

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)



See below:
[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; 50 Hz |
| Ratings UL/CSA | 20A @ Ta 40 °C / 250 VAC; 60 Hz |
| 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 |

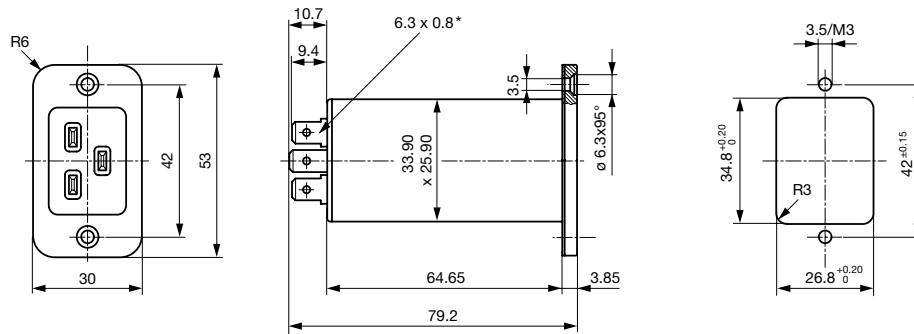
Compliances

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 |

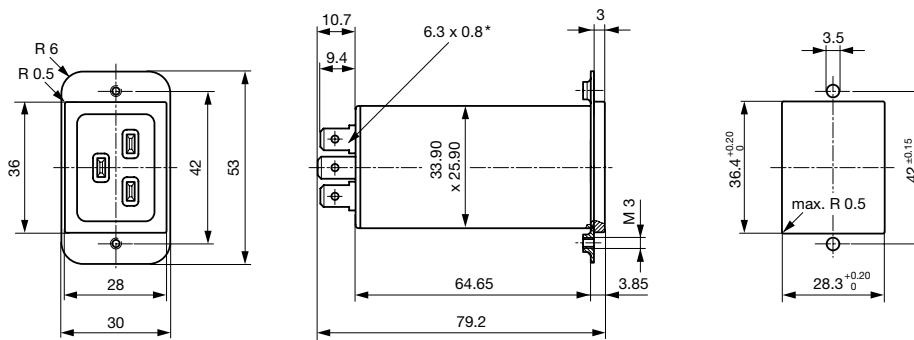
Dimensions [mm]

Screw-on from front side

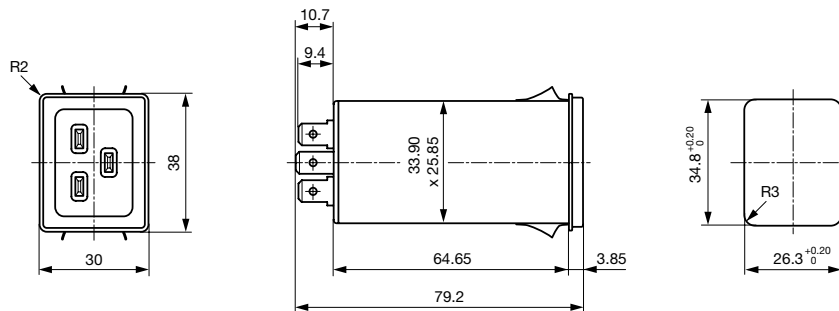


* Solder terminal: identical outer dimensions

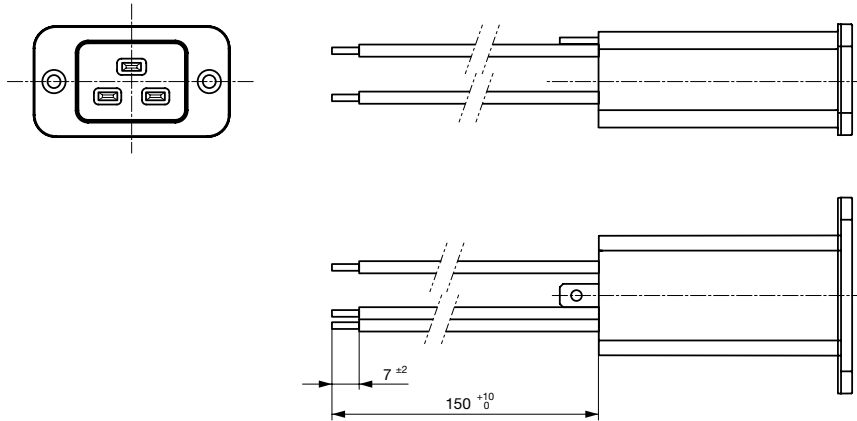
Screw-on mounting from rear side with metal flange



Snap-in mounting from front side



Screw-on mounting from front side with flexible wire



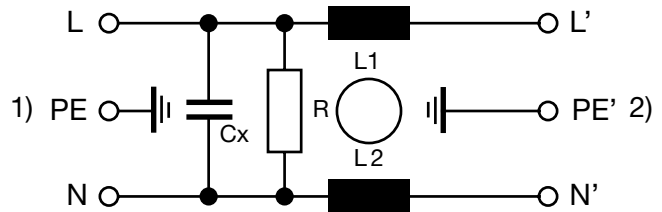
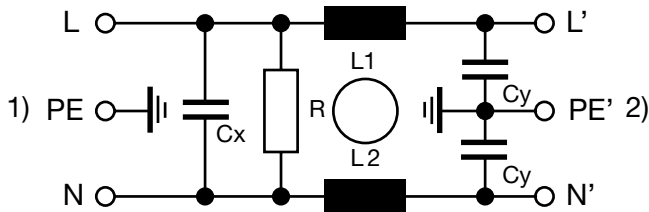
Technical Data of Filter-Components

| 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

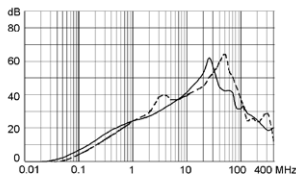
1) Line
2) Load

Attenuation Loss

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

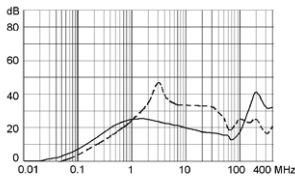
Standard version

20 A



Medical version (M5)

20 A



All Variants

| Rated Current IEC | Rated Current UL | 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 | 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 | 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

Packaging unit 20 Pcs

Accessories

Description



[Wire Harness](#)
 Wire harness for SCHURTER products



[Assorted Covers](#)
 Rear Cover

0859.0047



[Cord retaining kits](#)
 Cord retaining strain relief

Countersunk, K

4700.0010

Flat head, L

4700.0011

Mating Outlets/Connectors

Category / Description



[Connector Overview complete](#)

IEC Connector C19, Rewireable, Straight

4795

IEC Connector C19, Rewireable, Angled

4790

IEC Connector C19, Rewireable, Straight

0104U

[Connector further types to C20F](#)

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](#)