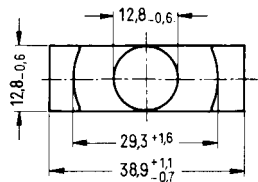
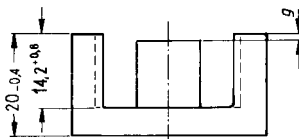


- In accordance with IEC 61185
- Quality assurance per UTE 83313-002/ CECC 25 301-002 (material N27)
- For SMPS transformers with optimum weight/performance ratio at small volume
- ETD cores are supplied as single units



FEK0053-8

Magnetic characteristics (per set)

$\Sigma l/A = 0,74 \text{ mm}^{-1}$
 $l_e = 92,2 \text{ mm}$
 $A_e = 125 \text{ mm}^2$
 $A_{\text{min}} = 123 \text{ mm}^2$
 $V_e = 11\,500 \text{ mm}^3$

Approx. weight 60 g/set

Ungapped

Material	A_L value nH	μ_e	$A_{L1\text{min}}$ nH	P_V W/set	Ordering code
N27	2550 + 30/- 20 %	1500	2140	2,22 (200 mT, 25 kHz, 100 °C)	B66363-G-X127
N67	2600 + 30/- 20 %	1540	2140	7,50 (200 mT, 100 kHz, 100 °C)	B66363-G-X167
N87	2700 + 30/- 20 %	1600	2140	6,00 (200 mT, 100 kHz, 100 °C)	B66363-G-X187

Gapped

Material	g mm	A_L value approx. nH	μ_e	Ordering code ** = 27 (N27) = 67 (N67) = 87 (N87)
N27,	0,10 ± 0,02	1062	622	B66363-G100-X1**
N67,	0,20 ± 0,02	639	374	B66363-G200-X1**
N87	0,50 ± 0,05	326	191	B66363-G500-X1**
	1,00 ± 0,05	196	115	B66363-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 $g > 0$).

Calculation factors (see page 423 for formulas)

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	196	– 0,734	308	– 0,847	287	– 0,865
N67	196	– 0,734	295	– 0,820	289	– 0,881
N87	196	– 0,734	300	– 0,796	280	– 0,873

Validity range: $K1, K2: 0,10 \text{ mm} < s < 3,00 \text{ mm}$
 $K3, K4: 90 \text{ nH} < A_L < 850 \text{ nH}$

Coil former

Material: GFR polyterephthalate (UL 94 V-0, insulation class to IEC 60085:
 F \geq 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

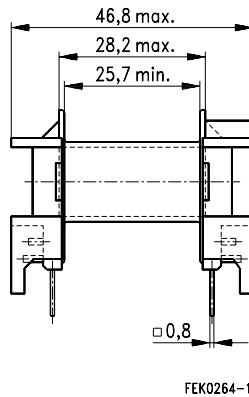
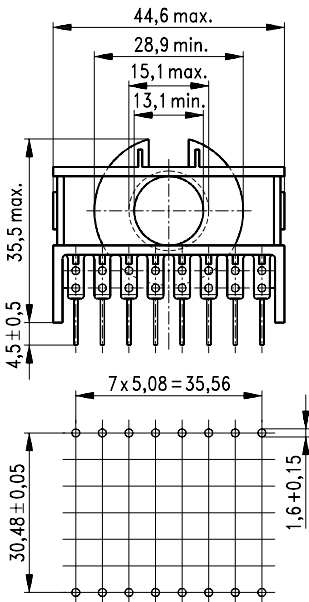
Winding: see page 157

Yoke

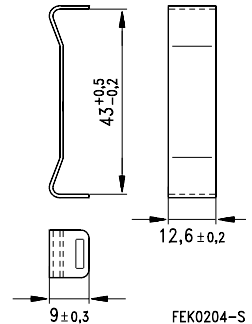
Material: Stainless spring steel (0,4 mm)

Coil former					Ordering code
Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	
1	178	69	13,3	16	B66364-B1016-T1
Yoke (ordering code per piece, 2 are required)					B66364-A2000

Coil former



Yoke



Hole arrangement
 View in mounting direction