

General-purpose filter

- current ratings from 1 to 100A
 - good differential mode attenuation
 - three choices of connector
 - optional medical versions (B type)
-
- Nennströme von 1 bis 100 A
 - Gute differentielle Dämpfung
 - Drei Anschlußarten
 - Für medizinische Geräte als Option (Typ B)
-
- courants de service de 1 à 100 A
 - bonne atténuation en mode différentiel
 - trois types de connexions
 - version pour appareils médicaux en option (type B)



Filter selection table

Choose the family FN xxx with the required current rating and features, and add /?? to determine input/output (line/load) connection style. Example: FN 612-1/06 is a 1A filter with fast-on connections.

Approvals



Family	Connections			Current ratings at 40°C (25°) A	Inductance L mH	Housing	Weight g			
							/03	/06	/10	/24
FN 612 -1 /??	-	/06	-	1 (1.15)	3	H1	-	80	-	-
FN 612 -3 /??	-	/06	-	3 (3.4)	2	H2	-	115	-	-
FN 612 -6 /??	-	/06	-	6 (6.9)	0.75	H2	-	115	-	-
FN 612 -10 /??	-	/06	-	10 (11.5)	0.45	H2	-	115	-	-
FN 612 -20 /??	/03	/06	/10	20 (23)	0.48	K2	290	260	290	-
FN 612 -30 /??	/03	-	/10	30 (34)	0.61	L1	630	-	630	-
FN 612 -80 /??	-	-	/24	80 (92)	0.2	L3	-	-	-	700
FN 612 -100/??	-	-	/24	100 (115)	0.2	L2	-	-	-	1100

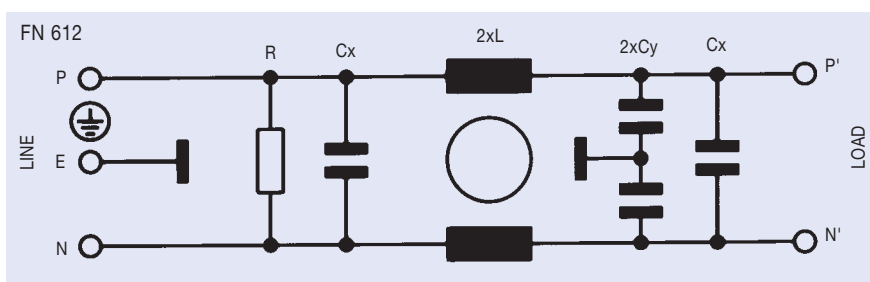
Additional specifications

Filter type	Capacitance		Res. R MΩ	Maximum leakage μA/phase	Maximum operating voltage		Operating frequency Hz	Hipot test voltage	
	Cx nF	Cy nF			VAC	Hz		PN→E VAC	P→N VDC
Standard types (up to 30A)	100	2.2	1	190	250	50/60	DC to 400	2000	1700
Standard types (80/100A)	470/1000	4.7	1*	450	250	50/60	DC to 400	2000	1700
B types (medical up to 30A)	100	-	1	2	250	50/60	DC to 400	2500	1700
B types (medical 80/100A)	470/1000	-	1*	2	250	50/60	DC to 400	2500	1700

MTBF at 40°C, 230V, per Mil-HB-217F: 800,000 hours.

*470k for 100A types

Electrical schematic

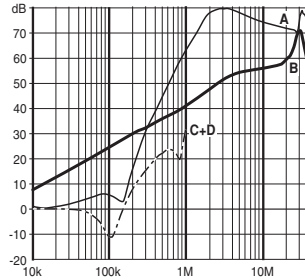


See tables for component values.

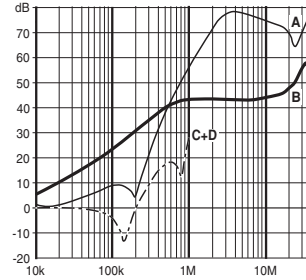
FN 612 insertion loss

Per CISPR 17; A = 50Ω/50Ω sym, B = 50Ω/50Ω asym, C = 0.1Ω/100Ω sym, D = 100Ω/0.1Ω sym

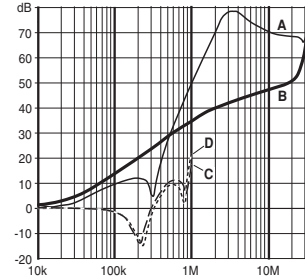
1 amp types



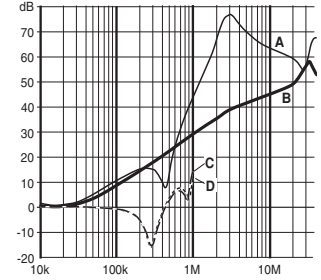
3 amp types



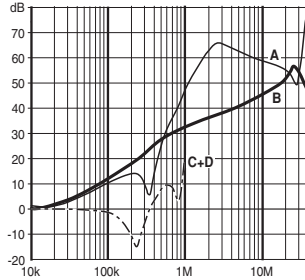
6 amp types



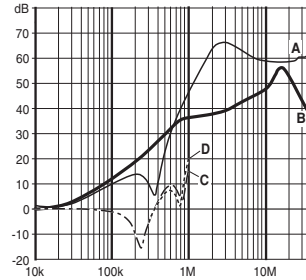
10 amp types



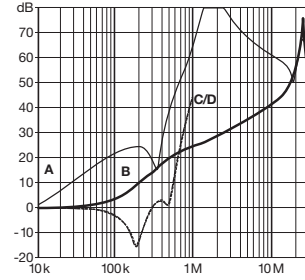
20 amp types



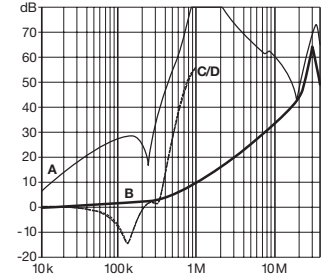
30 amp types



80 amp types



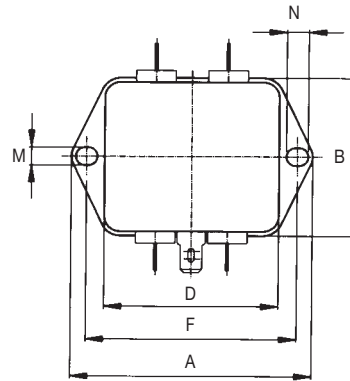
100 amp types



Mechanical data

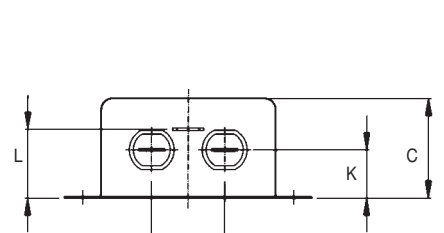
	FN 612 -1 H1	FN 612 -3-6-10 H2	FN 612 -20 K2	Tol. mm
A	71		85	± 0.5
B	46.6		54	± 1
C	22	29	40	± 1
D	50.5		65	± 1
F	61		75	± 0.2
J	21		27	± 0.5
K	10.5		12	± 0.5
L	16.5	24.5	29.5	± 0.5
M		5.3		± 0.1
N		6.3		± 0.1

TOP VIEW



Housing H1, H2, K2

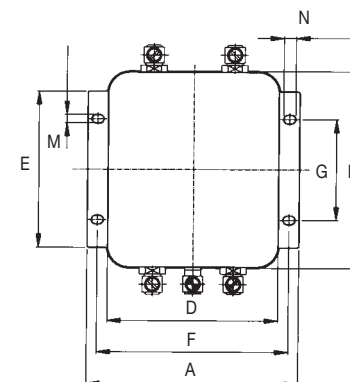
FRONT VIEW



Housing H1, H2, K2

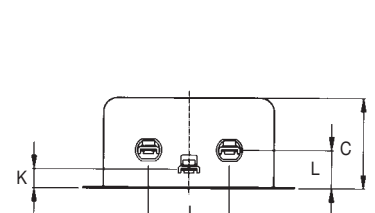
	FN 612 -30 L1	FN 612 -80 L3	FN 612 -100 L2	Tol. mm
A		105		± 0.5
B		99.5		± 1
C	38	45	57	± 1
D		84.5		± 1
E		79		± 0.5
F		95		± 0.2
G		51		± 0.1
J		40		± 0.5
K		9.5		± 0.5
L		19		± 0.5
M		4.4		± 0.1
N		6		± 0.1

TOP VIEW



Housing L1, L2, L3

FRONT VIEW



Housing L1, L2, L3

All dimensions in mm; 1 inch = 25.4 mm