

Typical data for SURA® M530-50HP

T	W/kg at 50 Hz	VA/kg at 50 Hz	A/m at 50 Hz
0,1	0,03	0,12	57,7
0,2	0,14	0,31	74,9
0,3	0,28	0,54	85,2
0,4	0,46	0,80	93,7
0,5	0,67	1,09	102
0,6	0,90	1,40	109
0,7	1,15	1,75	118
0,8	1,42	2,13	127
0,9	1,72	2,56	137
1,0	2,05	3,04	148
1,1	2,42	3,61	164
1,2	2,82	4,31	189
1,3	3,28	5,27	232
1,4	3,83	6,87	326
1,5	4,45	10,9	594
1,6	5,16	25,3	1460
1,7	5,83	67,4	3620
1,8	6,33	152	7320

Loss at 1.5 T , 50 Hz, W/kg 4,45

Loss at 1.0 T , 50 Hz, W/kg 2,05

Anisotropy of loss, % 6

Magnetic polarization at 50 Hz

H = 2500 A/m, T 1,66

H = 5000 A/m, T 1,74

H = 10000 A/m, T 1,84

Coercivity (DC), A/m 75

Relative permeability at 1.5 T 2010

Resistivity, $\mu\Omega\text{cm}$ 30

Yield strength, N/mm² 285

Tensile strength, N/mm² 405

Young's modulus, RD, N/mm² 210 000

Young's modulus, TD, N/mm² 220 000

Hardness HV5 (VHN) 125



RD represents the rolling direction

TD represents the transverse direction

Values for yield strength (0.2 % proof strength)

and tensile strength are given for the rolling direction

Values for the transverse direction are approximately 5% higher