#### AC Filter Cost Optimized



FMLB-51

#### See below: **Approvals and Compliances** Description **Characteristics** - Line filter in standard and medical version - Designed for universal industrial applications - 1-stage - High attenuation at maximum resp. asymmetric load independent from - standard attenuation the line impedance Protection against interference voltage from the mains Possible interferences generated in the equipment are strongly attenuated - Especially designed for industrial applications such as: Frequency Converters, Stepper Motor Drives, UPS-Systems, Inverters - Suitable for use in equipment according to IEC/UL 62368-1 Suitable for use in medical equipment according to IEC/UL 60601-1 Other versions on request Version with wire connection References Alternative: Standard version We recommend for new applications the type FMAB NEO Weblinks pdf data sheet, html datasheet, General Product Information, Approvals, Distributor-Stock-Check, Detailed request for product, Microsite **Technical Data** Ratings IEC 6 - 20 A @ Ta 40 °C / 250 VAC; 50 Hz Line Filter Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 6 - 20 A @ Ta 40 °C / 125 VAC; 60 Hz Ratings UL/CSA Technical Details Leakage Current standard < 0.35 mA (250 V / 60 Hz) MTBF > 200'000 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) Allowable Operation Tempe--25 °C to 100 °C rature 25/100/21 acc. to IEC 60068-1 **Climatic Category** Protection Class Suitable for appliances with protection class I acc. to IEC 61140 Terminal Quick connect terminals 6.3 x 0.8 mm

#### **Approvals and Compliances**

Aluminum

Material: Housing

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.

# FMLB-51

## Approvals

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

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40004673
c <b>FL</b> us	UL Approvals	UL	UL File Number: E72928

## Product standards

Product standards that are referenced

Organization	Design	Standard	Description
IEC	Designed according to	IEC 60320-1	Appliance couplers for household and similar general purposes
IEC.	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
(h)	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
( <b>h</b> )	Designed according to	UL 1283	Electromagnetic interference filters
CSA Group	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
IEC.	Designed for applications acc.	IEC/UL 62368-1	IEC 62368-1 includes the basic requirements for safety of audio, video, information technology and office equipment.
IEC	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

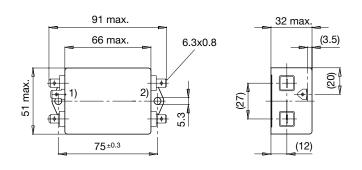
#### Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description			
CE	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	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863			
0	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	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.			
T	Medical Technology	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1			

## **Dimension** [mm]

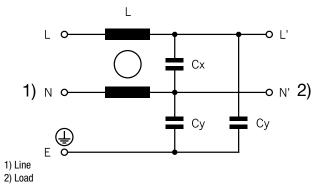
Case 49



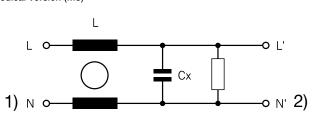
1) Line 2) Load

### Diagrams

Standard version



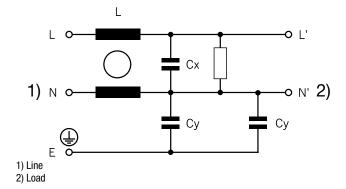
Medical Version (M5)



Е 1) Line 2) Load

(Ē

Medical Version (M80)

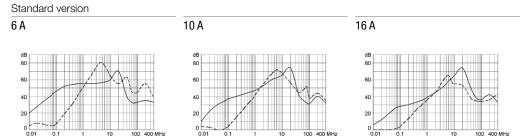


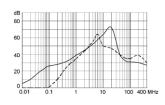
### **Attenuation Loss**

- - - - 50 $\Omega$  differential mode \_

20 A

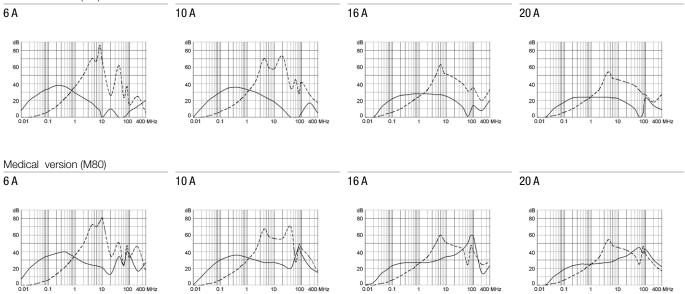






## FMLB-51

## Medical version (M5)



## All Variants

Rated Current [A]	Filter-Type	L [mH]	Cx (X2) [μF]	Cy (Y2) [nF]	Weight [g]	Housings	Order Number
6	Standard version	2 x 14	0.1	3.3	212 g	49	5500.2035
10	Standard version	2 x 5	0.1	3.3	212 g	49	5500.2036
16	Standard version	2 x 2	0.1	3.3	208 g	49	5500.2037
20	Standard version	2 x 1.5	0.1	3.3	218 g	49	5500.2038
6	Medical Version (M5)	2 x 14	0.1	-	212 g	49	5500.2082
10	Medical Version (M5)	2 x 5	0.1	-	212 g	49	5500.2083
16	Medical Version (M5)	2 x 2	0.1	-	208 g	49	5500.2084
20	Medical Version (M5)	2 x 1.5	0.1	-	218 g	49	5500.2085
6	Medical Version (M80)	2 x 14	0.1	0.47	212 g	49	5500.2094
10	Medical Version (M80)	2 x 5	0.1	0.47	212 g	49	5500.2095
16	Medical Version (M80)	2 x 2	0.1	0.47	208 g	49	5500.2096
20	Medical Version (M80)	2 x 1.5	0.1	0.47	218 g	49	5500.2097

Most Popular.

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

Packaging unit

10 Pcs