

Injection moulded bonded NdFeB



Product description

Generally, the bonded NdFeB magnet is produced by molding compression of the compound NdFeB alloy powder with epoxy resin, also it can be made by injection or extrusion from NdFeB alloy powder mixed with plastic.

The characteristics are as follows:

1. **Higher Magnet Property:** the magnet property of bonded NdFeB magnet is between that of sintered NdFeB and ferrite, and with good consistency and stability.
2. **Large Freeness of Product Shapes and High Precision of Dimension:** the magnet shape and dimension are decided by the tooling, like ring, segment, block, etc., without further sintering and mechanical machining processes.
3. **Good Corrosion Resistance:** after electrodeposited or through other special treatments, it can be used under normal or unfavorable environment conditions for a long time.
4. **Diverse magnetization:** Multi-pole magnetization and screw angle magnetization are available, and the field distribution could be square, sinusoid and so on.

4. It has **high production efficiency**, suitable for mass production. The bonded NdFeB magnet is mainly used for all kinds of micro–miniature motors, such as spindle motor, stepping motor, synchronous motor, DC motor and brushless DC motor. It can replace sintered NdFeB magnet and ferrite, making motor assembling simpler and more reliable, reducing costs and improving efficiency.

Magnetic Properties Of Injection Moulded NdFeB Bonded Magnet

Part No.	Br		Hcb		Hci		(BH)max		α	β	Max. Temp. ℃
	kGs	mT	kOe	kA/m	kOe	kA/m	MGOe	kJ/m ³	%/℃	%/℃	
HIM11	3.94	394	3.38	269	9.86	785	3.3	26.3	-0.11	-0.39	120
HIM12	4.54	454	3.83	305	8.68	691	4.4	35.0	-0.12	-0.43	120
HIM13	5.07	507	4.25	338	8.71	693	5.4	43.0	-0.12	-0.43	120
HIM21	5.36	536	4.43	353	9.70	773	5.9	47.0	-0.11	-0.36	120
HIM22	5.85	585	4.65	370	8.92	710	6.8	54.1	-0.11	-0.36	120
HIM23	6.19	619	4.84	385	8.85	704	7.5	59.7	-0.11	-0.36	120
HIM31	4.92	492	4.05	322	8.67	690	5.0	39.8	-0.11	-0.36	120
HIM32	5.30	530	4.32	344	8.71	693	5.8	46.2	-0.11	-0.36	120
HIM33	5.25	525	4.50	358	11.2	892	5.9	47.0	-0.14	-0.36	160

The data is the typical value, please reference

The binder of HIM11--HIM23 is PA12.

The binder of HIM31--HIM33 is PPS.

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