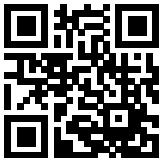


AC Feedthrough Filter



- IEC/EN 60939 approval
- Rated currents from 10 to 63 A
- 5 kV pulse test capability
- Class Y2 capacitor



Technical Specifications

Maximum continuous operating voltage	300 VAC, 50/60 Hz (ENEC) 250 VAC, 50/60 Hz (UL) 1000 VDC max
Rated currents	10 to 63 A @ 60°C
Operating frequency	DC to 60 Hz
High potential test voltage	3000 VDC for 2 sec
Temperature range (operation and storage)	-40°C to +100°C (40/100/21)
Flammability corresponding to	UL 94 V-0
Capacitor class	Y2
MTBF (Mil-HB-217F)	<200 A:>675,000 h @ 60°C/300 V =200 A:>494,000 h @ 60°C/300 V

Approvals & Compliances



Feedthrough filters offer a high insertion loss across a broad band of frequencies from a few tens of kHz up to the GHz region. In general, feedthrough filters offer a higher level of EMI suppression than feedthrough capacitors of the same current rating. This is particularly relevant to applications where source impedance is smaller than 50 Ω. Different versions are available offering a wide selection on operating currents and performance levels. AC feedthrough filters are designed and approved for up to 300 VAC 50/60 Hz operation.

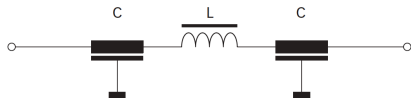
Features and Benefits

- Very low internal series inductance
- Very high self-resonant frequency
- Self-healing dielectric
- High quality and reliability
- Through-bulkhead mounting
- Anti-twist protection
- Custom-specific or dual-versions on request

Typical Applications

- Power line filter for 110/240 VAC power lines
- Increasing system and information security
- Power supplies
- Switching and cellular equipment
- Computer servers
- UPS power supplies
- Medical equipment
- Shielded rooms

Typical electrical schematic



Feedthrough Selector Table

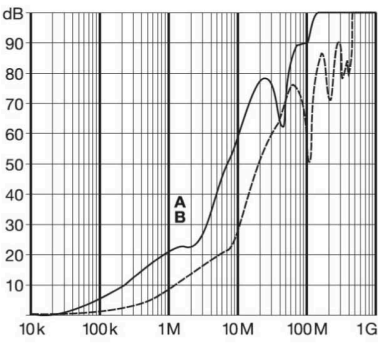
Feedthrough	Rated current @ 60°C [A]	Leakage current* @ 250 VAC/50 Hz [mA]	Capacitance** C [nF]	Inductance L @ 10 kHz [nH]	DC resistance*** R @ 25°C [mΩ]	Weight [g]
FN 7611-10-M3	10	1.89	10	70	1.2	55
FN 7612-10-M3	10	8.86	47	70	1.52	70
FN 7611-16-M4	16	4.15	22	70	0.65	80
FN 7612-16-M4	16	18.85	100	70	0.92	90
FN 7611-32-M4	32	4.15	22	70	0.65	80
FN 7612-32-M4	32	18.85	100	70	0.92	90
FN 7611-63-M6	63	28.3	150	186	0.47	250

* Tolerance +20%
** Tolerance ±20%
*** Tolerance +15%

Typical Filter Attenuation

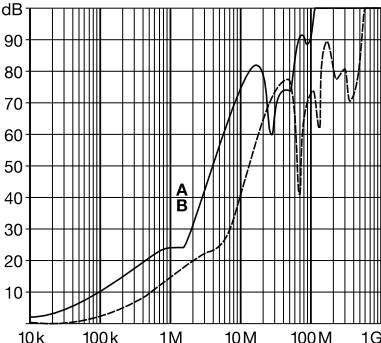
Full load, 50 Ω system

10 A types



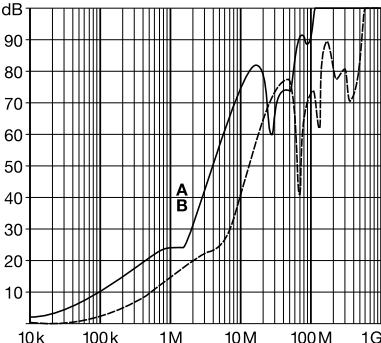
A = FN 7612-10-M3
B = FN 7611-10-M3

16 A types



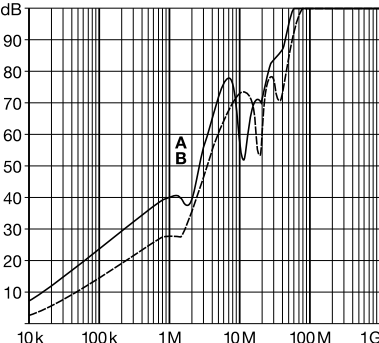
A = FN 7612-16-M4
B = FN 7611-16-M4

32 A types



A = FN 7612-32-M4
B = FN 7611-32-M4

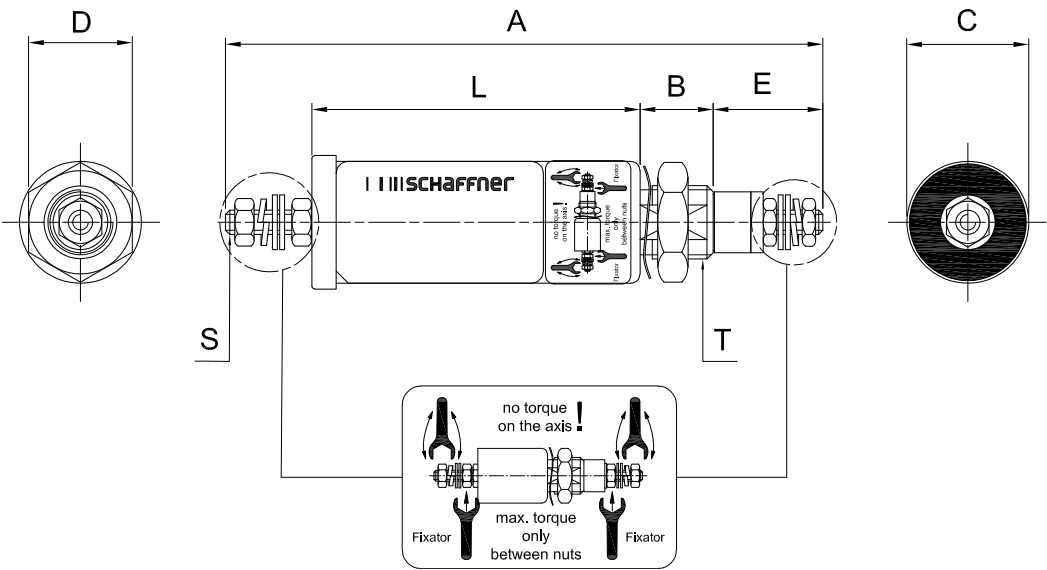
63 A types



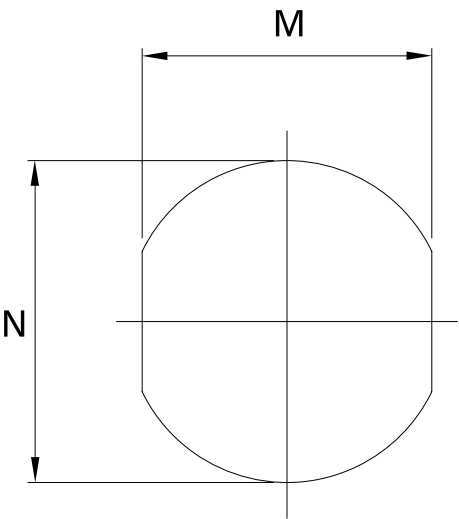
A = FN 7612-63-M6
B = FN 7611-63-M6

Mechanical Data

FN 761x10 A



Panel cut out



Dimensions

	A	B	C	D	E	L	M	N	S	T
FN 7611-10-M3	107	12	20	17	16	66	10.3	Ø12.3	M3	M12x1
FN 7612-10-M3	140	12	20	17	16	99	10.3	Ø12.3	M3	M12x1
FN 7611-16-M4	116	14	25	22	18	69	14.3	Ø16.3	M4	M16x1
FN 7612-16-M4	148	14	25	22	18	101	14.3	Ø16.3	M4	M16x1
FN 7611-32-M4	116	14	25	22	18	69	14.3	Ø16.3	M4	M16x1
FN 7612-32-M4	148	14	25	22	18	101	14.3	Ø16.3	M4	M16x1
FN 7611-63-M6	173	16	32	27	26	105	18.3	Ø20.3	M6	M20x1
FN 7612-63-M6	189	19	54	41	26	118	24.3	Ø27.3	M6	M27x1.5
Tolerances					±2		±0.2			

All dimensions in mm; 1 inch = 25.4 mm
Tolerances according: ISO 2768-m/EN 22768-m

Recommended Torque

	M3	M4	M6	M8	M12	M12x1	M16x1	M20x1	M27x1.5	M32x1.5
Terminal thread	0.5 Nm	1.2 Nm	2.5 Nm	5 Nm	11 Nm					
Mounting thread						3 Nm	4 Nm	7 Nm	12 Nm	14 Nm

Headquarters, Global Innovation and Development

Switzerland
Schaffner Group
Industrie Nord
Nordstrasse 11e
4542
Luterbach
+41 32 681 66 26
info@schaffner.com

To find your local partner within Schaffner's global network [schaffner.com](https://www.schaffner.com)

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Sales and Application Centers

China
Schaffner EMC Ltd. Shanghai
T20-3 C No 565 Chuangye Road Pudong district
201201
Shanghai
+86 2138139500
cschina@schaffner.com

Sweden
Schaffner EMC AB
Östermalmstrorg 1
114 42
Stockholm
+46 8 5050 2425
swedensales@schaffner.com

Switzerland
Schaffner EMV AG
Industrie Nord
Nordstrasse 11e
4542
Luterbach
+41 32 681 66 26
switzerlandsales@schaffner.com

India
Schaffner India Pvt. Ltd
Regus World Trade Centre
WTC 22nd Floor Unit No 2238 Brigade
Gateway Campus 26/1 Dr. Rajkumar Road
Malleshwaram (W)
560055
Bangalore
+91 8067935355
indiasales@schaffner.com

Italy
Schaffner EMC S.r.l.
Via Ticino, 30
20900
Monza (MB)
+39 039 21 41 070
italysales@schaffner.com

Japan
Schaffner EMC K.K.
ISM Sangenjaya 7F
1-32-12 Kamiuma Setagaya-ku
154-0011
Tokyo
+81 3 5712 3650
japansales@schaffner.com

Singapore
Schaffner EMC Pte Ltd.
Blk 3015A Ubi Road 1 #05-09 Kampong Ubi
Industrial Estate
408705
Singapore
+65 63773283
singaporesales@schaffner.com

Finland
Schaffner Oy
Lohjanharjuntie 1109
08500
Lohja
+ 358 50 468 72 84
finlandsales@schaffner.com

France
Schaffner EMC S.A.S.
16-20 Rue Louis Rameau
95875
Bezons
+33 1 34 34 30 60
francesales@schaffner.com

Germany
Schaffner Deutschland GmbH
Ohiostr. 8
76149
Karlsruhe
+49 721 56910
germanysales@schaffner.com

Thailand
Schaffner EMC Co. Ltd.
Sathorn Square Tower
Room 3780 37FL 98 North-Sathorn Rd Silom
Bangrak
10500
Bangkok
+66 621056397
thailsales@schaffner.com

United Kingdom
Schaffner Ltd.
Suite 1 Oakmede Place
Terrace Road
RG42 4JF
Binfield
+44 118 9770070
uksales@schaffner.com

United States
Schaffner EMC Inc.
52 Mayfield Avenue
Edison, New Jersey
+1 732 225 9533
usasales@schaffner.com