

CER | ISO-CER

Sintered Ferrite

MATERIAL TYPE

Ceramic

SURFACE PROTECTION

Not necessary

ORIENTATION

Axial / Diametral / Radial

MAGNETIZATION

Single or Multiple Poles on the functional surface

TEMPERATURE BEHAVIOR

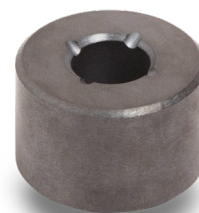
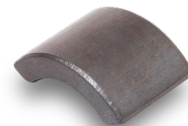
Br TEMPERATURE COEFFICIENT	% / °C	-0,2
HcJ TEMPERATURE COEFFICIENT	% / °C	+0,3

*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 is depending on the magnet shape, size and on the specific application.

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 /°C	14
THERMAL EXPANSION COEF // c	10 ⁻⁶ /°C	9



Sintered Ferrite (Anisotropic)

GRADES	Br		HcB		HcJ		BH max		Max. Working Temp.**
	G	T	Oe	kA/m	Oe	kA/m	MGOe	kJ/m ³	
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

Sintered Ferrite (Isotropic)

GRADES	Br		HcB		HcJ		BH max		Max. Working Temp.**
	G	T	Oe	kA/m	Oe	kA/m	MGOe	kJ/m ³	
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