

### NANOPERM® - Low cost cores for small EMI filter chokes



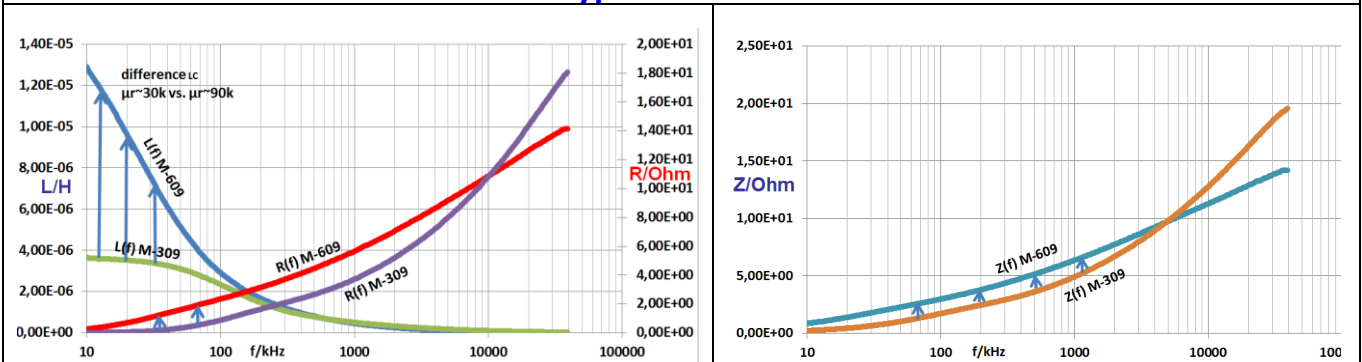
With the LC low cost typeline **MAGNETEC** has specially designed cores for common mode filter chokes; i.e. high attenuation is achieved with a minimum of core material. This is a new alternative to existing Ferrite based solutions. The big inner hole make a high number of turn possible. Two types are available, M-3xx having a permeability of 30k@10kHz and M-6xx having a permeability of 90k@10kHz.

See [www.magnetec.de](http://www.magnetec.de) for product infosheets:  
 Cased\_core selection matrix  
 CoolBLUE® High  $\mu$   
 CoolBLUE® Low  $\mu$

Type $\mu$ ~30k	Type $\mu$ ~90k	Dimensions [mm]		$l_{fe}$ [cm]	$a_{fe}$ [cm <sup>2</sup> ]	Type 30k	Type 60k
		nominal $d_a \times d_i \times h$	physical $D_a \times D_i \times H$			$A_L$ nom @ 10kHz [ $\mu$ H]	$A_L$ nom @ 10kHz [ $\mu$ H]
<b>M-306</b>	<b>M-606</b>	16 x 11 x 5	18,4 x 8,6 x 7,0	4,2	0,1	5,9 - 11,8	18,4 - 36,8
<b>M-307</b>	<b>M-607</b>	20 x 15 x 5	22,4 x 12,6 x 7,5	5,5	0,1	4,5 - 9,1	14,1 - 28,3
<b>M-308</b>	<b>M-608</b>	25 x 20 x 5	27,7 x 17,1 x 7,5	7,0	0,1	3,5 - 7,0	11,0 - 21,9
<b>M-309</b>	<b>M-609</b>	30 x 25 x 5	32,7 x 22,0 x 7,5	8,6	0,1	2,8 - 5,7	9,0 - 17,9
<b>M-310</b>	<b>M-610</b>	40 x 35 x 5	42,5 x 31,8 x 7,5	11,8	0,1	2,1 - 4,2	6,3 - 12,5
<b>M-333</b>	<b>M-633</b>	50 x 45 x 5	52,2 x 41,8 x 7,5	14,9	0,1	1,6 - 3,3	5,2 - 10,4
<b>M-334</b>	<b>M-634</b>	60 x 55 x 5	62,0 x 51,6 x 7,5	17,7	0,1	1,3 - 2,8	4,3 - 8,6
<b>M-335</b>	<b>M-635</b>	70 x 65 x 5	72,0 x 61,4 x 7,5	20,9	0,1	1,1 - 2,3	3,6 - 7,3

Design: Cased in plastic box

#### Typical behavior



The **NANOPERM® Low Cost** cores offers following benefits:

- **Small weight**
- **High leakage inductance**
- **Advanced and uniform attenuation**

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