



CCNT-025-016-010-MFBL

Nanocrystalline toroidal core 25x16x10 mm

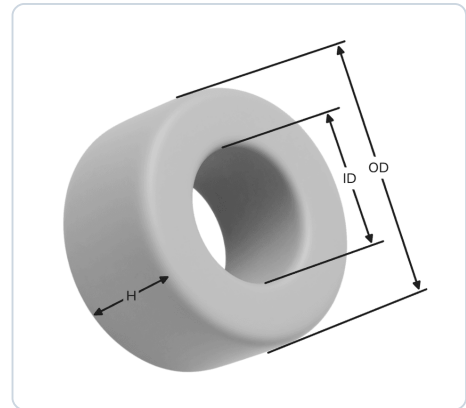
DIMENSIONS

Parameter	Bare (mm)	Cased (mm)
Outside diameter (OD)	25	27.5
Inside diameter (ID)	16	13.8
Height (H)	10	12.6

Dimensions Summary: Bare OD 25mm x ID 16mm x H 10mm; Cased OD 27.5mm x ID 13.8mm x H 12.6mm

Finished tolerance: 0.3mm

Case marking uses bare core dimensions.



CORE PROPERTIES

A_{Fe}	0.37 cm ²	L_{Fe}	6.43 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	21 g

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

1kHz ($\mu H/N^2$)	10kHz @ 2mT ($\mu H/N^2$)	100kHz @ 2mT ($\mu H/N^2$)
135	40	10

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

Protective Relay Cts | Metering Cts | Medium-Frequency Auxiliary Transformers | Ground-Fault Sensors | Protection-Class Current Transformers

DOCUMENT CONTROL

Author	Created	Approver	Approved
Aditya R.	23 Apr 2026	Mahavir S.	30 Apr 2026