

E 30/15/7

Core

B66319

- E cores are supplied as single units

Magnetic characteristics (per set)

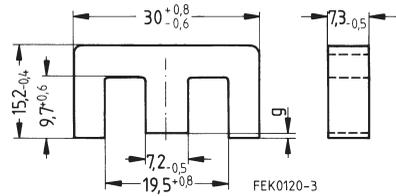
$$\Sigma l/A = 1,12 \text{ mm}^{-1}$$

$$l_e = 67 \text{ mm}$$

$$A_e = 60 \text{ mm}^2$$

$$A_{\min} = 49 \text{ mm}^2$$

$$V_e = 4\,000 \text{ mm}^3$$



Approx. weight 22 g/set

Ungapped

Material	A_L value nH	μ_e	$A_{L1\min}$ nH	P_V W/set	Ordering code
N30	3100 + 30/- 20 %	2760			B66319-G-X130
N27	1700 + 30/- 20 %	1510	1410	< 0,81 (200 mT, 25 kHz, 100°C)	B66319-G-X127
N87	1900 + 30/- 20 %	1690	1410	< 2,20 (200 mT, 100 kHz, 100°C)	B66319-G-X187

Gapped

Material	g mm	A_L value approx. nH	μ_e	Ordering code ** = 27 (N27) = 87 (N87)
N27,	0,10 ± 0,02	460	410	B66319-G100-X1**
N87	0,18 ± 0,02	300	265	B66319-G180-X1**
	0,34 ± 0,02	195	175	B66319-G340-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 (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	90	- 0,708	156	- 0,847	144	- 0,865
N87	90	- 0,708	154	- 0,796	140	- 0,873

Validity range: $K1, K2: 0,10 \text{ mm} < s < 2,00 \text{ mm}$
 $K3, K4: 560 \text{ nH} < A_L < 60 \text{ nH}$

Coil former (magnetic axis horizontal or 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, 3,5s

Winding: see "Processing Notes", page 159

Squared pins

Yoke

Material: Stainless spring steel (0,4 mm)

Coil former						Ordering code
Figure	Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	
1	1	90	56	21	14	B66232-A1114-T1
2	1	90	56	21	12	B66232-J1112-T1
Yoke (ordering code per piece, 2 are required)						B66232-A2010

Figure 1, horizontal version

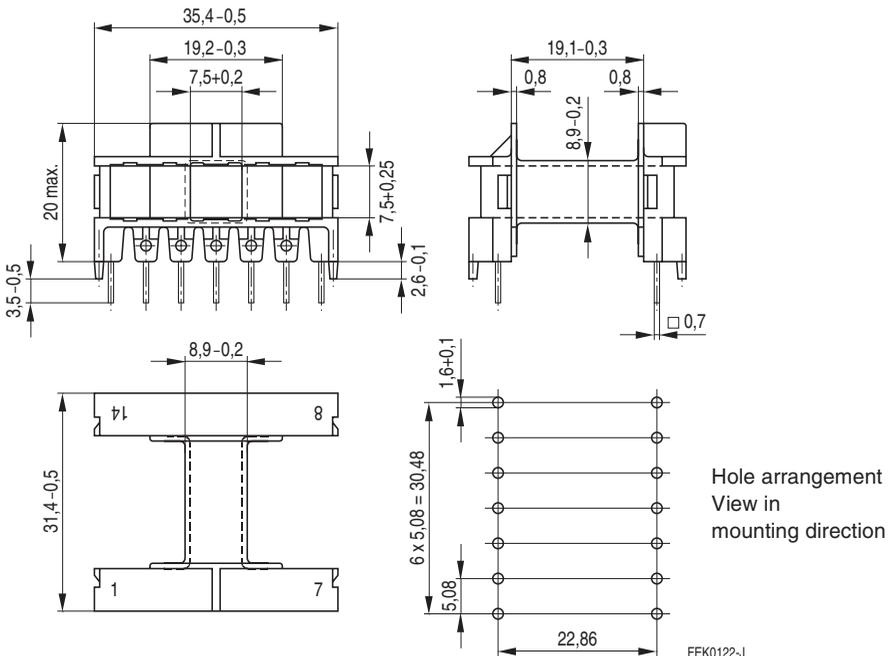
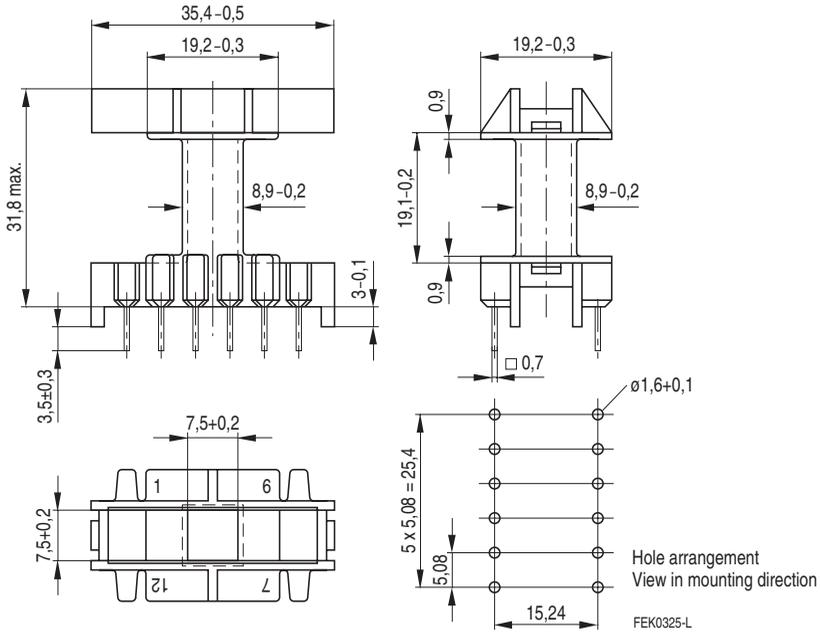
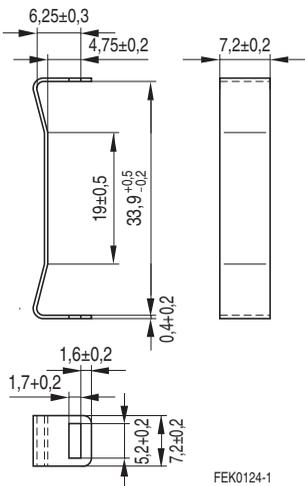


Figure 2, vertical version



Yoke



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