

WHY REGULATORS FREEZE AND NOT ONLY IN COLD WATER



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Needless to say, on cold water dives there's a chance your regulator might freeze, but not for the reasons you'd expect.

Clue: it's got nothing to do with water temperatures.



[How To Freeze a Scuba Regulator - H/T YouTube](#)

As an expert over at [ScubaLab](#) clearly explains, regulators don't freeze only in freezing water. In fact, their research has demonstrated that regs can fail in waters as warm as 50°F (10°C). Why? Well, put quite simply, it's because of the drop in pressure from the tank to the 1st stage that automatically causes the temperature to fall.

This happens on every dive, but on cold water dives, the water can't heat the reg as fast as it's being chilled. Consequently, this can cause your regulator to fail and cause to much-dreaded free-flow effect.

[Alec Peirce explains regulator freeze - H/T YouTube](#)

Below are some useful tips from [ScubaDiving.com](#) on how to prevent regulators from freezing up:

- Avoid breathing from the 2nd stage out of the water.
- Slowly inflate your BCD, and never free flow your 2nd stage to fill an SMB.
- Breathe slowly and steadily. Avoid any hard work.
- Use a reg with an in-line shut off valve to stop free-flows.

Read the full article on [scubadiving.com](#).

With that being said, it's important to have a regulator with an anti-freeze design that prevents it from failing, thus allowing you to make the most out of your dive.

Luckily, there are a few regulators that have excellent performance even in extreme diving conditions. These are some of the best regulators for cold water diving:

1. [Sherwood Scuba Blizzard Pro Cold Water and Ice Diving Regulator](#) make cold and ice diving a breeze! With a sturdy design and incredible attention to detail, this regulator sets the benchmark for cold water regulators.
2. [Apeks GTX 200 Din Scuba Diving Regulator](#) is the epitome of innovation and style. Its rugged design and high-tech features make for easy breathing even in the most challenging of environments.
3. [Mares Regulator Abyss 22 Navy II INT](#) is a reliable dive reg for the toughest dive conditions and used to break many Guinness World Records.

Images Source: [YouTube Clips](#)

Read for More details at [scubadiving.com](#)

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