

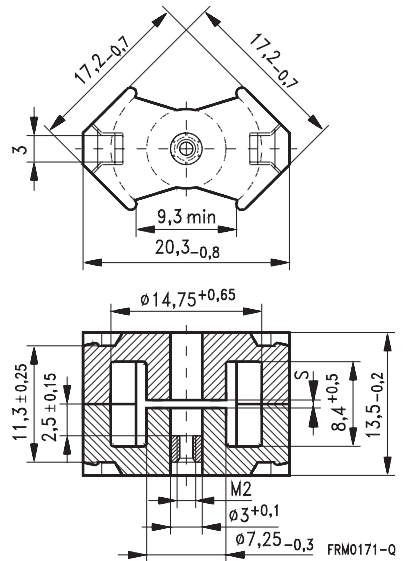
- In accordance with IEC 60431
- Core without center hole for transformer applications
- RM cores are supplied in sets

**Magnetic characteristics** (per set)

|              | with center hole | without center hole |                  |
|--------------|------------------|---------------------|------------------|
| $\Sigma l/A$ | 0,74             | 0,7                 | mm <sup>-1</sup> |
| $l_e$        | 29,8             | 30,4                | mm               |
| $A_e$        | 40               | 43                  | mm <sup>2</sup>  |
| $A_{min}$    | —                | 39                  | mm <sup>2</sup>  |
| $V_e$        | 1 200            | 1 340               | mm <sup>3</sup>  |

**Approx. weight** (per set)

| $m$ | 6,5 | 7,2 | g |
|-----|-----|-----|---|
|     |     |     |   |


**Gapped**

| Material | $A_L$ value<br>nH      | $s$<br>approx.<br>mm | $\mu_e$    | Ordering code <sup>1)</sup><br>-A with center hole<br>-N with threaded sleeve<br>-J without center hole |
|----------|------------------------|----------------------|------------|---|
| N41      | 160 ± 5 %<br>250 ± 5 % | 0,30<br>0,18         | 89<br>139  | B65819-J160-J41<br>B65819-J250-J41  |
| N48      | 250 ± 3 %<br>315 ± 3 % | 0,16<br>0,12         | 147<br>186 | B65819-+250-A48<br>B65819-+315-A48  |

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

**Ungapped**

| Material          | $A_L$ value<br>nH | $\mu_e$ | $A_{L1min}$<br>nH | $P_V$<br>W/set                      | Ordering code<br>-J w/o center hole |
|-------------------|-------------------|---------|-------------------|-------------------------------------|-------------------------------------|
| N30               | 5000 + 30/- 20 %  | 2780    |                   |                                     | B65819-J-R30                        |
| T38               | 10000 +40/- 30 %  | 5570    |                   |                                     | B65819-J-Y38                        |
| N49               | 1900 + 30/- 20 %  | 1070    | 1070              | < 0,22<br>(50 mT, 500 kHz, 100 °C)  | B65819-J-R49                        |
| N87               | 2700 + 30/- 20 %  | 1510    | 1600              | < 0,77<br>(200 mT, 100 kHz, 100 °C) | B65819-J-R87                        |
| N97 <sup>1)</sup> | 2700 + 30/- 20 %  | 1510    | 1600              | < 0,58<br>(200 mT, 100 kHz, 100 °C) | B65819-J-R97                        |

1) Preliminary data

**Coil former**

Material: GFR thermosetting plastic; UL 94 V-0, insulation class to IEC 60085:  
 B65820-B: F  $\triangleq$  max. operating temperature 155 °C); color code green  
 B65820-W: H  $\triangleq$  max. operating temperature 180 °C); color code black

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

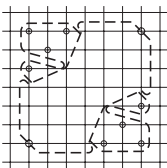
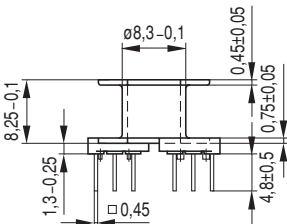
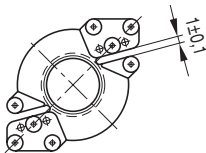
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 153

Squared pins

For matching clamp and insulating washers see page 219

| Sections | $A_N$<br>mm <sup>2</sup> | $l_N$<br>mm | $A_R$ value<br>$\mu\Omega$ | Pins | Ordering code                      |
|----------|--------------------------|-------------|----------------------------|------|------------------------------------|
| 1        | 21,4                     | 35,6        | 56                         | 8    | B65820-B1008-D1<br>B65820-W1008-D1 |



Hole arrangement  
View in  
mounting direction

FRM0276-3

**Clamp**

- With ground terminal, made of stainless spring steel (tinned), 0,4 mm thick
- Solderability to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

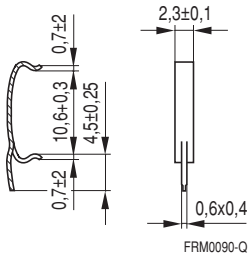
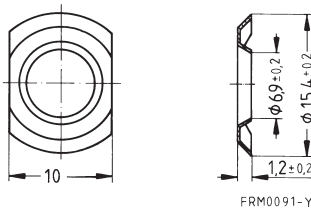
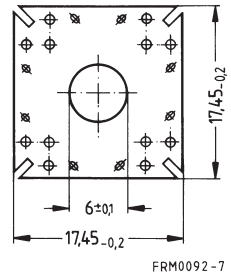
**Insulating washer 1 between core and coil former**

- For tolerance compensation and for insulation
- Made of polycarbonate (UL 94 V-0, insulation class to IEC 60085: E  $\geq$  120 °C), 0,08 mm thick

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

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

|   | Ordering code |
|---|---------------|
| Clamp (ordering code per piece, 2 are required) | B65820-B2001  |
| Insulating washer 1 (reel packing, PU = 1 reel) | B65820-A5000  |
| Insulating washer 2 (bulk)                      | B65820-C2005  |

**Clamp**

**Insulating washer 1**

**Insulating washer 2**


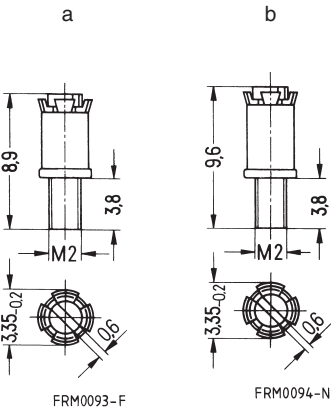
|                    |               |
|--------------------|---------------|
| <b>RM 7</b>        | <b>B65659</b> |
| <b>Accessories</b> | <b>B63339</b> |

### 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 7                    |                         | Adjusting screw |                         |          |            | Min. adjusting range % | Ordering code |
|------------------------------|-------------------------|-----------------|-------------------------|----------|------------|------------------------|---------------|
| Material                     | A <sub>L</sub> value nH | Fig.            | Tube core Ø × length mm | Material | Color code |                        |               |
| N48                          | 250                     | a               | 2,60 × 3,7              | N 22     | red        | 12                     | B65659-F1-X23 |
|                              | 315                     | b               | 2,75 × 4,4              | N 22     | black      | 16                     | B65659-F3-X23 |
| <b>Adjusting screwdriver</b> |                         |                 |                         |          |            |                        | B63399-B4     |
| <b>Handle</b>                |                         |                 |                         |          |            |                        | B63399-B5     |

### Adjusting screws



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