

Excellent Performance EMC/EMI Filter



- Superior attenuation performance
- Optional earth line choke
- Complies with IEC/EN 60601-1
- Snap-in versions (S and S1 type)
- Hot inlet versions (HI type)



Performance indicators

Attenuation performance



Rated current [A]



Technical Specifications

Maximum continuous operating voltage	250 VAC, 50/60 Hz
Operating frequency	DC to 400 Hz
Rated currents	1 to 15 A @ 50°C max
Approvals by rated current	1 to 10 A (ENEC, CQC) 1 to 15 A (UL, CSA)
High potential test voltage	P → PE 2000 VAC for 2 sec (standard types) P → PE 2500 VAC for 2 sec (B types) P → N 1000 VAC for 2 sec
Protection category	IP 40 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 94 V-2 or better
MTBF @ 40°C/230 V (Mil-HB-217F)	≤8 A: 2,035,000 hours ≤15 A: 1,035,000 hours

Approvals & Compliances



(CQC except HI-types)

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.

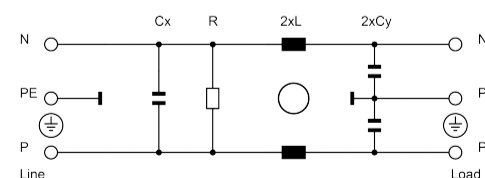
Features and Benefits

- 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
- FN 9244 B versions comply with the requirements of IMOP acc. to IEC/EN 60601-1 for creepage and clearance, leakage current and high potential testing
- Optional earth line choke see FN 9244 E 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

Typical electrical schematic



Filter Selection Table

Filter	Rated current @ 50°C (25°C)	Leakage current* @ 250 VAC/50 Hz (@ 120 VAC/60 Hz)	Inductance L	Capacitance		Resistance R	Output connections	Weight
				Cx	Cy			
	[A]	[mA]	[mH]	[μF]	[nF]	[kΩ]		[g]
FN9244x-1-06	1 (1.2)	0.31 (0.18)	59.53	0.1	2.2		-06	38
FN9244x-3-06	3 (3.5)	0.31 (0.18)	13.45	0.1	2.2	-06	38	
FN9244x-6-06	6 (7.2)	0.31 (0.18)	4.1	0.1	2.2	-06	38	
FN9244x-8-06	8 (10.6)	0.31 (0.18)	2.3	0.1	2.2		-06	38
FN9244x-10-06	10 (11.6)	0.31 (0.18)	1.02	0.1	2.2		-06	38
FN9244x-12-06	12 (12)	0.31 (0.18)	0.58	0.1	2.2		-06	38
FN9244x-15-06	15 (15)	0.31 (0.18)	0.4	0.1	2.2		-06	38
FN9244x-12-06HI	12 (12)	0.31 (0.18)	0.58	0.1	2.2		-06	38
FN9244x-15-06HI	15 (15)	0.31 (0.18)	0.4	0.1	2.2		-06	38
FN9244xR-1-06	1 (1.2)	0.31 (0.18)	59.53	0.1	2.2	1000	-06	38
FN9244xR-3-06	3 (3.5)	0.31 (0.18)	13.45	0.1	2.2	1000	-06	38
FN9244xR-6-06	6 (7.2)	0.31 (0.18)	4.1	0.1	2.2	1000	-06	38
FN9244xR-8-06	8 (10.6)	0.31 (0.18)	2.3	0.1	2.2	1000	-06	38
FN9244xR-10-06	10 (11.6)	0.31 (0.18)	1.02	0.1	2.2	1000	-06	38
FN9244xR-12-06	12 (12)	0.31 (0.18)	0.58	0.1	2.2	1000	-06	38
FN9244xR-15-06	15 (15)	0.31 (0.18)	0.4	0.1	2.2	1000	-06	38
FN9244xR-12-06HI	12 (12)	0.31 (0.18)	0.58	0.1	2.2	1000	-06	38
FN9244xR-15-06HI	15 (15)	0.31 (0.18)	0.4	0.1	2.2	1000	-06	38
FN9244xB-1-06	1 (1.2)	0.00	59.53	0.1		1000	-06	38
FN9244xB-3-06	3 (3.5)	0.00	13.45	0.1		1000	-06	38
FN9244xB-6-06	6 (7.2)	0.00	4.1	0.1		1000	-06	38
FN9244xB-8-06	8 (10.6)	0.00	2.3	0.1		1000	-06	38
FN9244xB-10-06	10 (11.6)	0.00	1.02	0.1		1000	-06	38
FN9244xB-12-06	12 (12)	0.00	0.58	0.1		1000	-06	38
FN9244xB-15-06	15 (15)	0.00	0.4	0.1		1000	-06	38
FN9244xB-12-06HI	12 (12)	0.00	0.58	0.1		1000	-06	38
FN9244xB-15-06HI	15 (15)	0.00	0.4	0.1		1000	-06	38

* Maximum leakage under normal operating conditions (acc. to IEC60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

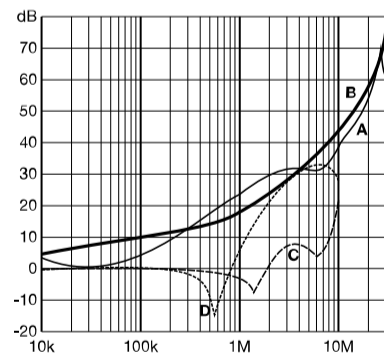
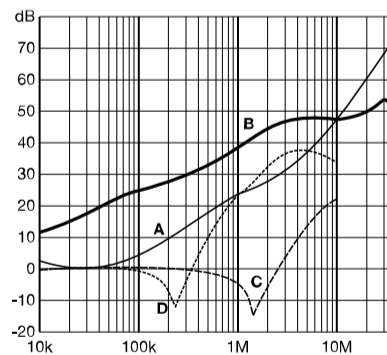
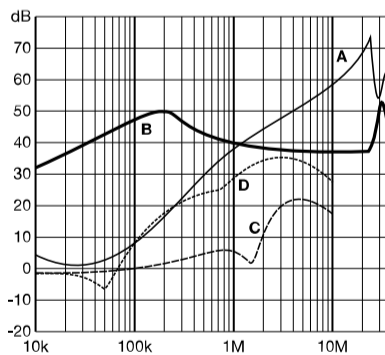
Typical Filter Attenuation

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

1 and 3 A types

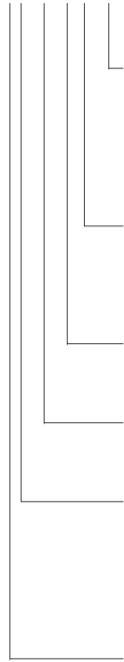
6 to 10 A types

12 and 15 A types



Product selector

FN 9244xx-yy-..HI-zz



- Snap-in range for S version only
 - Blank: Snap-in range 0.7 to 1.5mm
 - 20: Snap-in range 1.5 to 2.2mm
- Rated current
 - Blank: Standard IEC inlet type C14
 - HI: Hot IEC inlet type C16 (12 and 15A types only)
- 06: Faston 6.3 x 0.8mm (spade/soldering)
- 1 to 15: Rated current
 - Blank: Standard version
 - R: Bleed resistor
 - B: Medical version (with bleed resistor and without Y2-capacitor)

- Blank: Standard housing with mounting flanges
- U: Housing with wider mounting flanges
- S: Snap-in version, snapper on vertical side
- S1: Snap-in version, snapper on horizontal side

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

Distributor Inventory

Check stock levels at global distributors via the QR code

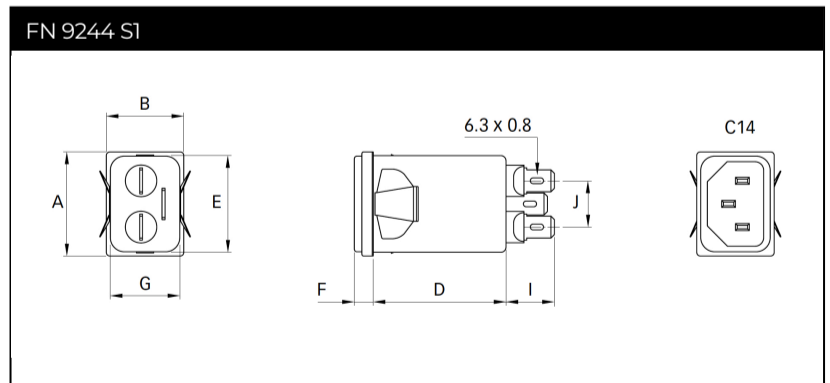
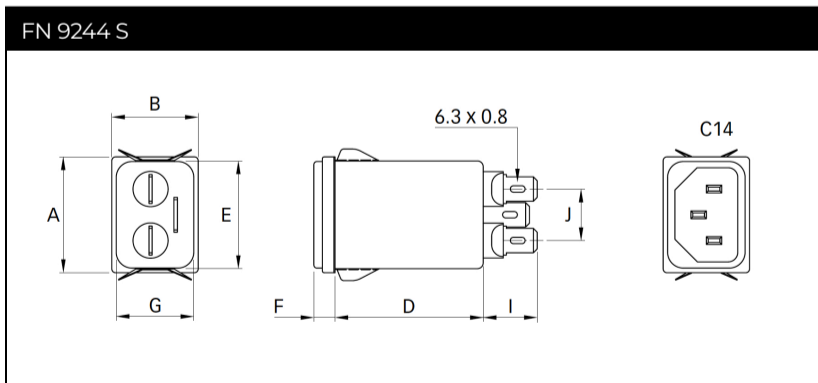
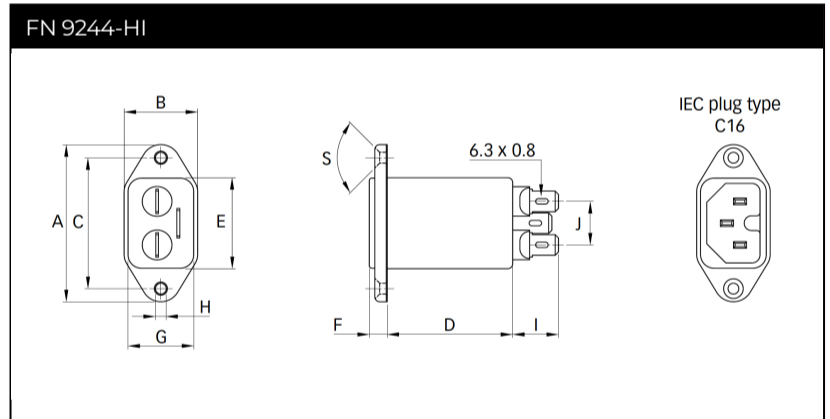
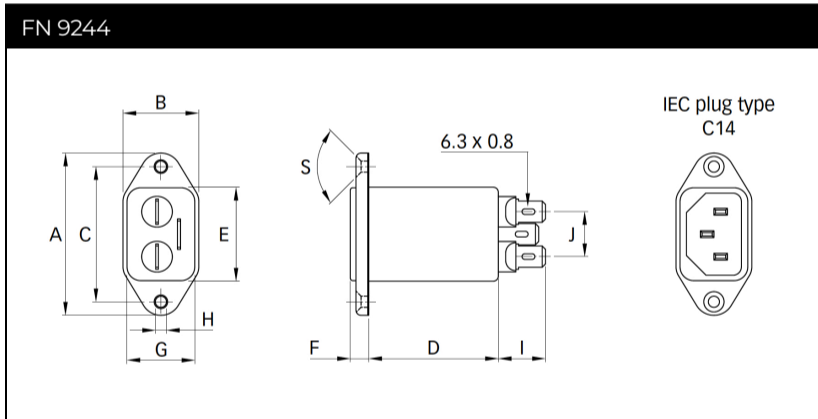


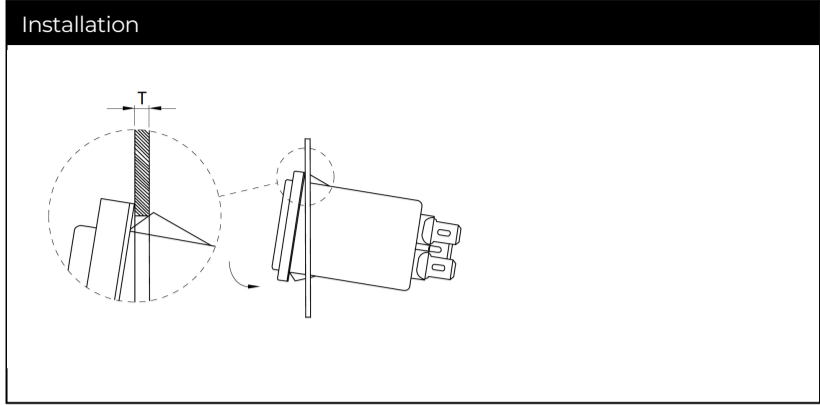
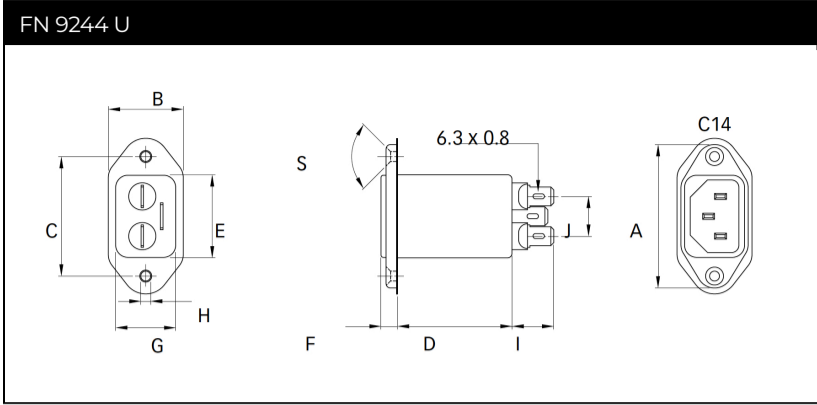
Search for the individual filter at <https://products.schaffner.com/stock> (qr-code)

Wider range of stock level availability:

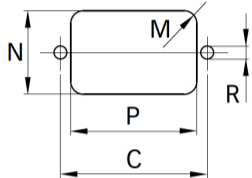
Stock level per types 1 - 15 A	Link
Standard housing types	
Housing with wider mounting flanges (U)	
Snap-in housing types (S&S1)	
Medical versions (B)	
Bleed resistor types (R)	

Mechanical Data





Panel cut out



Dimensions

	FN 9244	FN 9244 U	FN 92244 S	FN 92244 S1	FN 9244-HI	Tol.
A	48	48	29.9	29.9	48	
B	22.4	25	22.4	22.4	22.4	
C	40	40			40	±0.2
D	38.25	38.25	38.25	38.25	38.25	
E	27.8	27.7	27.8	27.8	27.8	+0.6/-0
F	5.7	5.7	5.7	5.7	5.7	
G	20.1	20.1	20.1	20.1	20.1	+0.6/-0
H	Ø3.3	Ø3.3			Ø3.3	
I	14	14	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		

* Recommended torque for M3 (90° countersunk flat head) is 0.5 Nm

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

All dimensions in mm; 1 inch = 25.4 mm
Tolerances according to: ISO 2768-m/EN 22768-m

Please visit www.schaffner.com to find more details on connectors.

Accessories

Power Cord with angled Locking System C13



- Protects appliances that are vulnerable to vibration
- Connector cannot be accidentally pulled or vibrated out of the inlet
- Space availability/constraints
- Different angles for ease of access
- Space saving
- Release locking mechanism
- Prevents accidental disconnection

[Technical Data Sheet >](#)

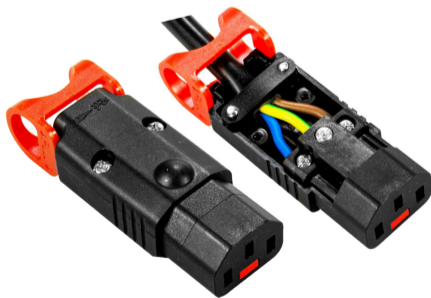
IL 13P IEC C13 Rewireable Angled Connectors with Locking System



- Protects appliances that are vulnerable to vibration
- Connector cannot be accidentally pulled or vibrated out of the inlet
- Space availability/constraints
- Different angles for ease of access
- Space saving
- Release locking mechanism
- Prevents accidental disconnection

[Technical Data Sheet >](#)

IL 13P IEC C13 Rewireable Connectors with Locking System



The locking system has a tensile force of typical 300N. It is recommended to use it with flange mount filters. For details refer to our Application Note "Using IEC Lock Power Cords with IEC Inlets and Filters".

Schaffner power connector with IEC lock guard against accidental disconnection of all electrical appliances with an IEC inlet. No exchange or modification of the IEC inlet or IEC inlet filter system is needed. Easy retrofit .for all electronic equipments and devices

[Technical Data Sheet >](#)

Headquarters, Global Innovation and Development

Switzerland

Schaffner Holding AG

Industrie Nord
Nordstrasse 11e
4542
Luterbach
+41 32 681 66 26
info@schaffner.com

Sales and Application Centers

China

Schaffner EMC Ltd. Shanghai

T20-3 C, No 565 Chuangye Road, Pudong district
201201
Shanghai
+86 2138139500
cschina@schaffner.com

Finland

Schaffner Oy

Sauvonrinne 19 H
8500
Lohja
+358 50 468 7284
finlandsales@schaffner.com

France

Schaffner EMC S.A.S.

16-20 Rue Louis Rameau
95875
Bezons
+33 1 34 34 30 60
francesales@schaffner.com

Germany

Schaffner Deutschland GmbH

Schoemperlenstrasse 12B
76185
Karlsruhe
+49 721 56910
germanysales@schaffner.com

India

Schaffner India Pvt. Ltd

Regus World Trade Centre
WTC, 22nd Floor Unit No 2238, Brigade Gateway Campus, 26/1, Dr. Rajkumar Road Malleshwaram (W)
560055
Bangalore
+91 8067935355
indiasales@schaffner.com

Italy

Schaffner EMC S.r.l.

Via Ticino, 30
20900
Monza (MB)
+39 039 21 41 070
italysales@schaffner.com

Japan

Schaffner EMC K.K.

ISM Sangenjaya 7F
1-32-12 Kamiuma, Setagaya-ku
154-0011
Tokyo
+81 3 5712 3650
japansales@schaffner.com

Singapore

Schaffner EMC Pte Ltd.

Blk 3015A Ubi Road 1, #05-09, Kampong Ubi Industrial Estate
408705
Singapore
+65 63773283
singaporesales@schaffner.com

Spain

Schaffner EMC España

Calle Caléndula 93, Miniparc III, Edificio E El Soto de Moraleja, Alcobendas
28109
Madrid
+34 917 912 900
spainsales@schaffner.com

Sweden

Schaffner EMC AB

Östermalmstrorg 1
114 42
Stockholm
+46 8 5050 2425
swedensales@schaffner.com

Switzerland

Schaffner EMV AG

Industrie Nord
Nordstrasse 11e
4542
Luterbach
+41 32 681 66 26
switzerlandsales@schaffner.com

Taiwan

Schaffner EMV Ltd.

U-Town
20 Floor-2, No 97, Section 1, XinTai 5th Road, XiZhi District
22175
New Taipei City
+886 226975500
taiwansales@schaffner.com

Thailand

Schaffner EMC Co. Ltd.

Sathorn Square Tower
Room 3780, 37FL, 98 North-Sathorn Rd, Silom, Bangrak
10500
Bangkok
+66 621056397
thailandsales@schaffner.com

United Kingdom

Schaffner Ltd.

1, Oakmede Place
Terrace Road
RG42 4JF
Binfield
+44 118 9770070
uksales@schaffner.com

United States

Schaffner EMC Inc.

52 Mayfield Avenue
Edison, New Jersey
+1 732 225 9533
usasales@schaffner.com

To find your local partner within Schaffner's global network schaffner.com

© 2022 Schaffner Group

The content of this document has been carefully checked and understood. However, neither Schaffner nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Schaffner does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Swiss law and resulting disputes shall be settled by the courts at the place of business of Schaffner Holding AG. Latest publications and a complete disclaimer can be downloaded from the Schaffner website. All trademarks recognized.