Excellent Performance EMC/EMI Filter



Superior attenuation performance	
Optional earth line choke	

Complies with IEC/EN 60601-1 (B type)
Snap-in versions (S and S1 type)

Hot inlet versions (HI type)



Performance indicators

Attenuation performance



Technical Specifications

MTBF

Maximum continuous operating voltage	250 VAC, 50/60 Hz		
Rated currents	1 to 15 A @ 50°C max		
Operating frequency	DC to 400 Hz		
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		
Temperature range (operation and storage)	-25°C to +85°C (25/85/21)		
Protection category	IP 40 according to IEC 60529		
Flammability corresponding to	Plastic Material: UL 94 V-0 Laces for -07 version: UL 94 VW-1		
Approvals by rated current	1 to 10 A (ENEC, CQC) 1 to 15 A (UL, CSA)		
Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939		

UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939 ≤8 A: 2,035,000 hours @ 40°C/230 V (Mil-HB-217F) ≤15 A: 1,035,000 hours @ 40°C/230 V (Mil-HB-217F)



(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.

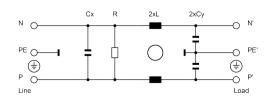
Features and Benefits

- 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 1MOP 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	Leakage current*	Inductance	ce Capacitance		Resistance	Output	Weight
	@ 50°C (25°C)	@ 250 VAC/50 Hz	L	Сх	Су	R	connections	
		(@ 120 VAC/60 Hz)						
							Π	
	[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

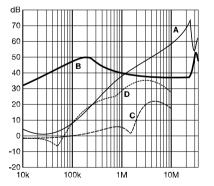
* Maximum leakage under normal operating conditions (acc. to IEC60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

Typical Filter Attenuation

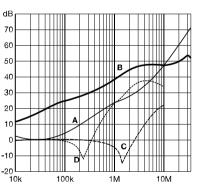
Per CISPR 17; A=50 $\Omega/50~\Omega$ sym; B=50 $\Omega/50~\Omega$ asym; C=0.1 $\Omega/100~\Omega$ sym; D=100 $\Omega/0.1~\Omega$ sym

1 and 3 A types

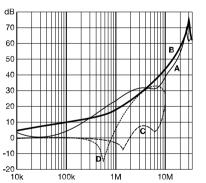
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5 to 10 A types	
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12 and 15 A types



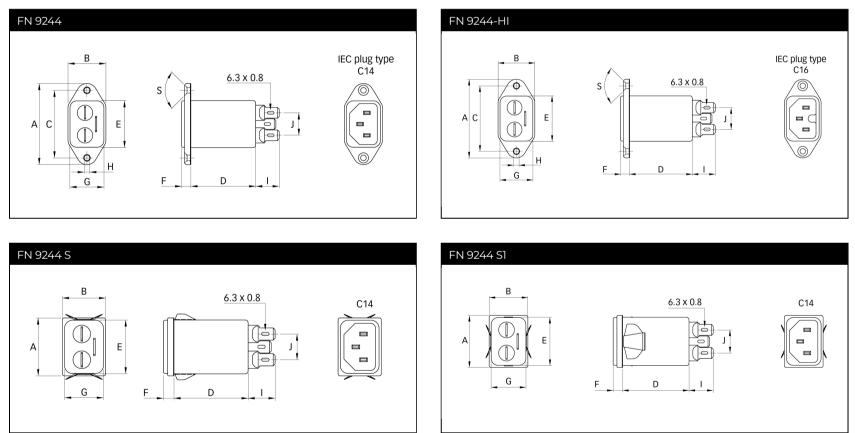
Product selector			Distributor Inventory			
FN 9244xx-yyHI-zz			Check stock levels at global distributors via the QR code	3		
	Snap-in ra	nge for S version only		3		
	Blank:	Snap-in range 0.7 to 1.5mm				
	20:	Snap-in range 1.5 to 2.2mm	LE102948	9Y		
	Blank:	Standard IEC inlet type C14				
	HI:	Hot IEC inlet type C16 (12 and 15A types only)	Search for the individual filter at <u>https://products.schaffner.com/stock</u> (qr-code)			
	06:	Faston 6.3 x 0.8mm (spade/soldering)	Wider range of stock level availability:			
			Stock level per types 1 - 15 A	Link		
	1 to 15:	Rated current	Standard housing types	¥		
			Housing with wider mounting flanges (U)	¥		
Stock I Stock I Stock I Stock I 1 to 15: Rated current Blank: Standard version R: Bleed resistor	Snap-in housing types (S&S1)	¥				
	R:	Bleed resistor	Medical versions (B)	¥		
	B:	Medical version (with bleed resistor and without Y2-capacitor)	Bleed resistor types (R)	¥		
O	Blank:	Standard housing with mounting flanges				
\odot	U:	Housing with wider mounting flanges				
	S:	Snap-in version, snapper on vertical side				

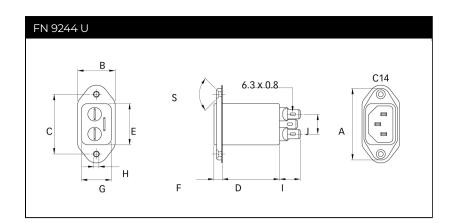
For example: FN 9244 B-15-06, FN 9244 S1B-10-06-20, FN 9244 R-12-06HI, FN 9244 UB-8-06

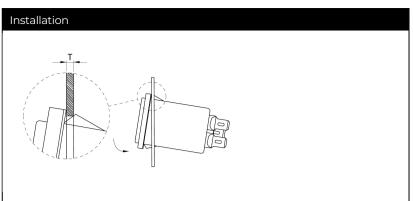
Snap-in version, snapper on horizontal side

Mechanical Data

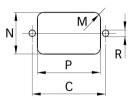
□ S1:







Panel cut out



Dimensions

	FN 9244	FN 9244 U	FN 92244 S	FN 92244 S1	FN 9244-HI	Tol.
Α	48	48	29.9	29.9	48	
в	22.4	25	22.4	22.4	22.4	
с	40	40			40	±0.2
D	38.25	38.25	38.25	38.25	38.25	
Е	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
н	Ø3.3	Ø3.3			Ø3.3	
1	14	14	14	14	14	
J	13.3	13.3	13.3	13.3	13.3	
М	R ≤3	R ≤3	R ≤1.5	R ≤1.5	R ≤3	
Ν	21.5	21.5	20.8	21.9	21.5	
Р	28.5	28.5	29.4	28.5	28.5	
R*	MЗ	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

 $\ensuremath{^{**}}$ For selecting the panel thickness, please refer to the filter selector table.

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

Please visit <u>www.schaffner.com</u> to find more details on connectors.

Accessories

IL 13P IEC C13 Rewireable Connectors with Locking System



IL 13P IEC C13 Rewireable Angled Connectors with Locking System



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 >