



NO20

TYPICAL VALUES

POLARISATION J_{peak} T	SPECIFIC TOTAL LOSS				
	at 50 Hz W/kg	at 400 Hz W/kg	at 2500 Hz W/kg	at 5000 Hz W/kg	at 10000 Hz W/kg
0.1	0.02	0.17	2.79	9.01	27.0
0.2	0.07	0.72	10.6	31.8	95.6
0.3	0.14	1.49	24.4	65.6	191
0.4	0.23	2.50	40.4	108	315
0.5	0.32	3.80	58.4	159	
0.6	0.42	5.17	78.4	219	
0.7	0.54	6.70	103	290	
0.8	0.66	8.36	133	375	
0.9	0.80	10.3	166	477	
1.0	0.95	12.3	200		
1.1	1.14	14.8	248		
1.2	1.36	17.9			
1.3	1.65	21.4			
1.4	2.00	25.3			
1.5	2.40	29.7			
1.6	2.75				
1.7	3.06				
1.8	3.32				

	GUARANTEED VALUES	TYPICAL VALUES
Loss at 1.0 T and 50 Hz, W/kg	-	0.95
Loss at 1.0 T and 400 Hz, W/kg	15.0	12.3
Loss at 1.0 T and 2500 Hz, W/kg	215	200
Nominal thickness, mm		0.20
Resistivity, $\mu\Omega\text{cm}$		52
Density, g/cm^3		7.65
Yield strength, N/mm^2		370
Tensile strength, N/mm^2		450
Young's modulus, RD, N/mm^2		185 000
Young's modulus, TD, N/mm^2		200 000
Hardness HV5		180

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



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POLARISATION J_{peak} T	MAGNETIC FIELD STRENGTH H_{peak}				
	at 50 Hz A/m	at 400 Hz A/m	at 2500 Hz A/m	at 5000 Hz A/m	at 10000 Hz A/m
0.1	29	34	42	51	75
0.2	36	42	67	87	128
0.3	42	48	87	116	166
0.4	46	55	103	141	202
0.5	51	60	118	165	
0.6	55	66	133	189	
0.7	61	72	148	217	
0.8	68	80	165	248	
0.9	78	89	183	284	
1.0	91	101	204	324	
1.1	111	121	227		
1.2	145	155			
1.3	214	230			
1.4	411	439			
1.5	1280	1310			
1.6	2970				
1.7	5380				
1.8	9390				

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