

DATA SHEET

E28/17/11

El cores

New data

2004 Sep 01

EI cores

E28/17/11

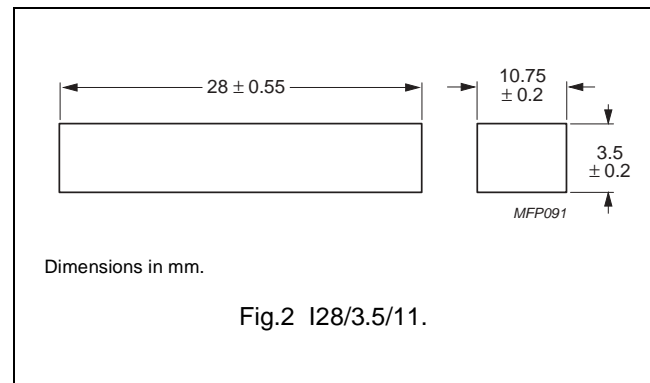
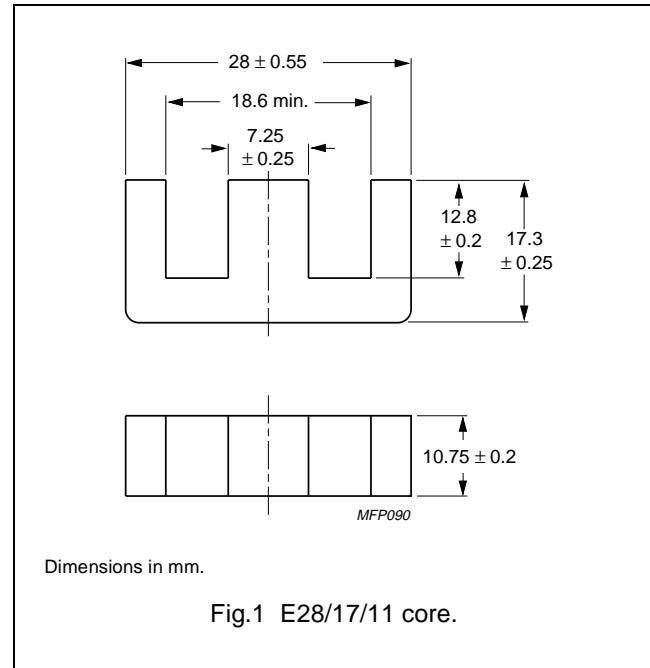
CORES

Effective core parameters of an E / I combination

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.588	mm ⁻¹
V_e	effective volume	4120	mm ³
l_e	effective length	49.2	mm
A_e	effective area	83.7	mm ²
A_{min}	minimum area	83.7	mm ²
m	mass of E core	≈ 17	g
m	mass of I core	≈ 5.1	g

Ordering information for I cores

GRADE	TYPE NUMBER
3C90	I28/3.5/11-3C90
3F3	I28/3.5/11-3F3



Core halves for use in combination with an I core

A_L measured in combination with an I core, clamping force for A_L measurements 40 ± 20 N;

GRADE	A_L (nH)	μ_e	AIR GAP (μ m)	TYPE NUMBER
3C90	$3625 \pm 25 \%$	≈ 1700	≈ 0	E28/17/11-3C90
3F3	$3420 \pm 25 \%$	≈ 1600	≈ 0	E28/17/11-3F3

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B̂ = 200 mT; T = 100 °C	f = 100 kHz; B̂ = 100 mT; T = 100 °C	f = 400 kHz; B̂ = 50 mT; T = 100 °C
E28/17/11+I28/3.5/11-3C90	≥ 330	≤ 0.5	≤ 0.5	–
E28/17/11+I28/3.5/11-3F3	≥ 320	–	≤ 0.5	≤ 0.9




DATA SHEET STATUS DEFINITIONS

DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
Preliminary specification	Development	This data sheet contains preliminary data. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.
Product specification	Production	This data sheet contains final specifications. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.

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PRODUCT STATUS DEFINITIONS

STATUS	INDICATION	DEFINITION
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Design-in		These products are recommended for new designs.
Preferred		These products are recommended for use in current designs and are available via our sales channels.
Support		These products are not recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.