

HIGH PERFORMANCE EMI POWER FILTERS

N500X SERIES



Features

- Suitable for 400Hz supplies
- Low power dissipation
- Compact, Rugged construction
- Current range 16 to 200 Amperes
- Maximum protection in Tempest and EMC applications
- 100dB insertion loss from 40kHz

Description

This range of power filters affords insertion loss in excess of 100dB from as low as 40kHz and up to 10GHz, for both off load and on load conditions.

Their applications are as follows:

- With high performance screened room and anechoic chamber facilities providing protection of both incoming and outgoing supplies in line with the shield performance.
- In Tempest applications where the very highest degree of protection is required to obtain maximum security.
- For EMC applications such as computer suites, and for general purpose high performance filtering.

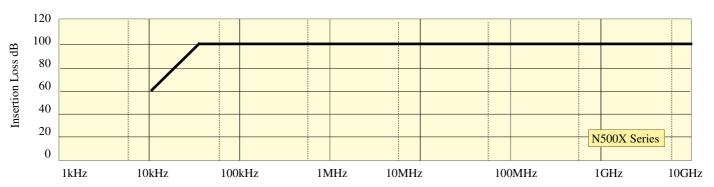
The N500X generation from ETS-Lindgren includes a reduction in power dissipation versus current rating. The entire range is available with optionally fitted transient suppressors for surge and spike protection.

The filter networks are all RF sealed in high quality electro-tin plated steel cases. The load current should return through the filter to maintain maximum performance.

Solid and permanent earthing of the case is <u>essential</u> for safety reasons and to ensure optimum performance.

All ETS Lindgren filters are ROHS Compliant and are CE marked for Compliance with the low voltage Directive.

Performance Graph



TYPICAL FILTER PERFORMANCE

Typical asymmetric performance (on and off load) for N500X Series as measured in accordance with MIL-STD 220A with additional testing to 10GHz.

UK:

Tel +44-1438-730700 Fax +44-1438-730751 USA:

Tel +1-512-531 6400 Fax +1-512-531 6500 FINLAND:

Tel +358-2-8383 300 Fax +358-2-8651 233 FRANCE:

Tel +33-1-48 65 34 03 Tel +33-1-48 65 34 69 **CHINA**:

Tel +86-10-8275 5086 Tel +86-10-8275 5537 JAPAN:

Tel +81-3-3813 7100 Tel +81-3-3813 8068



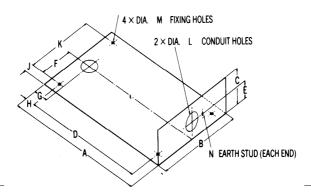
HIGH PERFORMANCE EMI POWER FILTERS

Technical Data

PART NUMBER		N5000	N5001	N5002	N5003	N5004	N5005	N5006	N5007	N5008	N5009
Current Max	(Amps)	16	16	32	32	63	63	100	100	200	200
Voltage Max	(Volts)	250	440/250	250	440/250	250	440/250	250	440/250	250	440/250
Frequency	(Hertz)	DC/50/60/400									
Number of lines		2	4	2	4	2	4	2	4	2	4
Volt drop on full load in a 250V 50/60Hz system per line (max)	(V)	1.3	0.65	0.3	0.15	0.4	0.2	0.3	0.15	0.2	0.1
Full load dissipation	(W)	20	20	20	20	48	48	60	60	80	80
Case temperature rise on full load	(Deg C)	20									
Maximum recommended case temperature on full load	(Deg C)	70									
Filters fitted with 250V transient suppressors		N5000 TS	N5001 TS	N5002 TS	N5003 TS	N5004 TS	N5005 TS	N5006 TS	N5007 TS	N5008 TS	N5009 TS
Filters fitted with 400V transient suppressors		N5000 HVTS	N5001 HVTS	N5002 HVTS	N5003 HVTS	N5004 HVTS	N5005 HVTS	N5006 HVTS	N5007 HVTS	N5008 HVTS	N5009 HVTS

Physical Data

1 Nystout Data														
PART NUMBER	A	В	С	D	Е	F	G	Н	J	K	L	M	N	Weight Kg
N5000	305	175	110	212	50	64	46	46	24	127	20	7	M6	4.3
N5001	305	345	110	212	50	108	46	46	65	216	20	9	M6	7.6
N5002	560	210	110	487	50	41	46	35	64	82	32	9	M6	14.4
N5003	560	415	110	487	50	143	46	35	64	286	32	9	M6	27.2
N5004	560	210	110	487	50	41	46	35	64	82	32	9	M6	15.4
N5005	560	415	110	487	50	143	46	35	64	286	32	9	M6	28.4
N5006	660	205	165	537	68	41	75	62	61	82	32	9	M8	22
N5007	660	410	165	537	68	143	75	62	62	286	50	9	M8	32
N5008	660	205	165	537	68	41	75	62	61	82	32	9	M8	26.8
N5009	660	410	165	537	68	143	75	62	62	286	50	9	M8	44





Continuous Development: ETS-Lindgren Ltd reserves the right to amend any information contained within this datasheet without prior notice to take into account new developments. Please note: All figures are typical unless otherwise specified. All dimensions are approximate. All dimensions are in mm.

Reproduction: No part of this document may be reproduced in any way whatsoever without the prior written consent of ETS-Lindgren Ltd.