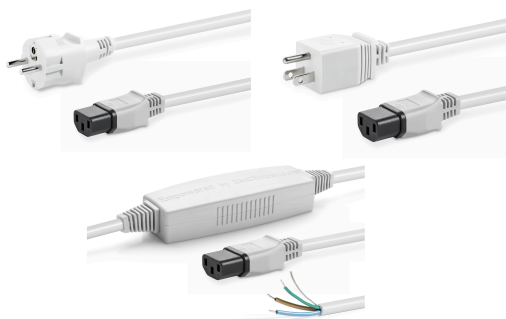


## Power Cord Input EMC Filter IF 13



- High frequency attenuation
- Shielding and ferrite cable
- Easy to integrate in any design
- Retrofit for any IEC C14 inlet
- Rated current up to 10A
- Various powerline plugs for international usage



### Technical Specifications

<b>Maximum continuous operating voltage</b>	250 VAC (120V for US plug version), 50/60 Hz
<b>Rated currents</b>	10 A
<b>High potential test voltage</b>	IF13-SE: P -> N 1200 VDC (1 min) P+N -> PE 2100 VDC (1 min) IF13-SE: P+N -> PE 2100 VAC (1 min 50Hz) P -> N 2100 VDC (1 min)
<b>Protection category</b>	IP 20 according IEC 60529
<b>Temperature range (operation and storage)</b>	-25°C to +70°C
<b>Connector (load side)</b>	IEC C13 according to IEC/EN 60320-2-2 stripped ends
<b>Connector (line side) and cables</b>	Schuko Plug CEE7/VII US NEMA5-15 plug standard stripped ends
<b>Flammability corresponding to</b>	Cable: UL VW-1

### Approvals & Compliances



The IF13 power cord with integrated filter is the easiest way to integrate an EMC filter into a given design (with a power cord). The approach to incorporate the filter in an external cable can help to pass compliance testing at the end of the design phase. The performance of the filter is enhanced through the ferrite cable and shielding. With different versions of input and output connections the cord can be easily implemented. Complying with RoHS and REACH the power cords fulfill worldwide environmental regulations.

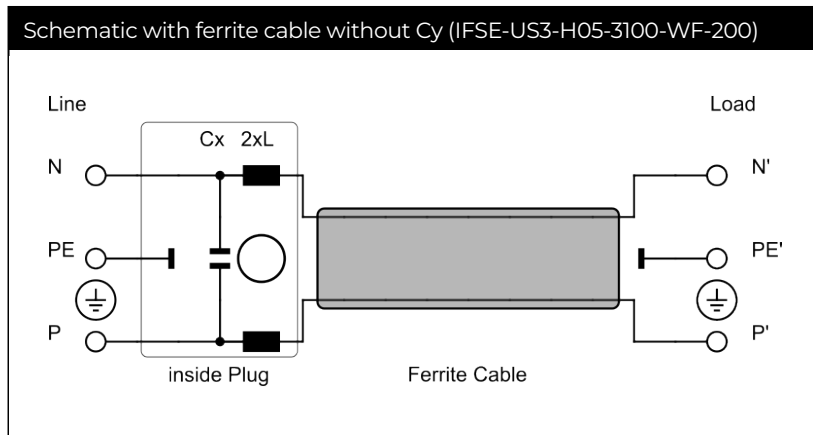
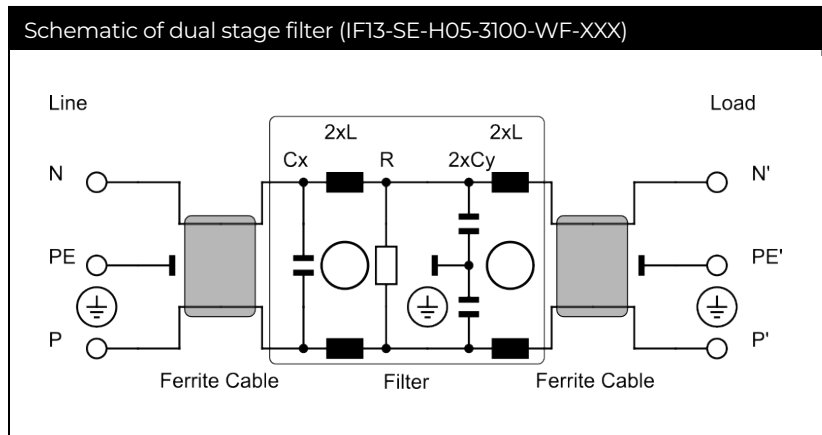
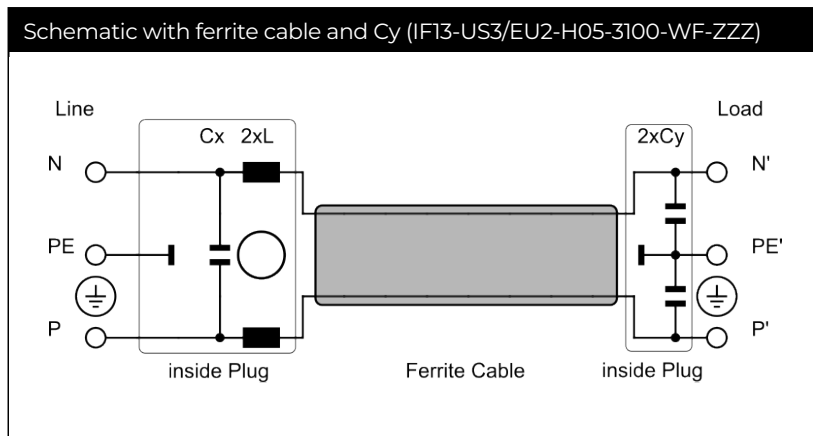
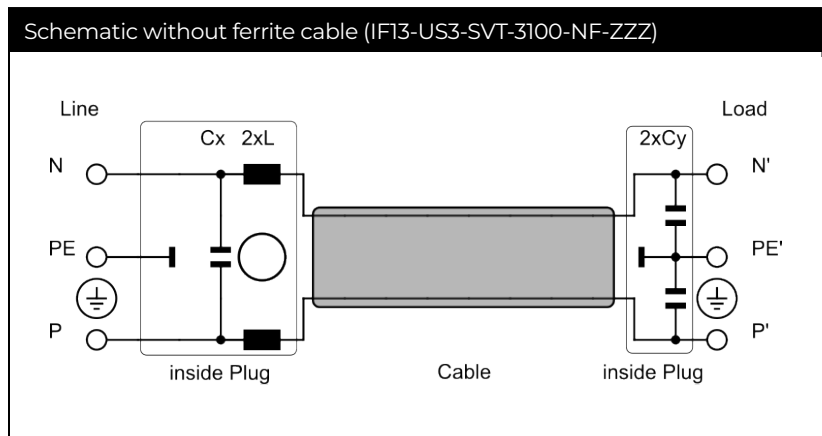
### Features and Benefits

- Easy to implement, no redesign required
- EMC lifeline at last design stage
- High performance in high frequency range
- Retrofit for cord connected devices
- no space allocation required for filter

### Typical Applications

- All cord connected applications
- Datacenter
- Communication Technology
- Medical and Laboratory devices
- Security applications
- High frequency applications
- Applications with critical housing dimensions (cable is external)

### Typical Electrical Schematics



### Filter Selection Table

Filter*	Rated current @ 40°C (25°C) [A]	Leakage current** @ 250V AC/50 Hz (@ 120V AC/60 Hz) [mA]	Inductance L [mH]	Capacitance		Resistance R [kΩ]	Ferrite Cable***	Input connection	Output connection	Weight (200 cm) [g]
				Cx [μF]	Cy [nF]					
IF13-US3-SVT-3100-NF-...	10	0.31 (0.18)	0.8	0.1	2.2	no	NEMA5-15	C13	240	
IF13-US3-H05-3100-WF-...	10	0.31 (0.18)	0.8	0.1	2.2	yes	NEMA5-15	C13	340	
IF13-EU2-H05-3100-WF-...	10	0.31 (0.18)	0.8	0.1	2.2	yes	CEE7/VII	C13	360	
IF13-SE-H05-3100-WF-...	10	0.31 (0.18)	0.8 (2x)	0.1	2.2	1000	yes	Stripped Ends	C13	410
IFSE-US3-H05-3100-WF-...	10	0	0.8	0.1			yes	NEMA5-15	Stripped Ends	310

\* To compile a complete part number, please replace the .. with the required length.

\*\* Maximum leakage under usual AC operating conditions (acc. IEC 60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

\*\*\* All cable is shielded

Product selector IF 13

### IFxx-yyy-zzz-aaaa-bb-ccc:

- Cable length:** 200 – 200cm
- Cable version:** WF – With ferrite cable  
NF – without ferrite cable
- Cable core:** 3100 – 3 X 1.00 mm<sup>2</sup> (US: AWG 18)
- Cable type:** H05 - H05VV-F  
SVT - SVT
- Line side plug:** EU2 – CEE7/VII straight, integrated filter  
US3 – NEMA5-15, straight, integrated filter  
SE – with stripped ends
- Load side plug:** 13 - IEC C13 female plug, straight, integrated filter  
SE – with stripped ends

### Cable\* Selection Table IF 13

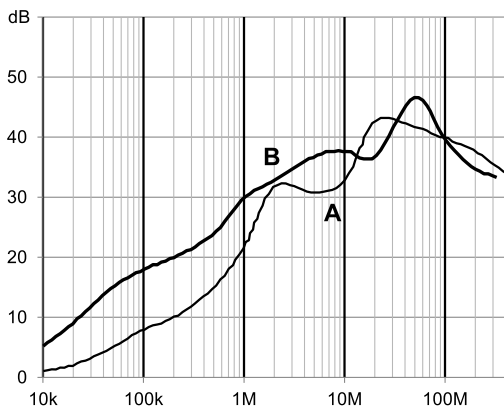
<b>IF 13-US3-SVT-3100-NF-...</b>	IEC cable assembly with input EMC Filter, IEC C13 connector, without ferrite coated cable, US version
<b>IF 13-US3-H05-3100-WF-...</b>	IEC cable assembly with input EMC Filter, IEC C13 connector, with ferrite coated cable, US version
<b>IF 13-EU2-H05-3100-WF-...</b>	IEC cable assembly with input EMC Filter, IEC C13 connector, with ferrite coated cable, EU version
<b>IF 13-SE-H05-3100-WF-...</b>	IEC cable assembly with EMC Filter, IEC C13 connector, with ferrite coated cable, stripped version
<b>IF SE-US3-H05-3100-WF-...</b>	IEC cable assembly with input EMC Filter, stripped output, with ferrite coated cable, US version

\* All cables are shielded

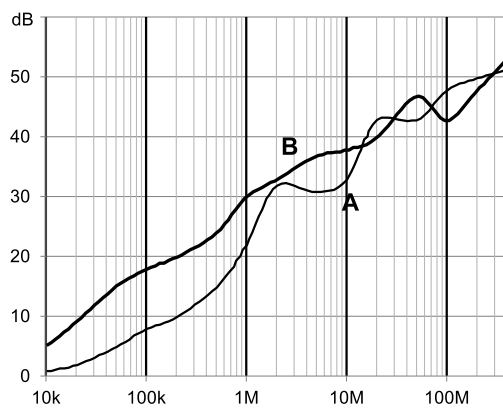
### Typical Filter Attenuation

Per CISPR 17; A=50 Ω/50 Ω sym; B=50 Ω/50 Ω asym

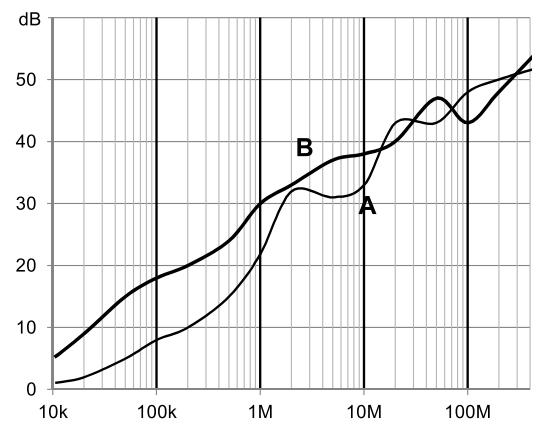
IF13-US3-SVT-3100-NF-200



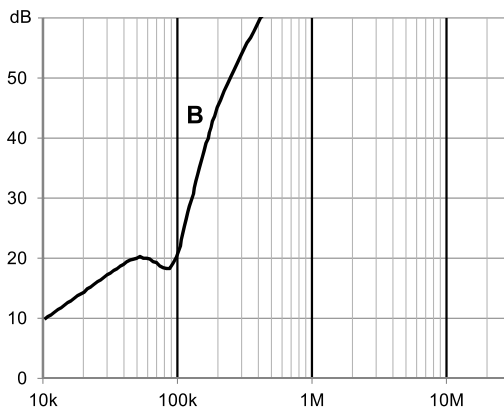
IF13-US3-H05-3100-WF-200



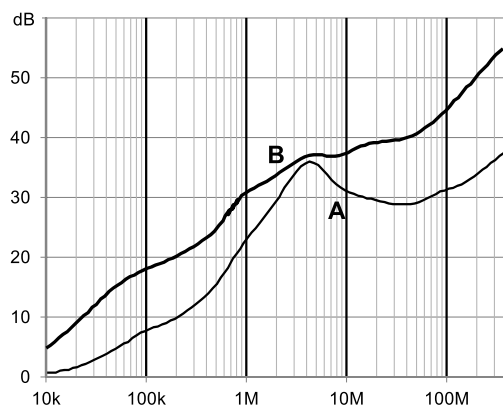
IF13-EU2-H05-3100-WF-200



IF13-SE-H05-3100-WF-200

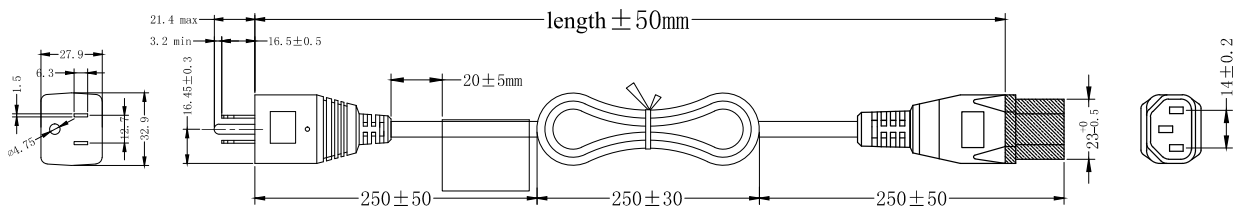


IFSE-US3-H05-3100-WF-200

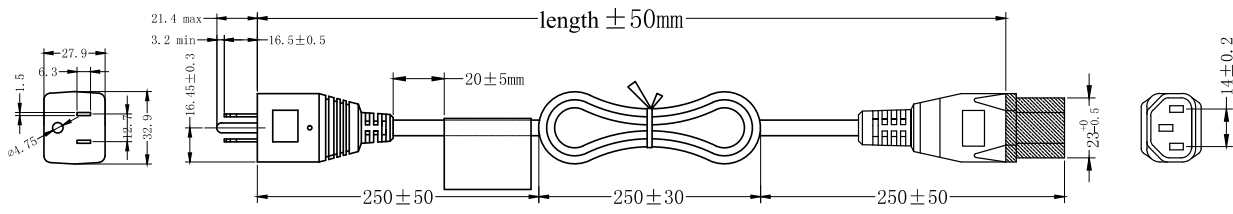


### Mechanical Data

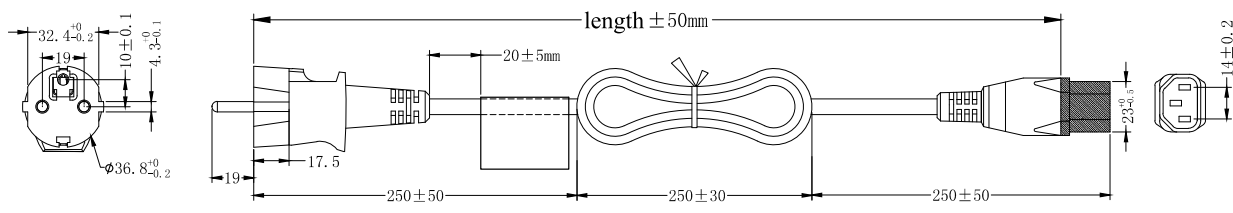
#### F13-US3-SVT-3100-NF



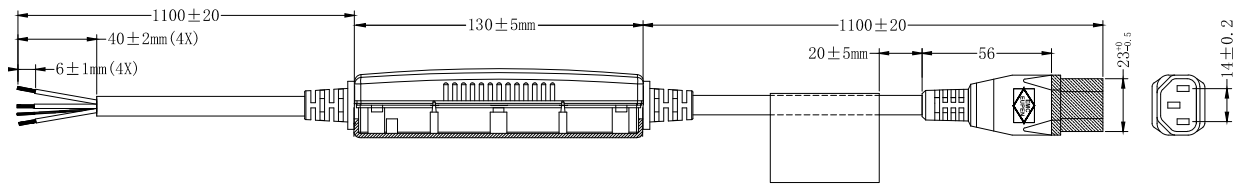
#### IF13-US3-H05-3100-WF



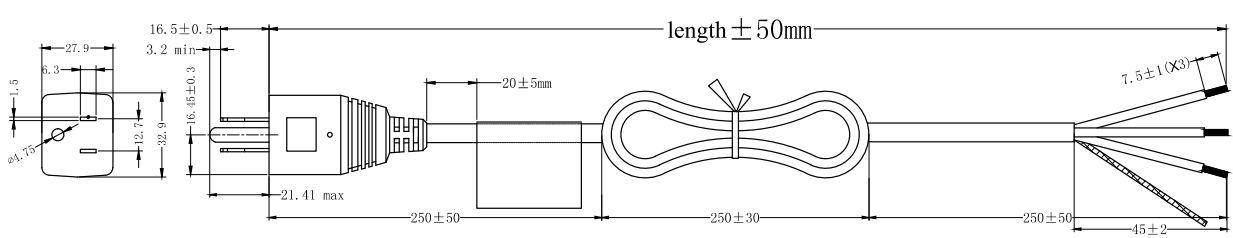
#### IF13-EU2-H05-3100-WF



#### IF13-SE-H05-3100-WF-200



#### IFSE-US3-H05-3100-WF



Please visit [www.schaffner.com](http://www.schaffner.com) to find more details on filter connectors.

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