



CCNT-030-020-015-MFBL

Nanocrystalline toroidal core 30x20x15 mm

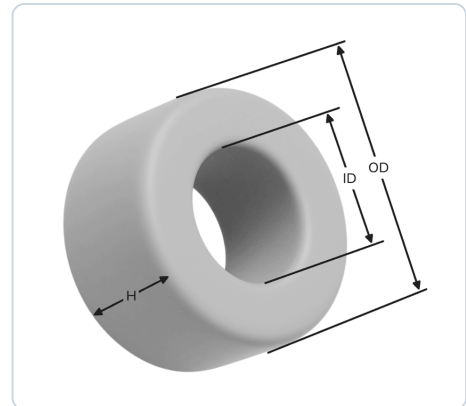
DIMENSIONS

Parameter	Bare (mm)	Cased (mm)
Outside diameter (OD)	30	33.6
Inside diameter (ID)	20	17.7
Height (H)	15	17.8

Dimensions Summary: Bare OD 30mm x ID 20mm x H 15mm; Cased OD 33.6mm x ID 17.7mm x H 17.8mm

Finished tolerance: 0.3mm

Case marking uses bare core dimensions.



CORE PROPERTIES

A_{Fe}	0.63 cm ²	L_{Fe}	7.9 cm	B_s	1.25 T	μ_i	80,000
Working temp	-40°C – +130°C	Curie	560 °C	Casing	PBT Class B 130C	Weight	43 g

INDUCTANCE FACTOR AL ($\mu H/N^2$)

1kHz ($\mu H/N^2$)	10kHz @ 2mT ($\mu H/N^2$)	100kHz @ 2mT ($\mu H/N^2$)
160	65	17

DESIGN NOTE

Published AL is for the finished closed toroid under the stated test conditions ($N = 1$) and is typical, with a tolerance of $\pm 30\%$. Estimate inductance as $L \approx AL \times N^2$, then verify on the wound part. Size the winding to the cased inside diameter, not the bare ID. High- μ_i nanocrystalline toroids suit current transformers, common-mode chokes, and gate-drive isolation; for DC-biased PFC or reactor designs that need a controlled air gap, use a cut core. Keep peak flux within 1.25 T and continuous case temperature within the PBT Class B 130°C rating.

TYPICAL APPLICATIONS

High-Accuracy Cts | Medium-Frequency Power Transformers | Protective Relay Cts | Ground-Fault Sensors | High-Accuracy/precision Current Transformers

DOCUMENT CONTROL

Author	Created	Approver	Approved
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