#### 1-Phase AC Filters / DC Filters https://www.schurter.com /PG84

# **FMBB NEO**

#### AC Filter 2-Stage, Broad Band Attenuation



Quick connect terminals 6.3x0.8 mm Case MB



Quick connect terminals 6.3x0.8 mm Case MF



Quick connect terminals 6.3x0.8 mm Case 09

# Description

- Line filter in standard and medical version
- 2 positions3 Designs:
- C) high symmetrical and asymmetrical noise attenuation
  - D) Excellent high frequency noise attenuation
  - F) Excellent low frequency noise attenuation

# **Unique Selling Proposition**

- Broad band attenuation
- 3 Filter designs for various applications
- Compact and fully potted
- Optional wire leads

#### See below: Approvals and Compliances

#### **Characteristics**

- Designed for current applications of 1 36 A
- 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 60950
- Suitable for use in medical equipment according to IEC/UL 60601-1

# Other versions on request

- Version with wire connection

References

Alternative: Standard version

#### Weblinks

pdf datasheet, html-datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product, Microsite

#### **Technical Data**

Ratings IEC	1 - 36 A @ Ta 40 °C / 250 VAC; 50 Hz
Ratings UL/CSA	1 - 30 A @ Ta 40 °C / 125/250 VAC;
	60 Hz
Leakage Current	standard < 0.5 mA (250 V / 60 Hz)
-	medical (M5) < 5 µA resp. (M80) < 80
	μΑ (250 V / 60 Hz)
Dielectric Strength	1.7 kVDC between L-N
-	2.75 kVDC between L/N-PE
	Test voltage (2 sec)
Allowable Operation Tempe-	-25 °C to 100 °C
rature	
Climatic Category	25/100/21 acc. to IEC 60068-1
IP-Protection	from rear-side IP 20 IEC 60529
Protection Class	Suitable for appliances with protection
	class I acc. to IEC 61140
Terminal	Quick connect terminal 6.3 x 0.8 mm
	Bolt and nut M4
Material: Housing	Aluminum

Line Filter	Standard and Medical Version, IEC
	60939, UL 1283, CSA C22.2 no. 8
	Technical Details
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 134485 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: FMBB NEO

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40030410
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
IEC	Designed according to	IEC 60127-6	Miniature fuses. Part 6. Fuse-holders for miniature fuse-links
(h)	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
(h)	Designed according to	UL 1283	Electromagnetic interference filters
GEO Group	Designed according to	CSA C22.2 no. 42	General Use Receptacles, Attachment Plugs, and Similar Wiring Devices
GED CSA Group	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 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.
IEC.	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

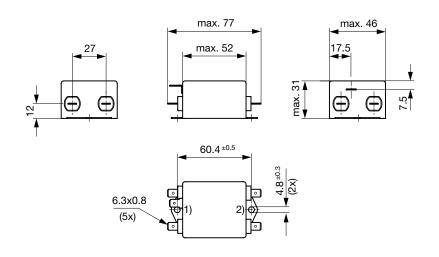
### Compliances

The product complies with following Guide Lines

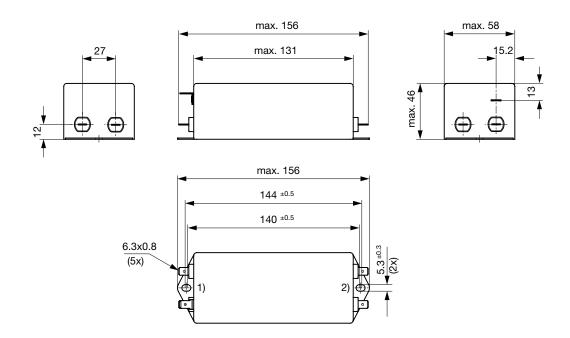
The product complete with here will be also											
Identification	Details	Initiator	Description								
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.								
RoHS	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU								
<b>©</b>	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.								
Ť	Medical Equipment	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1								

## Dimension [mm]

Case 09 with quick connect terminals

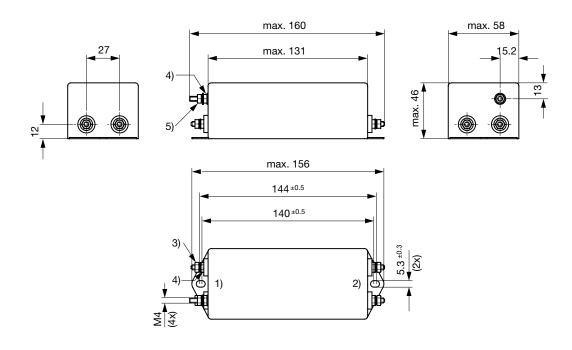


1) Line 2) Load Case MB with quick connect terminals



1) Line 2) Load

### Case MB with bolt and nut M4

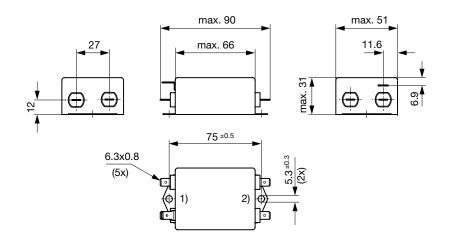


1) Line

2) Load

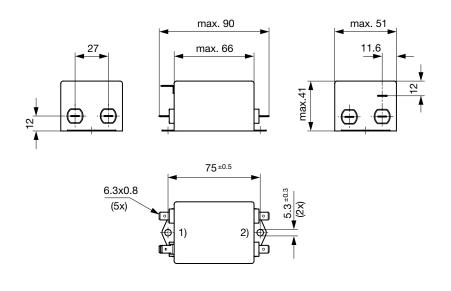
- 3) Nut torque 0.8...1 Nm, keep lock-nut fastened
- 4) Lock-nut do not unscrew
- 5) PE: M4x16, 1.2...1.5 Nm, keep lock-nut fastened

Case MC with quick connect terminals

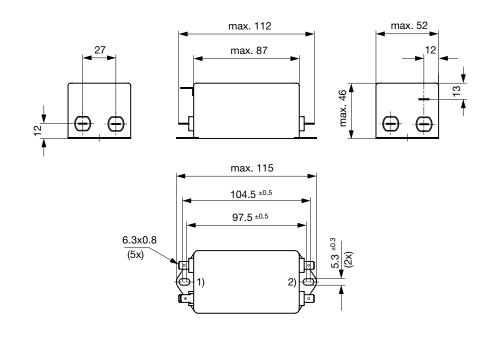


1) Line 2) Load

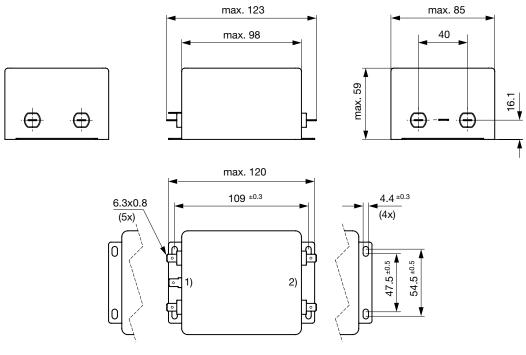
### Case MD with quick connect terminals



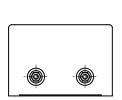
1) Line 2) Load Case ME with quick connect terminals

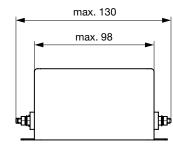


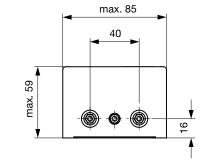
1) Line 2) Load Case MF with quick connect terminals

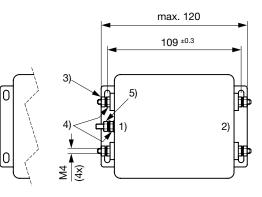


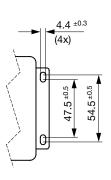
### 1) Line 2) Load Case MF with bolt and nut M4











1) Line

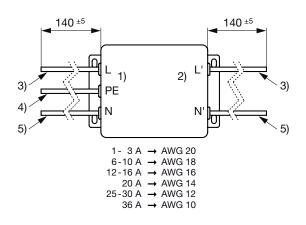
2) Load

3) Nut torque 0.8...1 Nm, keep lock-nut fastened

4) Lock-nut do not unscrew

5) PE: M4x16, 1.2...1.5 Nm, keep lock-nut fastened

Case with wire leads



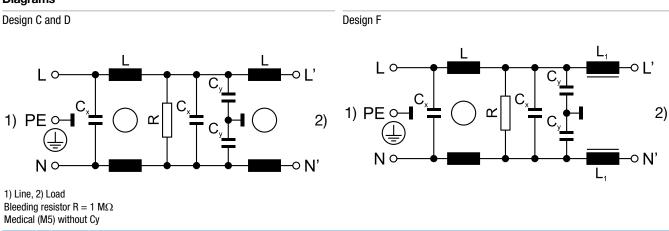
1) Line 2) Load

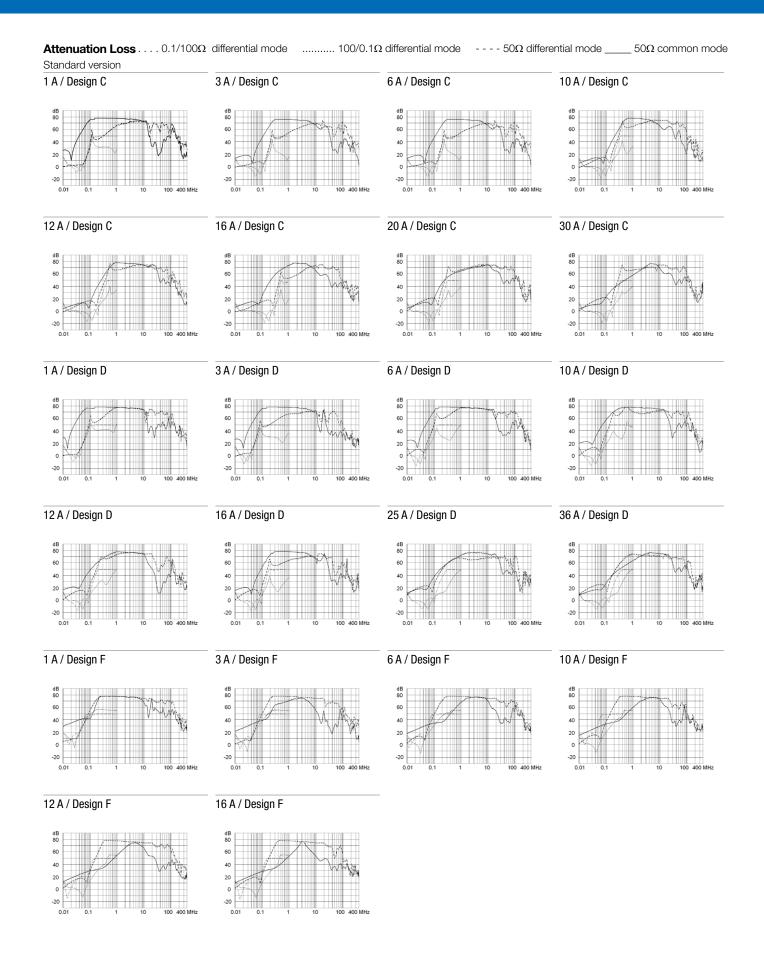
3) Brown

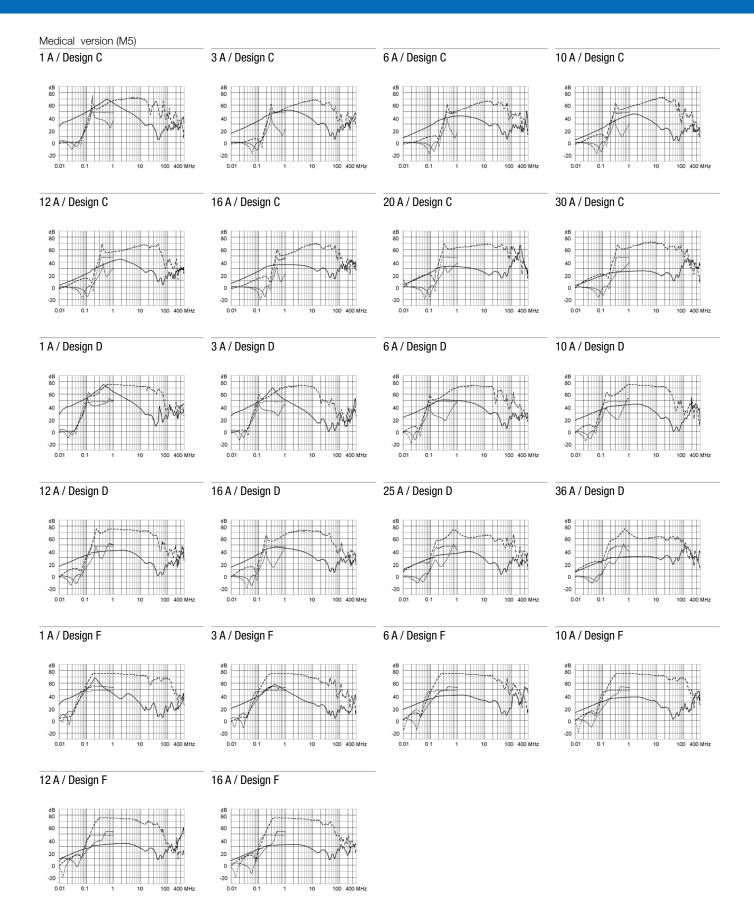
4) Yellow-Green

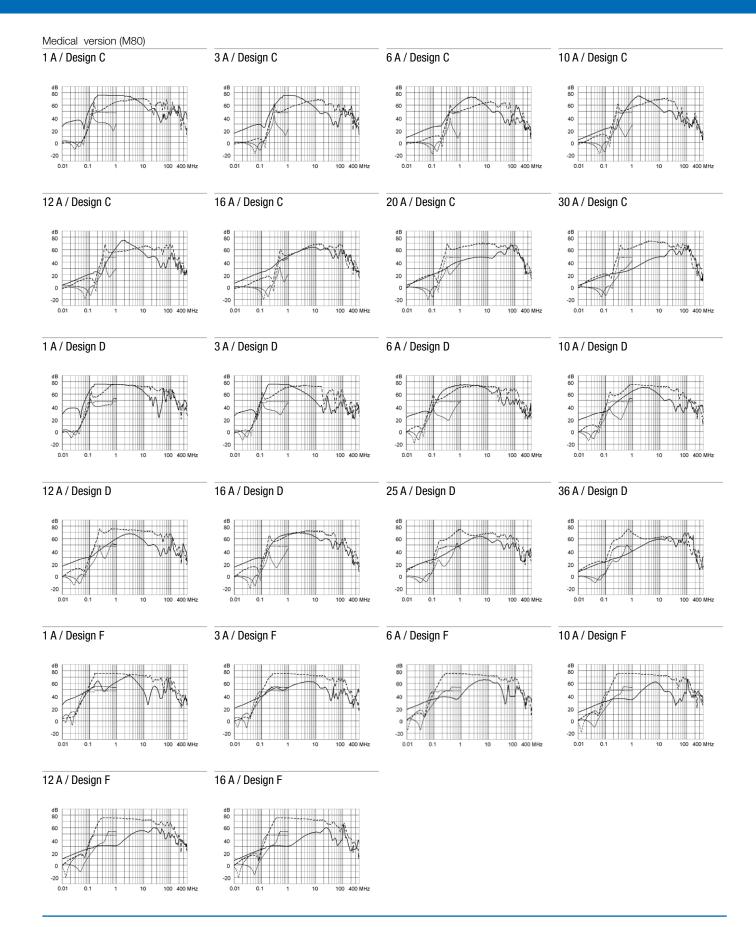
5) Blue

Diagrams









# All Variants

Rated current	Filter-Type	Terminal	Design	L	L1	Сх	Су	Ri	Power Loss	Weight	Housings	Packa- ging	Order Number
[A]				[mH]	[mH]	[µF]	[nF]	<b>[m</b> Ω]	[W]	[g]		[ST]	
1	Standard	Quick connect terminal 6.3 x 0.8 mm	С	12	-	0.22	4.7	945	1.9	125 g	09	15	5500.2600.01
3	Standard	Quick connect terminal 6.3 x 0.8 mm	С	2.5	-	0.22	4.7	120	2.2	130 g	09	15	5500.2601.01
6	Standard	Quick connect terminal 6.3 x 0.8 mm	С	0.97	-	0.22	4.7	26.2	1.9	130 g	09	15	5500.2602.01
10	Standard	Quick connect terminal 6.3 x 0.8 mm	С	0.8	-	0.47	4.7	12.9	2.6	200 g	MC	10	5500.2603.01
12	Standard	Quick connect terminal 6.3 x 0.8 mm	С	0.58	-	0.47	4.7	10.1	2.9	200 g	MC	10	5500.2604.01
16	Standard	Quick connect terminal 6.3 x 0.8 mm	С	0.65	-	0.33	4.7	8	4.1	265 g	MD	10	5500.2605.01
20	Standard	Quick connect terminal 6.3 x 0.8 mm	С	0.6	-	1	4.7	4.6	3.7	390 g	ME	5	5500.2606.01
30	Standard	Bolt and nut M4	С	0.6	-	1	10	2.5	4.5	855 g	MF	3	5500.2607.03
1	Standard	Quick connect terminal 6.3 x 0.8 mm	D	22	-	0.33	4.7	1320	2.7	165 g	MC	10	5500.2610.01
3	Standard	Quick connect terminal 6.3 x 0.8 mm	D	9.8	-	0.47	4.7	226	4.1	225 g	MD	10	5500.2611.01
6	Standard	Quick connect terminal 6.3 x 0.8 mm	D	7.8	-	1	4.7	55.4	4	350 g	ME	5	5500.2612.01
10	Standard	Quick connect terminal 6.3 x 0.8 mm	D	4.5	-	1	4.7	23.6	4.7	625 g	MB	4	5500.2613.01
12	Standard	Quick connect terminal 6.3 x 0.8 mm	D	3.25	-	1	4.7	16	4.6	630 g	MB	4	5500.2614.01
16	Standard	Quick connect terminal 6.3 x 0.8 mm	D	2.8	-	1	4.7	10.9	5.6	826 g	MF	3	5500.2615.01
25	Standard	Bolt and nut M4	D	2.0	-	2.2	4.7	4.8	6	830 g	MB	4	5500.2616.03
36	Standard	Bolt and nut M4	D	1.23	-	2.2	4.7	3.3	8.5	810 g	MB	4	5500.2617.03
1	Standard	Quick connect terminal 6.3 x 0.8 mm	F	22	0.49	0.33	4.7	1200	2.4	180 g	MC	10	5500.2620.01
3	Standard	Quick connect terminal 6.3 x 0.8 mm	F	9.8	0.16	0.47	4.7	194	3.5	240 g	MD	10	5500.2621.01
6	Standard	Quick connect terminal 6.3 x 0.8 mm	F	7.8	0.11	1	4.7	60	4.3	400 g	ME	5	5500.2622.01
10	Standard	Quick connect terminal 6.3 x 0.8 mm	F	4.5	0.06	1	4.7	21	4.2	645 g	MB	4	5500.2623.01
12	Standard	Quick connect terminal 6.3 x 0.8 mm	F	3.25	0.05	1	4.7	14.6	4.2	695 g	MB	4	5500.2624.01
16	Standard	Quick connect terminal 6.3 x 0.8 mm	F	2.8	0.043	1	4.7	13.7	7	950 g	MF	3	5500.2625.01
1	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	C	12	-	0.22	-	945	1.9	125 g	09	15	5500.2600.04
3	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	C	2.5	-	0.22	-	120	2.2	130 g	09	15	5500.2601.04
6	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	C	0.97	-	0.22	-	26.2	1.9	130 g	09 MC	15	5500.2602.04
10 12	Medical (M5) Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	C C	0.8 0.58	-	0.47 0.47	-	12.9 10.1	2.6 2.9	200 g 200 g	MC MC	10 10	5500.2603.04 5500.2604.04
12	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm Quick connect terminal 6.3 x 0.8 mm	C	0.58	-	0.47	-	8	4.1	200 g	MD	10	5500.2605.04
20	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	C	0.05	-	1	-	4.6	3.7	203 g	ME	5	5500.2606.04
30	Medical (M5)	Bolt and nut M4	C	0.6	-	1		2.5	4.5	855 g	MF	3	5500.2607.06
1	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	D	22	-	0.33	_	1320	2.7	165 g	MC	10	5500.2610.04
3	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	D	9.8	-	0.47	-	226	4.1	225 g	MD	10	5500.2611.04
6	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	D	7.8	-	1	-	55.4	4	350 g	ME	5	5500.2612.04
10	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	D	4.5	-	1	-	23.6	4.7	625 g	MB	4	5500.2613.04
12	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	D	3.25	-	1	-	16	4.6	630 g	MB	4	5500.2614.04
16	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	D	2.8	-	1	-	10.9	5.6	826 g	MF	3	5500.2615.04
25	Medical (M5)	Bolt and nut M4	D	2.0	-	2.2	-	4.8	6	830 g	MB	4	5500.2616.06
36	Medical (M5)	Bolt and nut M4	D	1.23	-	2.2	-	3.3	8.5	810 g	MB	4	5500.2617.06
1	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	F	22	0.49	0.33	-	1200	2.4	180 g	MC	10	5500.2620.04
3	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	F	9.8	0.16	0.47	-	194	3.5	240 g	MD	10	5500.2621.04
6	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	F	7.8	0.11	1	-	60	4.3	400 g	ME	5	5500.2622.04
10	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	F	4.5	0.06	1	-	21	4.2	645 g	MB	4	5500.2623.04
12	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	F	3.25	0.05	1	-	14.6	4.2	695 g	MB	4	5500.2624.04
16	Medical (M5)	Quick connect terminal 6.3 x 0.8 mm	F	2.8	0.043	1	-	13.7	7	950 g	MF	3	5500.2625.04
1	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	С	12	-	0.22	0.47	945	1.9	125 g	09	15	5500.2600.07
3	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	С	2.5	-	0.22	0.47	120	2.2	130 g	09	15	5500.2601.07
6	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	С	0.97	-	0.22	0.47	26.2	1.9	130 g	09	15	5500.2602.07
10	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	С	0.8	-	0.47	0.47	12.9	2.6	200 g	MC	10	5500.2603.07
12	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	С	0.58	-	0.47	0.47	10.1	2.9	200 g	MC	10	5500.2604.07
16	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	С	0.65	-	0.33	0.47	8	4.1	265 g	MD	10	5500.2605.07
20	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	С	0.6	-	1	0.47	4.6	3.7	390 g	ME	5	5500.2606.07
30	Medical (M80)	Bolt and nut M4	С	0.6	-	1	0.47	2.5	4.5	855 g	MF	3	5500.2607.09
1	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	D	22	-	0.33	0.47	1320	2.7	165 g	MC	10	5500.2610.07

Rated current	Filter-Type	Terminal	Design	L	L1	Cx	Су	Ri	Power Loss	Weight	Housings	Packa- ging	Order Number
[A]				[mH]	[mH]	[µF]	[nF]	<b>[m</b> Ω]	[W]	[g]		[ST]	
3	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	D	9.8	-	0.47	0.47	226	4.1	225 g	MD	10	5500.2611.07
6	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	D	7.8	-	1	0.47	55.4	4	350 g	ME	5	5500.2612.07
10	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	D	4.5	-	1	0.47	23.6	4.7	625 g	MB	4	5500.2613.07
12	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	D	3.25	-	1	0.47	16	4.6	630 g	MB	4	5500.2614.07
16	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	D	2.8	-	1	0.47	10.9	5.6	826 g	MF	3	5500.2615.07
25	Medical (M80)	Bolt and nut M4	D	2.0	-	2.2	0.47	4.8	6	830 g	MB	4	5500.2616.09
36	Medical (M80)	Bolt and nut M4	D	1.23	-	2.2	0.47	3.3	8.5	810 g	MB	4	5500.2617.09
1	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	F	22	0.49	0.33	0.47	1200	2.4	180 g	MC	10	5500.2620.07
3	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	F	9.8	0.16	0.47	0.47	194	3.5	240 g	MD	10	5500.2621.07
6	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	F	7.8	0.11	1	0.47	60	4.3	400 g	ME	5	5500.2622.07
10	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	F	4.5	0.06	1	0.47	21	4.2	645 g	MB	4	5500.2623.07
12	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	F	3.25	0.05	1	0.47	14.6	4.2	695 g	MB	4	5500.2624.07
16	Medical (M80)	Quick connect terminal 6.3 x 0.8 mm	F	2.8	0.043	1	0.47	13.7	7	950 g	MF	3	5500.2625.07

Most Popular.

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

Design C) high symmetrical and asymmetrical noise attenuation

D) Excellent high frequency noise attenuation

F) Excellent low frequency noise attenuation