

Os materiais magnéticos nanocristalinos são formados por grãos magnéticos de dimensões em torno de 5-10nm imersos em um material amorfo e possuem características magnéticas diferenciadas tais como: alta magnetização de saturação, alta permeabilidade (até 280000), indução magnética (até 1,25T), baixa coercividade, boa estabilidade térmica que levam a redução significativa de tamanho e peso dos núcleos magnéticos, bem como menores perdas em comparação aos ferrites convencionais, especialmente em altas frequências.

A Magmattec atualmente é a única empresa na América Latina a produzir núcleos magnéticos nanocristalinos.

CARACTERÍSTICAS

- Alta permeabilidade magnética inicial;
- Alta indução de saturação, em torno de 1,2T;
- Baixas perdas;
- Matéria prima permite fácil conformação de núcleos.

VANTAGENS

- Maior sensibilidade à indução magnética;
- Redução de peso e volume em até 60%;
- Melhor eficiência térmica e elétrica;
- Personalização de tamanhos e acabamentos.

BENEFÍCIOS

- Maior confiabilidade e precisão em medições;
- Redução das dimensões do equipamento;
- Melhor eficiência energética;
- Tamanho e acabamento conforme projeto.

ESPECIFICAÇÕES

PERMEABILIDADE MÁXIMA	60 Hz	280.000
PERMEABILIDADE MÉDIA INICIAL	50 Hz	98.000
PERMEABILIDADE MÍNIMA	50 Hz	40.000
INDUÇÃO DE SATURAÇÃO B_{SAT}	T	1,25
TEMPERATURA DE CURIE	°C	560
DENSIDADE	g/cm ³	7,3
MAGNETOSTRICÇÃO, λ_s		5 x10 ⁻⁶
RESISTIVIDADE	$\mu\Omega$ -cm	130



Acabamentos

Capa plástica (final B), fibra de vidro (final D), pintura epóxi ou sem revestimento (consulte de acordo com as dimensões da peça e necessidade de resistência mecânica e à temperatura).

Dimensões

Os núcleos podem ser fabricados com dimensões adequadas necessidade do projeto.

Dimensões Finais com Acabamento

Abaixo são informadas as faixas de variação das dimensões finais dos núcleos calculadas a partir das dimensões nominais sem acabamento, para os dois tipos principais de acabamento: capa plástica (final B) e fibra de vidro (final D). Para outros tipos de acabamento, consultar.

Acabamento em capa plástica

Faixas de Tolerância	Acréscimo nas Dimensões Nominais		
	Altura	Diâmetro Interno	Diâmetro Externo
Diâmetro Interno até 65 mm	+4 mm	+4 mm	+4 mm
Diâmetro Interno acima de 65 mm	+7 mm	+7 mm	+7 mm

Acabamento em fita de fibra de vidro

Faixas de Tolerância	Variação nas Dimensões Nominais		
	Altura	Diâmetro Interno	Diâmetro Externo
Até 35 mm	+0,5/+3,5 mm	-	-
A partir de 40 mm	+0,5/+5,5 mm	-	-
Até 200 mm	-	-2,5/+0,5 mm	+0,5/+5,0 mm
Entre 205 e 400 mm	-	-4,0/+1,0 mm	+1,0/+7,0 mm
Acima de 405 mm	-	-5,0/+1,0 mm	+1,0/+8,0 mm

Formatos

Toroidais, oblongos, U.

Outras opções

Gap, bipartido, suportes.

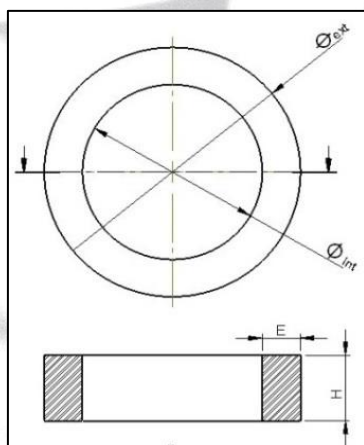
Materiais

Material 521 apresenta melhor relação custo/benefício para aplicações de baixa frequência (~60Hz). Material 520 apresenta menores perdas em frequências na faixa de 1kHz a 100kHz.

Todas as características das peças podem ser discutidas com nossa equipe para satisfazer as necessidades de cada projeto específico. Consulte-nos.

Núcleos Toroidais 520

Produto	Código	Dimensões sem acabamento			E _{Fe} (mm)	L _{Fe} (cm)	A _{Fe} (cm ²)	AS _{Fe} (cm ²)	m _{Fe} (g)	V _{Fe} (cm ³)	AL (1kHz) (μH/esp ²)
		φ _{ext} (mm)	φ _{int} (mm)	H (mm)							
MMT520T20.14.10B	1.01.0640	20,0	14,0	10,0	3,0	5,3	0,3	13,9	10,0	1,4	59
MMT520T25.17.10B	1.01.0158	25,0	17,0	10,0	4,0	6,6	0,4	18,5	17,0	2,4	67
MMT520T30.20.08B	1.01.0188	30,0	20,0	8,0	5,0	7,9	0,4	20,4	20,0	2,8	56
MMT520T30.20.10B	1.01.0159	30,0	20,0	10,0	5,0	7,9	0,5	23,6	25,0	3,5	71
MMT520T34.27.4B	1.01.0160	34,0	27,0	4,0	3,5	9,6	0,1	14,4	9,0	1,2	16
MMT520T35.31.4B	1.01.0161	35,0	31,0	4,0	2,0	10,4	0,1	12,4	5,0	0,7	9
MMT520T40.31.10B	1.01.0162	40,0	31,0	10,0	4,5	11,2	0,4	32,3	33,0	4,5	45
MMT520T52.38.25B	1.01.0225	52,0	38,5	25,0	6,8	14,2	1,5	90,3	155,0	21,6	132
MMT520T53.38.20B	1.01.0224	53,0	38,5	20,0	7,3	14,4	1,3	78,3	135,0	18,8	112
MMT520T54.30.20B	1.01.0647	54,0	30,0	20,0	12,0	13,2	2,0	84,4	194,0	26,9	190
MMT520T58.47.12B	1.01.0164	58,0	47,0	12,0	5,6	16,5	0,6	58,2	72,0	10,0	45
MMT520T68.45.25B	1.01.0376	68,0	45,0	25,0	11,5	17,7	2,4	129,6	312,0	43,4	170
MMT520T68.45.25B	1.01.0408	68,0	45,0	25,0	11,5	17,7	2,4	129,6	312,0	43,4	170
MMT520T78.48.30B	1.01.0375	78,0	48,0	30,0	15,0	19,8	3,8	178,1	545,0	75,7	238
MMT520T80.60.30B	1.01.0187	80,0	60,0	30,0	10,0	22,0	2,6	175,9	404,0	56,1	143
MMT520T86.66.10B	1.01.0261	86,0	66,0	10,0	10,0	23,9	0,9	95,5	146,0	20,3	44
MMT520T97.65.25B	1.01.0377	97,0	65,0	25,0	16,0	25,4	3,4	208,7	623,0	86,5	165
MMT520T103.75.30B	1.01.0186	103,0	75,0	30,0	14,0	28,0	3,6	246,0	719,0	99,8	157
MMT520T130.100.40B	1.01.0413	130,0	100,0	40,0	15,0	36,1	5,1	397,4	1327,0	184,2	174
MMT520T150.120.40B	1.01.0613	150,0	120,0	40,0	15,0	42,4	5,1	466,5	1557,0	216,3	148
MMT520T152.106.35D	1.01.0197	152,0	106,0	35,0	23,0	40,5	6,8	470,1	1997,0	277,3	208
MMT520T210.105.25D	1.01.0293	210,0	105,0	25,0	52,5	49,5	11,2	766,9	3974,0	552,0	278
MMT520T233.157.25B	1.01.0199	233,0	157,0	25,0	38,0	61,2	8,1	771,9	3562,0	494,7	162
MMT520T260.160.35D	1.01.0393	260,0	160,0	35,0	50,0	65,9	14,9	1121,5	7066,0	981,3	278



Núcleos Toroidais 521

Produto	Código	Dimensões sem acabamento			E _{Fe} (mm)	L _{Fe} (cm)	A _{Fe} (cm ²)	AS _{Fe} (cm ²)	m _{Fe} (g)	V _{Fe} (cm ³)	AL (1kHz) (μH/esp ²)
		φ _{ext} (mm)	φ _{int} (mm)	H (mm)							
MMT521T17.11.10B	1.01.0589	16,6	10,7	10,0	3,0	4,3	0,3	11,1	8,0	1,1	76
MMT521T21.14.08B	1.01.0174	21,0	14,0	8,0	3,5	5,5	0,3	12,6	10,0	1,4	56
MMT521T30.20.08B	1.01.0182	30,0	20,0	8,0	5,0	7,9	0,4	20,4	20,0	2,8	56
MMT521T40.31.10B	1.01.0759	40,0	31,0	10,0	4,5	11,2	0,4	32,3	31,0	4,3	42
MMT521T250.185.25D	1.01.0445	40,0	32,0	15,0	4,0	11,3	0,5	43,0	42,0	5,8	56
MMT521T50.40.20B	1.01.0758	50,0	40,0	20,0	5,0	14,1	0,9	70,7	87,0	12,0	74
MMT521T80.47.45B	1.01.0481	80,0	47,0	45,0	16,5	19,9	6,3	245,4	906,0	125,9	390
MMT521T80.60.30B	1.01.0757	80,0	60,0	30,0	10,0	22,0	2,6	175,9	404,0	56,1	143
MMT521T100.80.15B	1.01.0612	110,0	90,0	20,0	10,0	31,4	1,7	188,5	385,0	53,4	67
MMT521T115.90.20B	1.01.0469	115,0	90,0	20,0	12,5	32,2	2,1	209,3	493,0	68,4	81
MMT521T120.90.40D	1.01.0634	120,0	90,0	40,0	15,0	33,0	5,1	362,8	1211,0	168,2	190
MMT521T130.100.40B	1.01.0327	130,0	100,0	40,0	15,0	36,1	5,1	397,4	1327,0	184,2	174
MMT521T140.105.15B	1.01.0633	140,0	105,0	15,0	17,5	38,5	2,2	250,1	618,0	85,9	71
MMT521T140.110.20B	1.01.0631	140,0	110,0	20,0	15,0	39,3	2,6	274,9	721,0	100,1	80
MMT521T150.120.40B	1.01.0328	150,0	120,0	40,0	15,0	42,4	5,1	466,5	1557,0	216,3	148
MMT521T165.145.15D	1.01.0714	165,0	145,0	15,0	10,0	48,7	1,3	243,5	447,0	62,1	32
MMT521T170.130.30D	1.01.0701	170,0	130,0	30,0	20,0	47,1	5,1	471,2	1730,0	240,3	133
MMT521T170.130.35D	1.01.0609	170,0	130,0	35,0	20,0	47,1	6,0	518,3	2019,0	280,4	156
MMT521T170.130.100D	1.01.0681	170,0	130,0	100,0	20,0	47,1	17,0	1130,9	5768,0	801,1	444
MMT521T170.130.110D	1.01.0686	170,0	130,0	110,0	20,0	47,1	18,7	1225,2	6345,0	881,2	489
MMT521T180.130.30B	1.01.0742	180,0	130,0	30,0	25,0	48,7	6,4	535,6	2235,0	310,4	161
MMT521T180.130.45D	1.01.0364	180,0	130,0	45,0	25,0	48,7	9,6	681,7	3353,0	465,6	242
MMT521T180.130.50D	1.01.0657	180,0	130,0	50,0	25,0	48,7	10,6	730,4	3725,0	517,4	269
MMT521T185.135.10D	1.01.0654	185,0	135,0	10,0	25,0	50,2	2,1	351,8	769,0	106,8	52
MMT521T185.135.25D	1.01.0655	185,0	135,0	25,0	25,0	50,2	5,3	502,6	1923,0	267,0	130
MMT521T185.135.30D	1.01.0656	185,0	135,0	30,0	25,0	50,2	6,4	552,9	2307,0	320,4	156
MMT521T190.130.25D	1.01.0423	190,0	130,0	25,0	30,0	50,2	6,4	552,9	2307,0	320,4	156
MMT521T190.130.30D	1.01.0449	190,0	130,0	30,0	30,0	50,2	7,7	603,2	2769,0	384,5	188
MMT521T190.130.35D	1.01.0688	190,0	130,0	35,0	30,0	50,2	8,9	653,4	3230,0	448,6	219
MMT521T190.150.30D	1.01.0712	190,0	150,0	30,0	20,0	53,4	5,1	534,0	1961,0	272,4	118
MMT521T195.135.30B	1.01.0618	195,0	135,0	30,0	30,0	51,8	7,7	622,0	2855,0	396,5	182
MMT521T195.135.40B	1.01.0619	195,0	135,0	40,0	30,0	51,8	10,2	725,7	3807,0	528,7	242
MMT521T195.150.20D	1.01.0313	195,0	150,0	20,0	22,5	54,2	3,8	460,6	1492,0	207,3	87
MMT521T200.150.10D	1.01.0499	200,0	150,0	10,0	25,0	55,0	2,1	384,8	841,0	116,8	48
MMT521T200.150.40D	1.01.0603	200,0	150,0	40,0	25,0	55,0	8,5	714,7	3365,0	467,3	190
MMT521T200.160.50D	1.01.0470	200,0	160,0	50,0	20,0	56,5	8,5	791,7	3461,0	480,6	185
MMT521T205.135.45D	1.01.0300	205,0	135,0	45,0	35,0	53,4	13,4	854,5	5148,0	715,0	309
MMT521T205.145.35D	1.01.0287	205,0	145,0	35,0	30,0	55,0	8,9	714,7	3533,0	490,7	200
MMT521T205.155.20D	1.01.0427	205,0	155,0	20,0	25,0	56,5	4,3	508,9	1730,0	240,3	93
MMT521T205.155.30D	1.01.0705	205,0	155,0	30,0	25,0	56,5	6,4	622,0	2596,0	360,5	139
MMT521T205.155.65D	1.01.0284	205,0	155,0	65,0	25,0	56,5	13,8	1017,8	5624,0	781,1	301
MMT521T205.165.20D	1.01.0315	205,0	165,0	20,0	20,0	58,1	3,4	464,9	1423,0	197,6	72
MMT521T210.105.25D	1.01.0682	210,0	105,0	25,0	52,5	49,5	11,2	766,9	3974,0	552,0	278
MMT521T210.130.20D	1.01.0437	210,0	130,0	20,0	40,0	53,4	6,8	640,9	2615,0	363,2	157
MMT521T210.130.30D	1.01.0461	210,0	130,0	30,0	40,0	53,4	10,2	747,7	3922,0	544,7	235
MMT521T210.130.40D	1.01.0425	210,0	130,0	40,0	40,0	53,4	13,6	854,5	5229,0	726,3	314
MMT521T210.130.50D	1.01.0495	210,0	130,0	50,0	40,0	53,4	17,0	961,3	6537,0	907,9	392
MMT521T210.130.60D	1.01.0462	210,0	130,0	60,0	40,0	53,4	20,4	1068,1	7844,0	1089,5	471

Núcleos Toroidais 521

Produto	Código	Dimensões sem acabamento			E _{Fe} (mm)	L _{Fe} (cm)	A _{Fe} (cm ²)	AS _{Fe} (cm ²)	m _{Fe} (g)	V _{Fe} (cm ³)	AL (1kHz) (μH/esp ²)
		φ _{ext} (mm)	φ _{int} (mm)	H (mm)							
MMT521T210.130.70D	1.01.0685	210,0	130,0	70,0	40,0	53,4	23,8	1174,9	9152,0	1271,1	549
MMT521T210.130.110D	1.01.0440	210,0	130,0	110,0	40,0	53,4	37,4	1602,2	14381,0	1997,4	863
MMT521T210.130.120D	1.01.0608	210,0	130,0	120,0	40,0	53,4	40,8	1709,0	15688,0	2178,9	941
MMT521T210.150.20D	1.01.0429	210,0	150,0	20,0	30,0	56,5	5,1	565,5	2076,0	288,4	111
MMT521T210.150.30D	1.01.0500	210,0	150,0	30,0	30,0	56,5	7,7	678,6	3115,0	432,6	167
MMT521T210.150.40D	1.01.0390	210,0	150,0	40,0	30,0	56,5	10,2	791,6	4153,0	576,8	222
MMT521T210.150.45D	1.01.0391	210,0	150,0	45,0	30,0	56,5	11,5	848,2	4672,0	648,9	250
MMT521T210.150.60D	1.01.0460	210,0	150,0	60,0	30,0	56,5	15,3	1017,8	6229,0	865,2	333
MMT521T210.150.90D	1.01.0607	210,0	150,0	90,0	30,0	56,5	23,0	1357,1	9344,0	1297,8	500
MMT521T210.150.110D	1.01.0764	210,0	150,0	110,0	30,0	56,5	28,1	1583,3	11420,0	1586,1	611
MMT521T210.165.20D	1.01.0314	210,0	165,0	20,0	22,5	58,9	3,8	500,7	1622,0	225,3	80
MMT521T210.170.20D	1.01.0401	210,0	170,0	20,0	20,0	59,7	3,4	477,5	1461,0	202,9	70
MMT521T210.170.40D	1.01.0497	210,0	170,0	40,0	20,0	59,7	6,8	716,3	2922,0	405,9	140
MMT521T210.170.60D	1.01.0752	210,0	170,0	60,0	20,0	59,7	10,2	955,0	4384,0	608,8	211
MMT521T210.180.10D	1.01.0716	210,0	180,0	10,0	15,0	61,2	1,3	306,3	562,0	78,1	26
MMT521T215.145.80D	1.01.0362	215,0	145,0	80,0	35,0	56,5	23,8	1300,6	9690,0	1345,8	519
MMT521T215.175.20D	1.01.0755	215,0	175,0	20,0	20,0	61,2	3,4	490,1	1500,0	208,3	68
MMT521T215.175.25D	1.01.0416	215,0	175,0	25,0	20,0	61,2	4,3	551,3	1875,0	260,4	85
MMT521T215.175.30D	1.01.0417	215,0	175,0	30,0	20,0	61,2	5,1	612,6	2249,0	312,4	103
MMT521T220.150.30D	1.01.0433	220,0	150,0	30,0	35,0	58,1	8,9	755,5	3735,0	518,7	189
MMT521T220.190.20B	1.01.0621	220,0	190,0	20,0	15,0	64,4	2,6	450,8	1182,0	164,2	49
MMT521T220.200.15B	1.01.0748	220,0	200,0	15,0	10,0	65,9	1,3	329,9	606,0	84,1	24
MMT521T220.200.20B	1.01.0617	220,0	200,0	20,0	10,0	65,9	1,7	395,8	807,0	112,2	32
MMT521T220.205.15B	1.01.0620	220,0	205,0	15,0	7,5	66,7	1,0	300,4	460,0	63,8	18
MMT521T225.135.10D	1.01.0477	225,0	135,0	10,0	45,0	56,5	3,8	622,0	1557,0	216,3	83
MMT521T225.135.15D	1.01.0478	225,0	135,0	15,0	45,0	56,5	5,7	678,5	2336,0	324,4	125
MMT521T225.170.30D	1.01.0404	225,0	170,0	30,0	27,5	62,0	7,0	713,5	3133,0	435,1	139
MMT521T225.200.20B	1.01.0658	225,0	200,0	20,0	12,5	66,7	2,1	433,9	1021,0	141,9	39
MMT521T225.205.50D	1.01.0715	225,0	205,0	50,0	10,0	67,5	4,3	810,5	2067,0	287,1	78
MMT521T230.130.25D	1.01.0366	230,0	130,0	25,0	50,0	56,5	10,6	848,2	4326,0	600,8	231
MMT521T230.150.20D	1.01.0678	230,0	150,0	20,0	40,0	59,7	6,8	716,2	2922,0	405,9	140
MMT521T230.150.35D	1.01.0383	230,0	150,0	35,0	40,0	59,7	11,9	895,3	5114,0	710,3	246
MMT521T230.190.20D	1.01.0496	230,0	190,0	20,0	20,0	65,9	3,4	527,8	1615,0	224,3	63
MMT521T235.155.25D	1.01.0447	235,0	155,0	25,0	40,0	61,2	8,5	796,4	3749,0	520,7	171
MMT521T235.195.20D	1.01.0316	235,0	195,0	20,0	20,0	67,5	3,4	540,3	1653,0	229,6	62
MMT521T240.130.95D	1.01.0636	240,0	130,0	95,0	55,0	58,1	44,4	1743,5	18584,0	2581,2	942
MMT521T240.165.30D	1.01.0660	240,0	165,0	30,0	37,5	63,6	9,6	858,8	4380,0	608,3	185
MMT521T240.165.35D	1.01.0661	240,0	165,0	35,0	37,5	63,6	11,2	922,4	5110,0	709,7	216
MMT521T240.185.40D	1.01.0317	240,0	185,0	40,0	27,5	66,7	9,4	901,2	4494,0	624,2	173
MMT521T240.185.80D	1.01.0406	240,0	185,0	80,0	27,5	66,7	18,7	1435,3	8988,0	1248,4	345
MMT521T245.155.30D	1.01.0498	245,0	155,0	30,0	45,0	62,8	11,5	942,4	5191,0	721,0	225
MMT521T245.185.30D	1.01.0450	245,0	185,0	30,0	30,0	67,5	7,7	810,5	3720,0	516,7	140
MMT521T245.200.55D	1.01.0264	245,0	200,0	55,0	22,5	69,9	10,5	1083,4	5294,0	735,2	185
MMT521T245.205.50D	1.01.0698	245,0	205,0	50,0	20,0	70,7	8,5	989,6	4326,0	600,8	148
MMT521T250.130.30D	1.01.0354	250,0	130,0	30,0	60,0	59,7	15,3	1074,4	6575,0	913,2	316
MMT521T250.130.80D	1.01.0302	250,0	130,0	80,0	60,0	59,7	40,8	1671,3	17534,0	2435,3	842
MMT521T250.150.30D	1.01.0475	250,0	150,0	30,0	50,0	62,8	12,8	1005,3	5768,0	801,1	250
MMT521T250.160.30D	1.01.0426	250,0	160,0	30,0	45,0	64,4	11,5	966,0	5321,0	739,0	220

Núcleos Toroidais 521

Produto	Código	Dimensões sem acabamento			E _{Fe} (mm)	L _{Fe} (cm)	A _{Fe} (cm ²)	AS _{Fe} (cm ²)	m _{Fe} (g)	V _{Fe} (cm ³)	AL (1kHz) (μH/esp ²)
		φ _{ext} (mm)	φ _{int} (mm)	H (mm)							
MMT521T250.170.25D	1.01.0439	250,0	170,0	25,0	40,0	65,9	8,5	857,6	4037,0	560,8	159
MMT521T250.170.30D	1.01.0436	250,0	170,0	30,0	40,0	65,9	10,2	923,6	4845,0	672,9	190
MMT521T250.170.130D	1.01.0438	250,0	170,0	130,0	40,0	65,9	44,2	2243,0	20995,0	2915,9	825
MMT521T250.180.10D	1.01.0677	250,0	180,0	10,0	35,0	67,5	3,0	607,9	1447,0	200,9	54
MMT521T250.180.15D	1.01.0727	250,0	180,0	15,0	35,0	67,5	4,5	675,4	2170,0	301,4	81
MMT521T250.190.25D	1.01.0360	250,0	190,0	25,0	30,0	69,1	6,4	760,2	3172,0	440,6	114
MMT521T250.195.20D	1.01.0334	250,0	195,0	20,0	27,5	69,9	4,7	664,0	2353,0	326,8	82
MMT521T250.210.20D	1.01.0704	250,0	210,0	20,0	20,0	72,2	3,4	578,0	1769,0	245,7	58
MMT521T255.135.35D	1.01.0428	255,0	135,0	35,0	60,0	61,2	17,9	1163,9	7873,0	1093,5	359
MMT521T255.140.35D	1.01.0285	255,0	140,0	35,0	57,5	62,0	17,1	1147,8	7642,0	1061,4	340
MMT521T255.175.25D	1.01.0746	255,0	175,0	25,0	40,0	67,5	8,5	878,0	4134,0	574,1	155
MMT521T255.175.30D	1.01.0711	255,0	175,0	30,0	40,0	67,5	10,2	945,6	4960,0	688,9	186
MMT521T255.215.20D	1.01.0733	255,0	215,0	20,0	20,0	73,8	3,4	590,6	1807,0	251,0	57
MMT521T255.215.30D	1.01.0706	255,0	215,0	30,0	20,0	73,8	5,1	738,2	2711,0	376,5	85
MMT521T255.215.40D	1.01.0384	255,0	215,0	40,0	20,0	73,8	6,8	885,9	3614,0	502,0	113
MMT521T260.130.25D	1.01.0454	260,0	130,0	25,0	65,0	61,2	13,8	1102,6	6092,0	846,1	278
MMT521T260.130.30D	1.01.0472	260,0	130,0	30,0	65,0	61,2	16,6	1163,9	7311,0	1015,4	333
MMT521T260.130.35D	1.01.0381	260,0	130,0	35,0	65,0	61,2	19,3	1225,2	8529,0	1184,6	389
MMT521T260.130.45D	1.01.0718	260,0	130,0	45,0	65,0	61,2	24,9	1347,7	10966,0	1523,1	500
MMT521T260.130.50D	1.01.0369	260,0	130,0	50,0	65,0	61,2	27,6	1408,9	12184,0	1692,3	556
MMT521T260.150.30D	1.01.0710	260,0	150,0	30,0	55,0	64,4	14,0	1094,8	6503,0	903,2	268
MMT521T260.150.85D	1.01.0739	260,0	150,0	85,0	55,0	64,4	39,7	1803,2	18426,0	2559,1	760
MMT521T120.90.35B	1.01.0491	260,0	150,0	100,0	55,0	64,4	46,8	1996,4	21677,0	3010,7	894
MMT521T260.165.100D	1.01.0324	260,0	165,0	100,0	47,5	66,7	40,4	1969,3	19406,0	2695,3	745
MMT521T260.170.25D	1.01.0402	260,0	170,0	25,0	45,0	67,5	9,6	945,6	4650,0	645,9	174
MMT521T485.400.15D	1.01.0689	260,0	170,0	25,0	45,0	67,5	9,6	945,6	4650,0	645,9	174
MMT521T260.170.30D	1.01.0756	260,0	170,0	30,0	45,0	67,5	11,5	1013,1	5580,0	775,0	209
MMT521T260.170.35D	1.01.0738	260,0	170,0	35,0	45,0	67,5	13,4	1080,7	6510,0	904,2	244
MMT521T260.170.40D	1.01.0276	260,0	170,0	40,0	45,0	67,5	15,3	1148,2	7440,0	1033,4	279
MMT521T260.170.70D	1.01.0740	260,0	170,0	70,0	45,0	67,5	26,8	1553,5	13021,0	1808,4	488
MMT521T260.170.80D	1.01.0754	260,0	170,0	80,0	45,0	67,5	30,6	1688,5	14881,0	2066,8	558
MMT521T260.185.30D	1.01.0430	260,0	185,0	30,0	37,5	69,9	9,6	943,6	4813,0	668,4	169
MMT521T260.185.100D	1.01.0311	260,0	185,0	100,0	37,5	69,9	31,9	1922,2	16042,0	2228,0	562
MMT521T260.200.40D	1.01.0637	260,0	200,0	40,0	30,0	72,2	10,2	1011,5	5306,0	737,0	174
MMT521T260.210.30D	1.01.0370	260,0	210,0	30,0	25,0	73,8	6,4	812,1	3389,0	470,6	106
MMT521T260.210.40D	1.01.0411	260,0	210,0	40,0	25,0	73,8	8,5	959,7	4518,0	627,5	142
MMT521T260.210.50D	1.01.0747	260,0	210,0	50,0	25,0	73,8	10,6	1107,4	5648,0	784,4	177
MMT521T260.210.100D	1.01.0468	260,0	210,0	100,0	25,0	73,8	21,3	1845,6	11295,0	1568,8	355
MMT521T260.210.120D	1.01.0331	260,0	210,0	120,0	25,0	73,8	25,5	2140,9	13554,0	1882,5	426
MMT521T260.210.130D	1.01.0762	260,0	210,0	130,0	25,0	73,8	27,6	2288,6	14684,0	2039,4	461
MMT521T260.220.20D	1.01.0671	260,0	220,0	20,0	20,0	75,4	3,4	603,2	1846,0	256,3	56
MMT521T265.155.30D	1.01.0451	265,0	155,0	30,0	55,0	65,9	14,0	1121,5	6662,0	925,3	262
MMT521T265.185.50D	1.01.0410	265,0	185,0	50,0	40,0	70,7	18,0	1272,3	9161,0	1272,3	314
MMT521T270.130.70D	1.01.0455	270,0	130,0	70,0	70,0	62,8	41,7	1759,2	18841,0	2616,9	817
MMT521T270.150.50D	1.01.0679	270,0	150,0	50,0	60,0	65,9	25,5	1451,3	12112,0	1682,3	476
MMT521T270.150.60D	1.01.0420	270,0	150,0	60,0	60,0	65,9	30,6	1583,3	14535,0	2018,7	571
MMT521T270.185.50D	1.01.0463	270,0	185,0	50,0	42,5	71,4	18,1	1322,2	9295,0	1290,9	311
MMT521T270.230.10D	1.01.0728	270,0	230,0	10,0	20,0	78,5	1,7	471,2	961,0	133,5	27

Núcleos Toroidais 521

Produto	Código	Dimensões sem acabamento			E _{Fe} (mm)	L _{Fe} (cm)	A _{Fe} (cm ²)	AS _{Fe} (cm ²)	m _{Fe} (g)	V _{Fe} (cm ³)	AL (1kHz) (μH/esp ²)
		φ _{ext} (mm)	φ _{int} (mm)	H (mm)							
MMT521T270.230.15D	1.01.0729	270,0	230,0	15,0	20,0	78,5	2,6	549,8	1442,0	200,3	40
MMT521T270.230.30D	1.01.0332	270,0	230,0	30,0	20,0	78,5	5,1	785,4	2884,0	400,5	80
MMT521T270.230.70D	1.01.0333	270,0	230,0	70,0	20,0	78,5	11,9	1413,7	6729,0	934,6	187
MMT521T275.175.30D	1.01.0649	275,0	175,0	30,0	50,0	70,7	12,8	1130,9	6489,0	901,2	222
MMT521T275.235.10D	1.01.0624	275,0	235,0	10,0	20,0	80,1	1,7	480,6	981,0	136,2	26
MMT521T275.235.10B	1.01.0625	275,0	235,0	10,0	20,0	80,1	1,7	480,6	981,0	136,2	26
MMT521T275.235.15D	1.01.0626	275,0	235,0	15,0	20,0	80,1	2,6	560,7	1471,0	204,3	39
MMT521T275.235.15B	1.01.0627	275,0	235,0	15,0	20,0	80,1	2,6	560,7	1471,0	204,3	39
MMT521T275.235.20D	1.01.0628	275,0	235,0	20,0	20,0	80,1	3,4	640,9	1961,0	272,4	52
MMT521T275.235.20B	1.01.0629	275,0	235,0	20,0	20,0	80,1	3,4	640,9	1961,0	272,4	52
MMT521T360.210.100D	1.01.0672	275,0	235,0	20,0	20,0	80,1	3,4	640,9	1961,0	272,4	52
MMT521T280.170.30D	1.01.0405	280,0	170,0	30,0	55,0	70,7	14,0	1201,6	7138,0	991,3	244
MMT521T280.170.50D	1.01.0482	280,0	170,0	50,0	55,0	70,7	23,4	1484,3	11896,0	1652,2	407
MMT521T280.260.10D	1.01.0615	280,0	260,0	10,0	10,0	84,8	0,9	339,3	519,0	72,1	12
MMT521T290.130.35D	1.01.0365	290,0	130,0	35,0	80,0	65,9	23,8	1517,3	11305,0	1570,1	444
MMT521T290.170.25D	1.01.0330	290,0	170,0	25,0	60,0	72,2	12,8	1228,3	6633,0	921,2	217
MMT521T290.185.30D	1.01.0464	290,0	185,0	30,0	52,5	74,6	13,4	1231,1	7192,0	998,8	221
MMT521T290.185.80D	1.01.0474	290,0	185,0	80,0	52,5	74,6	35,7	1977,2	19178,0	2663,6	590
MMT521T290.185.110D	1.01.0444	290,0	185,0	110,0	52,5	74,6	49,1	2424,8	26370,0	3662,4	811
MMT521T290.210.35D	1.01.0696	290,0	210,0	35,0	40,0	78,5	11,9	1178,0	6729,0	934,6	187
MMT521T290.230.10D	1.01.0667	290,0	230,0	10,0	30,0	81,6	2,6	653,4	1500,0	208,3	38
MMT521T290.230.20D	1.01.0666	290,0	230,0	20,0	30,0	81,6	5,1	816,8	2999,0	416,6	77
MMT521T290.230.30D	1.01.0448	290,0	230,0	30,0	30,0	81,6	7,7	980,1	4499,0	624,8	115
MMT521T295.215.60D	1.01.0639	295,0	215,0	60,0	40,0	80,1	20,4	1602,1	11766,0	1634,2	314
MMT521T300.130.35D	1.01.0458	300,0	130,0	35,0	85,0	67,5	25,3	1621,0	12297,0	1708,0	461
MMT521T300.130.90D	1.01.0459	300,0	130,0	90,0	85,0	67,5	65,0	2363,9	31622,0	4391,9	1186
MMT521T300.230.20D	1.01.0622	300,0	230,0	20,0	35,0	83,2	6,0	915,7	3566,0	495,3	88
MMT521T300.230.20B	1.01.0623	300,0	230,0	20,0	35,0	83,2	6,0	915,7	3566,0	495,3	88
MMT521T300.245.35D	1.01.0663	300,0	245,0	35,0	27,5	85,6	8,2	1070,1	5043,0	700,4	118
MMT521T305.185.30D	1.01.0606	305,0	185,0	30,0	60,0	76,9	15,3	1385,4	8479,0	1177,6	245
MMT521T305.185.35D	1.01.0380	305,0	185,0	35,0	60,0	76,9	17,9	1462,3	9892,0	1373,9	286
MMT521T310.130.120	1.01.0289	310,0	130,0	120,0	90,0	69,1	91,8	2902,7	45681,0	6344,6	1636
MMT521T310.170.25D	1.01.0741	310,0	170,0	25,0	70,0	75,4	14,9	1432,5	8075,0	1121,5	243
MMT521T310.170.35D	1.01.0465	310,0	170,0	35,0	70,0	75,4	20,8	1583,3	11305,0	1570,1	340
MMT521T310.170.40D	1.01.0414	310,0	170,0	40,0	70,0	75,4	23,8	1658,7	12920,0	1794,4	389
MMT521T310.170.50D	1.01.0275	310,0	170,0	50,0	70,0	75,4	29,8	1809,5	16150,0	2243,0	486
MMT521T310.170.55D	1.01.0403	310,0	170,0	55,0	70,0	75,4	32,7	1884,9	17765,0	2467,3	535
MMT521T310.185.80D	1.01.0669	310,0	185,0	80,0	62,5	77,7	42,5	2215,9	23792,0	3304,5	673
MMT521T310.210.30D	1.01.0452	310,0	210,0	30,0	50,0	81,6	12,8	1306,8	7498,0	1041,4	192
MMT521T310.210.40D	1.01.0492	310,0	210,0	40,0	50,0	81,6	17,0	1470,2	9998,0	1388,5	256
MMT521T310.210.45D	1.01.0368	310,0	210,0	45,0	50,0	81,6	19,1	1551,9	11247,0	1562,1	288
MMT521T310.230.20D	1.01.0743	310,0	230,0	20,0	40,0	84,8	6,8	1017,8	4153,0	576,8	99
MMT521T310.230.25D	1.01.0400	310,0	230,0	25,0	40,0	84,8	8,5	1102,6	5191,0	721,0	123
MMT521T310.230.30D	1.01.0446	310,0	230,0	30,0	40,0	84,8	10,2	1187,5	6229,0	865,2	148
MMT521T310.230.40D	1.01.0271	310,0	230,0	40,0	40,0	84,8	13,6	1357,1	8306,0	1153,6	198
MMT521T310.230.70D	1.01.0286	310,0	230,0	70,0	40,0	84,8	23,8	1866,0	14535,0	2018,7	346
MMT521T310.250.70D	1.01.0735	310,0	250,0	70,0	30,0	87,9	17,9	1759,2	11305,0	1570,1	250
MMT521T320.200.30D	1.01.0399	320,0	200,0	30,0	60,0	81,6	15,3	1470,2	8998,0	1249,7	231

Núcleos Toroidais 521

Produto	Código	Dimensões sem acabamento			E _{Fe} (mm)	L _{Fe} (cm)	A _{Fe} (cm ²)	AS _{Fe} (cm ²)	m _{Fe} (g)	V _{Fe} (cm ³)	AL (1kHz) (μH/esp ²)
		φ _{ext} (mm)	φ _{int} (mm)	H (mm)							
MMT521T320.210.35D	1.01.0687	320,0	210,0	35,0	55,0	83,2	16,4	1498,5	9808,0	1362,2	242
MMT521T320.240.15D	1.01.0659	320,0	240,0	15,0	40,0	87,9	5,1	967,6	3230,0	448,6	71
MMT521T320.280.10D	1.01.0730	320,0	280,0	10,0	20,0	94,2	1,7	565,5	1154,0	160,2	22
MMT521T320.280.15D	1.01.0731	320,0	280,0	15,0	20,0	94,2	2,6	659,7	1730,0	240,3	33
MMT521T320.280.20D	1.01.0732	320,0	280,0	20,0	20,0	94,2	3,4	753,9	2307,0	320,4	44
MMT521T325.185.70D	1.01.0378	325,0	185,0	70,0	70,0	80,1	41,7	2243,0	24023,0	3336,5	641
MMT521T330.130.60D	1.01.0699	330,0	130,0	60,0	100,0	72,2	51,0	2312,1	26532,0	3685,0	870
MMT521T330.130.120D	1.01.0367	330,0	130,0	120,0	100,0	72,2	102,0	3179,2	53064,0	7370,0	1739
MMT521T335.285.40D	1.01.0419	335,0	285,0	40,0	25,0	97,3	8,5	1266,0	5960,0	827,8	108
MMT521T340.130.60D	1.01.0487	340,0	130,0	60,0	105,0	73,8	53,6	2436,2	28464,0	3953,3	894
MMT521T340.210.30D	1.01.0750	340,0	210,0	30,0	65,0	86,4	16,6	1641,4	10310,0	1431,9	236
MMT521T340.210.35D	1.01.0749	340,0	210,0	35,0	65,0	86,4	19,3	1727,8	12028,0	1670,6	276
MMT521T340.260.40D	1.01.0434	340,0	260,0	40,0	40,0	94,2	13,6	1507,9	9228,0	1281,7	178
MMT521T340.185.35D	1.01.0473	345,0	185,0	35,0	80,0	83,2	23,8	1914,7	14266,0	1981,3	352
MMT521T350.285.100D	1.01.0484	350,0	285,0	100,0	32,5	99,7	27,6	2643,2	19839,0	2755,4	341
MMT521T355.285.35D	1.01.0418	355,0	285,0	35,0	35,0	100,5	10,4	1407,4	7537,0	1046,7	128
MMT521T355.290.30D	1.01.0765	355,0	290,0	30,0	32,5	101,3	8,3	1266,4	6045,0	839,6	101
MMT521T355.290.35D	1.01.0680	355,0	290,0	35,0	32,5	101,3	9,7	1367,7	7053,0	979,6	118
MMT521T355.305.20D	1.01.0720	355,0	305,0	20,0	25,0	103,6	4,3	933,0	3172,0	440,6	51
MMT521T360.185.35D	1.01.0652	360,0	185,0	35,0	87,5	85,6	26,0	2097,3	16045,0	2228,4	375
MMT521T360.185.60D	1.01.0486	360,0	185,0	60,0	87,5	85,6	44,6	2525,3	27505,0	3820,2	642
MMT521T360.210.60D	1.01.0471	360,0	210,0	60,0	75,0	89,5	38,3	2417,3	24657,0	3424,6	526
MMT521T360.210.80D	1.01.0638	360,0	210,0	80,0	75,0	89,5	51,0	2775,5	32876,0	4566,2	702
MMT521T360.230.60D	1.01.0453	360,0	230,0	60,0	65,0	92,6	33,2	2316,8	22119,0	3072,2	441
MMT521T360.285.20D	1.01.0703	360,0	285,0	20,0	37,5	101,3	6,4	1165,1	4650,0	645,9	78
MMT521T360.285.30D	1.01.0493	360,0	285,0	30,0	37,5	101,3	9,6	1367,7	6975,0	968,8	116
MMT521T360.285.40D	1.01.0301	360,0	285,0	40,0	37,5	101,3	12,8	1570,3	9301,0	1291,7	155
MMT521T360.285.60D	1.01.0763	360,0	285,0	60,0	37,5	101,3	19,1	1975,6	13951,0	1937,6	233
MMT521T360.285.100D	1.01.0673	360,0	285,0	100,0	37,5	101,3	31,9	2786,1	23251,0	3229,4	388
MMT521T360.285.120D	1.01.0312	360,0	285,0	120,0	37,5	101,3	38,3	3191,3	27902,0	3875,2	465
MMT521T360.290.30D	1.01.0441	360,0	290,0	30,0	35,0	102,1	8,9	1327,3	6561,0	911,2	108
MMT521T360.310.20D	1.01.0485	360,0	310,0	20,0	25,0	105,2	4,3	947,1	3220,0	447,3	50
MMT521T360.310.30D	1.01.0700	360,0	310,0	30,0	25,0	105,2	6,4	1157,6	4831,0	670,9	75
MMT521T360.320.30D	1.01.0694	360,0	320,0	30,0	20,0	106,8	5,1	1068,1	3922,0	544,7	59
MMT521T360.320.70D	1.01.0693	360,0	320,0	70,0	20,0	106,8	11,9	1922,6	9152,0	1271,1	137
MMT521T365.285.50D	1.01.0415	365,0	285,0	50,0	40,0	102,1	17,0	1837,8	12497,0	1735,7	205
MMT521T365.285.100D	1.01.0379	365,0	285,0	100,0	40,0	102,1	34,0	2858,7	24994,0	3471,4	410
MMT521T370.130.90D	1.01.0467	370,0	130,0	90,0	120,0	78,5	91,8	3298,5	51910,0	7209,7	1440
MMT521T370.170.60D	1.01.0466	370,0	170,0	60,0	100,0	84,8	51,0	2714,2	31146,0	4325,8	741
MMT521T370.185.35D	1.01.0456	370,0	185,0	35,0	92,5	87,1	27,5	2223,0	17273,0	2399,0	389
MMT521T370.185.40D	1.01.0483	370,0	185,0	40,0	92,5	87,1	31,5	2310,1	19740,0	2741,7	444
MMT521T370.185.50D	1.01.0457	370,0	185,0	50,0	92,5	87,1	39,3	2484,5	24675,0	3427,1	556
MMT521T370.185.80D	1.01.0422	370,0	185,0	80,0	92,5	87,1	62,9	3007,5	39481,0	5483,4	889
MMT521T370.185.95D	1.01.0697	370,0	185,0	95,0	92,5	87,1	74,7	3269,1	46883,0	6511,5	1056
MMT521T370.325.50D	1.01.0435	370,0	225,0	50,0	72,5	93,4	30,8	2289,7	20734,0	2879,7	406
MMT521T370.285.25D	1.01.0320	370,0	285,0	25,0	42,5	102,8	9,0	1388,9	6690,0	929,2	108
MMT521T370.285.100D	1.01.0336	370,0	285,0	100,0	42,5	102,8	36,1	2932,2	26760,0	3716,7	433
MMT521T225.195.15D	1.01.0664	370,0	325,0	50,0	22,5	109,1	9,6	1582,9	7516,0	1043,9	108

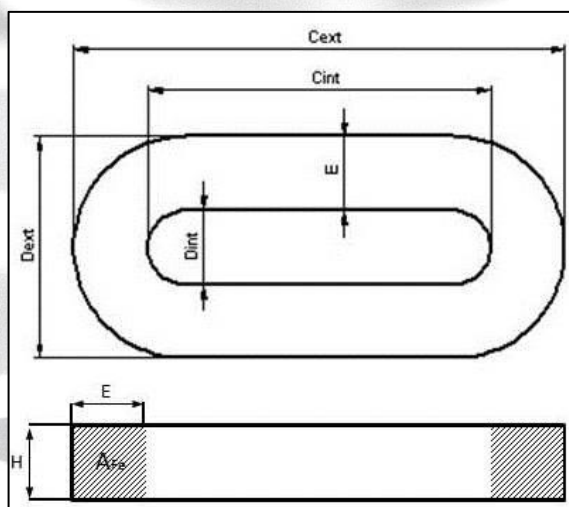
Núcleos Toroidais 521

Produto	Código	Dimensões sem acabamento			E _{Fe} (mm)	L _{Fe} (cm)	A _{Fe} (cm ²)	AS _{Fe} (cm ²)	m _{Fe} (g)	V _{Fe} (cm ³)	AL (1kHz) (μHesp ²)
		φ _{ext} (mm)	φ _{int} (mm)	H (mm)							
MMT521T370.330.35D	1.01.0432	370,0	330,0	35,0	20,0	109,9	6,0	1209,5	4710,0	654,2	67
MMT521T380.340.20D	1.01.0488	380,0	340,0	20,0	20,0	113,0	3,4	904,7	2769,0	384,5	37
MMT521T380.340.30D	1.01.0479	380,0	340,0	30,0	20,0	113,0	5,1	1130,9	4153,0	576,8	56
MMT521T380.340.50D	1.01.0489	380,0	340,0	50,0	20,0	113,0	8,5	1583,3	6921,0	961,3	93
MMT521T380.340.90D	1.01.0480	380,0	340,0	90,0	20,0	113,0	15,3	2488,1	12458,0	1730,3	167
MMT521T385.335.25D	1.01.0719	385,0	335,0	25,0	25,0	113,0	5,3	1130,9	4326,0	600,8	58
MMT521T390.330.20D	1.01.0721	390,0	330,0	20,0	30,0	113,0	5,1	1130,9	4153,0	576,8	56
MMT521T400.185.50D	1.01.0707	400,0	185,0	50,0	107,5	91,9	45,7	2894,4	30227,0	4198,2	613
MMT521T410.185.40D	1.01.0702	410,0	185,0	40,0	112,5	93,4	38,3	2850,5	25739,0	3574,8	504
MMT521T410.210.60D	1.01.0695	410,0	210,0	60,0	100,0	97,3	51,0	3116,3	35760,0	4966,7	645
MMT521T410.330.30D	1.01.0713	410,0	330,0	30,0	40,0	116,2	10,2	1627,3	8536,0	1185,6	108
MMT521T430.370.25D	1.01.0761	430,0	370,0	25,0	30,0	125,6	6,4	1382,2	5768,0	801,1	63
MMT521T430.380.40D	1.01.0692	430,0	380,0	40,0	25,0	127,2	8,5	1654,0	7787,0	1081,5	82
MMT521T450.430.60D	1.01.0668	450,0	430,0	60,0	10,0	138,2	5,1	1935,2	5076,0	705,0	45
MMT521T460.385.25D	1.01.0745	460,0	385,0	25,0	37,5	132,7	8,0	1659,1	7615,0	1057,7	74
MMT521T460.385.40D	1.01.0744	460,0	385,0	40,0	37,5	132,7	12,8	2057,3	12184,0	1692,3	118
MMT521T460.430.50D	1.01.0670	460,0	430,0	50,0	15,0	139,7	6,4	1817,3	6417,0	891,2	56
MMT521T475.395.35D	1.01.0662	475,0	395,0	35,0	40,0	136,6	11,9	2049,8	11709,0	1626,2	107
MMT521T490.450.80D	1.01.0734	490,0	450,0	80,0	20,0	147,6	13,6	2953,0	14458,0	2008,0	113
MMT521T510.460.30D	1.01.0737	510,0	460,0	30,0	25,0	152,3	6,4	1676,0	6993,0	971,3	52

Núcleos Oblongos

Produto	Código	Dimensões sem acabamento						H _{Fe} (cm)	L _{Fe} (cm)	A _{Fe} (cm ²)	A _{s Fe} (cm ²)	V _{Fe} (cm ³)	m _{Fe} (g)	AL (1kHz) (μH/esp ²)
		C _{ext} (mm)	C _{int} (mm)	D _{ext} (mm)	D _{int} (mm)	H (mm)	E (mm)							
MMT520OB943335	1.01.0202	212,0	148,0	96,0	31,0	36,0	32,5	3,5	43,3	7,6	580,9	353,7	2660	188
MMT520OB205.71.30D	1.01.0204	206,0	148,0	124,0	69,0	31,0	27,5	3,0	46,2	6,6	826,0	285,6	2100	113
MMT520OB211.149.30T *	1.01.0203	212,0	148,0	96,0	32,0	40,0	32,0	3,0	43,3	8,7	1092,4	324,8	2390	165

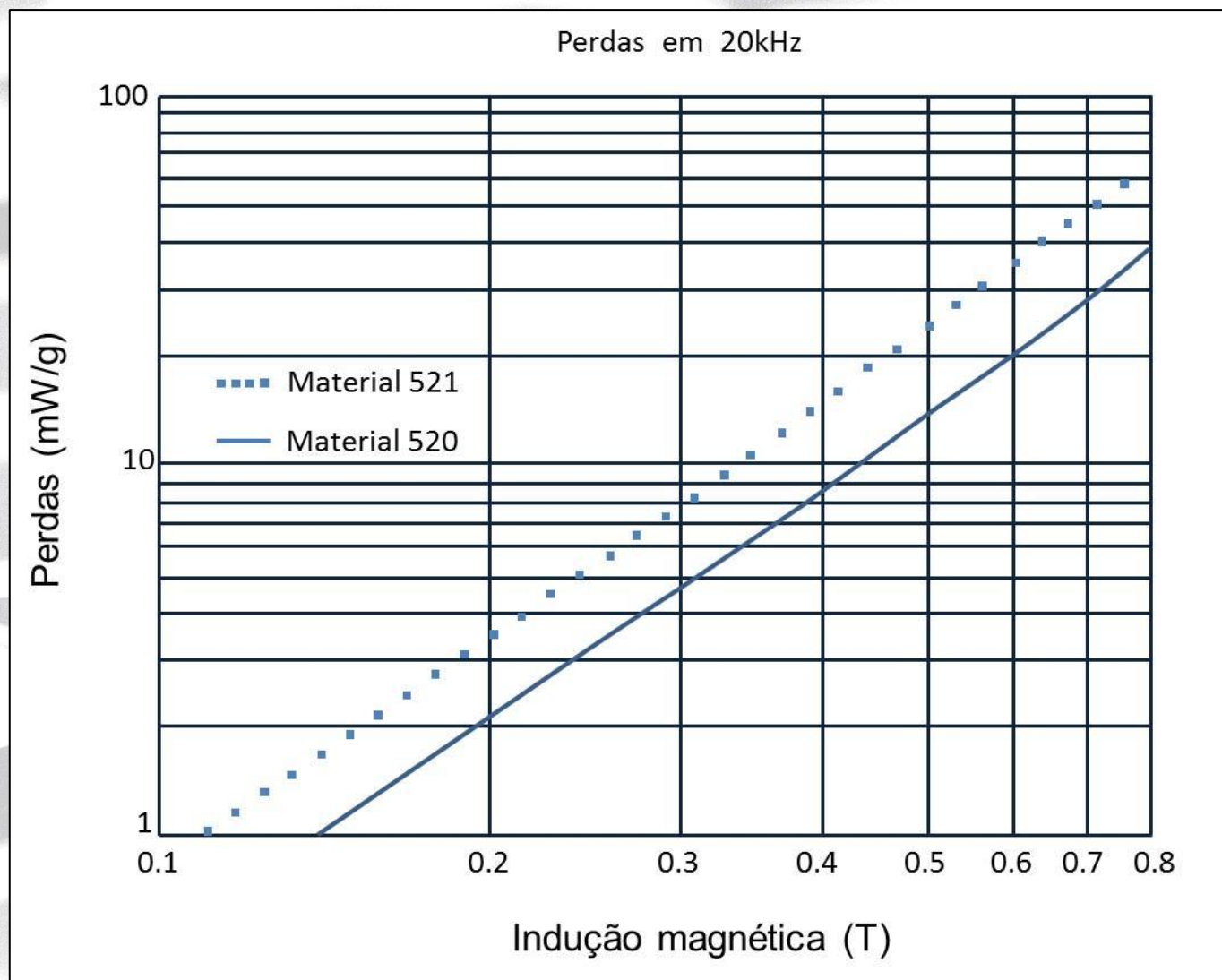
*Núcleo triplo



*núcleo triplo com suporte

Gráficos

Material 520 e 521



Material 521

