HF Performance EMC/EMI Filter

- Rated currents up to 10 A
- Faston connection
- Optional PCB through hole connection
- Good HF coupling to the equipment housing
- Optional medical versions (B type)

**Performance indicators**

<table>
<thead>
<tr>
<th>Attenuation performance</th>
<th>standard</th>
<th>high</th>
<th>very high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating current [A]</td>
<td>0</td>
<td>4</td>
<td>12</td>
</tr>
</tbody>
</table>

** Approvals & Compliances **

The FN 9226 IEC inlet filter combines an IEC inlet and mains filter with excellent filter attenuation in a small form factor. The FN 9226 is designed for printed circuit board mounting with good HF coupling to the equipment housing. Choosing the FN 9226 power entry module 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, output connections and low leakage versions for medical applications helps you to select the desired solution for your application.

** Technical specifications **

- **Maximum continuous operating voltage**: 250 VAC, 50/60 Hz
- **Operating frequency**: DC to 400 Hz
- **Rated currents**: 1 to 10 A @ 50°C max.
- **Approvals by rated current**: 1 to 10 A (ENEC, 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 760 VAC for 2 sec
- **Protection category**: IP 40 according 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 (Mil-HB-217F)**: 800,000 hours

** Features and benefits **

- High conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- Rear flange mounting
- FN 9226 B versions comply with the requirements of 1MOP acc. to IEC/EN 60601-1 for creepage, clearance, leakage current and high potential testing
- Faston connection or PCB through hole pins
- Good HF coupling
- Rated currents up to 10 A
- 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
- Consumer goods
- Test and measurement equipment
- EDP and office equipment
- Medical equipment
- Rack mounting equipment

** Typical electrical schematic **

![Typical electrical schematic](image)
## Filter selection table

<table>
<thead>
<tr>
<th>Filter</th>
<th>Rated current @ 50°C (25°C)</th>
<th>Leakage current* @ 250 VAC/50 Hz (25°C)</th>
<th>Inductance L</th>
<th>Capacitance Cx</th>
<th>Capacitance Cy</th>
<th>Resistance R</th>
<th>Output connections</th>
<th>Weight [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 9226-1-..</td>
<td>1 (2)</td>
<td>0.31 (0.18)</td>
<td>4.65</td>
<td>47.0</td>
<td>2.2</td>
<td>-02</td>
<td>-06</td>
<td>40</td>
</tr>
<tr>
<td>FN 9226-3-..</td>
<td>3 (3.5)</td>
<td>0.31 (0.18)</td>
<td>1.24</td>
<td>47.0</td>
<td>2.2</td>
<td>-02</td>
<td>-06</td>
<td>40</td>
</tr>
<tr>
<td>FN 9226-6-..</td>
<td>6 (7.2)</td>
<td>0.31 (0.18)</td>
<td>0.52</td>
<td>47.0</td>
<td>2.2</td>
<td>-02</td>
<td>-06</td>
<td>40</td>
</tr>
<tr>
<td>FN 9226-10-..</td>
<td>10 (11.6)</td>
<td>0.31 (0.18)</td>
<td>0.27</td>
<td>47.0</td>
<td>2.2</td>
<td>-02</td>
<td>-06</td>
<td>40</td>
</tr>
<tr>
<td>FN 9226 B-1-..</td>
<td>1 (2)</td>
<td>0.00</td>
<td>4.65</td>
<td>47.0</td>
<td>2200</td>
<td>-02</td>
<td>-06</td>
<td>40</td>
</tr>
<tr>
<td>FN 9226 B-3-..</td>
<td>3 (3.5)</td>
<td>0.00</td>
<td>1.24</td>
<td>47.0</td>
<td>2200</td>
<td>-02</td>
<td>-06</td>
<td>40</td>
</tr>
<tr>
<td>FN 9226 B-6-..</td>
<td>6 (7.2)</td>
<td>0.00</td>
<td>0.52</td>
<td>47.0</td>
<td>2200</td>
<td>-02</td>
<td>-06</td>
<td>40</td>
</tr>
<tr>
<td>FN 9226 B-10-..</td>
<td>10 (11.6)</td>
<td>0.00</td>
<td>0.27</td>
<td>47.0</td>
<td>2200</td>
<td>-02</td>
<td>-06</td>
<td>40</td>
</tr>
</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

### For example: FN 9226-6-02, FN 9226 B-10-06

### 1 and 3 A types

### 6 to 10 A types
Mechanical data

**Connection style -02**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>48</td>
<td>±0.5</td>
</tr>
<tr>
<td>B</td>
<td>22.4</td>
<td>±0.3</td>
</tr>
<tr>
<td>C</td>
<td>40</td>
<td>±0.2</td>
</tr>
<tr>
<td>D</td>
<td>35.15</td>
<td>±0.3</td>
</tr>
<tr>
<td>E</td>
<td>28.35</td>
<td>±0.3</td>
</tr>
<tr>
<td>F</td>
<td>5.7</td>
<td>±0.3</td>
</tr>
<tr>
<td>G</td>
<td>20</td>
<td>±0.3</td>
</tr>
<tr>
<td>H</td>
<td>Ø4</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>6</td>
<td>7.3</td>
</tr>
<tr>
<td>J</td>
<td>13.2</td>
<td>+0.6/-0</td>
</tr>
<tr>
<td>K</td>
<td>14</td>
<td>14.25</td>
</tr>
<tr>
<td>L</td>
<td>6.8</td>
<td>6.8</td>
</tr>
<tr>
<td>M</td>
<td>Ø3.5</td>
<td>Ø3.5</td>
</tr>
<tr>
<td>N</td>
<td>22.6</td>
<td>+0.2/-0</td>
</tr>
<tr>
<td>P</td>
<td>34.4</td>
<td>34.4</td>
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<tr>
<td>R</td>
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<td>Ø3.5</td>
</tr>
<tr>
<td>S</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>U</td>
<td>0.8</td>
<td>±0.1</td>
</tr>
<tr>
<td>V</td>
<td>34</td>
<td>±0.3</td>
</tr>
</tbody>
</table>

**Connection style -06**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>48</td>
<td>±0.5</td>
</tr>
<tr>
<td>B</td>
<td>22.4</td>
<td>±0.3</td>
</tr>
<tr>
<td>C</td>
<td>40</td>
<td>±0.2</td>
</tr>
<tr>
<td>D</td>
<td>35.15</td>
<td>±0.3</td>
</tr>
<tr>
<td>E</td>
<td>28.35</td>
<td>±0.3</td>
</tr>
<tr>
<td>F</td>
<td>5.7</td>
<td>±0.3</td>
</tr>
<tr>
<td>G</td>
<td>20</td>
<td>±0.3</td>
</tr>
<tr>
<td>H</td>
<td>Ø4</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>6</td>
<td>7.3</td>
</tr>
<tr>
<td>J</td>
<td>13.2</td>
<td>+0.6/-0</td>
</tr>
<tr>
<td>K</td>
<td>14</td>
<td>14.25</td>
</tr>
<tr>
<td>L</td>
<td>6.8</td>
<td>6.8</td>
</tr>
<tr>
<td>M</td>
<td>Ø3.5</td>
<td>Ø3.5</td>
</tr>
<tr>
<td>N</td>
<td>22.6</td>
<td>+0.2/-0</td>
</tr>
<tr>
<td>P</td>
<td>34.4</td>
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<tr>
<td>R</td>
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<td>S</td>
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<td>14</td>
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</tr>
<tr>
<td>V</td>
<td>34</td>
<td>±0.3</td>
</tr>
</tbody>
</table>

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

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

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

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