

DC Feedthrough Capacitor



- EN/IEC 60384-14 approval
- Rated currents from 10 to 200 A
- 2.5 kV pulse test capability
- Class Y4 capacitor



Technical Specifications

Maximum continuous operating voltage	130 DC (UL, ENEC) 130 VAC, 50/60 Hz (UL, ENEC) 650 VDC max
Rated currents	10 to 200 A @ 60°C max.
Capacitor class	Y4
High potential test voltage	1700 VDC for 2 sec
Insulation resistance (100VDC after 60 sec)	<0.33 μF, R >1500 MΩ >0.33 μF, τ >5000 s
Temperature range (operation and storage)	-40°C to +100°C (40/100/21)
Flammability corresponding to	UL 94 V-2 or better
MTBF @ 60°C/130 V (Mil-HB-217F)	<200 A: >1,400,000 hours ≥200 A: >450,000 hours

Approvals & Compliances



Feedthrough capacitors offer a high insertion loss across a broad band of frequencies from a few tens of kHz up to the GHz region. The construction of feedthrough capacitors cause a better suppression performance over a much wider frequency range than a conventional two-wire capacitor of equivalent value. Different versions are available offering a wide selection on operating currents and performance levels. DC feedthrough capacitors are designed and approved for 130 VDC/130 VAC 50/60 Hz operation.

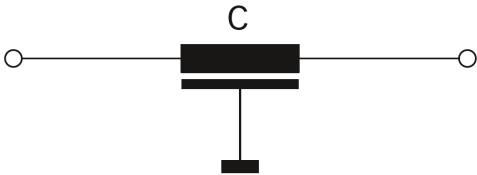
Features and Benefits

- 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 48 VDC battery power
- Increasing system and information security
- Telecom base stations
- Switching and cellular equipment
- Computer servers
- UPS power supplies
- Medical equipment

Typical electrical schematic



Feedthrough Selector Table

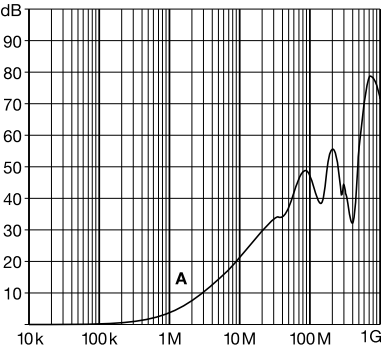
Feedthrough	Rated current @ 60°C	Leakage current* @ 130 VAC/50 Hz	Capacitance** C	DC resistance*** R @ 25°C	Weight
	[A]	[mA]	[nF]	[mΩ]	[g]
FN 7560-10-M3	10	0.49	10	0.8	15
FN 7562-16-M4	16	4.9	100	0.62	34
FN 7563-16-M4	16	23	470	0.63	78
FN 7562-32-M4	32	4.9	100	0.62	34
FN 7563-32-M4	32	23	470	0.63	79
FN 7560-63-M6	63	0.49	10	0.3	70
FN 7561-63-M6	63	2.3	47	0.3	70
FN 7562-63-M6	63	4.9	100	0.3	70
FN 7563-63-M6	63	23	470	0.43	103
FN 7560-100-M8	100	2.3	47	0.23	145
FN 7561-100-M8	100	4.9	100	0.23	145
FN 7562-100-M8	100	23	470	0.23	145
FN 7563-100-M8	100	49	1000	0.25	192
FN 7560-200-M10	200	4.9	100	0.16	160
FN 7561-200-M10	200	23	470	0.16	160
FN 7562-200-M10	200	49	1000	0.18	268
FN 7563-200-M10	200	230	4700	0.14	490

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

Typical Filter Attenuation

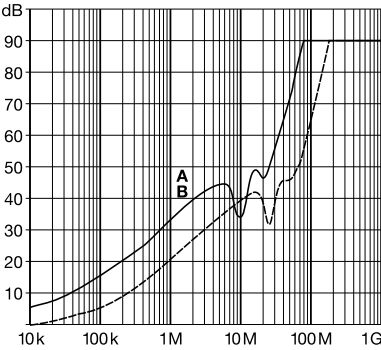
Full load, 50 Ω system

10 A types



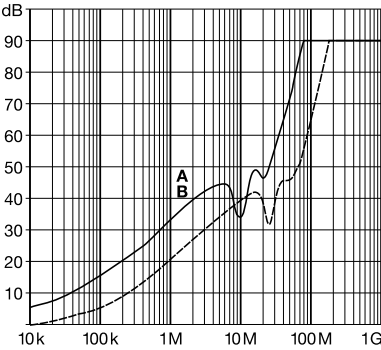
A = FN 7560-10-M3

16 A types



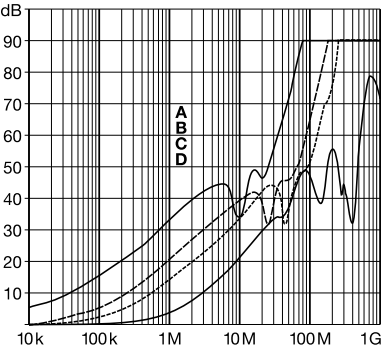
A = FN 7563-16-M4
B = FN 7562-16-M4

32 A types



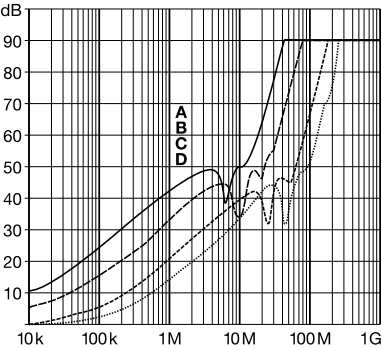
A = FN 7563-32-M4
B = FN 7562-32-M4

63 A types



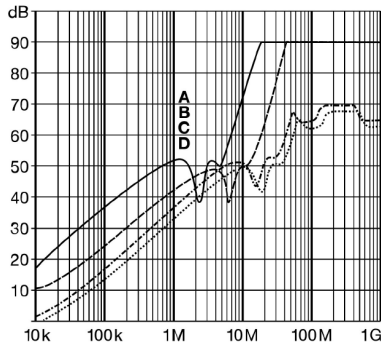
A = FN 7563-63-M6
B = FN 7562-63-M6
C = FN 7561-63-M6
D = FN 7560-63-M6

100 A types



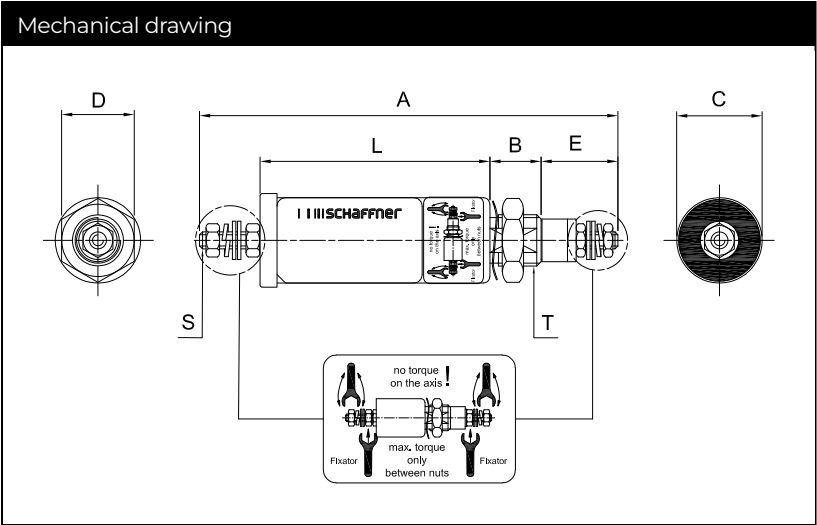
A = FN 7563-100-M8
B = FN 7562-100-M8
C = FN 7561-100-M8
D = FN 7560-100-M8

200 A types

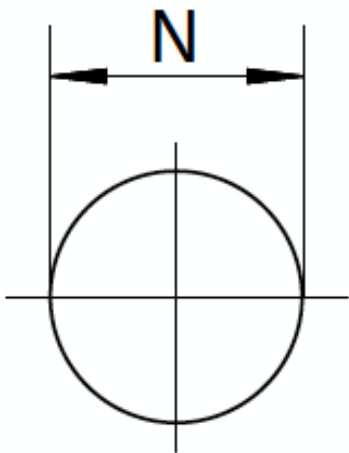


A = FN 7563-200-M10
B = FN 7562-200-M10
C = FN 7561-200-M10
D = FN 7560-200-M10

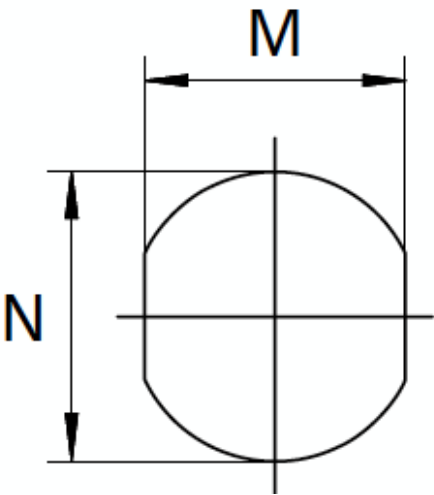
Mechanical Data



Panel cut out 10 A types



Panel cut out other types



Dimensions

	A	B	C	D	E	L	M	N	S	T
FN 7560-10-M3	57	10	15	13	16	19		Ø10.3	M3	M10x1
FN 7562-16-M4	75	12	20	17	18	30	10.3	Ø12.3	M4	M12x1
FN 7563-16-M4	82	16	32	27	18	33	18.3	Ø20.3	M4	M20x1
FN 7562-32-M4	75	12	20	17	18	30	10.3	Ø12.3	M4	M12x1
FN 7563-32-M4	82	16	32	27	18	33	18.3	Ø20.3	M4	M20x1
FN 7560-63-M6	96	14	25	22	26	30	14.3	Ø16.3	M6	M16x1
FN 7561-63-M6	96	14	25	22	26	30	14.3	Ø16.3	M6	M16x1
FN 7562-63-M6	96	14	25	22	26	30	14.3	Ø16.3	M6	M16x1
FN 7563-63-M6	99	16	32	27	26	33	18.3	Ø20.3	M8	M20x1
FN 7560-100-M8	113	16	32	27	32	33	18.3	Ø20.3	M8	M20x1
FN 7561-100-M8	113	16	32	27	32	33	18.3	Ø20.3	M8	M20x1
FN 7562-100-M8	113	16	32	27	32	33	18.3	Ø20.3	M8	M20x1
FN 7563-100-M8	133	19	38	27	32	50	22.3	Ø24.3	M8	M24x1
FN 7560-200-M10	130	19	32	27	40	33	22.3	Ø24.3	M10	M24x1
FN 7561-200-M10	130	19	32	27	40	33	22.3	Ø24.3	M10	M24x1
FN 7562-200-M10	147	19	38	27	40	50	22.3	Ø24.3	M10	M24x1
FN 7563-200-M10	165	19	54	41	40	68	24.3	Ø27.3	M10	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	M10	M10x1	M12x1	M16x1	M20x1	M24x1	M27x1.5
Terminal thread	0.5 Nm	1.2 Nm	2.5 Nm	5 Nm	8 Nm						
Mounting thread						2 Nm	3 Nm	4 Nm	7 Nm	8 Nm	12 Nm

Headquarters, Global
Innovation and
Development

Switzerland
Schaffner Holding AG
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)

© 2022 Schaffner Group

The content of this document has been carefully checked and understood. However, neither Schaffner nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Schaffner does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Swiss law and resulting disputes shall be settled by the courts at the place of business of Schaffner Holding AG. Latest publications and a complete disclaimer can be downloaded from the Schaffner website. All trademarks recognized.

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

Finland
Schaffner Oy
Sauvonrinne 19 H
8500
Lohja
+358 50 468 7284
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
Schoemperlenstrasse 12B
76185
Karlsruhe
+49 721 56910
germanysales@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

Spain
Schaffner EMC España
Calle Caléndula 93, Miniparc III, Edificio E El
Soto de Moraleja, Alcobendas
28109
Madrid
+34 917 912 900
spainsales@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

Taiwan
Schaffner EMV Ltd.
U-Town
20 Floor-2, No 97, Section 1, XinTai 5th Road,
XiZhi District
22175
New Taipei City
+886 226975500
taiwansales@schaffner.com

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

United Kingdom
Schaffner Ltd.
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