

# IEC inlet filters FN 321

# **Compact IEC inlet filter**



safety for electronic systems



- Rated currents up to 10A
- High attenuation performance
- Reduces interference susceptibility

#### Approvals







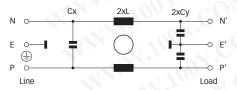


#### ROHS 2002/95/EC

#### Technical specifications

Maximum continuous operating voltage:	250VAC, 50/60Hz
Operating frequency:	dc to 400Hz
Rated currents:	1 to 10A @ 50°C max.
High potential test voltage:	P -> E 2000VAC for 2 sec
	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
MTDE @ 40°C/220V (Mil_HD_217E):	200 000 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. Choosing the FN 321 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 and output connections 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.
- Rear or front flange mounting.
- Faston or solder terminal connections.
- 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
- Test and measurement equipment
- EDP and office equipment
- Rack mounting equipment

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#### Filter selection table

Filter	Rated current	Leakage current*	Inductance	Capacitance		Resistance	Output connections		Weight
	@ 40°C (25°C)	@ 230VAC/50Hz	L	Сх	Су	R		.4	
							0	( ) ( )	
	[A]	[µA]	[mH]	[nF]	[nF]	[kΩ]		7 7	[g]
FN 321-1	1 (1.2)	560	10	47	3.3		-01	-05	65
FN 321-3	3 (3.5)	560	3.1	47	3.3		-01	-05	65
FN 321-6	6 (7.2)	560	1.2	47	3.3	21	-01	-05	65
FN 321-10	10 (11.6)	560	0.36	47	3.3		-01	-05	65

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

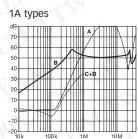
#### **Product selector**

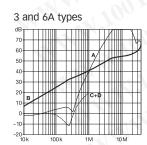


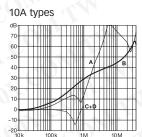
For example: FN 321-6-01 FN 321-10-05

#### 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



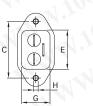


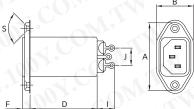


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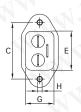
## Mechanical data

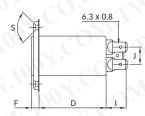
Connection style -01





## Connection style -05







Panel cut out



#### **Dimensions**

	FN 321 Connection style -01	FN 321 Connection style -05	Tolerances	
A	51.5	51.5	±0.5	1.0
В	26	26	±0.3	100
C	40	40	±0.2	
D	46.6	46.6	±0.3	4
E	27.9	27.9	+0.5	41 10
F	5.5	5.5	±0.3	
G	20.1	20.1		M Allo
H	Ø3.3	Ø3.3		
	11.4	13.4		
J	10.9	10.9	±0.5	110
M	R ≤ 3	R ≤ 3	1	
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

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