

CENTURACORES

Nanocrystalline Transformer Cores

<https://centuracores.com/products/ccnt-030-020-010-hfwh/>

Product datasheet: CCNT-030-020-010-HFWH

Product information

Nanocrystalline toroidal core 30x20x10 mm

Bare size: 30x20x10 mm

Finish: White PBT Class B 130C

CCNT-030-020-010-HFWH is a 30x20x10 mm nanocrystalline toroidal core for VFD/motor drive EMI filters, three-phase line filters, and industrial SMPS filters. 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): 10 mm

Cased / finished dimensions

Outer diameter (OD): 33 mm

Inner diameter (ID): 17.6 mm

Height (H): 13.2 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 : 0.41 cm²

Mean path length L_e : 7.85 cm

AL @ 10kHz, 2mT: 61 uH/T²

AL @ 100kHz, 2mT: 15 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: 23.5 g

Applications

- VFD/motor drive EMI filters
- three-phase line filters
- industrial SMPS filters
- inverter output chokes
- variable-frequency drive (VFD) input/output common-mode filters
- three-phase AC line EMI filter chokes
- industrial SMPS EMI suppression cores
- inverter output dv/dt filter chokes