

# Performance EMI Filter



- | Rated currents from 1 to 10 A
- | Compact housing
- | Optional overvoltage protection (Z type)



### Performance indicators



### Technical specifications

<b>Maximum continuous operating voltage</b>	250 VAC, 50/60 Hz
<b>Operating frequency</b>	dc to 400 Hz
<b>Rated currents</b>	1 to 10 A @ 40 °C max.
<b>High potential test voltage</b>	P → PE 2000 VAC for 2 sec P → N 250 VAC for 2 sec (Z types) P → N 760 VAC for 2 sec
<b>Temperature range (operation and storage)</b>	-25 °C to +100 °C (25/100/21)
<b>Flammability corresponding to</b>	UL 94 V-2 or better
<b>Design corresponding to</b>	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
<b>Surge pulse protection (optional)</b>	2 kV, IEC 61000-4-5
<b>MTBF @ 40°C/230V (Mil-HB-217F)</b>	710,000 hours

### Approvals



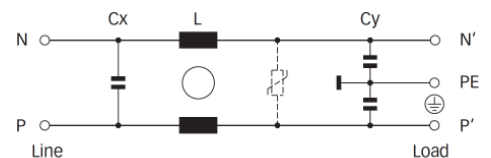
### Features and benefits

- | FN 332 filters are designed for easy and fast chassis mounting
- | FN 332 filters are also available with integrated surge pulse protection to safeguard sensitive electrical equipment
- | All FN 332 single-phase filters provide a good attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- | Chokes with high saturation resistance and high inductivity
- | Surge pulse protection
- | Custom-specific versions on request


### Typical applications

- | Electrical and electronic equipment
- | Consumer goods
- | Household equipment
- | Power supplies
- | Office automation equipment
- | Datacom equipment
- | Industrial equipment auxiliary supply

### Typical electrical schematic



## Filter selection table

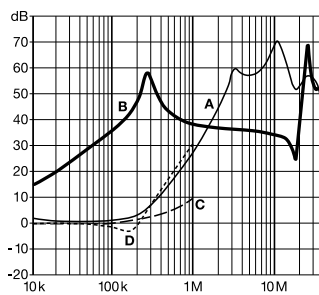
Filter	Rated current @ 40 °C (25 °C)	Leakage current* @ 230 VAC/50 Hz	Inductance L	Capacitance		Surge current	Energy absorption	Input/Output connections	Weight
	[A]	[ $\mu$ A]	[mH]	C <sub>x</sub> [nF]	C <sub>y</sub> [nF]	[A]	[J]		[g]
<b>FN 332-1-05</b>	1 (1.2)	340	10	15	2.2			-05	65
<b>FN 332-3-05</b>	3 (3.6)	340	2	15	2.2			-05	65
<b>FN 332-6-05</b>	6 (7.3)	340	0.8	15	2.2			-05	65
<b>FN 332-10 A-05</b>	10 (12)	340	0.5	15	2.2			-05	70
<b>FN 332Z-1-05</b>	1 (1.2)	340	10	15	2.2	1200	26	-05	65
<b>FN 332Z-3-05</b>	3 (3.6)	340	2	15	2.2	1200	26	-05	65
<b>FN 332Z-6-05</b>	6 (7.3)	340	0.8	15	2.2	1200	26	-05	65
<b>FN 332Z-10-05</b>	10 (12)	340	0.5	15	2.2	1200	26	-05	70

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

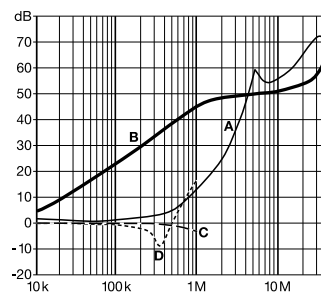
## Typical filter attenuation

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

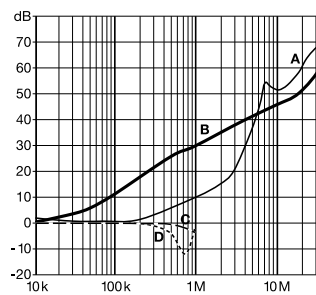
1 A types



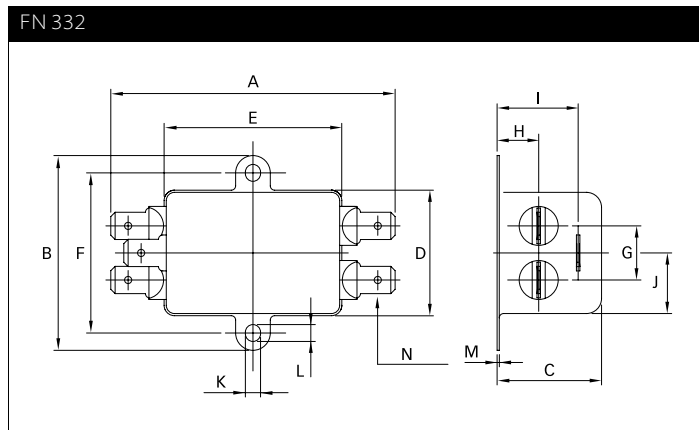
3 and 6 A types



10 A types



## Mechanical data



## Dimensions

	1 to 10 A types	Tolerances
<b>A</b>	65.6	±0.5
<b>B</b>	45	±0.5
<b>C</b>	24.8	±0.5
<b>D</b>	28	±0.5
<b>E</b>	40	±0.5
<b>F</b>	37	±0.4
<b>G</b>	12.5	±0.2
<b>H</b>	9.6	±0.2
<b>I</b>	18.7	±0.5
<b>J</b>	14	±0.5
<b>K</b>	3.5	
<b>L</b>	3.9	
<b>M</b>	0.5	
<b>N</b>	6.3 x 0.8	

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

Please visit [www.schaffner.com](http://www.schaffner.com) to find more details on filter connectors