

HF Performance EMC/EMI Filter

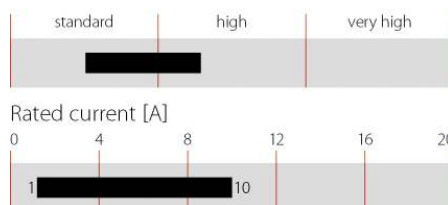


- | Rated currents up to 10 A
- | Faston connection
- | Optional PCB through hole connection
- | Good HF coupling to the equipment housing
- | Optional medical versions (B type)



Performance indicators

Attenuation performance



Approvals



RoHS

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

Maximum continuous operating voltage	250 VAC, 50/60 Hz
Operating frequency	dc to 400 Hz
Rated currents	1 to 10 A @ 50 °C
Approvals by rated current	1 to 10 A (ENEC, 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 760 VAC for 2 sec
Protection category	IP40 according 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/230V (Mil-HB-217F)	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

Filter selection table

Filter	Rated current @ 40 °C (25 °C)	Leakage current* @ 230 VAC/50 Hz	Inductance L	Capacitance		Resistance R	Output connections		Weight [g]
				Cx	Cy				
	[A]	[μA]	[mH]	[nF]	[nF]	[kΩ]			
FN 9226-1-..	1 (1.2)	373	4.65	47.0	2.2		-02	-06	40
FN 9226-3-..	3 (3.5)	373	1.24	47.0	2.2		-02	-06	40
FN 9226-6-..	6 (7.2)	373	0.52	47.0	2.2		-02	-06	40
FN 9226-10-..	10 (11.6)	373	0.27	47.0	2.2		-02	-06	40
FN 9226B-1-..	1 (1.2)	2	4.65	47.0		2200	-02	-06	40
FN 9226B-3-..	3 (3.5)	2	1.24	47.0		2200	-02	-06	40
FN 9226B-6-..	6 (7.2)	2	0.52	47.0		2200	-02	-06	40
FN 9226B-10-..	10 (11.6)	2	0.27	47.0		2200	-02	-06	40

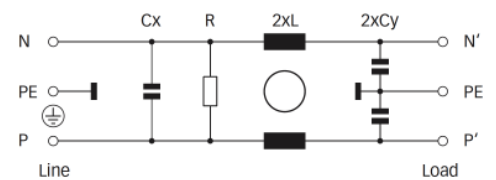
* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

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)

Typical electrical schematic

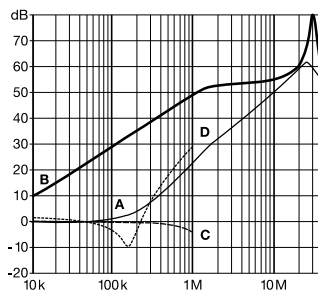


For example: FN 9226-6-02, FN 9226B-10-06

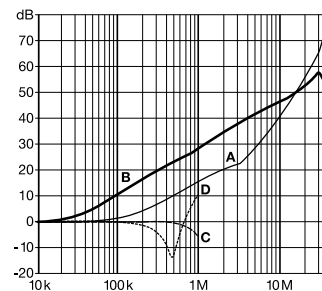
Typical filter attenuation

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

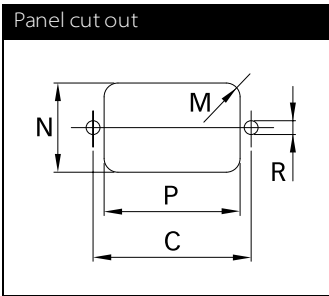
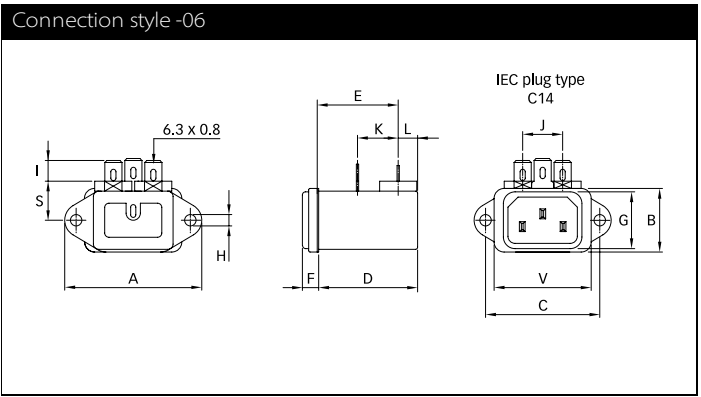
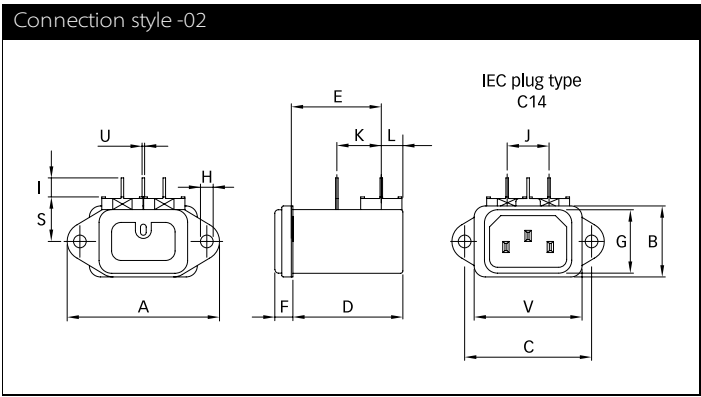
1 and 3 A types



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	Ø 4	Ø 4	
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	Ø 3.5	Ø 3.5	
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 to find more details on filter connectors.



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