

EMC-Power Line Filters for 1-Phase Systems

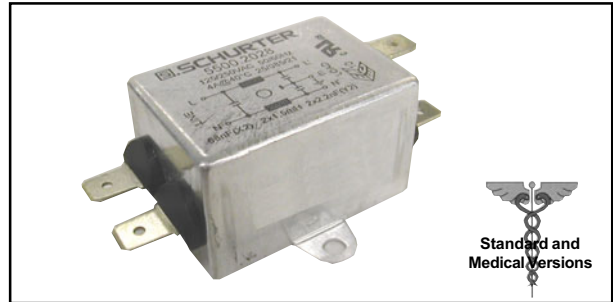
FMLB Series, all-purpose filters to Protection Class I, conform to EN 133200, UL 1283 and IEC 60950

Nominal current: 1 – 10 A @ 40 °C
 Rated voltage U_R (U_{max}): 125/250 VAC 50/60 Hz
 Attenuation: Standard
 Leakage current: for Standard and Medical applications
 Test voltages: L/N → E 2.7 kVDC, 2 sec
 L → N 1.7 kVDC, 2 sec *
 Climatic category: 25/085/21 acc. to IEC 60068-1
 50% saturation typ.: 2 to 3 x I_N @ 20 °C
 Inrush current: 1.5 x I_N 1 min. per hour
 MTBF @ 40 °C / U_R (U_{max}): > 200'000 h acc. To MIL-HB-217 F
 * without resistor

Approvals:



These filters are generally used as protection against interference voltages from the mains, and are mounted inside the equipment as close as possible to the mains input. At the same time possible interferences generated in the equipment are strongly attenuated and therefore will not reach the mains.



Optional versions:

- Medical version M80 with leakage current < 80µA
 - Version with ZNR-varistor for overvoltage protection
- Contact Schurter for minimum order quantity

Order Numbers and Technical Data

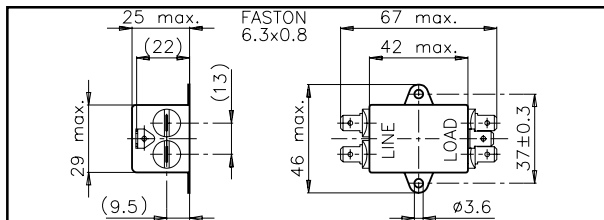
| Type FMLB Standard | I_N (1) @ 40 °C [A] | U_R (U_{max}) [VAC] | L_N (2) -30% / +50% [mH] | Leakage current (3) @ 250 V / 50 Hz [mA] | $C_x(X2)$ [nF] | $C_y(Y2)$ [nF] | R [MΩ] | Case |
|-------------------------|-----------------------------|---------------------------------|----------------------------------|--|-------------------|-------------------|-----------|------|
| 5500.2026 | 1 | 250 | 2 x 10 | < 0.25 | 68 | 2.2 | - | 41 |
| 5500.2027 | 2 | 250 | 2 x 4 | < 0.25 | 68 | 2.2 | - | 41 |
| 5500.2028 | 4 | 250 | 2 x 1.5 | < 0.25 | 68 | 2.2 | - | 41 |
| 5500.2029 | 6 | 250 | 2 x 0.8 | < 0.25 | 68 | 2.2 | - | 41 |
| 5500.2030 | 10 | 250 | 2 x 0.3 | < 0.25 | 68 | 2.2 | - | 41 |
| Type FMLB Medical M5 | I_N (1) @ 40 °C [A] | U_R (U_{max}) [VAC] | L_N (2) -30% / +50% [mH] | Leakage current (3) @ 250 V / 50 Hz [µA] | $C_x(X2)$ [nF] | $C_y(Y2)$ [nF] | R [MΩ] | Case |
| 5500.2077 | 1 | 250 | 2 x 10 | < 5 | 68 | - | 1 | 41 |
| 5500.2078 | 2 | 250 | 2 x 4 | < 5 | 68 | - | 1 | 41 |
| 5500.2079 | 4 | 250 | 2 x 1.5 | < 5 | 68 | - | 1 | 41 |
| 5500.2080 | 6 | 250 | 2 x 0.8 | < 5 | 68 | - | 1 | 41 |
| 5500.2081 | 10 | 250 | 2 x 0.3 | < 5 | 68 | - | 1 | 41 |

(1) Current derating over 40°C : $I = I_N \times \sqrt{(85-\vartheta_a)/45}$

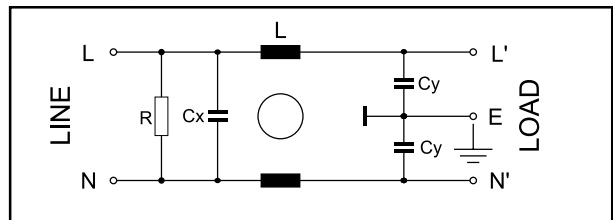
(2) Nominal inductance measured according to EN 138100, see introduction of this catalog, paragraph 3.4

(3) Measured according to IEC 60950 5.2.3 Annex D, see introduction of this catalog, paragraph 3.5

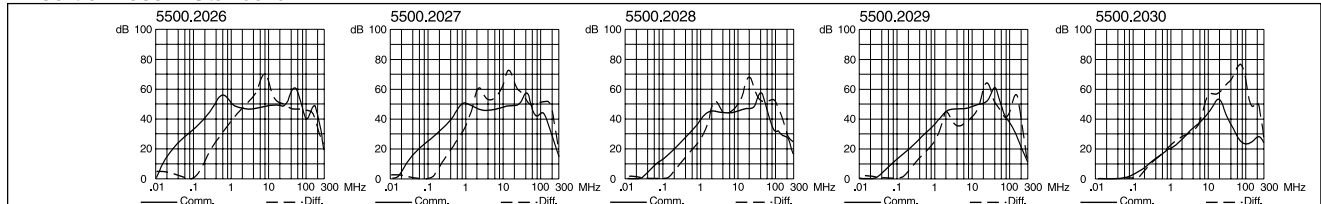
Case 41



Circuit diagram



Insertion loss - Standard



Insertion loss - Medical M5

