

# Metallic Glass Cobalt/Silicon/Boron/Manganese Coil

**Grade:** Metallic Glass

**Formula:** Co70/Si+B 23/Mn 5/Fe+Mo 2 (Atomic %)

**Thickness:** 0.04mm

**Coil Width:** 25mm

**Length:** 0.5m

**UOM Code:** 019-091-99

**SKU:** 1000002290-group

**Product Code:** CO83-FL-000100

## Material Properties for Glasses

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	130

### Magnetic Properties

Element	Value
Coercivity - as cast( $\text{A m}^{-1}$ )	1
Remanence ratio( $\text{Br/Bs}$ )	0.7-0.95
Curie temperature( $^{\circ}\text{C}$ )	350
Saturation flux density( $\text{T}$ )	0.8
Saturation magnetostriction( $\times 10^{-3}$ )	0.3

### Thermal Properties

Element	Value
Crystallisation temperature( $^{\circ}\text{C}$ )	450
Maximum use temperature in air( $^{\circ}\text{C}$ )	80-120

### Physical Properties

Element	Value
Density( $\text{gcm}^{-3}$ )	7.6

## Mechanical Properties

Element	Value
Tensile modulus( GPa )	150
Hardness - Vickers( kgf mm <sup>2</sup> )	900
Tensile strength( MPa )	1500-2000