

### 3-fold common mode NANOPERM® chokes



Types	Inom free convection	Inom' forced cooling	Isat* /mA	L <sub>N</sub> @ 10 kHz [mH]	L <sub>S</sub> [μH]	R <sub>cu</sub> [mΩ]	Pin Ø [mm]	H x B x T [mm]	Design
<a href="#">MB-074<sup>1</sup></a>	3,5	5	80	3 x 6	~ 20	< 40	0,8	38 x 36 x 21	upright
<a href="#">MB-049<sup>1</sup></a>	5	7	60	3 x 8	~ 60	< 36	1,12	42 x 42 x 27	flat
<a href="#">MB-650<sup>1</sup></a>	10	14	110	3 x 11	~ 56	< 15	1,6	60 x 60 x 29	flat
<a href="#">MB-687</a>	12	17	450	3 x 2,5	~ 7	< 9	1,25	47,5 x 47 x 26	upright
<a href="#">MB-051</a>	12	17	150	3 x 5	~25	<8,6	1,8	59x59x27	flat
<a href="#">MB-652</a>	17	24	300	3 x 3	~ 30	< 7,9	1,8	69 x 69 x 29,5	flat
<a href="#">MB-637</a>	14	20	80	3 x 4,4	~ 12	< 5,5	1,4	48,5 x 48,5 x 26	flat
<a href="#">MB-540<sup>1</sup></a>	15	20	85	3 x 15	~ 16	< 7,0	1,8	59,5 x 59,5 x36,5	flat
<a href="#">MB-617</a>	16	22	90	3 x 11	~ 9	< 6	1,8	52x52x34	flat
<a href="#">MB-634</a>	20	28	400	3 x 1,7	~ 14	< 4,85	2,0	60 x 30 x 60	upright
<a href="#">MB-427</a>	20	28	4760	3x0,31	~8	<2,6	2,5	99,5x99,5x38	flat
<a href="#">MB-653</a>	22	31	270	3 x 4	~ 19	< 4,8	2,24	69 x 69 x 37	flat
<a href="#">MB-157</a>	25	35	300	3 x 6,2	~ 22	< 5,5	2,36	75 x 75 x 34	flat
<a href="#">MB-043</a>	22	31	300	3 x 1,5	~8	< 2,6	2,5	60 x 60 x 30	flat
<a href="#">MB-054</a>	27	38	300	3 x 3,2	~ 9	< 2,6	3,0	73 x 73 x 35	flat
<a href="#">MB-367</a>	28	40	800	3 x 1,2	~ 0,7	< 1,8	3,0	70 x 45 x 70	upright
<a href="#">MB-047</a>	30	42	350	3 x 4	~ 20	< 3,8	5,0	81 x 81 x 62	flat
<a href="#">MB-691</a>	35	50	150	3 x 3	~ 4	< 1,6	2,5	60 x 60 x 34	flat
<a href="#">MB-426</a>	45	64	6660	3 x 0,16	~4,5	<0,95	2x2,5	99,5x99,5x38	flat
<a href="#">MB-656<sup>1</sup></a>	60	85	450	3 x 3,5	~ 17	< 1,35	2x3,35	115 x 115 x 50	flat
<a href="#">MB-657<sup>1</sup></a>	100	140	500	3 x 2,5	~ 10	< 0,85	11,5	130 x 130 x 55	flat
<a href="#">MB-058<sup>1</sup></a>	160	225	1200	3 x 2	~ 10	< 0,5	22,5	158 x 158 x 75	flat

For all information no liability assumed.

\*Saturation Current Isat of NANOPERM®: Peak value of the exiting current when the initial inductance level is dropped to 10 per cent, see [www.magnetec.de](http://www.magnetec.de). <sup>1</sup>preliminary

Overtemperature needs to be checked in the application. Environment temperature usually at 70°C, see datasheets, at another environment temperature, the new nom. current can be estimated acc. to the derating theory: <http://www.magnetec.de/fileadmin/pdf/derating.pdf>. In forced cooling condition, double Rth value is assumed.

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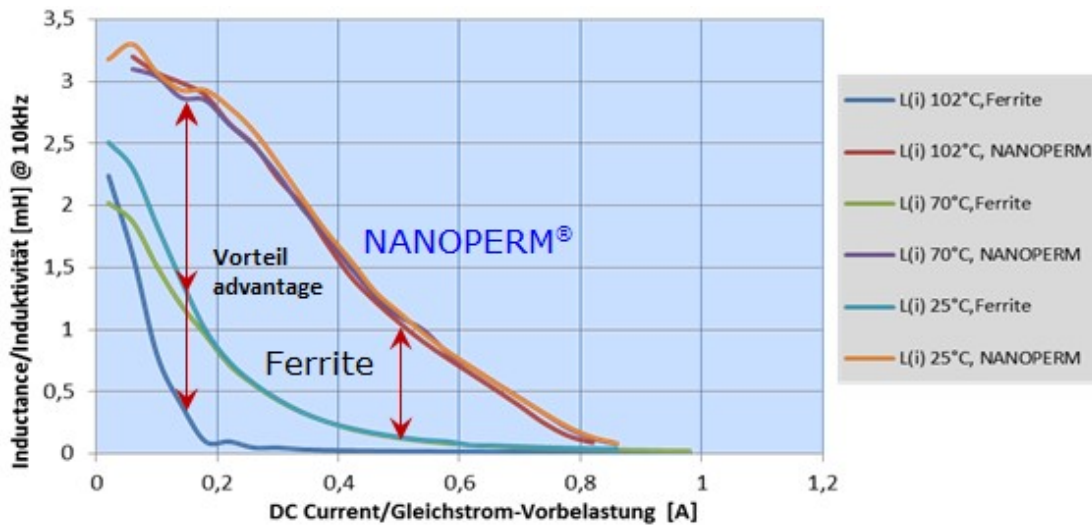
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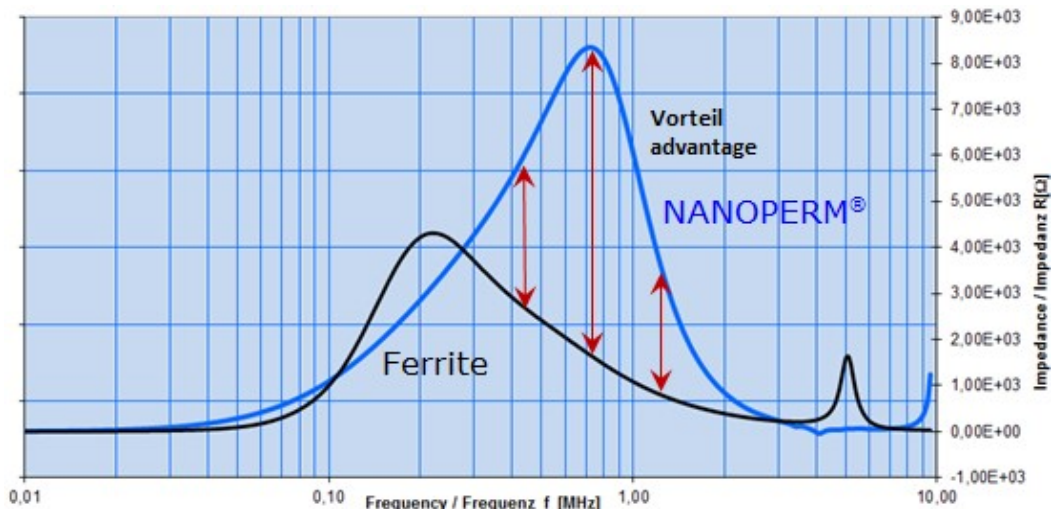
E-Mail: [magnetec@magnetec.de](mailto:magnetec@magnetec.de)

### 3-fold common mode NANOPERM® chokes

Example choke – weight and size comparison Ferrite vs. NANOPERM® choke:



Diff. example choke - performance comparison of a NANOPERM® choke vs. Ferrite based choke:



With the same core size NANOPERM® offers significantly improved attenuation levels up to the MHz range. For typical impedances vs. frequency charts, please visit [www.magentec.de](http://www.magentec.de).

Our Chokes are based on tape wound cores based on the nanocrystalline softmagnetic material **NANOPERM®**. Compared to chokes made of ferrite cores, the following benefits are achieved:

- **High impedance and advanced EMI suppression**
- **Higher saturation flux density**
- **Less temperature sensitive**
- **higher max. component temp (130°C)**

Chokes are available for the nominal current range from 3,5 – 160 Amps, designed acc. to EN60938-1.

The plastic materials fulfill UL-94 V0 and are UL listed.

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