

# IEC inlet filters FN 9226

# HF performance IEC inlet filter



energy efficiency and reliabil



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

#### **Approvals**







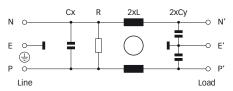




#### **Technical specifications**

Maximum continuous operating voltage:	250VAC, 50/60Hz
Operating frequency:	dc to 400Hz
Rated currents:	1 to 10A @ 50°C
Approvals by rated current:	1 to 10A (ENEC, UL, CSA)
High potential test voltage:	P -> E 2000VAC for 2 sec (standard types)
	P -> E 2500VAC for 2 sec (B types)
	P -> N 760VAC 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):	800,000 hours

#### Typical electrical schematic



The FN 9226 IEC inlet filter combines an IEC inlet and mains filter with excellent filter attenuation in a small form factor. The  ${
m FN}$  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.

#### 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 10A.
- Custom-specific versions are available on request.

# Typical applications

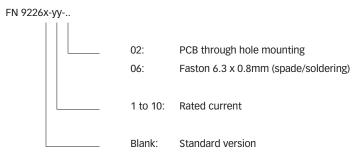
- Portable electrical and electronic equipment
- Small to medium-sized machines and household equipment
- Single-phase power supplies, switch-mode power supplies
- **■** Consumer goods
- Test and measurement equipment
- EDP and office equipment
- Medical equipment
- Rack mounting equipment

#### Filter selection table

Filter	Rated current	Leakage current*	Inductance	Capa	acitance	Resistance	Output connectio	ns Weight
	@ 40°C (25°C)	@ 230VAC/50Hz	L	Сх	Су	R		
	[4]	f., a1	[mat 1]	[=1	[m=1	[]-01		
	[A]	[µA]	[mH]	[nF]	[nF]	[kΩ]		□ [g]
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

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

#### **Product selector**

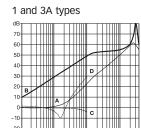


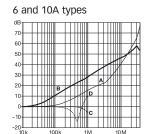
B: Medical version (with bleed resistor and without Y2-capacitor)

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

# Typical filter attenuation

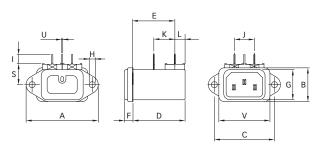
Per CISPR 17; A =  $50\Omega/50\Omega$  sym; B =  $50\Omega/50\Omega$  asym; C =  $0.1\Omega/100\Omega$  sym; D =  $100\Omega/0.1\Omega$  sym



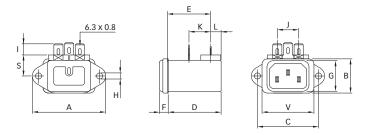


### Mechanical data

# Connection style -02



# Connection style -06



# Panel cut out



#### **Dimensions**

	FN 9226 Connection style -02	FN 9226 Connections style -06	Tolerances	
		001001.0003,10 00		
A	48	48	±0.5	
В	22.4	22.4	±0.3	
С	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	
Н	Ø4	Ø4		
<u> </u>	6	7.3		
J	13.2	13.2	+0.6/-0	
K	14	14.25	±0.5	
L	6.8	6.8	±0.3	
М	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	<b>∅</b> 0.8		±0.1	
V	34	34	±0.3	

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