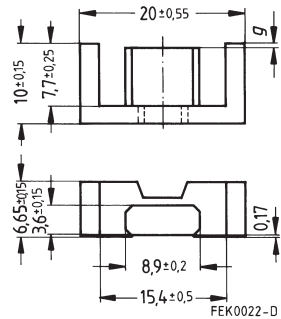


- E core with flattened, lower center leg for especially flat transformer design
- For DC/DC converters
- EFD cores are supplied as single units

Magnetic characteristics (per set)

$$\begin{aligned} \Sigma/A &= 1,52 \text{ mm}^{-1} \\ l_e &= 47 \text{ mm} \\ A_e &= 31 \text{ mm}^2 \\ A_{\min} &= 31 \text{ mm}^2 \\ V_e &= 1460 \text{ mm}^3 \end{aligned}$$

Approx. weight 7,2 g/set

Ungapped

Material	A_L value nH	μ_e	$A_{L1\min}$ nH	P_V W/set	Ordering code
N49	910 + 30/- 20 %	1100	750	< 0,29 (50 mT, 500 kHz, 100 °C)	B66417-G-X149
N87	1200 + 30/- 20 %	1440	660	< 1,05 (200 mT, 100 kHz, 100 °C)	B66417-G-X187

Gapped

Material	A_L value nH	μ_e	g approx. mm	Ordering code
N87	100 ± 10 %	120	0,49	B66417-U100-K187
	160 ± 10 %	193	0,25	B66417-U160-K187

The A_L value in the table applies to a core set comprising one ungapped core (dimension $g = 0$) and one gapped core (dimension $g > 0$).

Calculation factors (for formulas, see “E cores: general information”, page 382)

Material	Relationship between air gap – A_L value		Calculation of saturation current			
	$K1$ (25 °C)	$K2$ (25 °C)	$K3$ (25 °C)	$K4$ (25 °C)	$K3$ (100 °C)	$K4$ (100 °C)
N87	61,1	- 0,699	85,4	- 0,796	75,7	- 0,873

Validity range: $K1, K2: 0,10 \text{ mm} < s < 1,40 \text{ mm}$
 $K3, K4: 50 \text{ nH} < A_L < 410 \text{ nH}$

Coil former

Material: GFR thermosetting plastic; UL 94 V-0, insulation class to IEC 60085:
 B66418-B: $F \triangleq$ max. operating temperature 155 °C; color code green
 B66418-W: $H \triangleq$ max. operating temperature 180 °C; color code black

Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

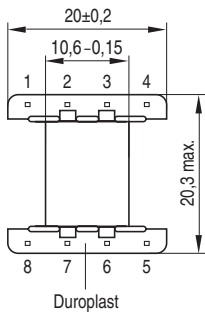
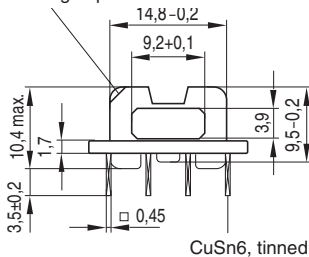
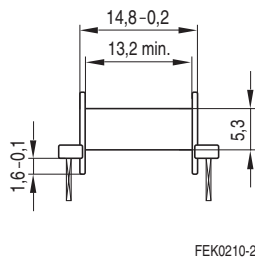
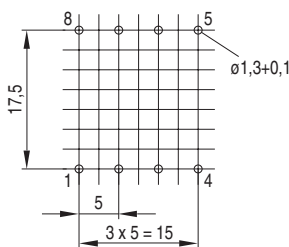
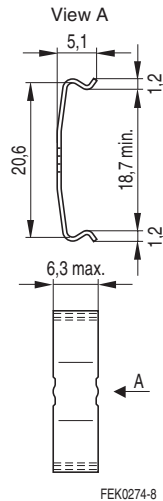
Winding: see "Processing Notes", page 157

Squared pins

Yoke

Material: Stainless spring steel (0,3 mm)

Coil former					Ordering code
Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	
1	28,1	40,2	49,2	8	B66418-B1008-D1 B66418-W1008-D1
Yoke (ordering code per piece, 2 are required)					B66418-B2000

Coil former

Marking of pin 1

Mounting holes

Yoke


Herausgegeben von EPCOS AG

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