

- In accordance with IEC 61185
- Quality assurance per UTE 83313-003/ CECC 25 301-003 (material N27)
- For SMPS transformers with optimum weight/performance ratio at small volume
- ETD cores are supplied as single units

**Magnetic characteristics** (per set)

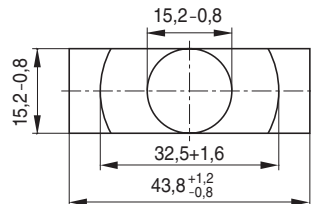
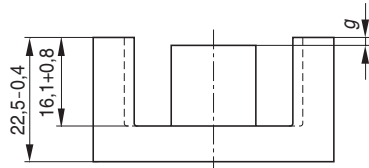
$$\Sigma/A = 0,6 \text{ mm}^{-1}$$

$$l_e = 103 \text{ mm}$$

$$A_e = 173 \text{ mm}^2$$

$$A_{\min} = 172 \text{ mm}^2$$

$$V_e = 17\,800 \text{ mm}^3$$

**Approx. weight** 94 g/set


FEK0057-6

**Ungapped**

Material	$A_L$ value nH	$\mu_e$	$A_{L1\min}$ nH	$P_V$ W/set	Ordering code
N27	3300 + 30/- 20 %	1560	2640	< 3,48 (200 mT, 25 kHz, 100 °C)	B66365-G-X127
N87	3500 + 30/- 20 %	1650	2640	< 9,40 (200 mT, 100 kHz, 100 °C)	B66365-G-X187
N97 <sup>1)</sup>	3600 + 30/- 20 %	1720	2640	< 8,00 (200 mT, 100 kHz, 100 °C)	B66365-G-X197

**Gapped**

Material	$g$ mm	$A_L$ value approx. nH	$\mu_e$	Ordering code ** = 27 (N27) = 87 (N87)
N27,	0,20 ± 0,02	862	407	B66365-G200-X1**
N87	0,50 ± 0,05	438	207	B66365-G500-X1**
	1,00 ± 0,05	262	124	B66365-G1000-X1**
	1,50 ± 0,05	194	92	B66365-G1500-X1**

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

1) Preliminary data

**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)
N27	262	– 0,74	420	– 0,847	391	– 0,865
N87	262	– 0,74	420	– 0,796	382	– 0,873

Validity range:  $K1, K2$ :  $0,10 \text{ mm} < s < 3,50 \text{ mm}$   
 $K3, K4$ :  $110 \text{ nH} < A_L < 1060 \text{ nH}$

**Coil former**

Material: GFR polyterephthalate (UL 94 V-0, insulation class to IEC 60085: F  $\triangleq$  max. operating temperature 155 °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

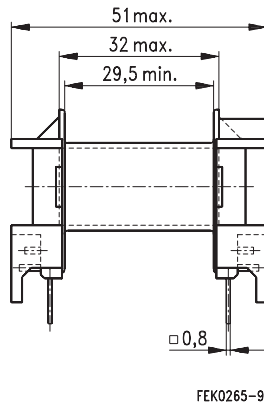
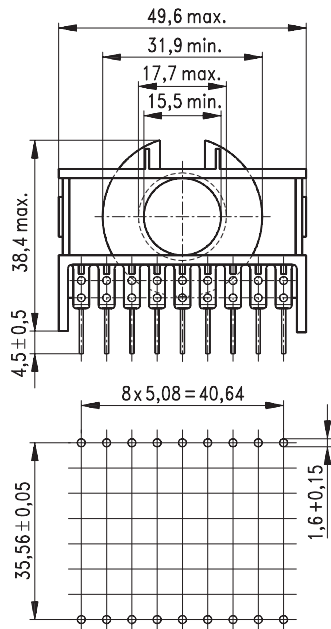
Winding: see "Processing Notes", page 158

**Yoke**

Material: Stainless spring steel (0,4 mm)

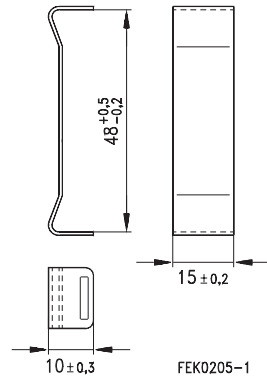
Coil former					Ordering code
Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	
1	210	77,7	12,7	18	B66366-B1018-T1
Yoke (ordering code per piece, 2 are required)					B66366-A2000

**Coil former**



FEK0265-9

**Yoke**



FEK0205-1

Hole arrangement  
View in mounting direction

**Herausgegeben von EPCOS AG**

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