1:1 Ferrite Choke Using Coax

Materials

FT-240-31 Toroid Core (for 160-10 meters) RG58 Coax, Turns 12, Total length (36") Plastic Box

- 2 SO-239 connectors
- 2 Small zip ties
- $8 #6 \times \frac{1}{2}$ stainless steel round-head bolt
- 8 #6 stainless steel nuts
- 8-#6 stainless steel washers
- 8 #6 stainless steel lock washers

Another Option

As above, but substitute the following two items:

FT-240-43 Toroid Core (for 80-10 meters) RG58 Coax, Turns 17, Total length (51")

Construction

Zip tie one end of coax leaving 3 inches outside the toroid. Wrap 6 turns and cross the 6th turn to the opposite side. Wrap 6 more turns on the opposite side and zip tie the final turn. A wrap is defined by the coax going through the inside of the toroid.

<image>

Websites

Frequency of choke http://www.karinya.net/g3txq/chokes/

Length of wire https://www.coilwindingmachines.eu/engineers_corner/toroidal_calculations.html

Wrapping the Toroid

https://www.youtube.com/watch?v=fFz9Z-TRtnQ&t=344s