

- In accordance with IEC 61246
- E cores are supplied as single units

**Magnetic characteristics (per set)**

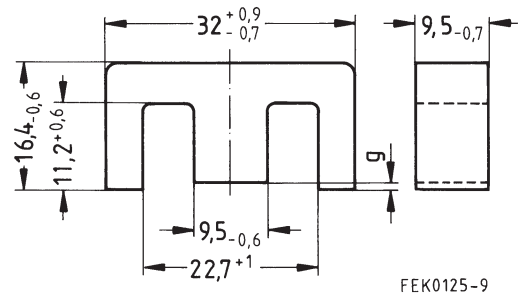
$$\Sigma l/A = 0,89 \text{ mm}^{-1}$$

$$l_e = 74 \text{ mm}$$

$$A_e = 83 \text{ mm}^2$$

$$A_{\min} = 81,4 \text{ mm}^2$$

$$V_e = 6\,140 \text{ mm}^3$$



FEK0125-9

**Approx. weight 30 g/set**
**Ungapped**

Material	$A_L$ value nH	$\mu_e$	$A_{L1\min}$ nH	$P_V$ W/set	Ordering code
N30	3800 + 30/- 20 %	2690			B66229-G-X130
N27	2100 + 30/- 20 %	1480	1770	< 1,10 (200 mT, 25 kHz, 100 °C)	B66229-G-X127
N87	2300 + 30/- 20 %	1630	1770	< 3,00 (200 mT, 100 kHz, 100 °C)	B66229-G-X187

**Gapped**

Material	$g$ mm	$A_L$ value approx. nH	$\mu_e$	Ordering code ** = 27 (N27) = 87 (N87)
N27,	0,50 ± 0,05	244	172	B66229-G500-X1**
N87	1,00 ± 0,05	145	103	B66229-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 (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	145	- 0,748	212	- 0,847	196	- 0,865
N87	145	- 0,748	208	- 0,796	191	- 0,873

Validity range:  $K1, K2: 0,10 \text{ mm} < s < 2,50 \text{ mm}$   
 $K3, K4: 70 \text{ nH} < A_L < 710 \text{ nH}$

**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

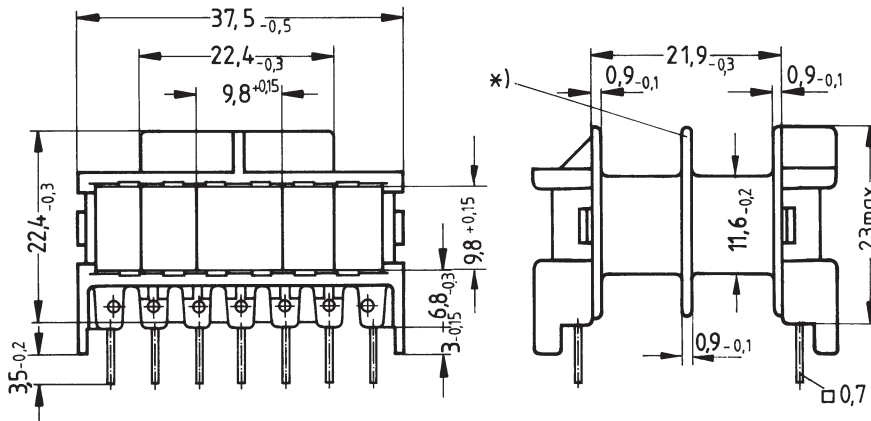
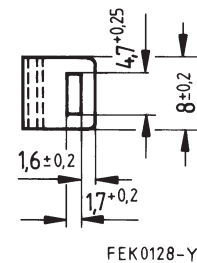
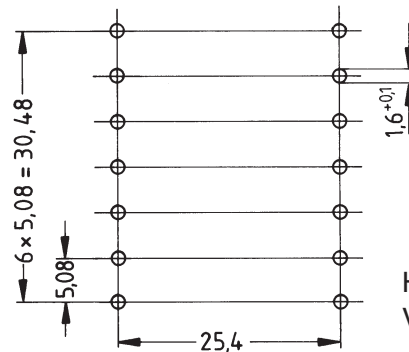
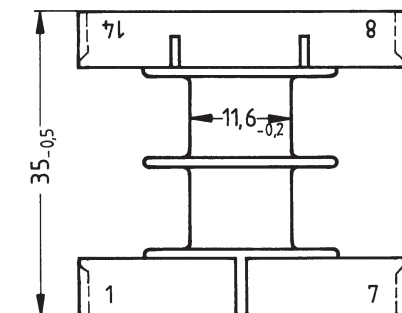
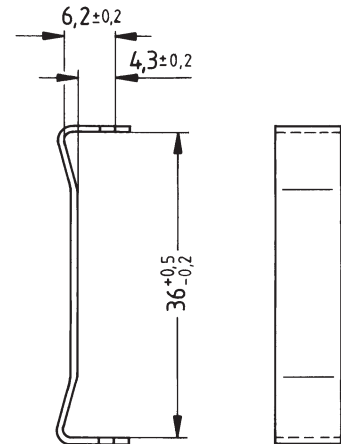
Winding: see "Processing Notes", page 159

Squared pins

**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	108,50	64,4	20,42	14	B66230-A1114-T1
2	103,64	64,4	21,38	14	B66230-A1114-T2
Yoke (ordering code per piece, 2 are required)					B66230-A2010

**Coil former**

**Yoke**


Hole arrangement  
View in mounting direction

\*) Center flange omitted in one-section version

FEK0127-Q

**Herausgegeben von EPCOS AG**

**Marketing Kommunikation, Postfach 80 17 09, 81617 München, DEUTSCHLAND**

© EPCOS AG 2000. Alle Rechte vorbehalten. Vervielfältigung, Veröffentlichung, Verbreitung und Verwertung dieser Broschüre und ihres Inhalts ohne ausdrückliche Genehmigung der EPCOS AG nicht gestattet.

Mit den Angaben in dieser Broschüre werden die Bauelemente spezifiziert, keine Eigenschaften zugesichert. Bestellungen unterliegen den vom ZVEI empfohlenen Allgemeinen Lieferbedingungen für Erzeugnisse und Leistungen der Elektroindustrie, soweit nichts anderes vereinbart wird.

Diese Broschüre ersetzt die vorige Ausgabe.

Fragen über Technik, Preise und Liefermöglichkeiten richten Sie bitte an den Ihnen nächstgelegenen Vertrieb der EPCOS AG oder an unsere Vertriebsgesellschaften im Ausland.

Bauelemente können aufgrund technischer Erfordernisse Gefahrstoffe enthalten. Auskünfte darüber bitten wir unter Angabe des betreffenden Typs ebenfalls über die zuständige Vertriebsgesellschaft einzuholen.

**Published by EPCOS AG**

**Marketing Communications, P.O. Box 80 17 09, 81617 Munich, GERMANY**

© EPCOS AG 2000. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.