High Performance IEC Inlet Filter

- Rated currents up to 20 A
- Optional medical versions (B type)
- Rear mounting
- Excellent attenuation in the lower frequency range

Performance indicators

<table>
<thead>
<tr>
<th>Attenuation performance</th>
<th>standard</th>
<th>high</th>
<th>very high</th>
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</table>

<table>
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<tr>
<th>Rated current (A)</th>
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<th>16</th>
<th>20</th>
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<td>12</td>
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<tr>
<td>16</td>
<td>-</td>
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Technical specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Maximum continuous operating voltage</td>
<td>250 VAC, 50/60 Hz</td>
</tr>
<tr>
<td>Operating frequency</td>
<td>DC to 400 Hz</td>
</tr>
<tr>
<td>Rated currents</td>
<td>1 to 20 A @ 50°C</td>
</tr>
<tr>
<td>Approvals by rated current</td>
<td>1 to 10 A (Semko) for 16 and 20 A types</td>
</tr>
<tr>
<td></td>
<td>1 to 20 A (UL, CSA)</td>
</tr>
<tr>
<td>High potential test voltage</td>
<td>P -&gt; PE 2000 VAC for 2 sec (standard types)</td>
</tr>
<tr>
<td></td>
<td>P -&gt; PE 2500 VAC for 2 sec (B types)</td>
</tr>
<tr>
<td></td>
<td>P -&gt; N 1100 VAC for 2 sec (1 to 10 A types)</td>
</tr>
<tr>
<td></td>
<td>P -&gt; N 1100 VDC for 2 sec (16 and 20 A types)</td>
</tr>
<tr>
<td>Protection category</td>
<td>IP 40 according to IEC 60529</td>
</tr>
<tr>
<td>Temperature range (operation and storage)</td>
<td>-25°C to +85°C (25/85/21)</td>
</tr>
<tr>
<td>Design corresponding to</td>
<td>UL 1283, CSA 22.2 No 8 1986, IEC/EN 60939</td>
</tr>
<tr>
<td>Flammability corresponding to</td>
<td>UL 94 V-2 or better</td>
</tr>
<tr>
<td>MTBF @ 40°C/230 V (MIL-HB-217F)</td>
<td>1,600,000 hours</td>
</tr>
</tbody>
</table>

Features and benefits

- Excellent conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- Rear mounting
- FN 9246 B versions comply with the requirements of 1MOP acc. to IEC/EN 60601-1 for creepage and clearance, leakage current and high potential testing
- Rated currents up to 20 A
- Custom-specific versions are available on request

Typical applications

- Electrical and electronic equipment
- Small to medium-sized machines and household equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment
- Building automation
- Medical equipment
- Lighting application

Approvals & Compliances

The FN 9246 IEC inlet filter combines an IEC inlet and mains filter with excellent filter attenuation in a small form factor. Choosing the FN 9246 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 current ratings and low leakage versions for medical applications are designed to offer you the desired solution.
## Filter selection table

<table>
<thead>
<tr>
<th>Filter</th>
<th>Rated current @ 40°C (25°C)</th>
<th>Leakage current* @ 250 VAC/50 Hz (@ 120 VAC/60 Hz)</th>
<th>Inductance L [mH]</th>
<th>Capacitance Cx [μF]</th>
<th>Capacitance Cy [nF]</th>
<th>Resistance R [kΩ]</th>
<th>Output connections</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 9246-1-06</td>
<td>1 (1.2)</td>
<td>0.31 (0.18)</td>
<td>50</td>
<td>1.22</td>
<td>2.2</td>
<td>470</td>
<td>-06</td>
<td>140</td>
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<tr>
<td>FN 9246-3-06</td>
<td>3 (3.5)</td>
<td>0.31 (0.18)</td>
<td>14</td>
<td>1.22</td>
<td>2.2</td>
<td>470</td>
<td>-06</td>
<td>140</td>
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<tr>
<td>FN 9246-6-06</td>
<td>6 (7.2)</td>
<td>0.31 (0.18)</td>
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<td>2.2</td>
<td>470</td>
<td>-06</td>
<td>140</td>
</tr>
<tr>
<td>FN 9246-10-06</td>
<td>10 (12)</td>
<td>0.31 (0.18)</td>
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<td>1.22</td>
<td>2.2</td>
<td>470</td>
<td>-06</td>
<td>140</td>
</tr>
<tr>
<td>FN 9246-12-06</td>
<td>12 (14)</td>
<td>0.31 (0.18)</td>
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<td>-06</td>
<td>140</td>
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<td>470</td>
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<td>275</td>
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<tr>
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</table>

*Maximum leakage under normal operating conditions (acc. to IEC60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

## 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

### 1 A types

### 3 to 10 A types

### 12 and 15 A types

### 16 and 20 A types

## Product selector

**FN 9246x-yy-...**

- **06:** Faston 6.3 x 0.8mm (spade/soldering)
- **1 to 20:** Rated current
  - Standard IEC inlet type C14 (1 to 15A types), C20 (16 and 20A types)
  - Blank: Standard version
  - **B:** Medical version (with bleed resistor and without Y2-capacitor)

For example: FN 9246-6-06, FN 9246 B-10-06
### Mechanical data

**1 to 15 A types**

<table>
<thead>
<tr>
<th>1 A</th>
<th>3 A</th>
<th>6 A</th>
<th>10 A</th>
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<td>M3 x 10 max.</td>
<td>M3 x 10 max.</td>
<td>M3 x 10 max.</td>
<td>M3 x 10 max.</td>
<td>M3 x 10 max.</td>
</tr>
</tbody>
</table>

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

### Power Cord with angled Locking System C13

- Locking system for standardized IEC C14 inlet filter
- No accidental disconnection
- Rated current up to 15 A
- Fits any Schaffner IEC C14 inlet filter
- Retrofit for any IEC C14 inlet
- Various power line plugs for international usage

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### IL 13P IEC C13 Rewireable Angled Connectors with Locking System

- Locking system for standardized IEC C14 inlet filter
- No accidental disconnection
- Rated current up to 15 A
- Fits any Schaffner IEC C14 inlet filter
- Retrofit for any IEC C14 inlet
- Various power line plugs for international usage

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### IL 13P IEC C13 Rewireable Connectors with Locking System

- Guards against accidental disconnection
- Requires no other equipment or special inlets to secure it
- Rewireable - offering total flexibility when assembling cables
- Fits any Schaffner IEC C14 inlet Filter
- Can be retrofitted
- Various power line plugs for international usage
- LSZH - Low smoke zero halogen

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