



## RM Cores

**Series/Type:**        **RM 10**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B65814N1011D001	B65814N1012D001	2003-08-08	2004-02-29	2004-08-31
B65814N1010D001	B65814K1010D001	2003-08-08	2004-02-29	2004-08-31

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<b>RM 10</b>
<b>Core</b>
<b>B65813</b>

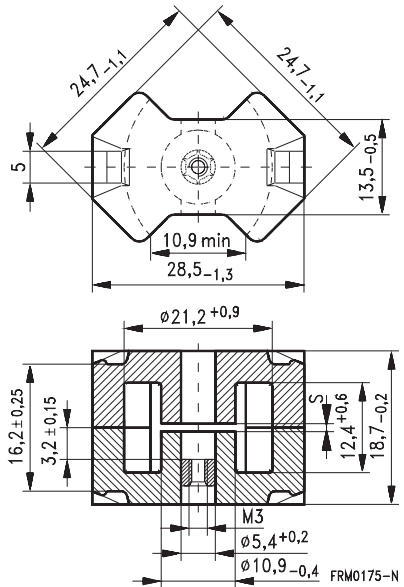
- In accordance with IEC 60431
- Cores without center hole for transformer applications
- RM cores are supplied in sets

**Magnetic characteristics** (per set)

	with center hole	without center hole	
$\Sigma I/A$	0,5	0,45	mm <sup>-1</sup>
$l_e$	42	44	mm
$A_e$	83	98	mm <sup>2</sup>
$A_{min}$	—	90	mm <sup>2</sup>
$V_e$	3 470	4 310	mm <sup>3</sup>

**Approx. weight** (per set)

$m$	20,7	22	g



**Gapped**

Material	$A_L$ value	s approx. mm	$\mu_e$	Ordering code 1)
	nH			-D with center hole -N with threaded sleeve -J without center hole
N48	400 ± 3 %	0,21	160	B65813-+400-A48
	630 ± 3 %	0,13	250	B65813-+630-A48
N41	250 ± 3 %	0,44	90	B65813-J250-A41
	630 ± 5 %	0,13	226	B65813-J630-J41
	1600 ± 10 %	0,04	573	B65813-J1600-K41

1) Replace the + by the code letter "D" or "N" for the required version.

**Ungapped**

Material	$A_L$ value nH	$\mu_e$	$A_{L1min}$ nH	$P_V$ W/set	Ordering code -J w/o center hole
N30	7600 + 30/- 20 %	2720			B65813-J-R30
T38	16000 + 40/- 30 %	5730			B65813-J-Y38
N49	2900 + 30/- 20 %	1040	1680	< 0,75 (50 mT, 500 kHz, 100 °C)	B65813-J-R49
N87	4200 + 30/- 20 %	1500	2550	< 2,30 (200 mT, 100 kHz, 100 °C)	B65813-J-R87
N97 <sup>1)</sup>	4200 + 30/- 20 %	1500	2550	< 2,00 (200 mT, 100 kHz, 100 °C)	B65813-J-R97
N41	5500 + 30/- 20 %	1960	2550	< 0,80 (200 mT, 25 kHz, 100 °C)	B65813-J-R41

1) Preliminary data

**Coil former**

Material: GFR thermosetting plastic (UL 94 V-0, insulation class to IEC 60085: H  $\geq$  max. operating temperature 180 °C), color code black

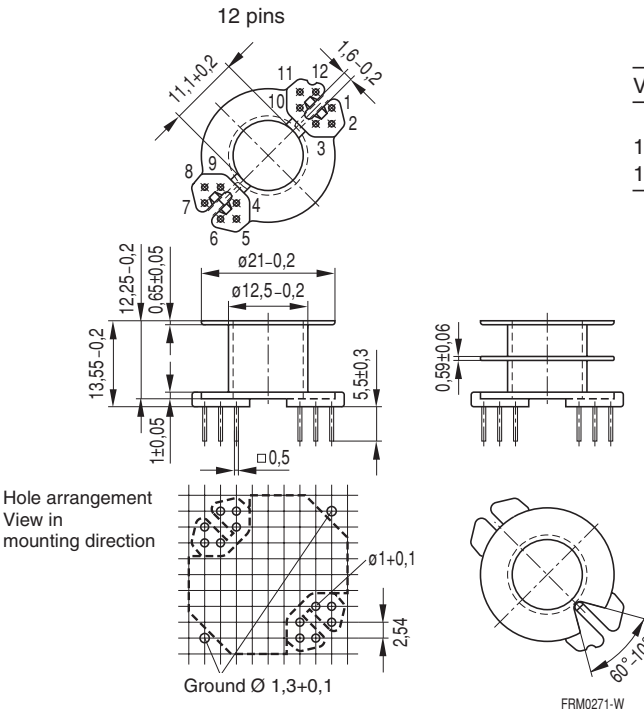
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

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

Winding: see "Processing Notes", page 153

Squared pins. For matching clamp and insulating washers see page 240.

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
1	41,5	52	43	8 10 11 12	B65814-N1008-D1 B65814-N1010-D1 B65814-N1011-D1 B65814-N1012-D1
2	39	52	46	8	B65814-N1008-D2



Version	Pins omitted
8 pins	2, 5, 8, 11
10 pins	2, 11
11 pins	9

**Coil former for power applications**

Optimized for automatic winding

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

F  $\triangleq$  max. operating temperature 155 °C), color code black

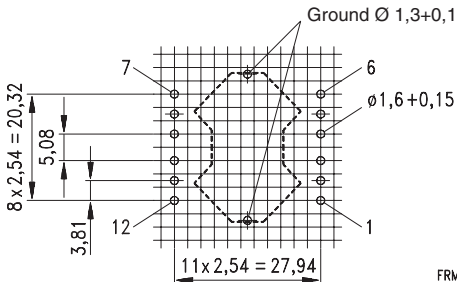
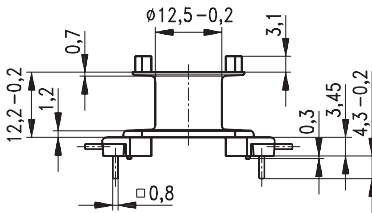
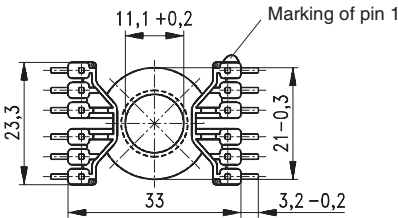
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

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

Winding: see "Processing Notes", page 153

For matching clamp and insulating washer 1 see page 240

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	Ordering code
1	41,5	52	43	12	B65814-C1512-T1



FRM0225-T

Hole arrangement  
View in mounting direction  
(Note half pitch!)

**Clamp**

- With ground terminal, made of stainless spring steel (tinned), 0,45 mm thick
- Solderability to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s
- Also available as strip clamp on reels

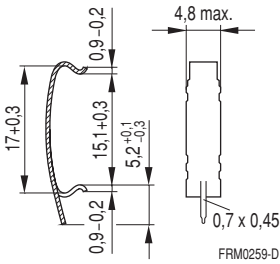
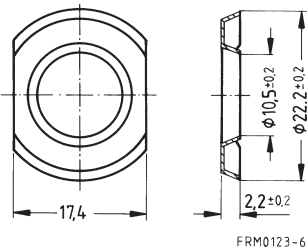
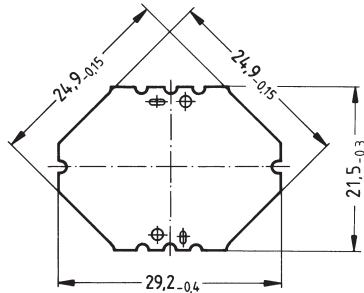
**Insulating washer 1 between core and coil former**

- For tolerance compensation and for insulation
- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E  $\triangleq$  120 °C), 0,1 mm thick

**Insulating washer 2 for double-clad PCBs**

- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E  $\triangleq$  120 °C), 0,3 mm thick

	Ordering code
Clamp (ordering code per piece, 2 are required)	B65814-A2203
Insulating washer 1 (reel packing, PU = 1 reel)	B65814-B5000
Insulating washer 2 (bulk)	B65814-B2005

**Clamp**

**Insulating washer 1**

**Insulating washer 2**


FRM0124-E

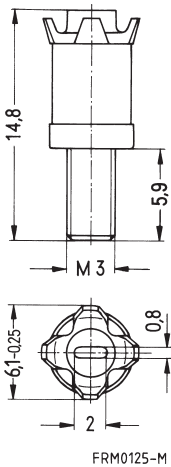
<b>RM 10</b>	<b>B63399</b>
<b>Accessories</b>	<b>B65679</b>

### Adjusting screw

- Tube core with thread and core brake made of GFR polyterephthalate
- Plastic **adjusting screwdriver** (not shown)
- Plastic **handle** for adjusting screwdriver (not shown)

Core RM 10		Adjusting screw			Min. adjusting range %	Ordering code
Material	A <sub>L</sub> value nH	Tube core ∅ × length mm	Material	Color code		
N 48	400	4,55 × 6,3	N 22	red	10	B65679-E3-X22
	400	4,98 × 6,3	N 22	black	18	B65679-E2-X22
	630				11	
	630	5,15 × 6,3	N 22	white	17	B65679-E1-X22
<b>Adjusting screwdriver</b>						B63399-B1
<b>Handle</b>						B63399-B5

### Adjusting screw



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