
Subject: Double Variomatic by OSKAR

Posted by [Oskar_van_Deventer](#) on Sat, 04 Aug 2012 12:03:07 GMT

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Hi Shapeways fans,

Double Variomatic is the second of three experiments with non-circular gears. It has two pairs identical gears with a varying gear ratio. When turning, at first the top square turns 90 degrees together with the bottom square. But then they start to diverge, with one square turning 90 degrees and the other 180 degrees. This local 1:2 gearing ratio is achieved by cascading two 1:sqrt(2) gear sections. Actually, that is not entirely true. The gearing ratio is continuously varying, and the 1:sqrt(2) ratio is only an average. Similarly, overall gearing ratio is 1:1 at average. After one full turn, both squares are back to start.

Watch the YouTube video.

Buy the puzzle at my Shapeways Shop.

Read more at the Non-Twisty Puzzles Forum.

Check out the photos below.

Enjoy!

Oskar

File Attachments

- 1) [Double-Variomatic---view-1.jpg](#), downloaded 225 times
 - 2) [Double-Variomatic---view-2.jpg](#), downloaded 234 times
 - 3) [Double-Variomatic---view-7.jpg](#), downloaded 231 times
 - 4) [Double Variomatic - gear curves - view 1.jpg](#), downloaded 232 times
 - 5) [Double Variomatic - gear curves - view 2.jpg](#), downloaded 227 times
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