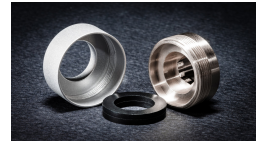
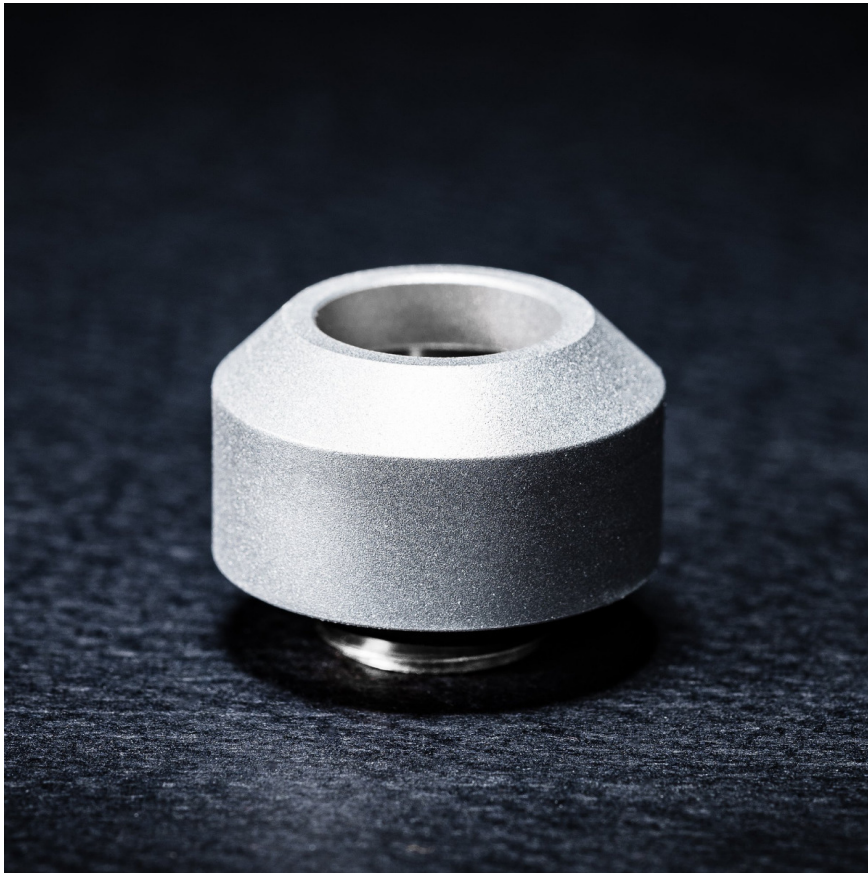




# Optimus Hardline Compression Fitting Satin Silver Aluminum 1/2" - 6 Pack

\$69.95

## Product Images



## Short Description

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The best hardline fitting ever made, period. The patent-pending Optimus gasket design is exponentially stronger than any o-ring design ever made. Our 1/8" (3.2mm) thick gasket provides huge surface area to clamp the hard tubing.

With ultra-precision machining, extreme corrosion resistant Pro-XE nickel, plasticizer-free o-rings and super clean looks, Optimus fittings are so good we back them with a 10 year warranty.

Note: 6 PACK: Comes in retail packaging with an 8mm allen wrench.

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## Features

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### HYPER ACCURATE G 1/4" FITTINGS

The highest end precision CNC lathes allow Optimus's thread accuracy down to achieve perfection down to 0.0002", far beyond any other fitting available. And this is for the first and 1000th fitting, not just the first off the line. We constantly calibrate and double check our precision. After all, our aerospace and medical customers demand the best, so should liquid cooling.

### TRUE BSPP-G 1/4" thread spec

This means that Optimus G 1/4" threads are crafted to the ISO-228 BSPP-G specification. Not "g 1/4 style" like many fittings in the industry. Does this matter? Definitely. If you've run into fitting leaks, acrylic breaking or other system gremlins, it's typically due to poor precision and uncalibrated CNC machines. We've seen expensive blocks where the accuracy of the threads was so off that the fitting had to be cross threaded (aka forced new threads) into the port to even get it to go in.

### PLASTICIZER-FREE EPDM O-RINGS

O-rings seem like a small detail, but are critically important for PC loops. We only use US-made EPDM o-rings with zero plasticizer added. EPDM is the industry standard, and the most bulletproof PC tubing is matte black EPDM. Plasticizer was common in clear tubing to make it flexible, but disintegrates and turns into loop gunk. In the last few years, tubing manufacturers have worked to eliminate plasticizers in tubes, but plasticizers can still be found in o-rings. Common o-ring materials like nitrile (aka buna-n and NBR) and viton can contain plasticizers. And often need lubricating oil to fit correctly into blocks, a major source of fluid gunk buildup. You'll notice this oil leaching in GPUs. Moreover, parts with no-name o-rings in funky colors are seriously

problematic. Colored silicon o-rings, moreover, are very fragile. Using pure EPDM is more difficult requiring the parts to have higher accuracy, but the benefits are loops free from contaminants.

#### BANISHING FLAKY ELECTROPLATED NICKEL

Flaking, disintegrating nickel is a widespread problem in liquid cooling. After all, nickel PC fittings and blocks prohibit use with plain water, or you void the warranty. Instead, you must use anti-corrosive fluids to protect nickel components. Why? Because the industry standard electroplated (aka electrolytic) nickel is a cosmetic nickel finish that isn't meant to be used in liquid applications. Often called chrome or shiny nickel, electroplated nickel is cost effective and looks good.

Unfortunately, water, anti-fungals and fancy fluids, including opaques, will rapidly strip electroplated nickel. The gunk that will appear in block fins isn't just broken down fluid, it's often disintegrated nickel, paint and cheap plastics. If this seems crazy, it is. After all, the cheapest home faucet can handle tap water, so why can't expensive PC fittings survive basic H2O?

Alas, electroplated nickel is the PC industry standard. What's the solution?

#### PROX-XE ELECTROLESS NICKEL

Optimus parts are finished with only industrial-grade extreme corrosion resistant nickel, called PRO-XE electroless nickel. Electroless is an aerospace industry finish with extreme chemical resistance, hardness and superior fluid lubricity. So why isn't everyone using electroless? Cost and appearance. Electroless is far more difficult to manufacture, especially when achieving perfect finishes needed for premium PC builds. And electroless can't achieve that easy chrome look of electroplating, which is why electroplating is the industry standard, even if it shouldn't be used.

#### SAFE FOR H2O

Aside from reliability, electroless nickel is able to withstand saltwater, corrosive chemicals and, yes, even plain water. With Optimus, you can use distilled water without fear of flaking. Distilled, aside from being cheap, is also the highest performance coolant readily available. Anti-corrosive additives lower the thermal conductivity of the liquid. That's why we can offer a 10 year warranty, even with regular H2O. It has been a herculean task to create Optimus's electroless products, but the results look great and are nearly indestructible.

## Additional Information

Brand	Optimus
SKU	OP-FIT-HARD-12IN-AL-6PK
Weight	0.6000
Special Order	No
Fitting Type	Rigid Compression
Fitting Size	1/2"
Fitting Angle	Straight
Fitting Finish	Matte Silver

