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)

**Technical specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<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 15 A @ 50 °C max.</td>
</tr>
<tr>
<td>Approvals by rated current</td>
<td>1 to 10 A (ENEC, CQC)</td>
</tr>
<tr>
<td></td>
<td>1 to 15 A (UL, CSA)</td>
</tr>
<tr>
<td>High potential test voltage</td>
<td>P → PE 2000 VAC for 2 sec (standard types)</td>
</tr>
<tr>
<td></td>
<td>P → PE 2500 VAC for 2 sec (B types)</td>
</tr>
<tr>
<td></td>
<td>P → N 1000 VAC for 2 sec</td>
</tr>
<tr>
<td>Protection category</td>
<td>IP40 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/230V (Mil-HB-217F)</td>
<td>≤8 A: 2,035,000 hours</td>
</tr>
<tr>
<td></td>
<td>≤15 A: 1,035,000 hours</td>
</tr>
</tbody>
</table>

**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.
- Optional medical versions (B type) comply with the requirements of IEC/EN 60601-1 for creepage and clearance, leakage current and high potential testing.
- Optional earth line choke see FN 9244E 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

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.
## Filter selection table

<table>
<thead>
<tr>
<th>Filter</th>
<th>Rated current @ 50 °C (25 °C)</th>
<th>Leakage current* @ 250 VAC/50 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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</thead>
<tbody>
<tr>
<td>FN 9244x-1-06</td>
<td>1 (1.2)</td>
<td>373</td>
<td>59.53</td>
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<td>2.2</td>
<td>-06</td>
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<td>38</td>
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<tr>
<td>FN 9244x-3-06</td>
<td>3 (3.5)</td>
<td>373</td>
<td>13.45</td>
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<td>FN 9244x-6-06</td>
<td>6 (7.2)</td>
<td>373</td>
<td>4.1</td>
<td>0.1</td>
<td>2.2</td>
<td>-06</td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>FN 9244x-8-06</td>
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<td>2.3</td>
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<td>-06</td>
<td></td>
<td>38</td>
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<tr>
<td>FN 9244x-10-06</td>
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<td>1.02</td>
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<td>0.1</td>
<td>1000</td>
<td>-06</td>
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</tbody>
</table>

* 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 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

![Graph 1]

6 to 10 A types

![Graph 2]

12 and 15 A types

![Graph 3]
Product selector

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

Mechanical data

Downloaded from Arrow.com.
**FN 9244U**

![Diagram](image)

**Installation**

![Diagram](image)

**Panel cut out**

![Diagram](image)

**Dimensions**

<table>
<thead>
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<th></th>
<th>FN 9244</th>
<th>FN 9244U</th>
<th>FN 92244S</th>
<th>FN 92244S1</th>
<th>FN 9244-HI</th>
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<td>51.85</td>
<td>29.9</td>
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<tr>
<td>B</td>
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<td>25</td>
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<tr>
<td>C</td>
<td>40 ±0.2</td>
<td>40 ±0.2</td>
<td>40 ±0.2</td>
<td>40 ±0.2</td>
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<td>Ø 3.3</td>
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<tr>
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<tr>
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<td>13.3</td>
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<td>R ≤ 3</td>
<td>R ≤ 1.5</td>
<td>R ≤ 1.5</td>
<td>R ≤ 3</td>
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<tr>
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<tr>
<td>R</td>
<td>M3</td>
<td>M3</td>
<td>M3</td>
<td>M3</td>
<td>M3</td>
</tr>
<tr>
<td>S</td>
<td>90°</td>
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<td>90°</td>
<td>90°</td>
<td>90°</td>
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<tr>
<td>T*</td>
<td>0.7-1.5</td>
<td>0.7-1.5</td>
<td>0.7-1.5</td>
<td>1.5-2.2</td>
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<td>T*</td>
<td>1.5-2.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 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

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