

# IEC Inlet Filters FN 370

## Versatile Filtered Power Entry Module

**SCHAFNER**  
energy efficiency and reliability



- Rated currents up to 6A
- Single or dual-fuse holder
- Fuses Ø6.3 x 32mm or Ø5 x 20mm
- Voltage selector 100/120/230/240V
- General purpose application
- Optional medical versions (B type)

### Approvals



ROHS

### Technical specifications

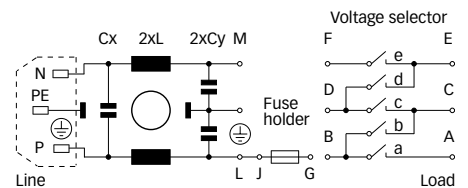
Maximum continuous operating voltage:	250VAC, 50/60Hz
Operating frequency:	dc to 400Hz
Rated currents:	2 to 6A @ 40°C max.
High potential test voltage:	P → PE 2000VAC for 2 sec (standard types) P → PE 2500VAC for 2 sec (B types)
	P → N 760VAC for 2 sec
Protection category:	IP40 according to IEC 60529
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):	550,000 hours

Voltage selector description:	VOL-SE 4SP-4
Function:	Series/parallel
Voltage marking*:	
1st:	100
2nd:	120
3rd:	230
4th:	240
Closed internal contact corresponding to:	
1st:	a, c, e
2nd:	b, c, e
3rd:	a, d
4th:	b, d

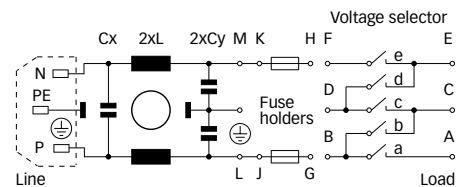
\* Other selected voltage marking on request.

### Typical electrical schematic

FN 370 / FN 376



FN 372 / FN 378 / FN 379



### Features and benefits


The FN 370 power entry module combines an IEC inlet, a mains filter with a single or dual-fuse holder and a voltage selector. Choosing FN 370 product line 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 amperage ratings, fuse options, mounting possibilities and filters for medical applications are designed to offer you the desired solution.

- Good conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.
- Rear/front or snap-in mounting.
- Single or dual-fuse holder.
- USA Ø6.3 x 32mm or EU Ø5 x 20mm fuses.
- Two attenuation performance ranges.
- Voltage selector 100/120/230/240V.
- Custom-specific versions are available on request.

### Typical applications

- Portable electrical and electronic equipment
- Consumer goods
- EDP and office equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment
- Medical equipment

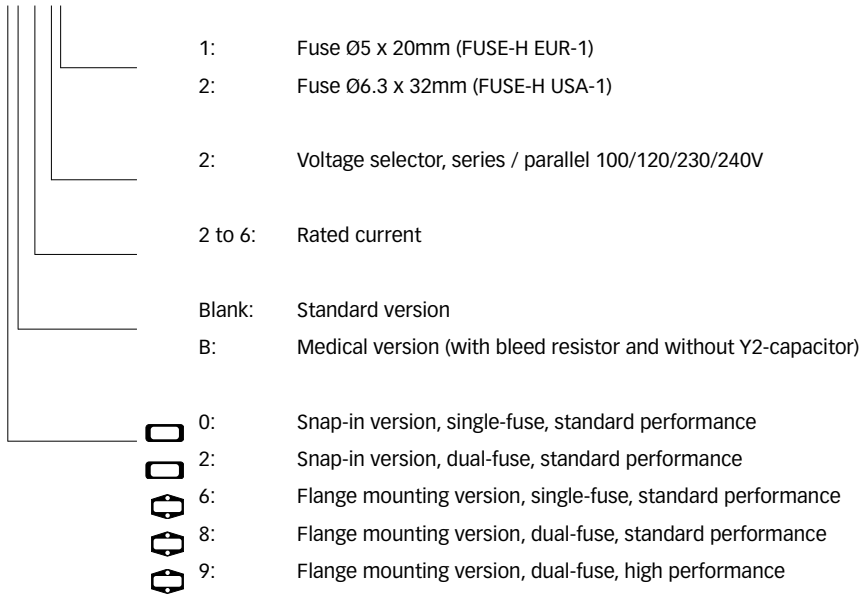
**Filter selection table**

Filter*	Rated current @ 40°C (25°C)	Leakage current** @ 230VAC/50Hz	Inductance L	Capacitance Cx Cy		Resistance R	Output connections	Fuses*** [Qty]	Weight [g]
	[A]	[µA]	[mH]	[nF]	[nF]	[kΩ]			
FN 370-2-2.1	2 (2.4)	373	0.70	47	2.2		13	1	55
FN 370-4-2.1	4 (4.8)	373	0.30	47	2.2		13	1	55
FN 370-6-2.1	6 (7.2)	373	0.18	47	2.2		13	1	55
FN 372-2-2.2	2 (2.4)	373	0.70	47	2.2		13	2	55
FN 372-4-2.2	4 (4.8)	373	0.30	47	2.2		13	2	55
FN 372-6-2.2	6 (7.2)	373	0.18	47	2.2		13	2	55
FN 376-2-2.1	2 (2.4)	373	0.70	47	2.2		13	1	55
FN 376-4-2.1	4 (4.8)	373	0.30	47	2.2		13	1	55
FN 376-6-2.1	6 (7.2)	373	0.18	47	2.2		13	1	55
FN 378-2-2.2	2 (2.4)	373	0.70	47	2.2		13	2	60
FN 378-4-2.2	4 (4.8)	373	0.30	47	2.2		13	2	60
FN 378-6-2.2	6 (7.2)	373	0.18	47	2.2		13	2	60
FN 379-2-2.2	2 (2.4)	373	2.00	47	2.2		13	2	70
FN 379-4-2.2	4 (4.8)	373	0.80	47	2.2		13	2	70
FN 379-6-2.2	6 (7.2)	373	0.50	47	2.2		13	2	70
FN 379B-2-2.2	2 (2.4)	2	2.00	47		1000	13	2	70
FN 379B-4-2.2	4 (4.8)	2	0.80	47		1000	13	2	70
FN 379B-6-2.2	6 (7.2)	2	0.50	47		1000	13	2	70

\* Select the requested fuse holder for fuse EUR-1 or USA-1.  
 \*\* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.  
 \*\*\* Filters are delivered without fuse.

**Product selector**

FN 37xx-y-zz

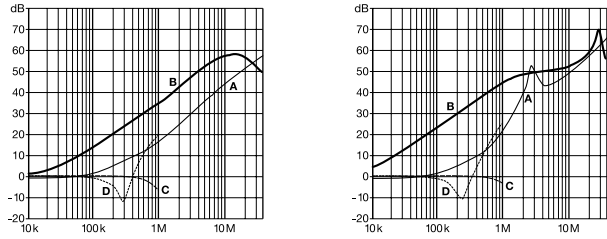


For example: FN 370-6-2.1, FN 378-4-2.2, FN 379B-2-2.2

**Typical filter attenuation**

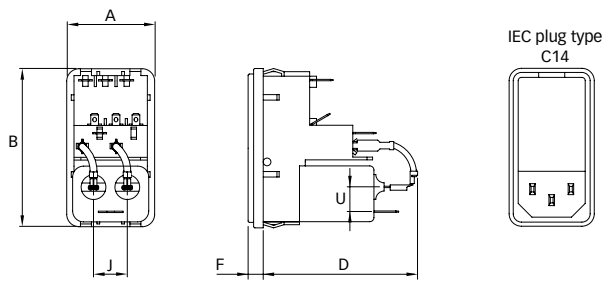
Per CISPR 17; A = 50Ω/50Ω sym; B = 50Ω/50Ω asym; C = 0.1Ω/100Ω sym; D = 100Ω/0.1Ω sym

FN 370 / FN 372 / FN 376 / FN 378 FN 379

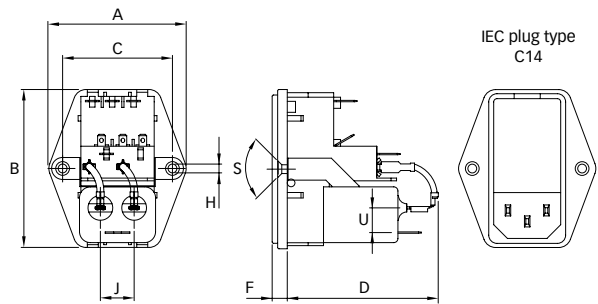


**Mechanical data**

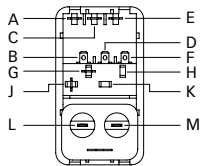
FN 370 / FN 372



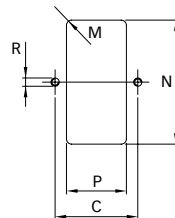
FN 376 / FN 378 / FN 379



**Connection designation**



**Panel cut out**



## Dimensions

	FN 370	FN 372	FN 376	FN 378	FN 379	Tolerances
<b>A</b>	32	32	50	50	50	±0.3
<b>B</b>	58	58	58	58	58	±0.3
<b>C</b>			40	40	40	±0.1
<b>D</b>	54	54	54	54	64.5	
<b>F</b>	5.5	5.5	5.5	5.5	5.5	
<b>H</b>			Ø3.3	Ø3.3	Ø3.3	
<b>J</b>	12.5	12.5	12.5	12.5	12.5	
<b>M</b>	R ≤ 2	R ≤ 2	R ≤ 2	R ≤ 2	R ≤ 2	±0.1
<b>N</b>	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	+0.2/-0
<b>P</b>	28.5	28.5	28.5	28.5	28.5	+0.2/-0
<b>R</b>			M3	M3	M3	
<b>S</b>			90°	90°	90°	
<b>U</b>	9	9	9	9	9	

\* For a back panel thickness between 0.8 and 2.0mm

\*\* For a back panel thickness between 2.1 and 3.2mm

All dimensions in mm; 1 inch = 25.4mm

Tolerances according: ISO 2768-m / EN 22768-m

**Headquarters, global innovation  
and development center**

**Schaffner Group**  
Nordstrasse 11  
4542 Luterbach  
Schweiz  
T +41 32 681 66 26  
F +41 32 681 66 30  
info@schaffner.com  
www.schaffner.com

To find your local partner within  
Schaffner's global network, please go to  
[www.schaffner.com](http://www.schaffner.com)

© 2012 Schaffner Group  
Specifications are subject to change  
within notice. The latest version of the  
data sheets can be obtained from the  
website. All trademarks recognized.

Schaffner is an ISO-registered company.  
Its products are designed and  
manufactured under the strict quality  
and environmental requirements of  
the ISO 9001 and ISO 14001 standards.

This document has been carefully  
checked. However, Schaffner does not  
assume any liability for errors or  
inaccuracies.

**Sales and application centers**

**China**  
**Schaffner EMC Ltd. Shanghai**  
T20-3, No 565 Chuangye Road  
Pudong New Area  
Shanghai 201201  
T +86 21 3813 9500  
F +86 21 3813 9501 / 02  
cschina@schaffner.com  
www.schaffner.com

**Finland**  
**Schaffner Oy**  
Sauvonrinne 19 H  
08500 Lohja  
T +358 19 35 72 71  
F +358 19 32 66 10  
finlandsales@schaffner.com

**France**  
**Schaffner EMC S.A.S.**  
112, Quai de Bezons  
95103 Argenteuil  
T +33 1 34 34 30 60  
F +33 1 39 47 02 28  
francesales@schaffner.com

**Germany**  
**Schaffner Deutschland GmbH**  
Schoemperlenstrasse 12B  
76185 Karlsruhe  
T +49 721 56910  
F +49 721 569110  
germanysales@schaffner.com

**Italy**  
**Schaffner EMC S.r.l.**  
Via Galileo Galilei, 47  
20092 Cinisello Balsamo (MI)  
T +39 02 66 04 30 45/47  
F +39 02 61 23 943  
italysales@schaffner.com

**Japan**  
**Schaffner EMC K.K.**  
Mitsui-Seimei Sangenjaya Bldg. 7F  
1-32-12, Kamiyuma, Setagaya-ku  
Tokyo 154-0011  
T +81 3 5712 3650  
F +81 3 5712 3651  
japansales@schaffner.com  
www.schaffner.jp

**Singapore**  
**Schaffner EMC Pte Ltd.**  
Blk 3015A Ubi Road 1  
05-09 Kampong Ubi Industrial Estate  
T +65 6377 3283  
F +65 6377 3281  
singaporesales@schaffner.com

**Spain**  
**Schaffner EMC España**  
Calle Caléndula 93  
Miniparc III, Edificio E  
El Soto de la Moraleja  
Alcobendas  
28109 Madrid  
T +34 618 176 133  
spainsales@schaffner.com

**Sweden**  
**Schaffner EMC AB**  
Turebergstorg 1, 6  
19147 Sollentuna  
T +46 8 5792 1121 / 22  
F +46 8 92 96 90  
swedensales@schaffner.com

**Switzerland**  
**Schaffner EMV AG**  
Nordstrasse 11  
4542 Luterbach  
T +41 32 681 66 26  
F +41 32 681 66 41  
sales@schaffner.ch

**Taiwan**  
**Schaffner EMV Ltd.**  
6th Floor, No 413  
Rui Guang Road  
Neihu District  
Taipei City 114  
T +886 2 87525050  
F +886 2 87518086  
taiwansales@schaffner.com

**Thailand**  
**Schaffner EMC Co. Ltd.**  
Northern Region Industrial Estate  
67 Moo 4 Tambon Ban Klang  
Amphur Muang P.O. Box 14  
Lamphun 51000  
T +66 53 58 11 04  
F +66 53 58 10 19  
thailandsales@schaffner.com

**UK**  
**Schaffner Ltd.**  
5 Ashville Way  
Molly Millars Lane  
Wokingham  
Berkshire RG41 2PL  
T +44 118 9770070  
F +44 118 9792969  
uksales@schaffner.com  
www.schaffner.uk.com

**USA**  
**Schaffner EMC Inc.**  
52 Mayfield Avenue  
Edison, New Jersey 08837  
T +1 732 225 9533  
F +1 732 225 4789  
usasales@schaffner.com  
www.schaffner.com/us



**Стандарт  
Электрон  
Связь**

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

**Наши контакты:**

**Телефон:** +7 812 627 14 35

**Электронная почта:** [sales@st-electron.ru](mailto:sales@st-electron.ru)

**Адрес:** 198099, Санкт-Петербург,  
Промышленная ул, дом № 19, литера Н,  
помещение 100-Н Офис 331