

Softmagnetic Core Material | Pearls Product Sheet



Softmagnetic pearls for suppression of interfering impulses



Due to their very high permeability, as well as very low core losses at the high frequencies of a conducted disturbance (150 kHz - 30 MHz) and a specifically increasing resistance, our small pearls made of nanocrystalline material are ideal for suppressing interference pulses (switching circuit). The pearls are usually attached to the base of electronic devices or threaded like a pearl string (as single-conductor choke). The Curie temperature of the ribbon material is approx.

570 degrees, the properties of the pearls remain largely unchanged up to approx. 120°C in continuous operation. Higher temperatures in the device are theoretically feasible, but must be checked by the customer in the application (an increase in the number of pearls may be necessary) and in order to check the resistance of the coating to the specific customer requirement.

Overview of our soft-magnetic pearls:

| Types / Reference | | Nom. I OD | Dimensions ID | s [mm] H | Finished dimensions [mm] OD ID H | Lfe ID | Afe (cm²) | ALnom @10kHz [μΗ] 50.000μ | Finishing |
|-------------------|--------|--------------|------------------|-------------|-------------------------------------|-----------|--------------|------------------------------|---------------|
| FS0301- | MRC068 | 3,6 | 1,7 | 3 | spray coated* | 0,83 | 0,02 | 16 | coated orange |
| FS0402- | MRC069 | 4 | 2,3 | 3 | spray coated* | 0,99 | 0,02 | 12 | coated orange |
| FS0402- | MRC070 | 4 | 2,3 | 2,5 | spray coated* | 0,99 | 0,02 | 10 | coated orange |
| FS0402- | MRC071 | 4 | 2,8 | 4,5 | spray coated* | 1,07 | 0,02 | 12 | coated orange |
| FS0402- | MRC072 | 4 | 2,3 | 4,5 | spray coated* | 0,99 | 0,03 | 18 | coated orange |
| FS0402- | MRC073 | 4,2 | 2,8 | 3 | spray coated* | 1,10 | 0,02 | 9 | coated orange |
| FS0402- | MRC074 | 4,5 | 2,8 | 4,5 | spray coated* | 1,15 | 0,03 | 15 | coated orange |
| FS0503- | MRC075 | 5 | 3,5 | 4,5 | spray coated* | 1,34 | 0,03 | 12 | coated orange |
| FS0503- | MRC076 | 5,2 | 3 | 3 | spray coated* | 1,29 | 0,03 | 12 | coated orange |
| FS0603- | MRC077 | 6 | 3 | 3 | spray coated* | 1,41 | 0,03 | 15 | coated orange |
| FS0603- | MRC078 | 6,8 | 3,5 | 3 | spray coated* | 1,62 | 0,04 | 14 | coated orange |
| FS0703- | MRC079 | 7 | 3,5 | 4,5 | spray coated* | 1,65 | 0,06 | 22 | coated orange |
| FS1007- | MRC080 | 10,2 | 7,5 | 4,5 | spray coated* | 2,78 | 0,05 | 10 | coated orange |
| FS1108- | MRC081 | 11,3 | 8,5 | 4,5 | spray coated* | 3,11 | 0,05 | 9 | coated orange |
| FS1210- | MRC082 | 12 | 10 | 4,5 | spray coated* | 3,46 | 0,03 | 6 | coated orange |
| FS1311- | MRC083 | 13 | 11,3 | 3 | spray coated* | 3,82 | 0,02 | 3 | coated orange |
| FS1512- | MRC084 | 15 | 12 | 3 | spray coated* | 4,24 | 0,03 | 5 | coated orange |

^{*}Spray coating is used for fixation of the core itself, there is no special confirmation of isolation. Max. dim. change ca. 1mm

The information is not binding and can be adjusted without prior information.

Important note: For safety and the proper usage, you are requested to approve the offered product specification for your application. These products are designed for general electronic devices. Performance and safety of this product for applications which could lead to physical harm is not confirmed. Be sure to examine the performance and safety when the product is used for these applications and take appropriate measures, such as failsafe, to avoid any accident. It is the responsibility of user to take such measures.