

# Product specification

Product name	Samarium Cobalt 18mmX5mmX4mm					
Item	Name	Symbol	SI		CGS	
Shape	Length	L	18	mm	1.8	cm
	Width	W	5	mm	0.5	cm
	Height	H	4	mm	0.4	cm
	Dimensional tolerance +/-	L	0.1	mm	0.01	cm
		W	0.1	mm	0.01	cm
		H	0.1	mm	0.01	cm
	Direction of magnetization	M	Assiale			
Surface treatment	-	-	$\mu$ m			
Measuring point	Surface flux density	B	332.3	mT	3323	G
	Attractive force	F	1.77	kgf	1772	gf
	Magnetic flux density on load point	Bd	511.4	mT	5114	G
	Total flux	Dia o	0.0000460 3	Wb	4603	Mx
	Permeance coefficient	Pc	0.99	Pc	-	
	Operating temperature range	Tw	320	deg C	608	deg F
	Operating temperature range	Tw	-	deg C	-	deg F
Material characteristics	Material grade	Samarium Cobalt	YXG28			
	Remanence	Br	1030-1080	mT	10.3-10.8	kG
	Coercive forces	Hcb	756-796	kA/m	9.5-10.0	kOe
	Intrinsic coercivity	Hcj	>1433	kA/m	>18	kOe
	Maximum energy product	BH	207-220	kJ/m <sup>3</sup>	26-28	MGOe
	Temperature coefficient	Br	-0.035	%/deg C	31.94	%/deg F
		Hcj	-0.2	%/deg C	31.64	%/deg F
	Max. operating temperature	Tw	300	deg C	572	deg F
	Curie temperature	Tc	800	deg C	1472	deg F
	Density	P	8.5	kg/m <sup>3</sup>	-	
Weight	Net	0.00306	kg	3.06	g	
Remark	REACH RoHS Directive					

Information on these magnetic characteristics are approximate and reference values. When using the calculated values for actual magnetic application products and research and development of the application of magnetic products, use these values as reference values. We are not responsible for the results from the reference values. The details can be found by referring to the product specifications. All specifications are subject to change without notice.