

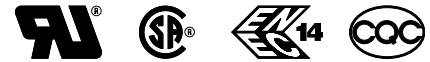
Excellent Performance IEC Inlet Filter

SCHAFFNER
energy efficiency and reliability



- Rated currents up to 15A
- Superior attenuation performance
- Optional medical versions (B type) according to IEC/EN 60601-1
- Snap-in versions (S and S1 type)
- Hot inlet versions (HI type)

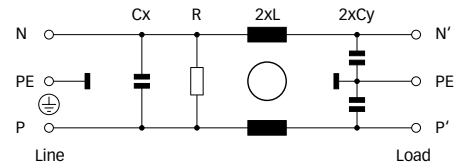
Approvals



Technical specifications

Maximum continuous operating voltage:	250VAC, 50/60Hz
Operating frequency:	dc to 400Hz
Rated currents:	1 to 15A @ 50°C
Approvals by rated current:	1 to 10A (ENEC, CQC) 1 to 15A (UL, CSA)
High potential test voltage:	P → PE 2000VAC for 2 sec (standard types) P → PE 2500VAC for 2 sec (B types) P → N 1000VAC for 2 sec
Protection category:	IP40 according to IEC 60529
Temperature range (operation and storage):	-25°C to +85°C (25/85/21)
Design corresponding to:	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
Flammability corresponding to:	UL 94V-2 or better
MTBF @ 40°C/230V (Mil-HB-217F):	≤8A: 2,035,000 hours ≤15A: 1,035,000 hours

Typical electrical schematic



The FN 9244 IEC inlet filter combines an IEC inlet and mains filter with superior filter attenuation in a small form factor. Choosing the FN 9244 product line brings you the rapid availability of a standard filter associated with the necessary safety acceptances. Standard IEC connector filters are a practical solution helping you to pass EMI system approval in a short time. A wide selection on amperage ratings, output connections, mounting possibilities and filters for medical applications are designed to offer you the desired solution.


Features and benefits

- Exceptional conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.
- Rear/front or snap-in mounting.
- Standard or wide mounting flange.
- Optional medical versions (B type) comply with the requirements of IEC/EN 60601-1 for creepage and clearance, leakage current and high potential testing.
- Optional earth line choke see FN 9244E data sheet.
- Custom-specific versions are available on request.

Typical applications

- Portable electrical and electronic equipment
- Small to medium-sized machines and household equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment
- Medical devices (MDD)
- In-vitro diagnostic medical devices (IVDD)
- Rack mounting equipment

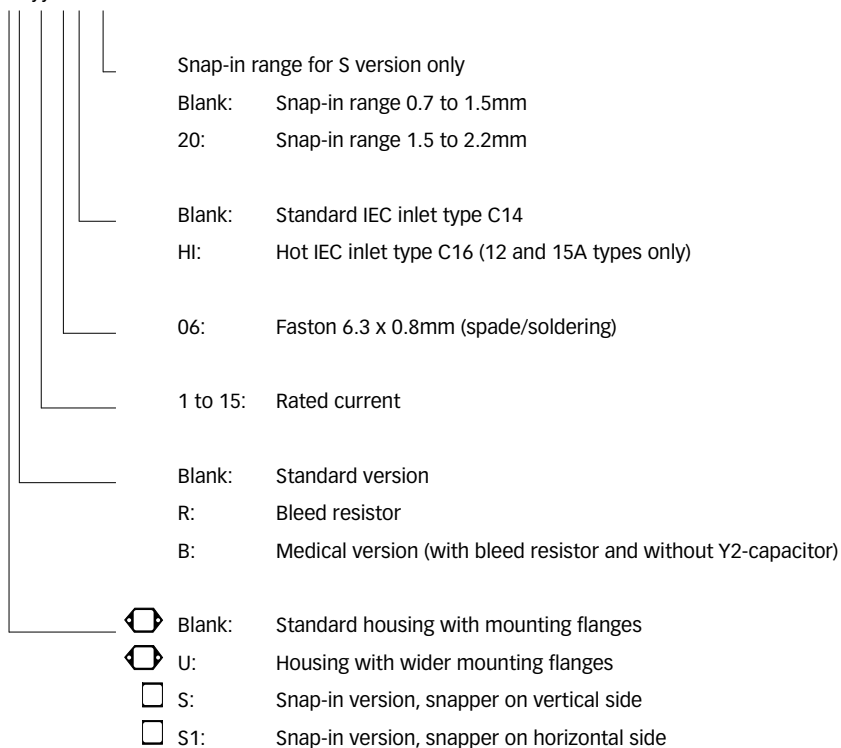
Filter selection table

Filter	Rated current @ 50°C (25°C)	Leakage current* @ 250VAC/50Hz	Inductance L	Capacitance Cx Cy		Resistance R	Output connections	Weight
	[A]	[µA]	[mH]	[µF]	[nF]	[kΩ]	 -06	[g]
FN 9244x-1-06	1 (1.2)	373	59.53	0.1	2.2		-06	38
FN 9244x-3-06	3 (3.5)	373	13.45	0.1	2.2		-06	38
FN 9244x-6-06	6 (7.2)	373	4.1	0.1	2.2		-06	38
FN 9244x-8-06	8 (10.6)	373	2.3	0.1	2.2		-06	38
FN 9244x-10-06	10 (11.6)	373	1.02	0.1	2.2		-06	38
FN 9244x-12-06	12 (12)	373	0.58	0.1	2.2		-06	38
FN 9244x-15-06	15 (15)	373	0.4	0.1	2.2		-06	38
FN 9244x-12-06HI	12 (12)	373	0.58	0.1	2.2		-06	38
FN 9244x-15-06HI	15 (15)	373	0.4	0.1	2.2		-06	38
FN 9244xR-1-06	1 (1.2)	373	59.53	0.1	2.2	1000	-06	38
FN 9244xR-3-06	3 (3.5)	373	13.45	0.1	2.2	1000	-06	38
FN 9244xR-6-06	6 (7.2)	373	4.1	0.1	2.2	1000	-06	38
FN 9244xR-8-06	8 (10.6)	373	2.3	0.1	2.2	1000	-06	38
FN 9244xR-10-06	10 (11.6)	373	1.02	0.1	2.2	1000	-06	38
FN 9244xR-12-06	12 (12)	373	0.58	0.1	2.2	1000	-06	38
FN 9244xR-15-06	15 (15)	373	0.4	0.1	2.2	1000	-06	38
FN 9244xR-12-06HI	12 (12)	373	0.58	0.1	2.2	1000	-06	38
FN 9244xR-15-06HI	15 (15)	373	0.4	0.1	2.2	1000	-06	38
FN 9244xB-1-06	1 (1.2)	2	59.53	0.1		1000	-06	38
FN 9244xB-3-06	3 (3.5)	2	13.45	0.1		1000	-06	38
FN 9244xB-6-06	6 (7.2)	2	4.1	0.1		1000	-06	38
FN 9244xB-8-06	8 (10.6)	2	2.3	0.1		1000	-06	38
FN 9244xB-10-06	10 (11.6)	2	1.02	0.1		1000	-06	38
FN 9244xB-12-06	12 (12)	2	0.58	0.1		1000	-06	38
FN 9244xB-15-06	15 (15)	2	0.4	0.1		1000	-06	38
FN 9244xB-12-06HI	12 (12)	2	0.58	0.1		1000	-06	38
FN 9244xB-15-06HI	15 (15)	2	0.4	0.1		1000	-06	38

* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

Product selector

FN 9244xx-yy-..HI-zz

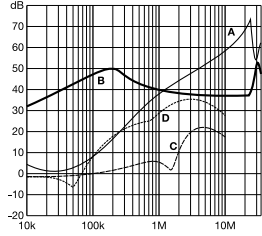


For example: FN 9244B-15-06, FN 9244S1B-10-06-20, FN 9244R-12-06HI, FN 9244UB-8-06

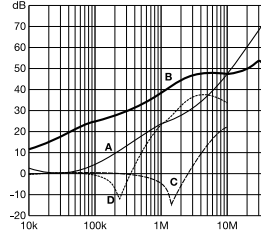
Typical filter attenuation

Per CISPR 17; A = 50Ω/50Ω sym; B = 50Ω/50Ω asym; C = 0.1Ω/100Ω sym; D = 100Ω/0.1Ω sym

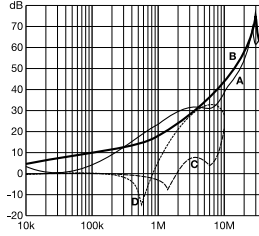
1 and 3A types



6 to 10A types

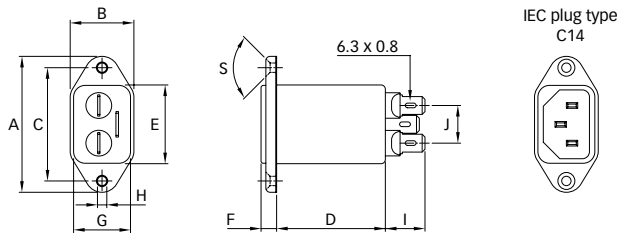


12 and 15A types

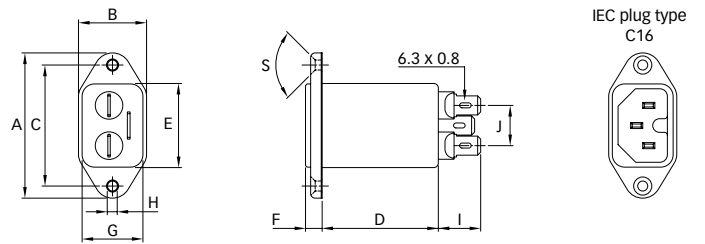


Mechanical data

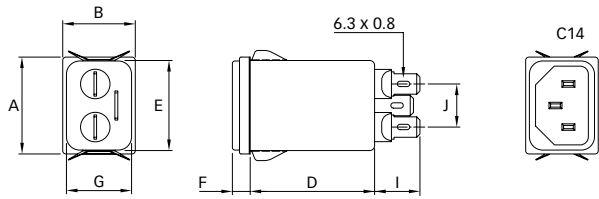
FN 9244



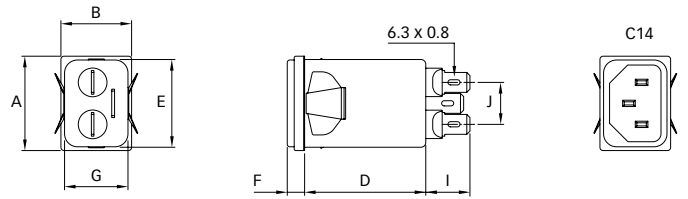
FN 9244-HI



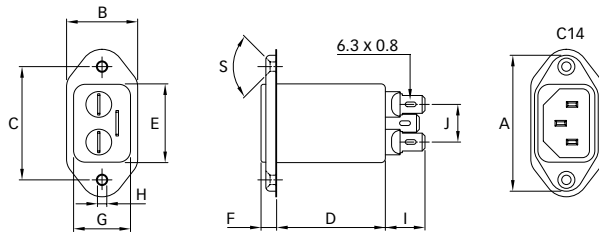
FN 9244S



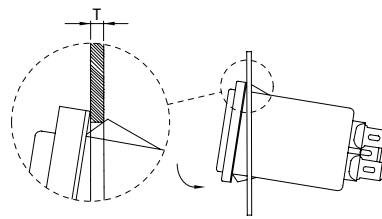
FN 9244S1



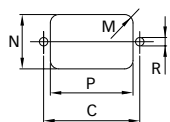
FN 9244U



Installation



Panel cut out



Dimensions

	FN 9244	FN 9244U	FN 9244S	FN 9244S1	FN 9244-HI
A	48	51.85	29.9	29.9	48
B	22.5	25	22.4	22.4	22.5
C	40 ±0.2	40 ±0.2			40 ±0.2
D	38.4	38.25	38.4	38.4	38.4
E	27.8	27.8	27.8	27.8	27.8
F	5.5	5.5	5.5	5.5	5.5
G	20.1	20.1	20.1	20.1	20.1
H	Ø3.3	Ø3.3			Ø3.3
I	14	14.1	14	14	14
J	13.3	13.3	13.3	13.3	13.3
M	R ≤ 3	R ≤ 3	R ≤ 1.5	R ≤ 1.5	R ≤ 3
N	21.5	21.5	20.8	21.9	21.5
P	28.5	28.5	29.4	28.5	28.5
R	M3	M3			M3
S	90°	90°			90°
T*			0.7 - 1.5	0.7 - 1.5	
T*			1.5 - 2.2	1.5 - 2.2	

* For selecting the panel thickness, please refer to the filter selector table.

All dimensions in mm; 1 inch = 25.4mm

Tolerances according: ISO 2768-m / EN 22768-m

**Headquarters and
global innovation and
development center**

Schaffner Group
Nordstrasse 11
4542 Luterbach
Switzerland
T +41 32 681 66 26
F +41 32 681 66 30
info@schaffner.ch
www.schaffner.com

Sales and application centers

China
Schaffner EMC Ltd. Shanghai
Building 11, Lane 1365
East Kangqiao Road
Shanghai 201319
T +86 21 6813 9855
F +86 21 6813 9811
cschina@schaffner.com
www.schaffner.com

Germany
Schaffner Deutschland GmbH
Schoemperlenstrasse 12B
76185 Karlsruhe
T +49 721 56910
F +49 721 569110
germanysales@schaffner.com

Finland
Schaffner Oy
Tynninkuja 7
08700 Lohja
T +358 19 35 72 71
F +358 19 32 66 10
finlandsales@schaffner.com

France
Schaffner EMC S.A.S.
112, Quai de Bezons
95103 Argenteuil
T +33 1 34 34 30 60
F +33 1 39 47 02 28
francesales@schaffner.com

Italy
Schaffner EMC S.r.l.
Via Galileo Galilei, 47
20092 Cinisello Balsamo (MI)
T +39 02 66 04 30 45/47
F +39 02 61 23 943
italysales@schaffner.com

Japan
Schaffner EMC K.K.
Mitsui-Seimei Sangenjaya Bldg. 7F
1-32-12, Kamiyama, Setagaya-ku
Tokyo 154-0011
T +81 3 5712 3650
F +81 3 5712 3651
japansales@schaffner.com
www.schaffner.jp

Sweden
Schaffner EMC AB
Turebergstorg 1, 6
19147 Sollentuna
T +46 8 5792 1121/22
F +46 8 92 96 90
swedensales@schaffner.com

Switzerland
Schaffner EMV AG
Nordstrasse 11
4542 Luterbach
T +41 32 681 66 26
F +41 32 681 66 41
sales@schaffner.ch

Singapore
Schaffner EMC Pte Ltd.
Blk 3015A Ubi Road 1
05-09 Kampong Ubi Industrial
Estate
T +65 6377 3283
F +65 6377 3281
singaporesales@schaffner.com

Spain
Schaffner EMC España
Calle Caléndula 93,
Miniparc III, Edificio E
El Soto de la Moraleja,
Alcobendas
28109 Madrid
T +34 618 176 133
spainsales@schaffner.com

Taiwan
Schaffner EMV Ltd.
6th Floor, No 413
Rui Guang Road
Neihu District
Taipei City 114
T +886 2 87525050
F +886 2 87518086
taiwansales@schaffner.com

Thailand
Schaffner EMC Co. Ltd.
Northern Region Industrial Estate
67 Moo 4 Tambon Ban Klang
Amphur Muang P.O. Box 14
Lamphun 51000
T +66 53 58 11 04
F +66 53 58 10 19
thailandsales@schaffner.com

UK
Schaffner Ltd.
5 Ashville Way
Molly Millars Lane
Wokingham
Berkshire RG41 2PL
T +44 118 9770070
F +44 118 9792969
uksales@schaffner.com
www.schaffner.uk.com

USA
Schaffner EMC Inc.
52 Mayfield Avenue
Edison, New Jersey 08837
T +1 732 225 9533
F +1 732 225 4789
usasales@schaffner.com
www.schaffner.com/us

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