

RUBBER MAGNET



The Characteristics of Rubber Magnet

Mixing ferrite magnet powder with synthetic rubber or plastic makes the product. It has the characteristics of:

- Excellent plasticity which can be easily punched, cut or pressed into various complex shapes
- Excellent flexibility which can be easily folded, twisted without damaging its magnetic properties
- Good embellishment property
- Demagnetization resistance capability
- High corrosion resistance capability

Application: Usually used in small-sized motors, toys, stationery, and decoration magnets on refrigerator, promotional and magnetic holding products.

RUBBER MAGNET 膠磁

Grade 牌號	YZT10N	YZT11N	YZT12	YZT12N	YZT13	YZT13B	YZT13BN	YZT13H	YZT13HN
Residual Magnetic Flux Density 剩磁 Br: Gs mT	2100-2300 210-230	2300-2500 230-250	2400-2600 240-260	2300-2500 230-250	2400-2600 240-260	2500-2700 250-270	2400-2600 240-260	2400-2600 240-260	2400-2600 240-260
Coercive Force 矯頑力 Hcb: Oe KA/m	1900-2200 151-175	2050-2350 163-187	2000-2350 159-187	2150-2400 171-191	2150-2450 171-195	2100-2400 167-191	2100-2400 167-191	2150-2450 171-195	2150-2450 171-195
Intrinsic Coercive Force 內稟矯頑力 Hcj: Oe KA/m	>2500 >199	>2500 >199	>2200 >175	>3200 >255	2800-3500 223-279	2600-3000 207-239	2600-3000 207-239	3500-4200 279-334	3500-4200 279-334
Max. Energy Product 最大磁能積 (BH)max: MGOe KJ/m ³	1.15-1.35 9.2-10.8	1.30-1.50 10.4-12.0	1.45-1.65 11.6-13.2	1.35-1.55 10.8-12.4	1.50-1.65 12.0-13.2	1.50-1.70 12.0-13.6	1.50-1.65 12.0-13.2	1.50-1.65 12.0-13.2	1.50-1.65 12.0-13.2
Reversing temperature Modulus $\Delta B_d/B_d/\Delta t$ (%°C) 可逆溫度係數	-0.18	-0.18	-0.18	-0.18	-0.18	-0.18	-0.18	-0.18	-0.18
Tensile Strength 拉伸強度 (MPa)	>2.5	>2.5	>3.5	>2.5	>3.5	>3.5	>2.5	>2.5	>2.5
Elongation 延伸率 (%)	>20	>20	>30	>20	>30	>30	>20	>20	>20
Hardness 硬度 (Shore D)	30-45	30-45	30-50	30-45	30-50	30-50	30-45	30-45	25-40
Density 密度 (g/cm ³)	3.60-3.75	3.60-3.75	3.60-3.80	3.60-3.75	3.60-3.80	3.60-3.80	3.60-3.75	3.60-3.75	3.60-3.75
Weight reduction by heat 加熱減重 (%)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Temperature Range 溫度範圍	-40-100°C	-40-100°C	-40-85°C	-40-100°C	-40-85°C	-40-85°C	-40-100°C	-40-85°C	-40-100°C

(Non- Motor used) RUBBER MAGNET (非馬達用) 膠磁

Grade 牌號	NF04	NF06	NF07	NF09	NF10	NF11
Binder 黏結劑	CPE	CPE	CPE	CPE	CPE	CPE
Residual Magnetic Flux Density 剩磁 Br: Gs	1400-1600	1600-1900	1900-2200	2200-2300	2300-2400	2400-2500
Coercive Force 矯頑力 Hcb: Oe	1000-1300	1200-1400	1300-1700	1650-2000	1900-2100	2000-2250
Intrinsic Coercive Force 內稟矯頑力 Hcj: Oe	1600-2400	1500-2400	2000-2800	2000-2800	2400-3200	2400-3300
Max. Energy Product 最大磁能積 (BH)max: MGOe	0.4-0.6	0.6-0.8	0.8-1.0	1.0-1.2	1.2-1.35	1.35-1.50
Tensile Strength 拉伸強度 (kg/cm)	60-85	60-85	60-85	40-65	40-75	45-75
Elongation 延伸率 (%)	450-750	350-750	300-650	100-300	200-500	70-350
Hardness 硬度 (Shore D)	40-51	40-51	40-51	30-45	30-45	35-45
Density 密度(g/cm ³)	3.65-3.75	3.65-3.70	3.65-3.75	3.65-3.70	3.70-3.80	3.70-3.80

PROPERTIES OF INJECTION MOLDING 註塑磁體磁性能

Grade	Binder	Powder	(BH) max 最大磁能積		Br 剩磁		Hcb 矯頑力		Hcj 內稟矯頑力		Density	Remark
			KJ/m3	MGOe	mT	KGs	kA/m	KQe	KA/m	KQe		
TZ0206	Nylon 6	Ba-Ferrite Sr-Ferrite	1.5-3.0	0.19-0.38	110-130	1.10-1.30	70-85	0.80-1.07	190-230	2.39-2.89	2.7-3.0	Isotropic
TZ0212	Nylon 12											
YZ1006	Nylon 6	Ba-Ferrite Sr-Ferrite	7.0-12.0	0.88-1.51	210-240	2.10- 2.40	120-170	1.51-2.14	160-230	2.01-2.89	3.0-3.5	Anisotropic
YZ1012	Nylon 12											
YZ1206	Nylon 6	Ba-Ferrite Sr-Ferrite	11.9-12.5	1.49-1.57	250-260	2.50-2.60	164-174	2.06- 2.16	210-230	2.64-2.89	3.35-3.55	Anisotropic
YZ1212	Nylon 12											
YZ1406	Nylon 6	Sr-Ferrite	14.3-14.9	1.80-1.87	270-280	2.70-2.80	170-180	2.14-2.26	210-230	2.64-2.89	3.50-3.65	Anisotropic
YZ1412	Nylon 12											
YZ1606	Nylon 6	Sr-Ferrite	15.5-16.9	1.95-2.12	285-295	2.85-2.95	190-210	2.39-2.64	210-250	2.64-3.14	3.65-3.75	Anisotropic
YZ1612	Nylon 12											
YZ12PPS	PPS	Sr-Ferrite	11.0-13.0	1.38-1.63	245-265	2.45-2.65	170-200	2.14-2.51	210- 250	2.64-3.14	3.48-3.65	Anisotropic
TZ4006	Nylon 6	NdFeB	38.9-40.0	4.88-5.02	485-490	4.85-4.90	315-327	3.95-4.10	792-796	9.95- 10.0	4.88-5.02	Isotropic
TZ4012	Nylon 12											