Excellent Performance EMC/EMI Filter

Superior attenuation performance
Optional earth line choke
Complies with IEC/EN 60601-1
Snap-in versions (S and S1 type)
Hot inlet versions (HI type)

Performance indicators

<table>
<thead>
<tr>
<th>Rated current (A)</th>
<th>Standard</th>
<th>High</th>
<th>Very high</th>
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<tr>
<td>0</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
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</table>

The FN 9244 IEC inlet filter combines an IEC inlet and mains filter with superior filter attenuation in a small form factor. Choosing the FN 9244 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, output connections, mounting possibilities and filters for medical applications are designed to offer you the desired solution.

Technical specifications

- **Maximum continuous operating voltage**: 250 VAC, 50/60 Hz
- **Operating frequency**: DC to 400 Hz
- **Rated currents**: 1 to 15 A @ 50°C max.
- **Approvals by rated current**
  - 1 to 10 A (ENEC, CQC)
  - 1 to 15 A (UL, CSA)
- **High potential test voltage**
  - P -> PE 2000 VAC for 2 sec (standard types)
  - P -> PE 2500 VAC for 2 sec (B types)
  - P -> N 1000 VAC for 2 sec
- **Protection category**: IP 40 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. B 1986, IEC/EN 60939
- **Flammability corresponding to**: UL 94 V-2 or better
- **MTBF @ 40°C/230 V (MII-HB-217F)**
  - ≤8 A: 2,035,000 hours
  - ≤15 A: 1,035,000 hours

Features and benefits

- Exceptional conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- Rear/front or snap-in mounting
- Standard or wide mounting flange
- FN 9244 B versions comply with the requirements of 1MOP acc. to IEC/EN 60601-1 for creepage and clearance, leakage current and high potential testing
- Optional earth line choke see FN 9244 E data sheet
- 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
- Medical devices (MDD)
- In-vitro diagnostic medical devices (IVDD)
- Rack-mounting equipment

Typical electrical schematic
## Filter selection table

<table>
<thead>
<tr>
<th>Filter</th>
<th>Rated current@ 50°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>
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<tr>
<td>FN9244x-1-06</td>
<td>1 (1.2)</td>
<td>0.31 (0.18)</td>
<td>59.53</td>
<td>0.1</td>
<td>2.2</td>
<td>-06</td>
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<tr>
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<td>FN9244xB-12-06Hi</td>
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<td>FN9244xB-15-06Hi</td>
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<td>1000</td>
<td></td>
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<td>38</td>
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</tbody>
</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 and 3 A types**

**6 to 10 A types**

**12 and 15 A types**
Product selector

- **FN 924400-yy-Hi-zz**
  - Snap range for S version only
  - Blank: Snap range 0.7 to 1.5mm
  - 20: Snap range 1.5 to 2.2mm
  - Blank: Standard IEC inlet type C14
  - Hi: Hot IEC inlet type C16 (12 and 15A types only)
  - 06: Faston 6.3 x 0.8mm (spade/soldering)
  - 1 to 15: Rated current
  - Blank: Standard version
  - R: Bleed resistor
  - B: Medical version (with bleed resistor and without Y2-capacitor)
  - U: Housing with wider mounting flanges
  - S: Snap-in version, snapper on vertical side
  - S1: Snap-in version, snapper on horizontal side

For example: FN 9244 B-15-06, FN 9244 S1B-10-06-20, FN 9244 R-12-06HI, FN 9244 UB-8-06

**Mechanical data**

**FN 9244**

**FN 9244-HI**

**FN 9244 S**

**FN 9244 S1**

**Distributor inventory**

Check stock levels at global distributors via the QR code

Search for the individual filter at [https://products.schaffner.com/stock](https://products.schaffner.com/stock) (qr-code)

Wider range of stock level availability:

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<thead>
<tr>
<th>Stock level per types 1 - 15 A</th>
<th>Link</th>
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<td>Standard housing types</td>
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<tr>
<td>Housing with wider mounting flanges (U)</td>
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<tr>
<td>Medical versions (B)</td>
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<td>Bleed resistor types (R)</td>
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## Dimensions

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<th>FN 9244 U</th>
<th>FN 92244 S</th>
<th>FN 92244 S1</th>
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<tr>
<td>C</td>
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<td>40</td>
<td>40</td>
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<tr>
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</table>

* Recommended torque for M3 (90° countersunk flat head) is 0.5 Nm

** For selecting the panel thickness, please refer to the filter selector table.

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 connectors.
**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

**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

**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

Datasheet PDF >
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