

Secrets from the Pro

How to choose your Scuba Regulator ✓



A regulator set is the most crucial piece of scuba equipment you'll ever buy. And, the regulator is likely to be the most expensive equipment in your gear bag. So you need to consider a number of factors, in coming to the right choice. Otherwise you could be replacing your regulator as you expand your scuba horizons. And that means paying out more money than you should, over the long run.

As a professional, I consider that your focus on a regulator should start, and nearly end, with the characteristics of the Regulator's 1st stage. The characteristics of the 2nd stage should be the final discriminating factors in your decision making.

Regulator 1st stages come in two basic types, with two variations. Thus, we would have four actual designs to consider, but one of the four is pretty much no longer available on the market (Unbalanced Diaphragm), so that cuts the consideration to three.

Basic Types	Variation 1: Unbalanced	Variation 2: Balanced
Piston	Unbalanced Piston ~ \$-\$\$	Balanced Piston ~ \$\$\$
Diaphragm	<i>Unbalanced Diaphragm (N/A)</i>	Balanced Diaphragm ~\$\$\$\$

Pistons are generally: a simple design, with less moving parts, easy to service.

Diaphragms are generally: more complicated design, more moving parts, harder to service.

Unbalanced regulators will generally provide decent performance for shallow depths.

Balanced regulators will normally provide better performance at deeper depths.

For recreational diving at deeper depths, the difference between a Balanced Piston 1st stage and a Balanced Diaphragm 1st stage is usually negligible.

1. If you are a recreational diver, sticking to shallow reefs (less than 20m), then an Unbalanced Piston regulator will provide adequate performance, with a lower retail price, and cheaper costs for the usual yearly servicing.

2. If you're expecting to be more adventurous, and wanting to explore the waters between 20m-40m, then you'll want a balanced regulator 1st stage (either Balanced Piston or Balanced Diaphragm).

Invariably, Balanced 1st stage regulators always have Balanced 2nd stages. Everything else are the 'bells and whistles' that manufacturers engineer in, which adds to the overall cost. So you have some room for calculating your own cost-value by choosing whether you want some or all of the bells and whistles.

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If your diving objective is anything beyond recreational, tropical water conditions, then you need to have an in-depth conversation with an advanced instructor. One who has extensive experience in the conditions, or type of diving, you're wishing to participate in.