

EMC-Power Line Filters for 1-Phase Systems

FMW2 Series, all-purpose filters to Protection Class I, conform to EN 133200, UL 1283 and IEC 60950

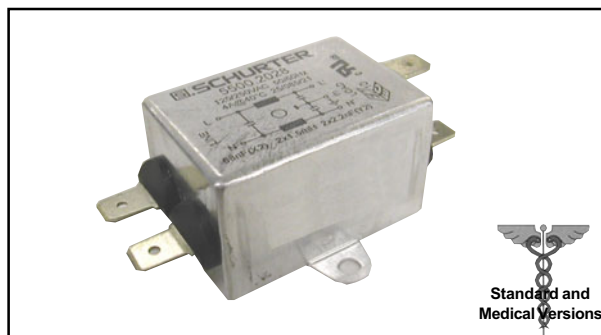
Nominal current: 1 – 10 A @ 40 °C
 Rated voltage U_R (U_{max}): 125/250 VAC 50/60 Hz
 Attenuation: Standard
 Leakage current: for Standard and Medical applications
 Test voltages: L/N → E 2.7 kVDC, 2 sec
 L → N 1.7 kVDC, 2 sec *
 Climatic category: 25/085/21 acc. to IEC 60068-1
 50% saturation typ.: 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:



The **FMW2** filter-line offers a wide range of filters with diverse types of technical characteristics, suitable for various kinds of applications.

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

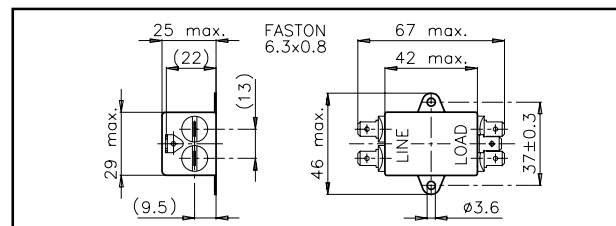
Type FMW2	I_N (1) @ 40 °C [A]	U_R (U_{max}) [VAC]	L_N (2) -30% / +50% [mH]	Leakage current (3) @ 250 V / 50 Hz [mA]	$C_x(X2)$ [nF]	$C_y(Y2)$ [nF]	R [MΩ]	Case
Standard								
5500.2039	1	250	2 x 10	< 0.25	15	2.2	-	41
5500.2040	3	250	2 x 2	< 0.25	15	2.2	-	41
5500.2041	6	250	2 x 0.8	< 0.25	15	2.2	-	41
5500.2042	10	250	2 x 0.4	< 0.25	15	2.2	-	41
Type FMW2	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
Medical M5								
5500.2098	1	250	2 x 10	< 5	15	-	1	41
5500.2104	3	250	2 x 2	< 5	15	-	1	41
5500.2100	6	250	2 x 0.8	< 5	15	-	1	41
5500.2102	10	250	2 x 0.4	< 5	15	-	1	41

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

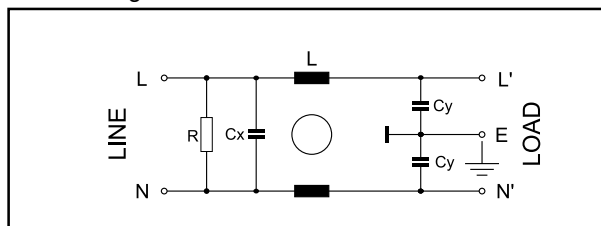
(2) Nominal inductance measured according to EN 138100, see introduction of this catalog, paragraph 3.4

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

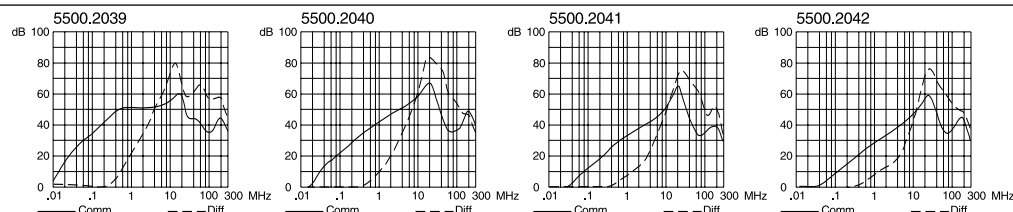
Case 41



Circuit diagram



Insertion loss - Standard



Insertion loss - Medical M5

