schaffner
energy efficiency and reliability

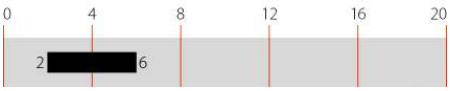
Versatile Filtered Power Entry Module

- Rated currents up to 6 A
- Single or dual-fuse holder
- Fuses Ø 6.3 x 32 mm or Ø 5 x 20 mm
- Voltage selector 100/120/230/240 V
- General purpose application
- Optional medical versions (B type)

Performance indicators

Attenuation performance

Rated current [A]



Approvals

RoHS

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.

Features and benefits

- 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 Ø 6.3 x 32mm or EU Ø 5 x 20mm fuses
- Two attenuation performance ranges
- Voltage selector 100/120/230/240 V
- 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

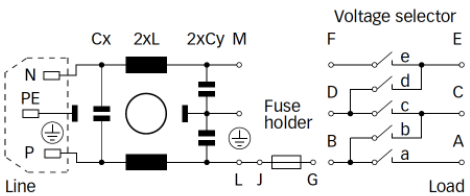
Technical specifications

Maximum continuous operating voltage	250 V, 50/60 Hz
Operating frequency	dc to 400 Hz
Rated currents	2 to 6 A @ 40 °C max.
High potential test voltage	P –> PE 2000 VAC for 2 sec (standard types) P –> N 760 VAC for 2 sec P –> PE 2500 VAC for 2 sec (B types)
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 94 V-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
2st	b, c, e
3st	a, d
4st	b, d

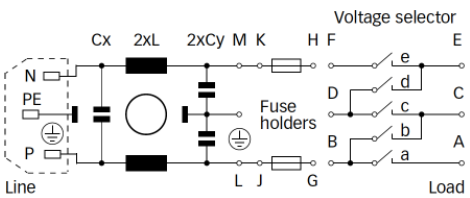
* Other selected voltage marking on request.

Typical electrical schematic

FN 370 / FN 376



FN 372 / FN 378 / FN 379



Filter selection table

Filter*	Rated current @ 40 °C (25 °C) [A]	Leakage current** @ 230 VAC/50 Hz [µA]	Inductance L [mH]	Capacitance Cx [nF]	Capacitance Cy [nF]	Resistance R [kΩ]	Output connections	Fuses*** [Qty]	Weight [g]
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

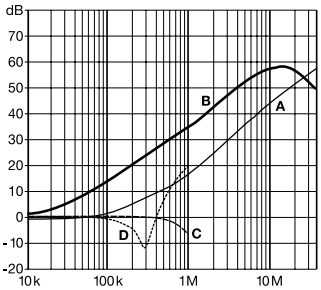
- 1: Fuse Ø5 x 20mm (FUSE-H EUR-1)
- 2: Fuse Ø6.3 x 32mm (FUSE-H USA-1)
- 2: Voltage selector, series / parallel 100/120/230/240V
- 2 to 6: Rated current
- Blank: Standard version
- B: Medical version (with bleed resistor and without Y2-capacitor)
- 0: Snap-in version, single-fuse, standard performance
- 2: Snap-in version, dual-fuse, standard performance
- 6: Flange mounting version, single-fuse, standard performance
- 8: Flange mounting version, dual-fuse, standard performance
- 9: Flange mounting version, dual-fuse, high performance

For example: FN 370-6-21, FN 378-4-22, FN 379B-2-22

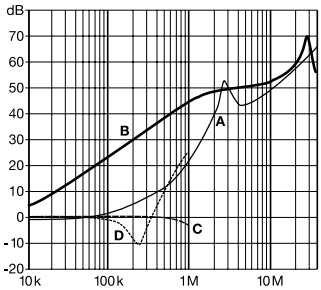
Typical filter attenuation

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

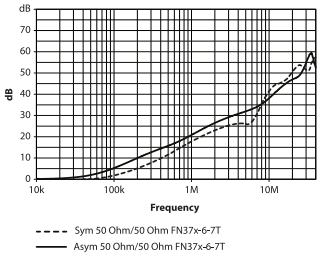
FN 370 / FN 372 / FN 376 / FN 378



FN 379

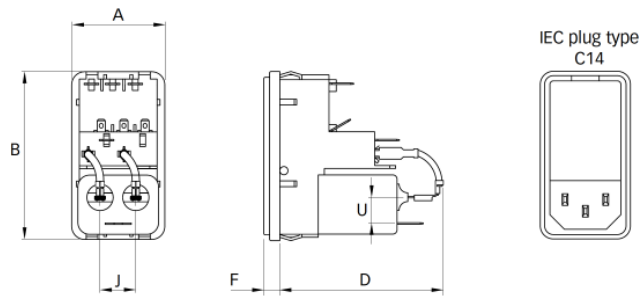


6A Types only

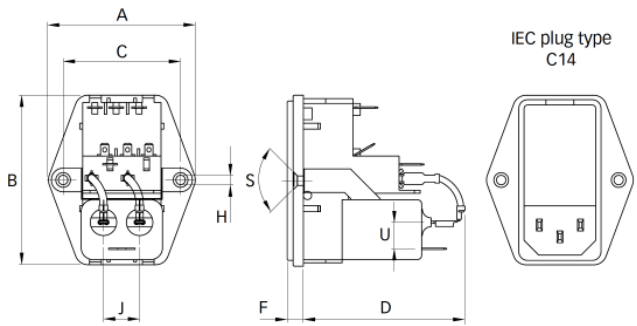


Mechanical data

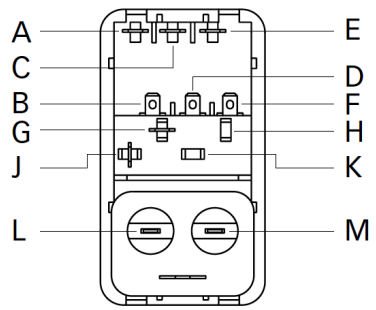
FN 370 / FN 372



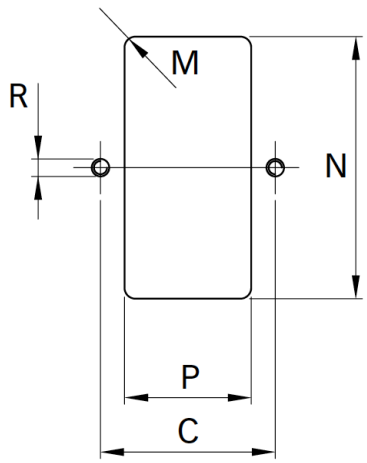
FN 376 / FN 378 / FN 379



Connection designation



Panel cut out



Dimensions

	FN 370	FN 372	FN 376	FN 378	FN 379	Tolerances
A	32	32	50	50	50	±0.3
B	58	58	58	58	58	±0.3
C			40	40	40	±0.1
D	54	54	54	54	64.5	
F	5.5	5.5	5.5	5.5	5.5	
H			Ø 3.3	Ø 3.3	Ø 3.3	
J	12.5	12.5	12.5	12.5	12.5	
M	R ≤ 2	R ≤ 2	R ≤ 2	R ≤ 2	R ≤ 2	±0.1
N	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	+0.2/-0
P	28.5	28.5	28.5	28.5	28.5	+0.2/-0
R			M3	M3	M3	
S			90°	90°	90°	
U	9	9	9	9	9	

* For a panel thickness between 0.8 and 3 mm.
** For a back panel thickness between 2.1 and 3.2 mm

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

Please visit www.schaffner.com to find more details on filter connectors.

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