

CENTURACORES

Nanocrystalline Transformer Cores

<https://centuracores.com/products/ccnt-030-020-012-hfwh/>

Product datasheet: CCNT-030-020-012-HFWH

Product information

Nanocrystalline toroidal core 30x20x12 mm

Bare size: 30x20x12 mm

Finish: White PBT Class B 130C

CCNT-030-020-012-HFWH is a 30x20x12 mm nanocrystalline toroidal core for higher-power line filters, VFD EMI suppression, and industrial drive chokes. Its nanocrystalline HF characteristic supports common-mode and EMI filter designs where impedance and winding window matter as much as size. Choose this size when the filter or choke needs this window and OD, not the next larger footprint.

Bare core dimensions

Outer diameter (OD): 30 mm

Inner diameter (ID): 20 mm

Height (H): 12 mm

Cased / finished dimensions

Outer diameter (OD): 34 mm

Inner diameter (ID): 18 mm

Height (H): 15.2 mm

Tolerance: 0.3mm

Size marking on the case is the bare core dimension, not the cased or finished size.

Magnetic properties

Effective area A_e : 0.49 cm²

Mean path length L_e : 7.9 cm

AL @ 10kHz, 2mT: 56 uH/T²

AL @ 100kHz, 2mT: 20 uH/T²

Saturation B_s : 1.25 Tesla

Initial permeability μ_i : 80000

Curie temperature: 560 C

Operating temperature: -40 deg C to +130 deg C

Net weight: 27.5 g

Applications

- higher-power line filters
- VFD EMI suppression
- industrial drive chokes
- solar inverter input filters
- higher-power (50–200W class) AC line common-mode filters
- VFD/industrial drive EMI suppression cores
- solar/wind inverter input filter chokes
- three-phase industrial EMI filters