

## AC Filter 2-Stage, Very High Symmetrical and Asymmetrical Attenuation



See below:

### Approvals and Compliances

#### Description

- Line-filter in standard version
- 2 stage
- high attenuation

#### Characteristics

- Designed for increased requirements
- 2-stage line filter with increased attenuation  
Protection against interference voltage from the mains
- Especially designed for industrial applications such as: Frequency Converters, Stepper Motor Drives, UPS-Systems, Inverters  
Especially suitable for use in switching power supplies
- Suitable for use in equipment according to IEC/UL 62368-1

#### References

We recommend for new applications the type [FMBB EP](#); [FMBB NEO](#)

#### Weblinks

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

#### Technical Data

|                                 |                                                                                                  |
|---------------------------------|--------------------------------------------------------------------------------------------------|
| Ratings IEC                     | 3 - 36 A @ Ta 40 °C / 250 VAC; 50 Hz                                                             |
| Ratings UL/CSA                  | 3 - 36 A @ Ta 40 °C / 125 VAC; 60 Hz                                                             |
| Leakage Current                 | standard < 0.5 mA (250 V / 60 Hz)                                                                |
| Dielectric Strength             | > 1.7 kVDC between L-N<br>> 2.7 kVDC between L/N-PE<br>Test voltage (2 sec)                      |
| Allowable Operation Temperature | -25 °C to 100 °C                                                                                 |
| Climatic Category               | 25/100/21 acc. to IEC 60068-1                                                                    |
| Protection Class                | Suitable for appliances with protection class I acc. to IEC 61140                                |
| Terminal                        | Quick connect terminals 6.3 x 0.8 mm / screw terminals<br>Current >24 A requires screw terminals |
| Material                        | Nickel plated steel                                                                              |

|             |                                                                                                           |
|-------------|-----------------------------------------------------------------------------------------------------------|
| Line Filter | Standard and Industrial Version, IEC 60939, UL 1283, CSA C22.2 no. 8<br><a href="#">Technical Details</a> |
| MTBF        | > 200'000h 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](#)

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: FSW2

| Approval Logo                                                                       | Certificates                  | Certification Body | Description                  |
|-------------------------------------------------------------------------------------|-------------------------------|--------------------|------------------------------|
|  | <a href="#">VDE Approvals</a> | VDE                | Certificate Number: 40019274 |
|  | <a href="#">UL Approvals</a>  | UL                 | UR File Number: E72928       |

Product standards

Product standards that are referenced

| Organization                                                                     | Design                | Standard        | Description                                                  |
|----------------------------------------------------------------------------------|-----------------------|-----------------|--------------------------------------------------------------|
|  | Designed according to | IEC 60939       | Passive filters for suppressing electromagnetic interference |
|  | Designed according to | UL 1283         | Passive filters for suppressing electromagnetic interference |
|  | 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 |

Compliances

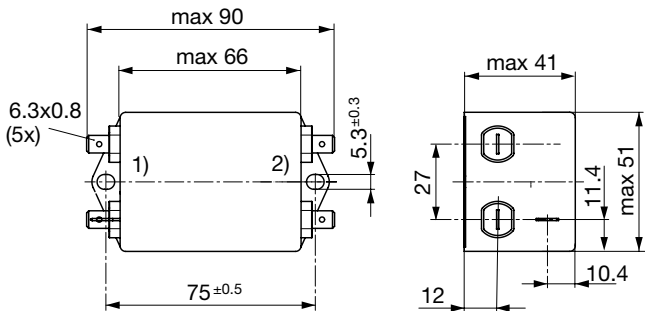
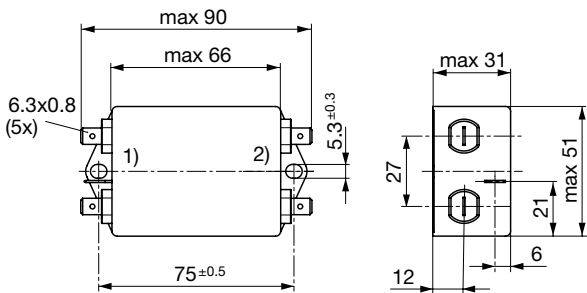
The product complies with following Guide Lines

| Identification                                                                     | Details                                        | Initiator   | Description                                                                                                                                                                                           |
|------------------------------------------------------------------------------------|------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <a href="#">CE declaration of conformity</a>   | 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. |
|    | <a href="#">UKCA declaration of conformity</a> | 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.                               |

Dimension [mm]

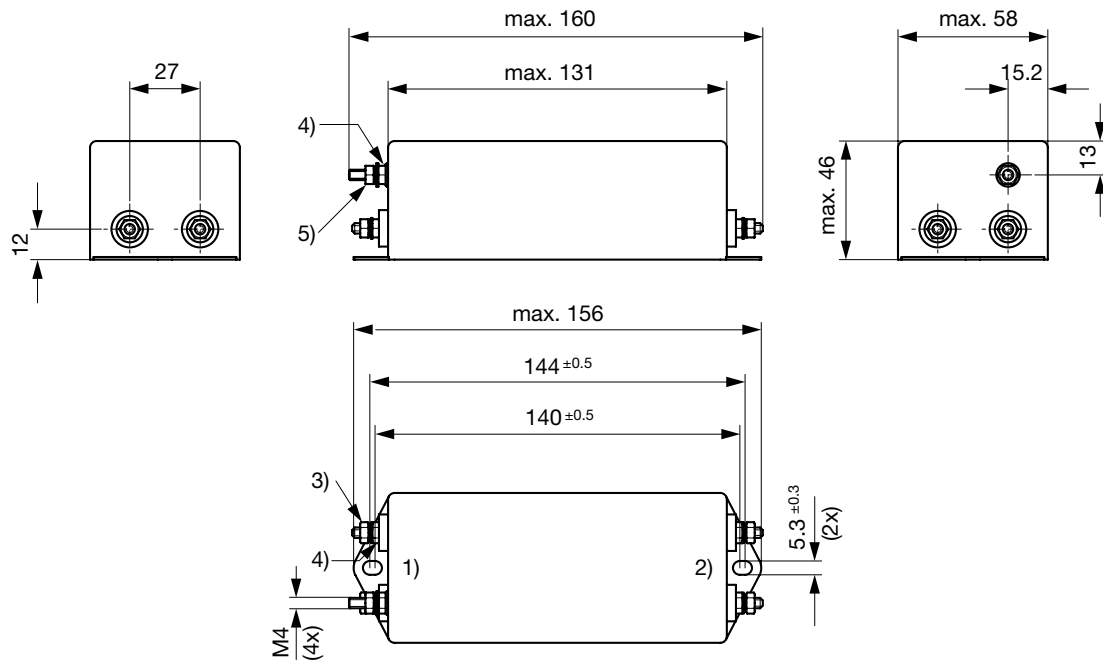
Case 49

Case 48



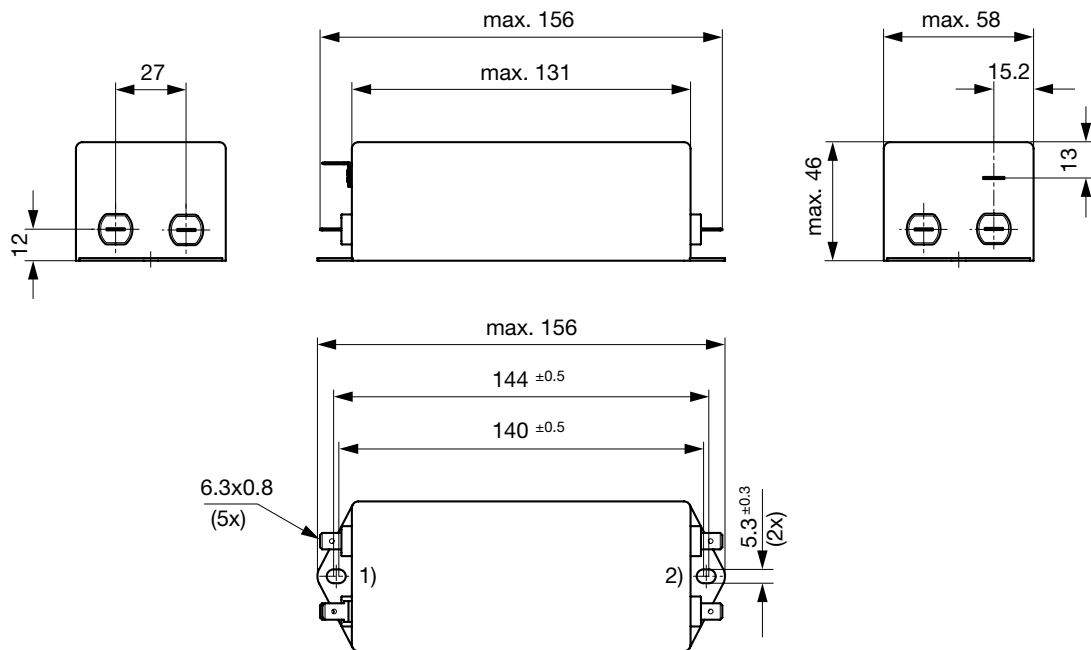
1) Line  
2) Load

Case FF with bolt and nut M4



- 1) Line
- 2) Load
- 3) Lock-nut do not unscrew
- 4) Nut torque 0.85...1 Nm, keep lock-nut fastened

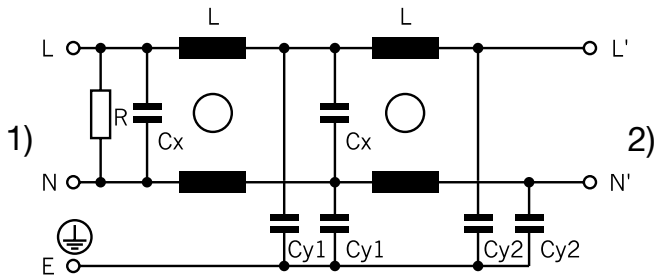
Case FF with quick connect terminals



- 1) Line
- 2) Load

Diagrams

Standard version

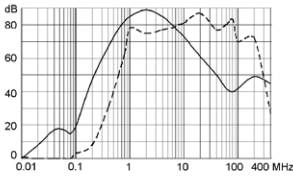


1) Line  
2) Load

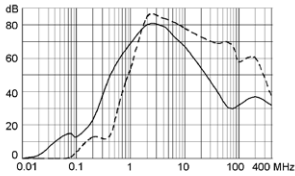
Attenuation Loss

Standard version

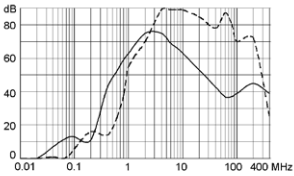
3 A



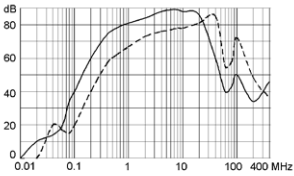
6 A



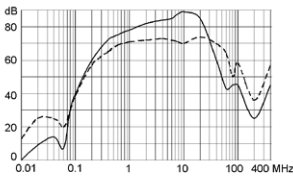
10 A



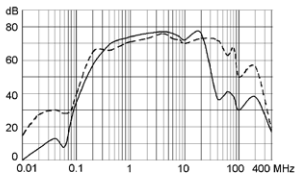
16 A



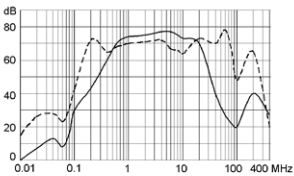
20 A



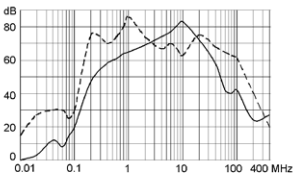
24 A



25 A

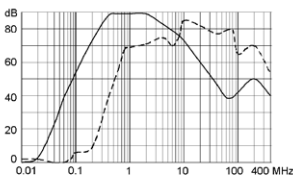


36 A

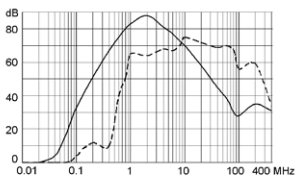


Industrial version

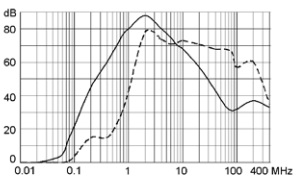
3 A



6 A



10 A



Variants

| Rated Current [A] | Filter-Type        | Leakage Current [mA] | Terminal                | L [mH]   | Cx [μF] | Cy1 [nF] | Cy2 [nF] | R [MΩ] | Weight [g] | Housing | Packaging [PCS] | Order Number |
|-------------------|--------------------|----------------------|-------------------------|----------|---------|----------|----------|--------|------------|---------|-----------------|--------------|
| 3                 | Standard version   | 0.25                 | Quick connect terminals | 2 x 2    | 0.1     | 1.5      | 1        | 1      | 157 g      | 49      | 10              | 5500.2058    |
| 6                 | Standard version   | 0.25                 | Quick connect terminals | 2 x 0.8  | 0.1     | 1.5      | 1        | 1      | 159 g      | 49      | 10              | 5500.2060    |
| 10                | Standard version   | 0.25                 | Quick connect terminals | 2 x 0.4  | 0.1     | 1.5      | 1        | 1      | 159 g      | 49      | 10              | 5500.2062    |
| 16                | Standard version   | 0.5                  | Quick connect terminals | 2 x 1.3  | 1       | 4.7      | -        | 1      | 200 g      | 48      | 10              | 5500.2218    |
| 20                | Standard version   | 0.5                  | Quick connect terminals | 2 x 2.4  | 2.2     | 4.7      | -        | 1      | 840 g      | FF      | 4               | 5500.2219    |
| 24                | Standard version   | 0.5                  | Quick connect terminals | 2 x 2    | 2.2     | 4.7      | -        | 1      | 910 g      | FF      | 4               | 5500.2220    |
| 25                | Standard version   | 0.5                  | Bolts and nuts M4       | 2 x 2    | 2.2     | 4.7      | -        | 1      | 910 g      | FF      | 4               | 5500.2221    |
| 36                | Standard version   | 0.5                  | Bolts and nuts M4       | 2 x 1.23 | 2.2     | 4.7      | -        | 1      | 910 g      | FF      | 4               | 5500.2222    |
| 3                 | Industrial version | 2.5                  | Quick connect terminals | 2 x 2    | 0.1     | 22       | 1        | 1      | 157 g      | 49      | 10              | 5500.2059    |

| Rated Current [A] | Filter-Type        | Leakage Current [mA] | Terminal                | L [mH]  | Cx [μF] | Cy1 [nF] | Cy2 [nF] | R [MΩ] | Weight [g] | Housing | Packaging [PCS] | Order Number |
|-------------------|--------------------|----------------------|-------------------------|---------|---------|----------|----------|--------|------------|---------|-----------------|--------------|
| 6                 | Industrial version | 2.5                  | Quick connect terminals | 2 x 0.8 | 0.1     | 22       | 1        | 1      | 159 g      | 49      | 10              | 5500.2061    |
| 10                | Industrial version | 2.5                  | Quick connect terminals | 2 x 0.4 | 0.1     | 22       | 1        | 1      | 159 g      | 49      | 10              | 5500.2063    |

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>