

# **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 standard high very high Rated current [A] 0 4 8 12 16 20

# **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 max
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	IP 40 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/230 V (Mil-HB-217F)	800,000 hours

# Approvals & Compliances











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.

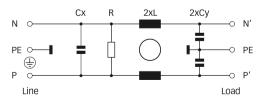
# **Features and Benefits**

- High conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- Rear flange mounting
- FN 9226 B versions comply with the requirements of 1MOP acc. to IEC/EN 60601-1 for creepage and clearance, leakage current and high potential testing
- 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

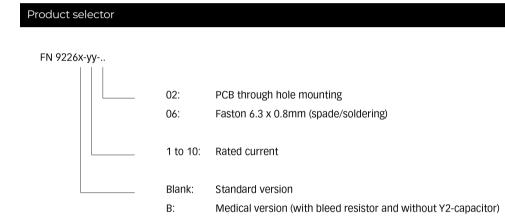
# Typical electrical schematic



# **Filter Selection Table**

Filter	Rated current	Leakage current*	Inductance	Сар	acitance	Resistance	Out	put connections	Weight
	@ 50°C (25°C)	@ 250 VAC/50 Hz	L	Cx	Су	R			
		(@ 120 VAC/60 Hz)							
	[A]	[mA]	[mH]	[nF]	[nF]	[kΩ]	$\perp$		[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

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



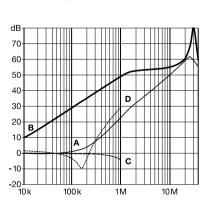
For example: FN 9226-6-02, FN 9226 B-10-06

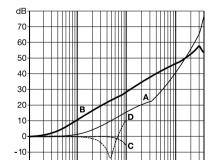
# **Typical Filter Attenuation**

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

6 to 10 A types

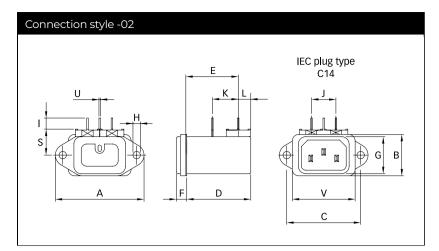


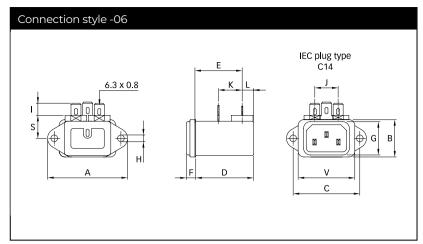




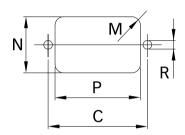
# 3 IEC Inlet Filters

# **Mechanical Data**





# Panel cut out



# **Dimensions**

	FN 9226	FN 9226	Tolerances
	Connection style -02	Connections style -06	
Α	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	
1	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	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  $\underline{www.schaffner.com}$  to find more details on filter 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 >

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