

IEC Appliance Inlet C20 with Filter, Front or Rear Side Mounting



Screw-on mounting
from front side



Snap-in mounting
from front side



Screw-on mounting
from rear side
with wires (stranded)



Approvals and Compliances

Description

- Panel Mount :
Screw-on version from front or rear side, snap-in version from front side
- 2 Functions :
Appliance Inlet Protection class I , Line filter in standard and medical version
- Solder, quick connect or wires (stranded)

Unique Selling Proposition

- Attractive flat front design
- Highly resistant since fully potted
- Various filter variants
- V-Lock cord retaining

Characteristics

- Compact design with optimal shielding
Suitable for assembly in metal plated plastic housings
- Version with class X1 and X2 (standard version) capacitors
- Universal line filter for standard applications
- Suitable for use in equipment according to IEC/UL 60950
Suitable for use in medical equipment according to IEC/UL 60601-1

Other versions on request

- 16A according to UL
- Capacity CX 330 nF

References

Alternative: version without line filter [4793](#); [4798](#)

Weblinks

[pdf datasheet](#), [html-datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#), [Microsite](#)

Newly available variants corresponding to V-Lock mating cordset. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset.

Technical Data

Ratings IEC	16A @ Ta 40 °C / 250 VAC; 50Hz
Ratings UL/CSA	20A @ Ta 40 °C / 250 VAC; 60Hz
Leakage Current	standard < 0.5 mA (250 V / 60 Hz) medical < 5 µA (250 V / 60 Hz)
Dielectric Strength	> 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec)
Impulse Withstand Voltage	> 2.5 kV between L-N (CX2) > 4 kV between L-N (CX1) > 5 kV between L/N-PE (Cy2) voltage (1.2/50 µs)
Allowable Operation Temperature	-25 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
IP-Protection	from front side IP 40 acc. to IEC 60529
Protection Class	Suitable for appliances with protection class I acc. to IEC 61140
Terminal	Solder, quick connect or wires (stranded)
Panel Thickness S	Screw: max 8 mm Mounting screw torque max 0.5 Nm Snap-in: 1 mm to 3 mm
Material: Housing	Thermoplastic, black, UL 94V-0

appliance inlet/-outlet	C20 acc. to IEC 60320-1, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 16A, Protection Class I
Line Filter	Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details
MTBF	> 3'000'000 h acc. to MIL-HB-217 F

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: C20F

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 104884
	UL Approvals	UL	UL File Number: E72928

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	IEC 60320-1	Appliance couplers for household and similar general purposes
	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
	Designed according to	IEC 61058-1	Switches for appliances. Part 1. General requirements
	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
	Designed according to	UL 1283	Electromagnetic interference filters
	Designed according to	CSA C22.2 no. 42	General Use Receptacles, Attachment Plugs, and Similar Wiring Devices
	Designed according to	CSA C22.2 no. 8	Electromagnetic interference (EMI) filters

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.
	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

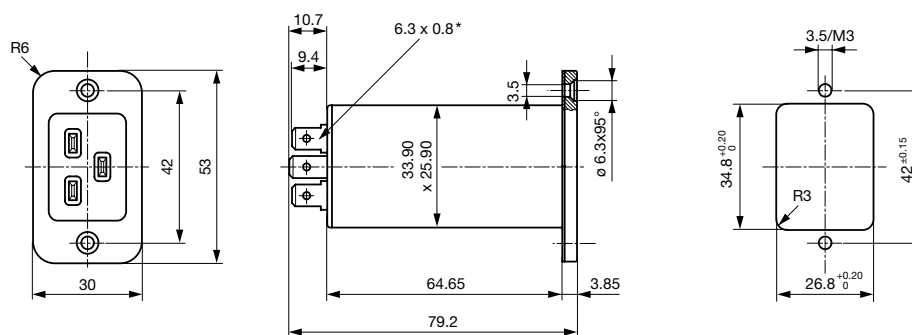
Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description
	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.
	MicrositeV-Lock	SCHURTER AG	V-Lock system are based on a matching plug-dose combination. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset.
	Medical Equipment	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1

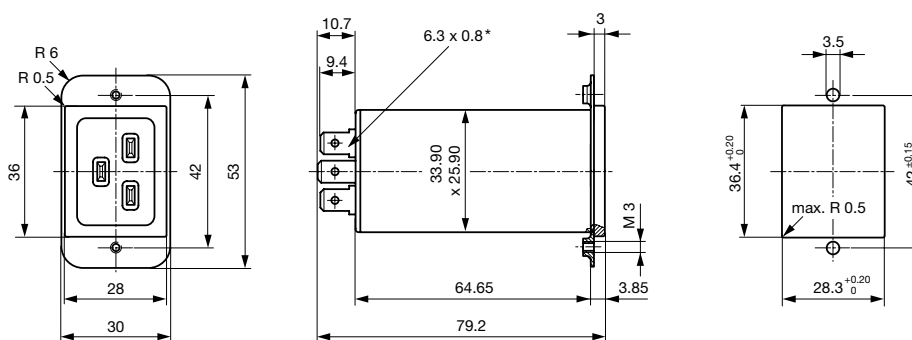
Dimensions [mm]

Screw-on mounting from front side

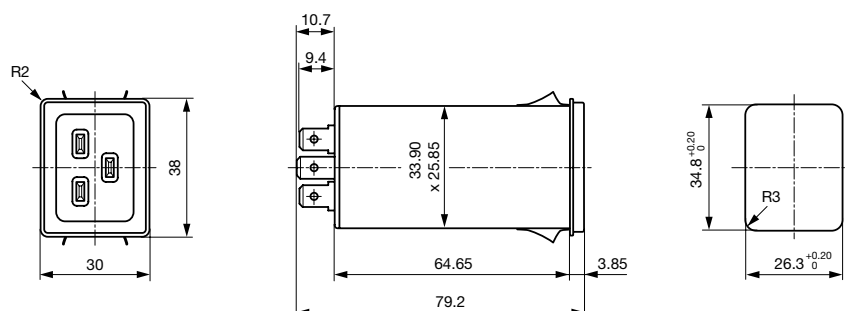


* Solder terminal: identical outer dimensions

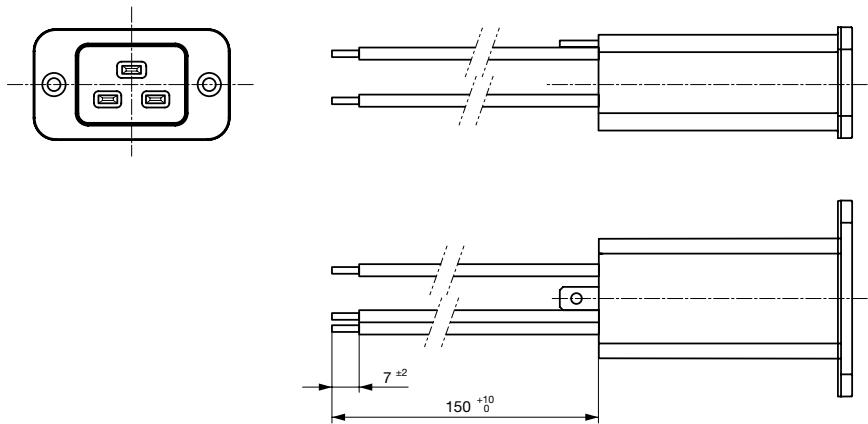
Screw-on mounting from rear side with metal flange



Snap-in mounting from front side



Screw-on mounting from front side with flexible wire



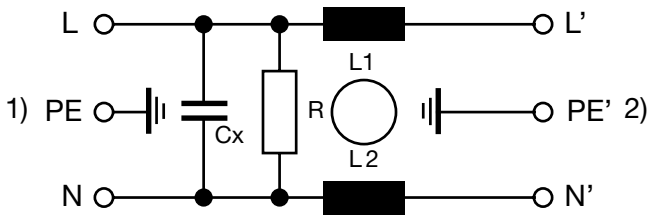
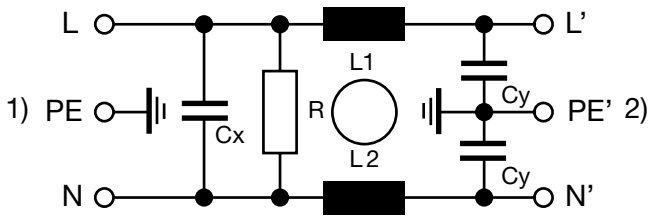
Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
16	Standard Version	2 x 0.3	100	2.2	1
16	Medical Version (M5)	2 x 0.3	100	-	1
16	Medical Version (M80)	2 x 0.3	100	0.47	1

Diagrams

Standard or medical version (M80)

Medical version (M5)



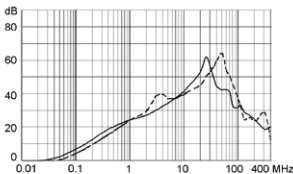
1) Line
2) Load

1) Line
2) Load

Attenuation Loss

Standard version

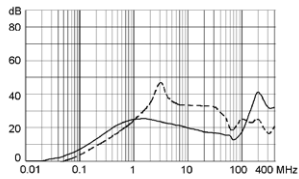
20 A



- - - 50Ω differential mode ____ 50Ω common mode

Medical version (M5)

20 A



All Variants

Rated Current IEC [A]	Rated Current UL [A]	Filter-Type	Panel mounting	Mounting side	Terminal	Capacitor	V-Lock	Order Number
16	20	Standard Version	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C20F.0111
16	20	Standard Version	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	X1 100nF		C20F.0113
16	20	Standard Version	Snap-in	Front Side	Solder terminals	X2 100nF		C20F.0011
16	20	Standard Version	Snap-in	Front Side	Solder terminals	X1 100nF		C20F.0013
16	20	Standard Version	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C20F.0101
16	20	Standard Version	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF	●	C20F.0101.21
16	20	Standard Version	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X1 100nF		C20F.0103
16	20	Standard Version	Screw	Front Side	Solder terminals	X2 100nF		C20F.0001
16	20	Standard Version	Screw	Front Side	Solder terminals	X2 100nF	●	C20F.0001.21
16	20	Standard Version	Screw	Front Side	Solder terminals	X1 100nF		C20F.0003
16	20	Standard Version	Screw	Rear Side	Flexible wire AWG14	X2 100nF		C20F.0221
16	20	Standard Version	Screw	Rear Side	Flexible wire AWG14	X1 100nF		C20F.0223
16	20	Standard Version	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C20F.0121
16	20	Standard Version	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	X1 100nF		C20F.0123
16	20	Standard Version	Screw	Rear Side	Solder terminals	X2 100nF		C20F.0021
16	20	Standard Version	Screw	Rear Side	Solder terminals	X1 100nF		C20F.0023
16	20	Medical Version (M5)	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C20F.0112
16	20	Medical Version (M5)	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	X1 100nF		C20F.0114
16	20	Medical Version (M5)	Snap-in	Front Side	Solder terminals	X2 100nF		C20F.0012
16	20	Medical Version (M5)	Snap-in	Front Side	Solder terminals	X1 100nF		C20F.0014
16	20	Medical Version (M5)	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C20F.0102
16	20	Medical Version (M5)	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X1 100nF		C20F.0104
16	20	Medical Version (M5)	Screw	Front Side	Solder terminals	X2 100nF		C20F.0002
16	20	Medical Version (M5)	Screw	Front Side	Solder terminals	X1 100nF		C20F.0004
16	20	Medical Version (M5)	Screw	Rear Side	Flexible wire AWG14	X2 100nF		C20F.0222
16	20	Medical Version (M5)	Screw	Rear Side	Flexible wire AWG14	X1 100nF		C20F.0224
16	20	Medical Version (M5)	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C20F.0122
16	20	Medical Version (M5)	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	X1 100nF		C20F.0124
16	20	Medical Version (M5)	Screw	Rear Side	Solder terminals	X2 100nF		C20F.0022
16	20	Medical Version (M5)	Screw	Rear Side	Solder terminals	X1 100nF		C20F.0024

Most Popular.

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

Wire length: 150 mm

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ELECTRONIC COMPONENTS

Mating Outlets/Connectors shuttered



[Power Cord Overview complete](#)

[Overview Power Cord with IEC Appliance Connector C19, V-Lock, straight](#)

[VAC19KS](#)

[Power Cord further types to C20F](#)

Mouser Electronics

Authorized Distributor

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Schurter:

<u>C20F.0002</u>	<u>C20F.0013</u>	<u>C20F.0011</u>	<u>C20F.0012</u>	<u>C20F.0014</u>	<u>C20F.0001</u>	<u>C20F.0004</u>	<u>C20F.0003</u>	<u>C20F.0021</u>
<u>C20F.0022</u>	<u>C20F.0023</u>	<u>C20F.0024</u>	<u>C20F.0025</u>	<u>C20F.0026</u>	<u>C20F.0102</u>	<u>C20F.0103</u>	<u>C20F.0104</u>	<u>C20F.0111</u>
<u>C20F.0112</u>	<u>C20F.0113</u>	<u>C20F.0114</u>	<u>C20F.0123</u>	<u>C20F.0124</u>	<u>C20F.0125</u>	<u>C20F.0126</u>	<u>C20F.0221</u>	<u>C20F.0222</u>
<u>C20F.0223</u>	<u>C20F.0224</u>	<u>C20F.0122</u>	<u>C20F.0121</u>	<u>C20F.0101</u>	<u>C20F.0101.21</u>			