

# Ferrocomp I 10/22 PA



## Product description

Magnetic material: Anisotropic Sr-ferrite  
 Bonding material: PA12

## Magnetic properties

	Unit	min	typ
Residual induction; $B_r$	mT	236	250.7
Coercive force; $b_{Hc}$	kA/m	170	189
Intrinsic coercive force; $i_{Hc}$	kA/m	220	261.9
Energy product; $BH_{max}$	$\text{kJ/m}^3$	10.6	12.3
Temperature coefficient; $TK_{Br}^{**}$	$\%/^{\circ}\text{C}$		-0,20
Temperature coefficient; $TK_{iHc}^{**}$	$\%/^{\circ}\text{C}$		0,15
Magnetising field strength; $M$	kA/m		800

Values shown in the table are typical and vary depending upon part geometry.

## Other relevant properties

	Unit	Value
Density; $\rho$	$\text{g/cm}^3$	3.29
Operating temperature; $T_{op}^{*/***}$	$^{\circ}\text{C}$	120
Tensile strength; $R_m$	MPa	52.3
Flexural strength; $\sigma_{fM}$	MPa	110.1
Elongation at break; $\epsilon$	%	1.259
Young's modulus; $E$	GPa	10.4
Glass transition; $T_g$	$^{\circ}\text{C}$	40
Melting temperature; $T_m$	$^{\circ}\text{C}$	180

\* Max operating temperature depends on the magnet dimensions, the exposure time and the specific application. Please get in touch with our applications engineers for any further info.

\*\* In the temperature range from 20  $^{\circ}\text{C}$  to 100  $^{\circ}\text{C}$ .

\*\*\* For magnets with PPS as binder, the chemical resistance to oils, grease, motor oils etc. is significantly better than for PA-bonded magnets; however this has to be checked in individual cases.