

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



Screw-on mounting
from front side

Snap-in mounting
from front side



See below:
[Approvals and Compliances](#)

Description

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

Unique Selling Proposition

- Attractive flat front design
- Highly resistant since fully potted
- Interrupts ground loops
- 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 medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP)
For applications according IEC/UL 62368-1 we recommend variants with bleed resistor

Other versions on request

- 16A according to UL
- Capacity CX 330 nF

References

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

Weblinks

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

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 / 250VAC; 50Hz | 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 |
| Ratings UL/CSA | 20A @ Ta 40 °C / 250VAC; 60Hz | Line Filter | Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details |
| Leakage Current | standard < 0.5 mA (250 V / 60Hz) medical < 5 µA (250 V / 60 Hz) | MTBF | > 3'000'000 h acc. to MIL-HB-217 F |
| 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 | front side IP40 acc. to IEC 60529 | | |
| Protection Class | Suitable for appliances with protection class I acc. to IEC 61140 | | |
| Terminal | Solder / quick connect / wires (stranded) | | |
| Panel Thickness S | Screw: max 8 mm Mounting screw torque max 0.5 Nm Snap-in: 1 mm to 3 mm | | |
| Material | Thermoplastic, black, UL 94V-0 | | |

Approvals and Compliances




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

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

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 | UR File Number: E72928 |
|  | CQC Approvals | CQC | CQC Certificate Number: CQC18001191999 |



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 |
|--|--------------------------------|----------------|--|
|  | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |
|  | Suitable for applications acc. | IEC 60601-1 | Medical electrical equipment - Part 1: General requirements for basic safety and essential performance |

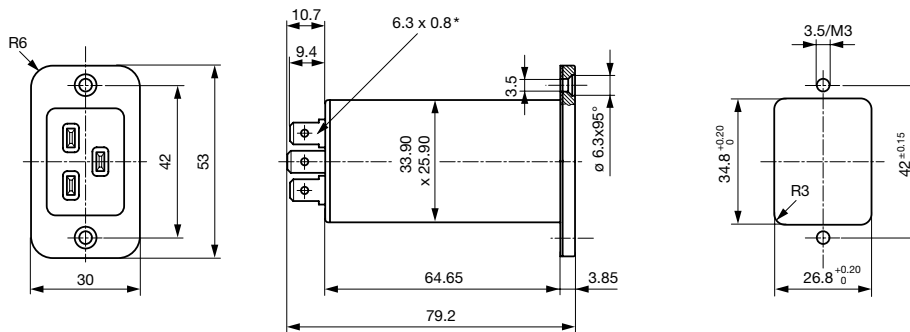
Compliances

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. |
|  | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008. |
|  | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
|  | 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. |
|  | | 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 (1 MOOP, 1 MOPP) |

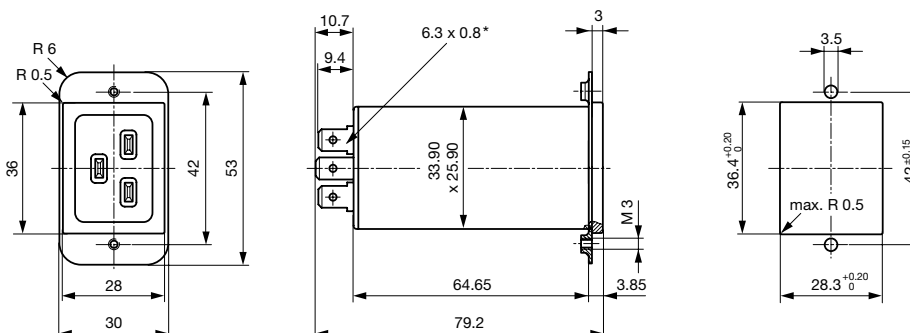
Dimensions [mm]

Screw-on from front side

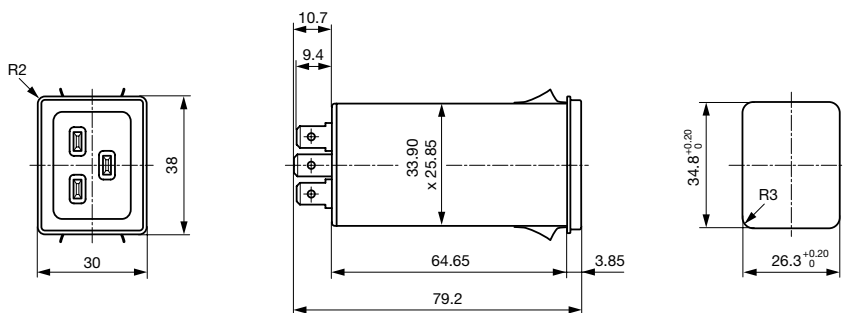


* Solder terminal: identical outer dimensions

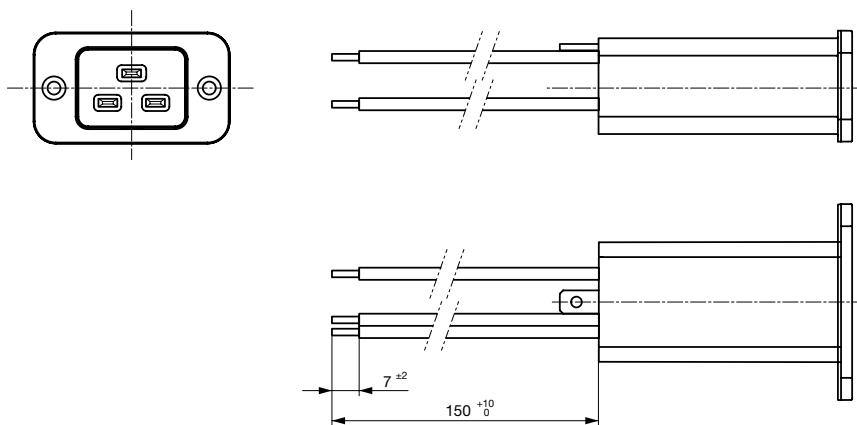
Screw-on mounting from rear side with metal flange



Snap-in mounting from front side



Screw-on mounting from front side with flexible wire

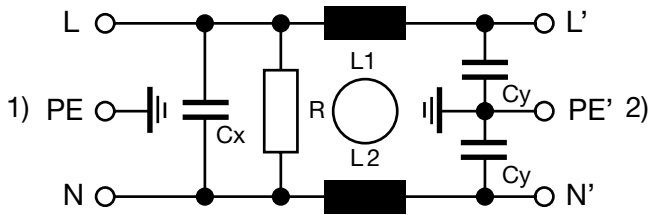


Technical Data of Filter-Components

| Rated Current [A] | Filter-Type | Inductance L1/ L2 [mH] | Inductance L3 [mH] | Capacitance CX [nF] | Capacitance CY [nF] | R [MΩ] |
|-------------------|---|---------------------------|-----------------------|------------------------|------------------------|--------|
| 16 | Standard version | 2 x 0.3 | - | 100 | 2.2 | 1 |
| 16 | Standard Version with Ground Line Choke | 2 x 0.3 | 0.15 | 330 | 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 |
| 16 | Medical Version (M5) with Ground Line Choke | 2 x 0.3 | 0.15 | 330 | - | 1 |

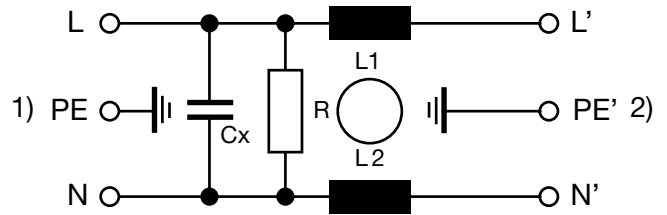
Diagrams

Standard version



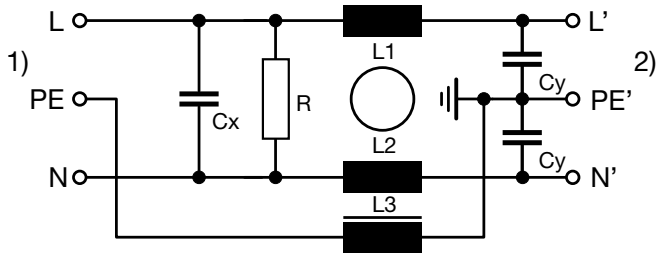
- 1) Line
- 2) Load

Medical Version (M5)



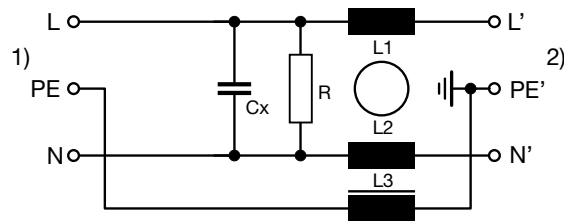
- 1) Line
- 2) Load

Standard version with ground line choke



- 1) Line
- 2) Load

Medical Version (M5) with ground line choke



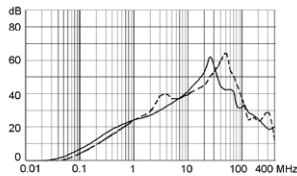
- 1) Line
- 2) Load

Attenuation Loss

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

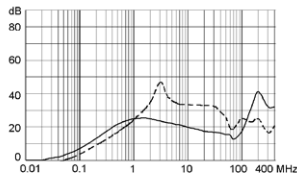
Standard version

20 A



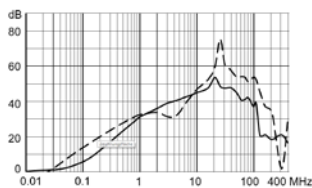
Medical version (M5)

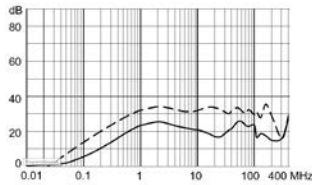
20 A



Standard version with ground line choke

20 A



Medical Version (M5) with ground line choke
20A

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 | 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 | Standard Version with Ground Line Choke | Snap-in | Front Side | Quick connect terminals 6.3 x 0.8 mm | X2 330nF | ● | 3-124-295 |
| 16 | 20 | Standard Version with Ground Line Choke | Screw | Front Side | Quick connect terminals 6.3 x 0.8 mm | X2 330nF | ● | 3-124-273 |
| 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.0022 |
| 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.0024 |
| 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) with Ground Line Choke | Screw | Front Side | Quick connect terminals 6.3 x 0.8 mm | X2 330nF | ● | 3-124-294 |

| Rated Current IEC [A] | Rated Current UL [A] | Filter-Type | Panel mounting | Mounting side | Terminal | Capacitor | V-Lock | Order Number |
|-----------------------|----------------------|-------------|----------------|---------------|----------|-----------|--------|--------------|
|-----------------------|----------------------|-------------|----------------|---------------|----------|-----------|--------|--------------|

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



RC320
 Rear Cover for Power Entry Module



Cord_retaining_kits
 Cord retaining strain relief

Countersunk, K

4700.0010

Flat head, L

4700.0011

Mating Outlets/Connectors

Category / Description



[Connector Overview complete](#)

| | |
|---|-------|
| 4795, Mounting: Power Cord, Cable Connector: IEC C19 | 4795 |
| 4790, Mounting: Power Cord, Screw Connector: IEC C19 | 4790 |
| 0104U, Mounting: Power Supply Cord, Screw clamps Connector: IEC C19 | 0104U |

Mating Outlets/Connectors shuttered



[Power Cord Overview complete](#)

| | |
|---|---------|
| VAC19KS, Overview, V-Lock cord retaining, diverse Connector IEC C19, diverse, black | VAC19KS |
|---|---------|