make the T10 balanced diaphragm first stage completely waterproof, avoiding water entry not only inside, but also in contact with the diaphragm and the calibration spring on the 1st stage, thereby creating an air chamber upstream of the regulator and its components, working like a proper thermal barrier. All problems are therefore avoided relating to contact with water full of suspended particles, sand, dissolved mineral salts and with cold water which, especially at temperatures below 10°C could form the foundation for possible freezing of the regulator.

The Seal Chamber (fig.2) consists of a special metal insert with a particular "radiator" shape designed to increase thermal exchange between the ambient temperature and the temperature inside the regulator, preventing its possible freezing effect, and a metal cap containing a silicone membrane inside. This, on warning of the ambient pressure variations, inverts and thereby transmits oscillations to the ambient pressure transducer beneath which, coming in contact with the main diaphragm, acts as a transmission element which transfers all information on the extreme pressure variations to the diaphragm. The main diaphragm which, in turn, protects and seals the mechanism inside the system, then transmits the pressure variations of the water to the high pressure valve.

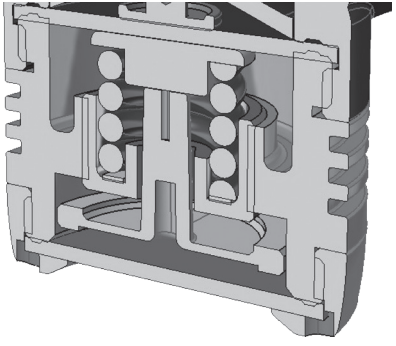

Fig. 2

⚠ **NOTE:** *before assembling the* ***Seal Chamber S.C.*** *the balanced diaphragm first stage must be calibrated. To ensure the regulator works properly, strictly comply with the calibration values outlined in the regulator performance table. Regulator calibration is not restricted by the ambient pressure variations transmission disk.*

1.6 - Performance

T10 / T10 S.C. / T10 S.C. Cromo	
Max Working pressure (Yoke connection)	0-232 bar (0-3365 psi)
Max Working pressure (DIN connection)	0-300 bar (0-4350 psi)
Intermediate pressure (200 bar - 2900 psi HP supply)	IP 9,5-10 bar (138-146 psi)
Air supply	4500 l/min (*)
High pressure (HP) ports	2
Low pressure (LP) ports	4
Weight without hose T10 SC	720 gr (INT) - 602 gr (DIN)

(*) Values measured on LP port with second stage connected and 200→150 bar pressure in the tanks.

MC9 / MC9 S.C.	
Max Working pressure (Yoke connection)	0-232 bar (0-3365 psi)
Max Working pressure (DIN connection)	0-300 bar (0-4350 psi)
Intermediate pressure (200 bar - 2900 psi HP supply)	IP 9,5-10 bar (138-146 psi)
Air supply	4500 l/min (*)
High pressure (HP) ports	2
Low pressure (LP) ports	4
Weight without hose MC9	590 gr (INT) - 450 gr (DIN)
Weight without hose MC9 SC	650 gr (INT) - 510 gr (DIN)

(*) Values measured on LP port with second stage connected and 200→150 bar pressure in the tanks.

MC5	
Max Working pressure (Yoke connection)	0-232 bar (0-3365 psi)
Max Working pressure (DIN connection)	0-300 bar (0-4350 psi)
Intermediate pressure (200 bar - 2900 psi HP supply)	IP 9,5-10 bar (138-146 psi)
Air supply	3000 l/min (*)
High pressure (HP) ports	1
Low pressure (LP) ports	3
Weight without hose MC5	450 gr (INT) - 350 gr (DIN)

(*) Values measured on LP port with second stage connected and 200→150 bar pressure in the tanks.