

- In accordance with IEC 61185
- Quality assurance per UTE 83313-001/ CECC 25 301-001 (material N27)
- For SMPS transformers with optimum weight/performance ratio at small volume
- ETD cores are supplied as single units

**Magnetic characteristics** (per set)

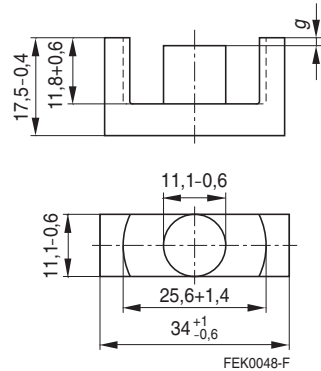
$$\Sigma/A = 0,81 \text{ mm}^{-1}$$

$$l_e = 78,6 \text{ mm}$$

$$A_e = 97,1 \text{ mm}^2$$

$$A_{\min} = 91,6 \text{ mm}^2$$

$$V_e = 7\,630 \text{ mm}^3$$

**Approx. weight** 40 g/set

**Ungapped**

Material	$A_L$ value nH	$\mu_e$	$A_{L1\min}$ nH	$P_V$ W/set	Ordering code
N27	2400 + 30/- 20 %	1540	1940	< 1,48 (200 mT, 25 kHz, 100 °C)	B66361-G-X127
N87	2600 + 30/- 20 %	1670	1940	< 4,00 (200 mT, 100 kHz, 100 °C)	B66361-G-X187
N97 <sup>1)</sup>	2650 + 30/- 20 %	1710	1940	< 3,40 (200 mT, 100 kHz, 100 °C)	B66361-G-X197

**Gapped**

Material	$g$ mm	$A_L$ value approx. nH	$\mu_e$	Ordering code ** = 27 (N27) = 87 (N87)
N27,	0,10 ± 0,02	790	508	B66361-G100-X1**
N87	0,20 ± 0,02	482	310	B66361-G200-X1**
	0,50 ± 0,05	251	161	B66361-G500-X1**
	1,00 ± 0,05	153	98	B66361-G1000-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	153	– 0,713	245	– 0,847	227	– 0,865
N87	153	– 0,713	240	– 0,796	222	– 0,873

Validity range:  $K1, K2$ :  $0,10 \text{ mm} < s < 2,50 \text{ mm}$   
 $K3, K4$ :  $80 \text{ nH} < A_L < 780 \text{ nH}$

**Coil former (magnetic axis horizontal)**

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

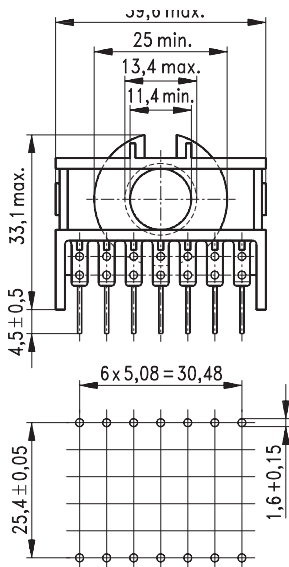
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 158

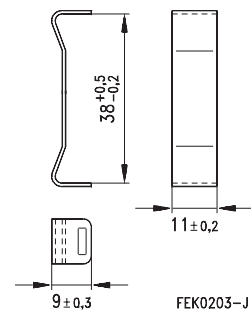
**Yoke**

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	122	60,5	17	14	B66362-B1014-T1
Yoke (ordering code per piece, 2 are required)					B66362-A2000

**Coil former**


Hole arrangement  
View in mounting direction

**Yoke**


**Coil former** (magnetic axis vertical)

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

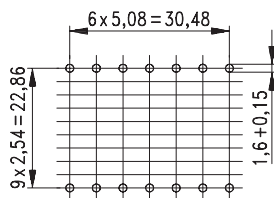
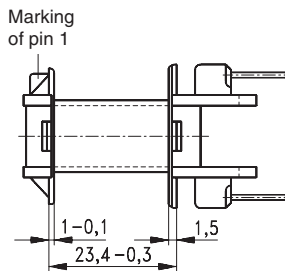
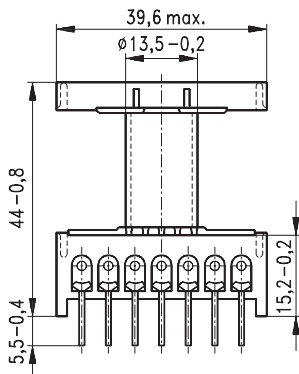
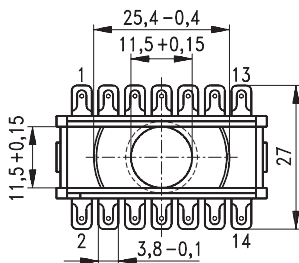
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 158

**Yoke**

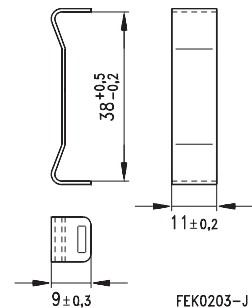
Material: Stainless spring steel (0,4 mm)

Coil former					Ordering code
Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	
1	122	60,5	17	14	B66362-L1014-T1
Yoke (ordering code per piece, 2 are required)					B66362-A2000

**Coil former**


Hole arrangement  
View in mounting direction

FEK0262-J

**Yoke**


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