

Compact high-performance module FN 9222

- up to 20A current ratings
- IEC 950-compliant
- optional medical version (B type)
- snap-in version (S and S1 type)
- Nennstrom bis 20A
- IEC 950 konform
- Für medizinische Geräte als Option (Typ B)
- Snap-in Version (Typ S und S1)
- courants de service pouvant atteindre 20A
- conforme à CEI 950
- version médicale en option (type B)
- version snap-in (type S et S1)



Filter selection table

Choose the family FN xxx with the required body style and features, and add -?? to determine current rating, and /?? for output connections. Example: FN 9222-1/06 is a horizontal screw-mounting filter, rated for 1A, with fast-on outputs.

Approvals



| Family | Current ratings A at 40°C (25°) | | | | | | | | Output connection | Housing | |
|-------------------|------------------------------------|---------|---------|-----------|---------|---------|-----------|---------|-------------------|---------|---|
| | 1 (1.2) | 3 (3.5) | 6 (7.2) | 10 (11.6) | 10 (12) | 10 (15) | 16 (18.5) | 20 (23) | | | |
| FN 9222 -?? /?? | -1 | -3 | -6 | -10 | -12 | -15 | -16 | -20 | /06 /07 | ✓ | - |
| FN 9222S -?? /?? | -1 | -3 | -6 | -10 | -12 | -15 | - | - | /06 /07 | - | ✓ |
| FN 9222S1 -?? /?? | -1 | -3 | -6 | -10 | -12 | -15 | - | - | /06 /07 | - | ✓ |
| Inductance L mH | | | | | | | | | | | |
| | 12 | 2.5 | 0.78 | 0.225 | 0.11 | 0.075 | 0.54 | 0.4 | | | |

Additional specifications

| Filter type | Capacitance | | Maximum leakage μA/phase | Res. R MΩ | Weight g | Maximum operating volt. | | Operating frequency Hz | Hipot test voltage | |
|------------------------------|-------------|----------|-----------------------------|-----------------|-------------|-------------------------|-------|---------------------------|--------------------|------------|
| | Cx nF | Cy nF | | | | VAC | Hz | | PN→E VAC | P→N VDC |
| Standard types (up to 15A) | 100 | 2.2 | 190 | - | 40 | 250 | 50/60 | DC to 400 | 2000 | 1700 |
| R types (up to 15A) | 100 | 2.2 | 190 | 1 | 40 | 250 | 50/60 | DC to 400 | 2000 | 1700 |
| R types (16/20A) | 330 | 2.2 | 190 | 1 | 120 | 250 | 50/60 | DC to 400 | 2000 | 1700 |
| B types (medical, up to 15A) | 100 | - | 2 | 1 | 40 | 250 | 50/60 | DC to 400 | 2500 | 1700 |
| B types (medical, 16/20A) | 330 | - | 2 | 1 | 120 | 250 | 50/60 | DC to 400 | 2500 | 1700 |

MTBF at 40°C, 230V, per Mil-HB-217F: 1,800,000 hours

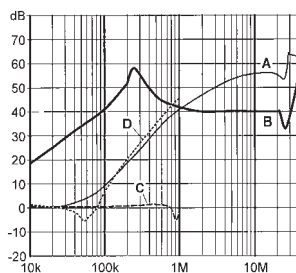
Temperature range: -25°C – +85°C

Please note that 16A and 20A filters are only available as R-types (FN 9222R-16-06 and FN9222R-20-06) with resistor.

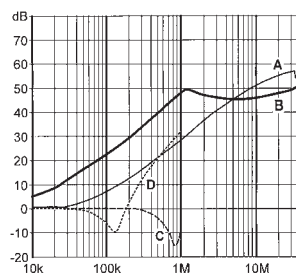
FN 9222 insertion loss

Per CISPR 17; A = 50Ω/50Ω sym, B = 50Ω/50Ω asym, C = 0.1Ω/100Ω sym, D = 100Ω/0.1Ω sym

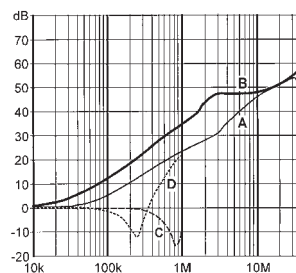
1 amp types



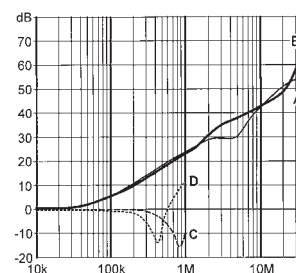
3 amp types



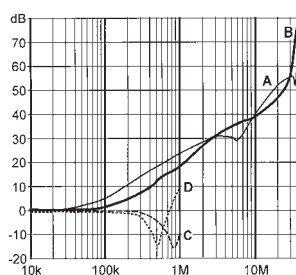
6 amp types



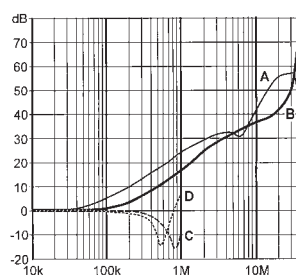
10 amp types



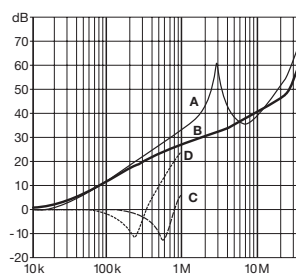
12 amp types



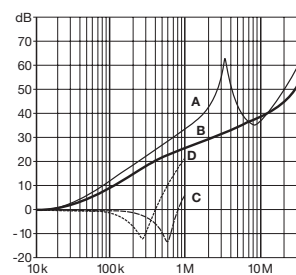
15 amp types



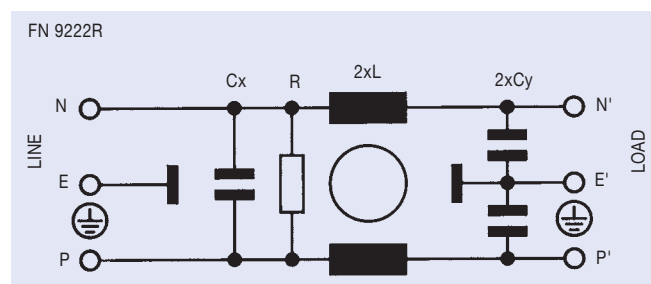
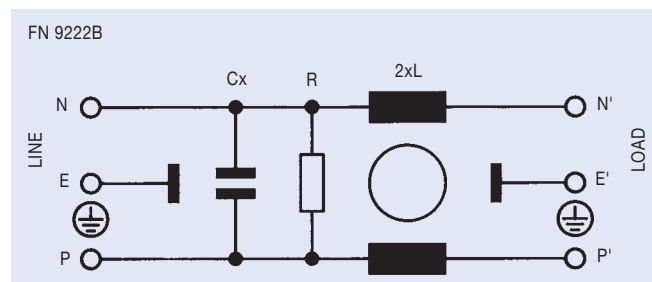
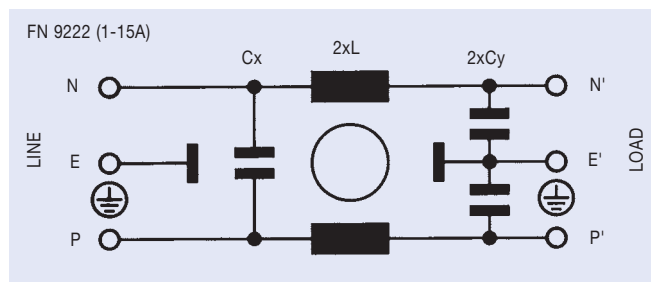
16 amp types



20 amp types



Electrical schematics



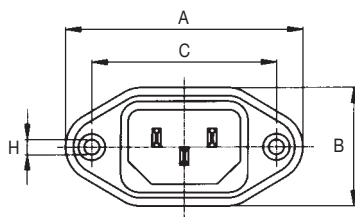
See tables for component values

Mechanical data

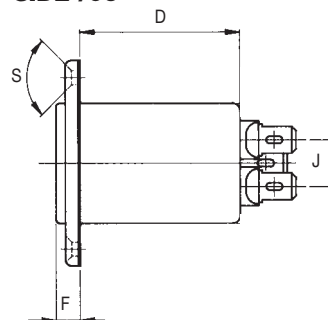
| FN 9222 | | |
|----------------|------------------------------------|--------|
| | up to 15A | 16-20A |
| A | 48 | 53 |
| B | 22.5 | 30 |
| C | 40 | 42 |
| D | 38.4 | 73 |
| F | 5.5 | |
| H | Ø3.3 | Ø3.5 |
| J | 13.3 | - |
| M | R≤3 | - |
| N | 21.5 ^{+0.5} ₋₀ | 27 |
| P | 28.5 ^{+0.5} ₋₀ | 34.7 |
| R | M3 | |
| S | 90° | |
| W | 6 | |
| Y | AWG 18 | |
| Z | 160 | |

FN 9222 up to 15A

FRONT

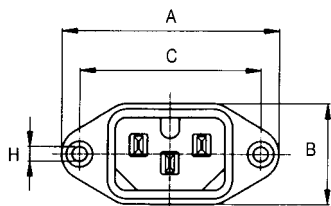


SIDE /06



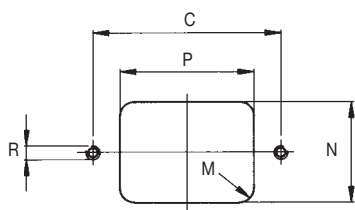
FN 9222 12 and 15A (versions with IEC hot inlet)

FRONT

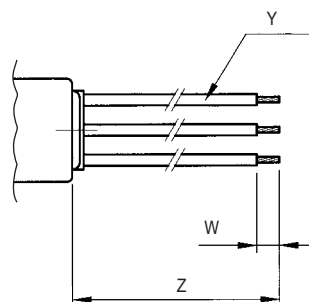


FN 9222x-12-xxHI
FN 9222x-15-xxHI

PANEL CUT-OUT

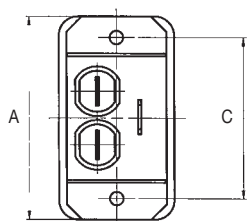


SIDE /07*

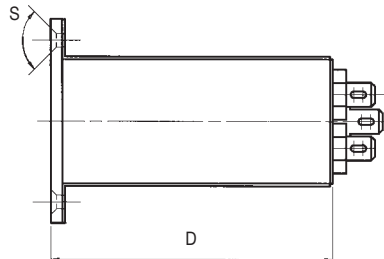


FN 9222R 16 and 20A

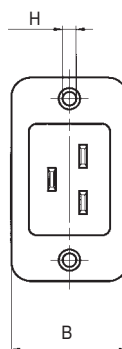
REAR



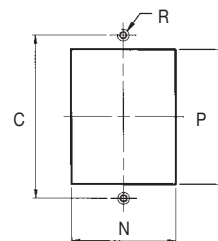
SIDE



FRONT



PANEL CUT-OUT



* FN 9222 filters with wire connections (/07) are currently in preparation. Their mechanical dimensions are subject to minor adjustments. Please contact your local Schaffner office for details.

Mechanical data

FN 9222S

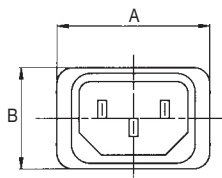
up to 15A

| | |
|----------|-------------------------|
| A | 29.9 |
| B | 22.4 |
| C | 27.8 |
| D | 38.4 |
| F | 5.5 |
| J | 13.3 |
| M | $R \leq 1.5$ |
| N | $20.8^{+0.1}_{-0}$ |
| P | $29.4^{+0.1}_{-0}$ |
| T | panel thickness 0.6-2mm |
| W | 6 |
| Y | AWG 18 |
| Z | 160 |

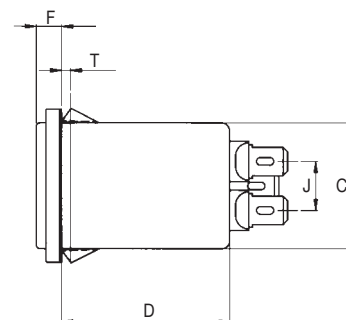
Snap-in version FN 9222S

(For installation instructions see page 92)

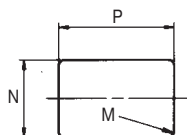
FRONT



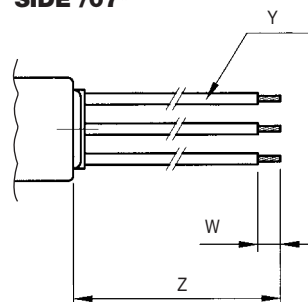
SIDE /06



PANEL CUT-OUT



SIDE /07*



FN 9222S1

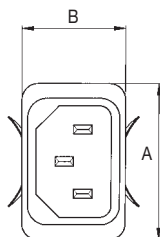
up to 15A

| | |
|----------|-------------------------|
| A | 29.9 |
| B | 22.4 |
| C | 27.8 |
| D | 38.4 |
| F | 5.5 |
| J | 13.3 |
| M | $R \leq 1.5$ |
| N | $21.9^{+0.1}_{-0}$ |
| P | $28.5^{+0.1}_{-0}$ |
| T | panel thickness 0.6-2mm |
| W | 6 |
| Y | AWG 18 |
| Z | 160 |

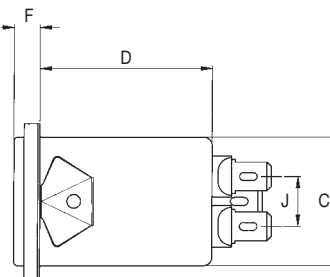
Snap-in version FN 9222S1

(For installation instructions see page 92)

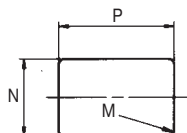
FRONT



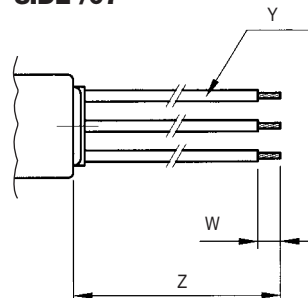
SIDE /06



PANEL CUT-OUT



SIDE /07*



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