

# 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



1Family	Current ratings A at 50°C (40°)								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 $\mu\text{A}/\text{phase}$	Res. R M $\Omega$	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

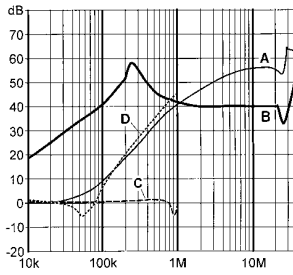
Temperature range: -25°C – +85°C

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

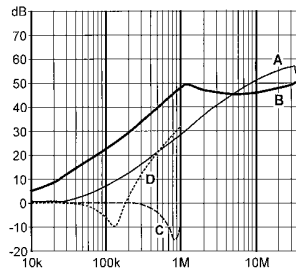
# FN 9222 insertion loss

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

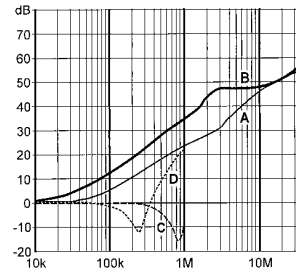
## 1 amp types



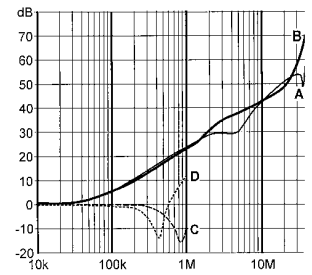
## 3 amp types



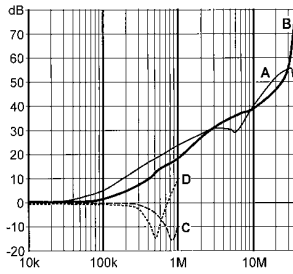
## 6 amp types



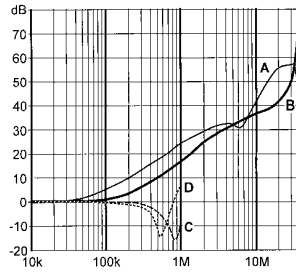
## 10 amp types



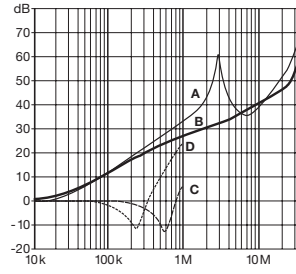
## 12 amp types



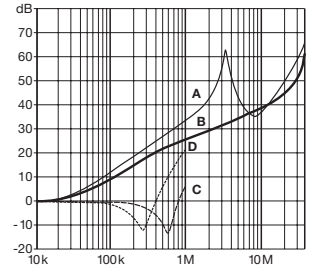
## 15 amp types



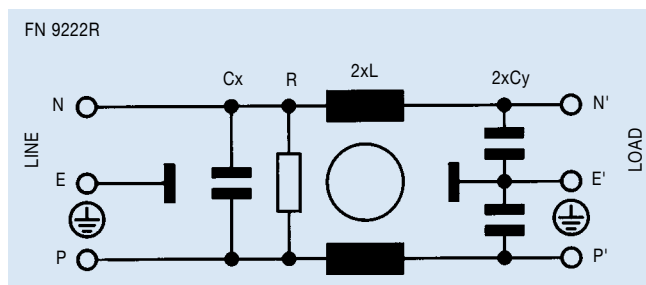
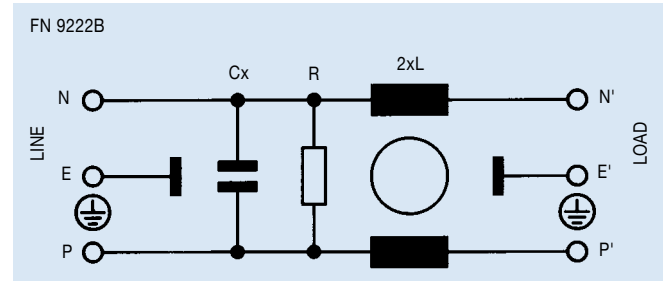
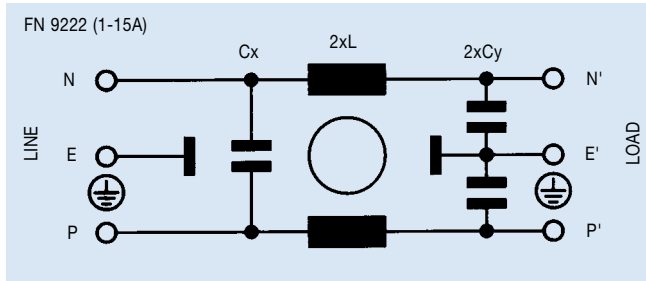
## 16 amp types



## 20 amp types



## Electrical schematics



See tables for component values

**Mechanical data**

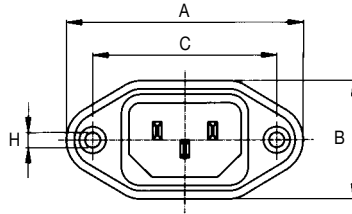
**FN 9222**

1 to 6A      10 to 15A      16-20A

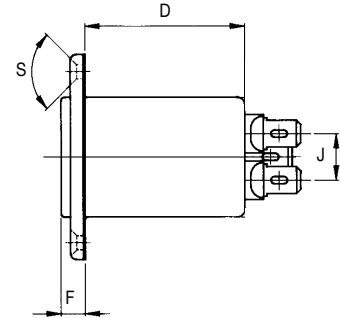
<b>A</b>	48	53
<b>B</b>	22.5	30
<b>C</b>	40	42
<b>D</b>	38.4	73
<b>F</b>	5.5	
<b>H</b>	Ø3.3	Ø3.5
<b>J</b>	13.3	-
<b>M</b>	R<3	-
<b>N</b>	21.5 <sup>+0.5</sup> <sub>-0</sub>	27
<b>P</b>	28.5 <sup>+0.5</sup> <sub>-0</sub>	34.7
<b>R</b>	M3	
<b>S</b>	90°	
<b>W</b>	6	
<b>Y</b>	AWG 18	AWG 16
<b>Z</b>	160	

**FN 9222 up to 15A**

**Front**

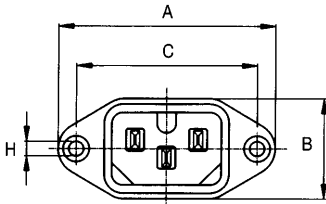


**Side /06**



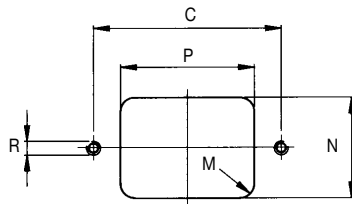
**FN 9222 12 and 15A  
(versions with IEC hot inlet)**

**Front**

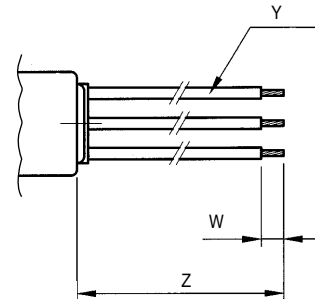


FN 9222x-12-xxHI  
FN 9222x-15-xxHI

**Panel cut-out**

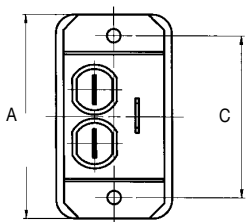


**Side /07\***

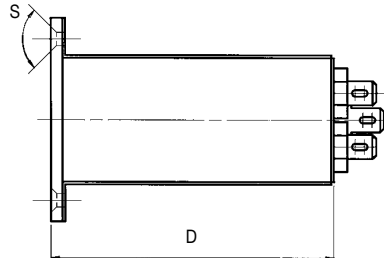


**FN 9222R 16 and 20A**

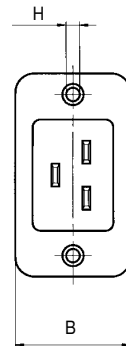
**Rear**



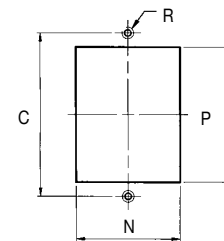
**Side**



**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

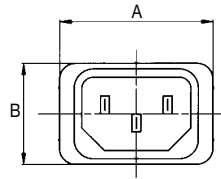
1 to 6A      10 to 15A

<b>A</b>	29.9	
<b>B</b>	22.4	
<b>C</b>	27.8	
<b>D</b>	38.4	
<b>F</b>	5.5	
<b>J</b>	13.3	
<b>M</b>	R≤1.5	
<b>N</b>	20.8 <sup>+0.1</sup> <sub>-0</sub>	
<b>P</b>	29.4 <sup>+0.1</sup> <sub>-0</sub>	
<b>T</b>	panel thickness 0.6-1.6mm	
<b>W</b>	6	
<b>Y</b>	AWG 18	AWG 16
<b>Z</b>	160	

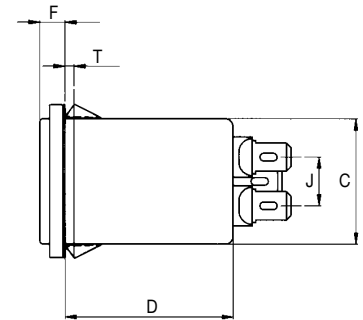
### Snap-in version FN 9222S

(For installation instructions see page 92)

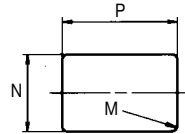
#### Front



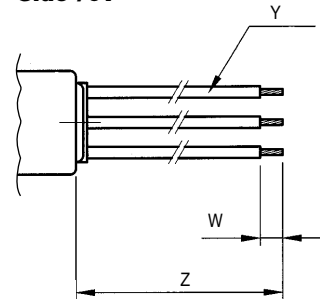
#### Side /06



#### Panel cut-out



#### Side /07\*



### FN 9222S1

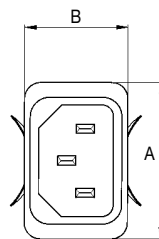
1 to 6A      10 to 15A

<b>A</b>	29.9	
<b>B</b>	22.4	
<b>C</b>	27.8	
<b>D</b>	38.4	
<b>F</b>	5.5	
<b>J</b>	13.3	
<b>M</b>	R≤1.5	
<b>N</b>	21.9 <sup>+0.1</sup> <sub>-0</sub>	
<b>P</b>	28.5 <sup>+0.1</sup> <sub>-0</sub>	
<b>T</b>	panel thickness 0.6-1.6mm	
<b>W</b>	6	
<b>Y</b>	AWG 18	AWG 16
<b>Z</b>	160	

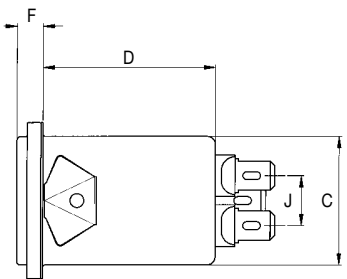
### Snap-in version FN 9222S1

(For installation instructions see page 92)

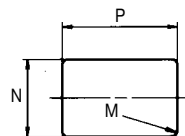
#### Front



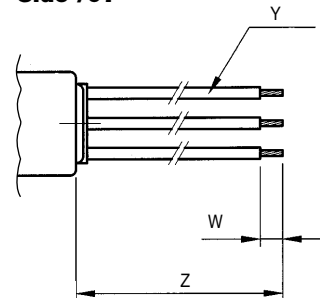
#### Side /06



#### Panel cut-out



#### Side /07\*



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