

# HF Performance EMC/EMI Filter



- Rated currents up to 10 A
- Faston connection
- Optional PCB through hole connection
- Good HF coupling to the equipment housing
- Optional medical versions (B type)



### Performance indicators

Attenuation performance



Rated current [A]



### Approvals



The FN 9226 IEC inlet filter combines an IEC inlet and mains filter with excellent filter attenuation in a small form factor. The FN 9226 is designed for printed circuit board mounting with good HF coupling to the equipment housing. Choosing the FN 9226 power entry module 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 current ratings, output connections and low leakage versions for medical applications helps you to select the desired solution for your application.

## Technical specifications

<b>Maximum continuous operating voltage</b>	250 VAC, 50/60 Hz
<b>Operating frequency</b>	DC to 400 Hz
<b>Rated currents</b>	1 to 10 A @ 50°C max.
<b>Approvals by rated current</b>	1 to 10 A (ENEC, UL, CSA)
<b>High potential test voltage</b>	P → PE 2000 VAC for 2 sec (standard types) P → N 760 VAC for 2 sec P → PE 2500 VAC for 2 sec (B types)
<b>Protection category</b>	IP 40 according IEC 60529
<b>Temperature range (operation and storage)</b>	-25°C to +85°C (25/85/21)
<b>Design corresponding to</b>	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
<b>Flammability corresponding to</b>	UL 94 V-2 or better
<b>MTBF @ 40°C/230 V (Mil-HB-217F)</b>	800,000 hours

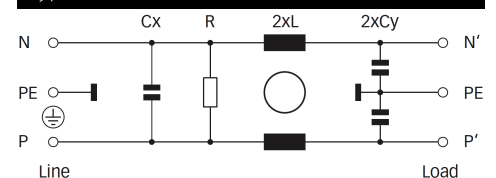
## Features and benefits

- High conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- Rear flange mounting
- Optional low leakage current versions for medical applications
- Faston connection or PCB through hole pins
- Good HF coupling
- Rated currents up to 10 A
- 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
- Consumer goods
- Test and measurement equipment
- EDP and office equipment
- Medical equipment
- Rack mounting equipment

### Typical electrical schematic



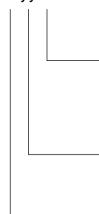
### Filter selection table

Filter	Rated current	Leakage current*	Inductance L	Capacitance		Resistance R	Output connections		Weight
	@ 50°C (25°C)	@ 250 VAC/50 Hz (@ 120 VAC/60 Hz)		Cx	Cy				
	[A]	[mA]	[mH]	[nF]	[nF]	[kΩ]			[g]
FN 9226-1-..	1 (1.2)	0.31 (0.18)	4.65	47.0	2.2		-02	-06	40
FN 9226-3-..	3 (3.5)	0.31 (0.18)	1.24	47.0	2.2		-02	-06	40
FN 9226-6-..	6 (7.2)	0.31 (0.18)	0.52	47.0	2.2		-02	-06	40
FN 9226-10-..	10 (11.6)	0.31 (0.18)	0.27	47.0	2.2		-02	-06	40
FN 9226 B-1-..	1 (1.2)	0.00	4.65	47.0		2200	-02	-06	40
FN 9226 B-3-..	3 (3.5)	0.00	1.24	47.0		2200	-02	-06	40
FN 9226 B-6-..	6 (7.2)	0.00	0.52	47.0		2200	-02	-06	40
FN 9226 B-10-..	10 (11.6)	0.00	0.27	47.0		2200	-02	-06	40

\* 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.

### Product selector

FN 9226x-yy-..



- 02: PCB through hole mounting
- 06: Faston 6.3 x 0.8mm (spade/soldering)
- 1 to 10: Rated current
- Blank: Standard version
- B: Medical version (with bleed resistor and without Y2-capacitor)

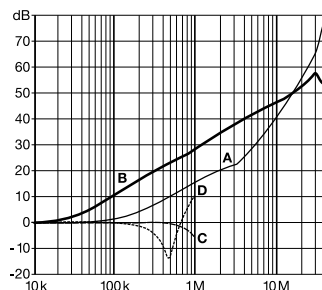
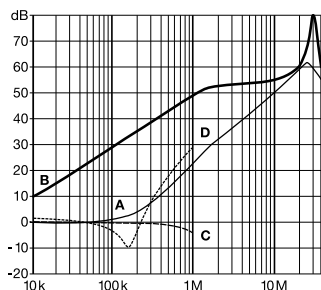
For example: FN 9226-6-02, FN 9226 B-10-06

### Typical filter attenuation

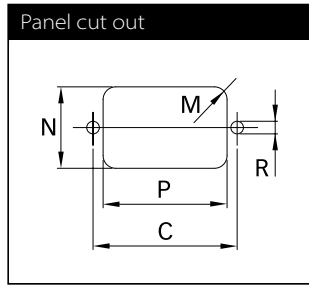
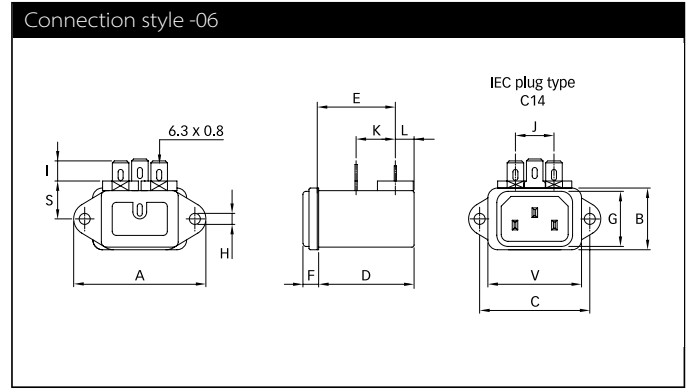
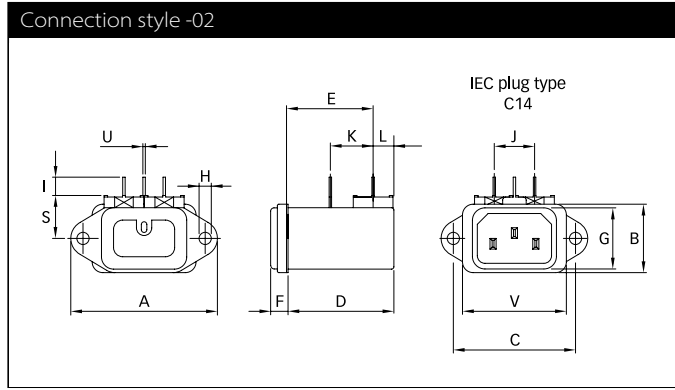
Per CISPR 17; A=50 Ω/50 Ω sym; B=50 Ω/50 Ω asym; C=0.1 Ω/100 Ω sym; D=100 Ω/0.1 Ω sym

1 and 3 A types

6 to 10 A types



**Mechanical data**



	FN 9226 Connection style -02	FN 9226 Connections style -06	Tolerances
A	48	48	±0.5
B	22.4	22.4	±0.3
C	40	40	±0.2
D	35.15	35.15	±0.3
E	28.35	28.35	±0.3
F	5.7	5.7	±0.3
G	20	20	±0.3
H	Ø4	Ø4	
I	6	7.3	
J	13.2	13.2	+0.6/-0
K	14	14.25	±0.5
L	6.8	6.8	±0.3
M	R≤3.5	R≤3.5	
N	22.6	22.6	+0.2/-0
P	34.4	34.4	+0.2/-0
R	Ø3.5	Ø3.5	
S	14	14	
U	0.8		±0.1
V	34	34	±0.3

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

Please visit [www.schaffner.com](http://www.schaffner.com) to find more details on filter connectors.



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