

Sintered Ferrite

CER / ISO-CER

MATERIAL TYPE

Ceramic

SURFACE PROTECTION

Not necessary

ORIENTATION

Axial / Diametral / Radial

MAGNETIZATION

Single or Multiple Poles on the functional surface

TEMPERATURE BEHAVIOR

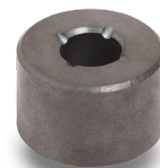
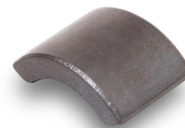
| | | |
|------------------------------|--------|------|
| Br TEMPERATURE COEFFICIENT* | % / °C | -0,2 |
| HcJ TEMPERATURE COEFFICIENT* | % / °C | +0,3 |

*The temperature coefficients are nominal reference values only. They can vary for different temperatures and don't need to be linear.

**The maximum operating temperature depends on the magnet shape, size and on the specific application. Maximum working temperature data shown on the catalogue are based on the international standard $B/H = Pc > 0,7$.

PHYSICAL AND MECHANICAL TYPICAL PROPERTIES

| | | |
|----------------------------------|----------------------------|-----------|
| CURIE TEMPERATURE | °C | 450 |
| RECOIL PERMEABILITY | (μ r) | 1,05-1,10 |
| SATURATION FIELD | kOe | > 14 |
| ELECTRICAL RESISTIVITY | Ω m | > 104 |
| COMPRESSIVE STRENGTH | N/mm ² | ~ 700 |
| DENSITY | g/cm ³ | ~ 5 |
| FLEXURAL STRENGTH | N/mm ² | 55 |
| TENSILE STRENGTH | N/mm ² | 50 |
| VICKERS HARDNESS | HV | ~ 500 |
| YOUNG'S MODULUS | N/mm ² | ~ 150 |
| SPECIFIC HEAT | kcal/kg/°C | 0,8 |
| THERMAL CONDUCTIVITY | kcal/m/hr/°C | ~ 5 |
| THERMAL EXPANSION COEF \perp c | $10^{-6}/^{\circ}\text{C}$ | 14 |
| THERMAL EXPANSION COEF // c | $10^{-6}/^{\circ}\text{C}$ | 9 |



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| GRADE | Br | | HcB | | HcJ | | BH max | | Max. Working Temp.** °C |
|-----------------------------|---------------|-------------|---------------|-----------|---------------|-----------|-------------|-------------------|----------------------------|
| | G | T | Oe | kA/m | Oe | kA/m | MGOe | kJ/m ³ | |
| Sintered Ferrite | | | | | | | | | |
| Anisotropic Material | | | | | | | | | |
| CER 30/25 | 3.800 - 4.200 | 0,38 - 0,42 | 2.000 - 2.700 | 160 - 216 | 2.060 - 2.780 | 165 - 222 | 3,3 - 3,7 | 26,3 - 29,5 | 250 |
| CER 32/25 | > 4.100 | > 0,41 | > 3.016 | > 240 | > 3.142 | > 250 | > 4,02 | > 32 | 250 |
| CER 24/35 | > 3.600 | > 0,36 | > 3.267 | > 260 | > 4.398 | > 350 | > 3,02 | > 24 | 250 |
| CER 25/38 | > 3.800 | > 0,38 | > 3.456 | > 275 | > 4.775 | > 380 | > 3,14 | > 25 | 250 |
| CER 31/30 | > 4.100 | > 0,41 | > 3.707 | > 295 | > 3.770 | > 300 | > 3,896 | > 31 | 250 |
| CER 39/34 | 3.900 - 4.100 | 0,39 - 0,41 | 3.200 - 3.400 | 255 - 271 | 3.400 - 3.600 | 261 - 287 | 3,6 - 4,0 | 28,6 - 31,8 | 250 |
| CER 39/39 | 3.900 - 4.100 | 0,39 - 0,41 | 3.300 - 3.500 | 263 - 279 | 3.900 - 4.100 | 311 - 326 | 3,9 - 4,1 | 31,0 - 32,0 | 250 |
| CER 40/40 | 4.000 - 4.200 | 0,40 - 0,42 | 3.390 - 3.690 | 270 - 294 | 3.860 - 4.140 | 307 - 330 | 3,8 - 4,2 | 30,3 - 33,4 | 250 |
| CER 43/50 | 4.200 - 4.400 | 0,42 - 0,44 | 3.700 - 4.080 | 295 - 325 | 4.800 - 5.150 | 382 - 410 | 4,21 - 4,59 | 33,5 - 36,5 | 250 |
| CER 45/45 | 4.400 - 4.600 | 0,44 - 0,46 | 3.895 - 4.445 | 310 - 354 | 4.350 - 4.710 | 346 - 375 | 4,59 - 4,96 | 36,5 - 39,5 | 250 |
| Isotropic Material | | | | | | | | | |
| ISOCER 10 | 2.000 - 2.100 | 0,20 - 0,21 | 1.600 - 2.000 | 128 - 160 | 1.650 - 2.100 | 132 - 165 | 0,80 - 1,20 | 6,4 - 9,6 | 250 |