

IEC inlet filters FN 329

Performance IEC inlet filter

SCHAFFNER
safety for electronic systems



- Rated currents up to 6A
- Integrated earth line choke
- Optional medical versions (B type)

Approvals

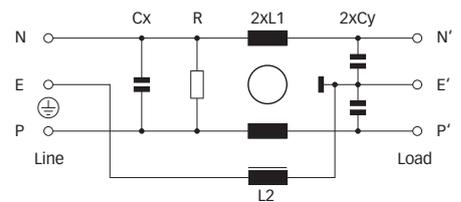


ROHS
2002/95/EC

Technical specifications

Maximum continuous operating voltage:	250VAC, 50/60Hz
Operating frequency:	dc to 400Hz
Rated currents:	1 to 6A @ 50°C max.
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, EN 60939
Flammability corresponding to:	UL 94V-2 or better
MTBF @ 40°C/230V (Mil-HB-217F):	600,000 hours

Typical electrical schematic



The FN 321 IEC inlet filter combines an IEC inlet and mains filter with excellent filter attenuation in a small form factor. The FN 329 performance power entry module offers additional EMI suppression for the earth line. Choosing the FN 329 compact 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 helping 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.
- Integrated earth line choke.
- Rear or front flange mounting.
- Optional low leakage current versions for medical applications.
- Faston or solder terminal connections.
- Rated currents up to 6A.
- 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

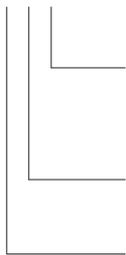
Filter selection table

Filter	Rated current @ 40°C (25°C) [A]	Leakage current* @ 230VAC/50Hz [μA]	Inductance		Capacitance		Resistance R [kΩ]	Output connections		Weight [g]
			L1 [mH]	L2 [mH]	Cx [nF]	Cy [nF]				
FN 329-1-..	1 (1.2)	560	6.3	0.4	47	3.3		-01	-05	55
FN 329-3-..	3 (3.5)	560	1.25	0.4	47	3.3		-01	-05	55
FN 329-6-..	6 (7.2)	560	0.48	0.4	47	3.3		-01	-05	55
FN 329B-1-..	1 (1.2)	2	6.3	0.4	47		1000		-05	55
FN 329B-3-..	3 (3.5)	2	1.25	0.4	47		1000		-05	55
FN 329B-6-..	6 (7.2)	2	0.48	0.4	47		1000		-05	55

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

Product selector

FN 329x-yy-..



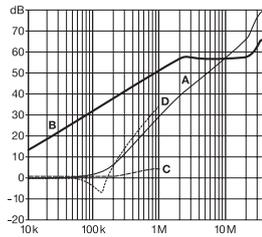
- 01: Solder lug
- 05: Faston 6.3 x 0.8mm
- 1 to 6: Rated current
- Blank: Standard version
- B: Medical version (with bleed resistor and without Y2-capacitor)

For example: FN 329-1-01, FN 329-3-05, FN 329B-6-05

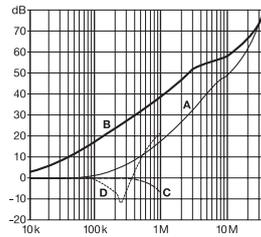
Typical filter attenuation

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

1A types

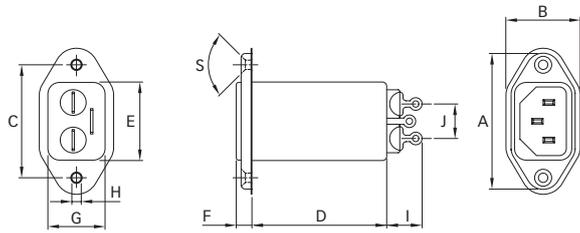


3 and 6A types

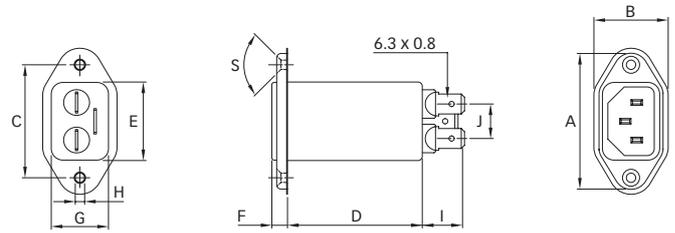


Mechanical data

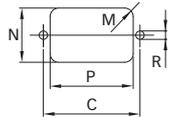
Connection style -01



Connection style -05



Panel cut out



Dimensions

	FN 329 Connection style -01	FN 329 Connection style -05	Tolerances
A	51.5	51.5	±0.5
B	26	26	±0.3
C	40	40	±0.2
D	46.6	46.6	±0.3
E	27.9	27.9	+0.5
F	5.5	5.5	±0.3
G	20.1	20.1	
H	Ø3.3	Ø3.3	
I	11.4	13.4	
J	10.9	10.9	±0.5
M	R ≤ 3	R ≤ 3	
N	21.5	21.5	±0.2
P	28.5	28.5	±0.2
R	M3	M3	
S	90°	90°	

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