Different types of magnetism

Type of magnetism	Magnetising field is absent (H = 0)	Magnetising field is present $(H \neq 0)$	Magnetisation of the material	Susceptibility	Relative permeability
Diamagnetism	O O O O O (Zero magnetic moment)	(Aligned opposite to the field)	M A H	Negative	Less than unity
Paramagnetism	(Net magnetic moment but random alignment)	(Aligned with the field)	M h	Positive and small	Greater than unity
Ferromagnetism	(Net magnetic moment in a domain but random alignment of domains)	(Aligned with the field)	M A H	Positive and large	Very large