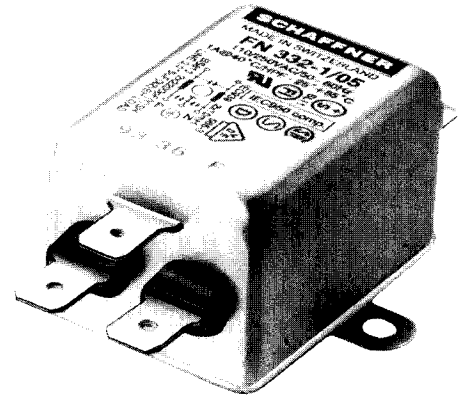


## FN 332

## Performance filter

Designed for suppressing high interference levels, this filter is available in a wide choice of current ratings, and also in an optional Z version with a varistor for protection against high surge voltages.

- 1 to 10A current ratings
- compact housing with solder or fast-on connections
- optional surge voltage protection (Z types)





See Mechanical Data (pages 60 and 63) for full details of housings and connections.

### 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 332-6/01 is a 6A filter with solder lug connections.

### Approvals



Family	Connections		Current ratings		Inductance L mH	Housing	Weight g
			A at 40°C (25°)				
FN 332 -1 /??	/01	/05	1	(1.2)	10	G1	65
FN 332 -3 /??	/01	/05	3	(3.6)	2	G1	65
FN 332 -6 /??	/01	/05	6	(7.3)	0.8	G1	65
FN 332 -10A/??	/01	/05	10	(12)	0.5	G1	70

### Additional specifications

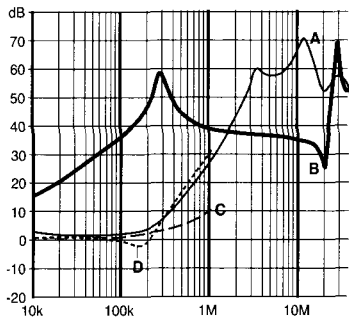
Filter type	Capacitance		Surge current A	Energy absorption J	Maximum leakage μA/phase	Maximum operating voltage		Operating frequency Hz	Hipot test voltage	
	Cx nF	Cy nF				VAC	Hz		PN→E VAC	P→N VDC
Standard types	15	2.2	-	-	190	250	50/60	DC to 400	2000	1700
FN 332Z types (surge protected)	15	2.2	1200	26	190	250	50/60	DC to 400	2000	350

MTBF at 40°C, 230V, per Mil-HB-217F: 710,000 hours.

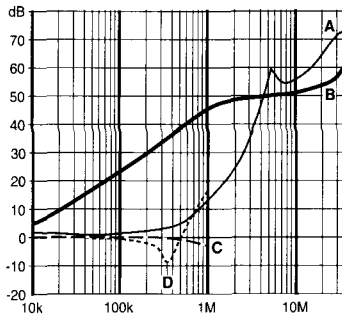
## Insertion loss

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

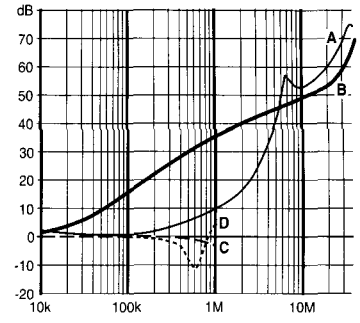
### 1 amp types



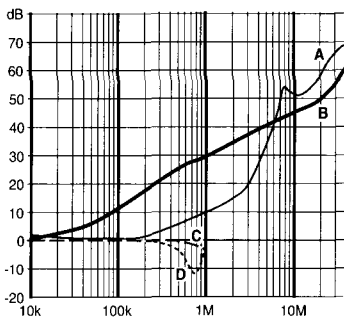
### 3 amp types



### 6 amp types

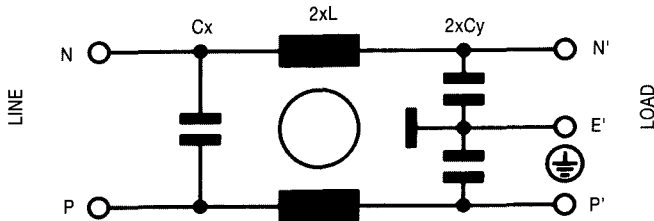


### 10 amp types

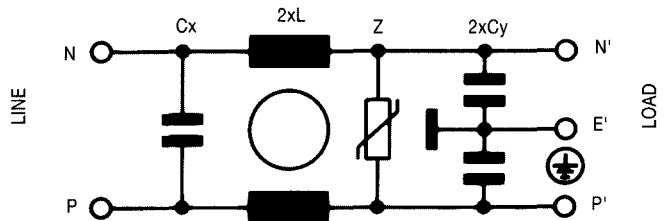


## Electrical schematics

FN 332



FN 332Z

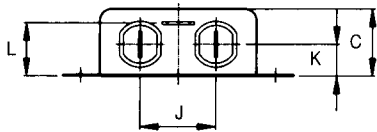


See tables for component values.

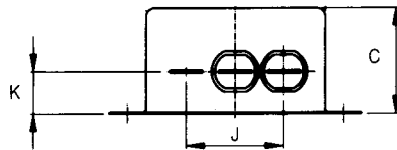
	FN 610 -1-3-6	FN 610-10	FN 332	FN 612-1	FN 612 -3-6-10	FN 612 -20	FN 660-1	FN 610 -20	FN 680-1	FN 343	Tol.* mm	
	Housing F1	F2	G1	H1	H2	H2	H21	J1	J11	J2		
<b>A</b>	64		45	71		85	71			70	± 0.5	
<b>B</b>	33		41	46.6 ± 1		54 ± 1	46.6 ± 1	52.6		69	± 0.5	
<b>C</b>	19	29	24.1	22 ± 1	29 ± 1	40 ± 1	29 ± 1	29		30 ± 1	± 0.5	
<b>D</b>	44		29 ± 0.5	50.5 ± 1		65 ± 1	50.5 ± 1	50.5 ± 1		49.8 ± 1	± 0.3	
<b>F</b>	54		37 ± 0.4	61		75	61			60 ± 0.2	± 0.2	
<b>J</b>	21		12.5 ± 0.2	21		27	21 <sup>(J1)</sup> 8.5 <sup>(J2)</sup>	21		27	± 0.5	
<b>K</b>	9		9.6 ± 0.2	10.5		12	10.5 ± 0.3	14		12	± 0.5	
<b>L</b>	15		18.7	16.5	24.5	29.5	19	20			± 0.5	
<b>M</b>	5.3		3.5	5.3								± 0.1
<b>N</b>	6.3		3.9	6.3								± 0.1
<b>Y</b>	6			6								± 1
<b>Z</b>	140			140								+ 5

\* Measurements share this common tolerance unless otherwise stated.

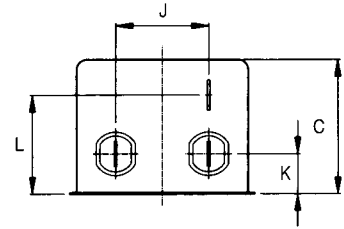
## FRONT VIEW



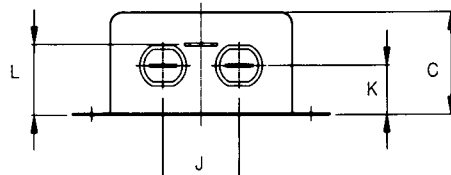
Housing F1, F2, G1  
H1, H2, J1, K2



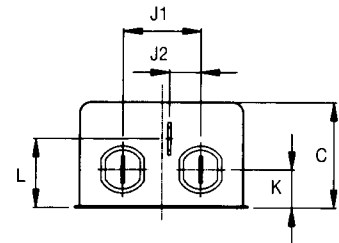
Housing J2



Housing K2

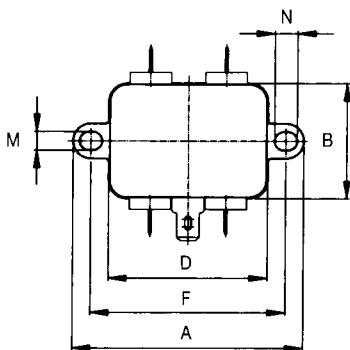


Housing J11

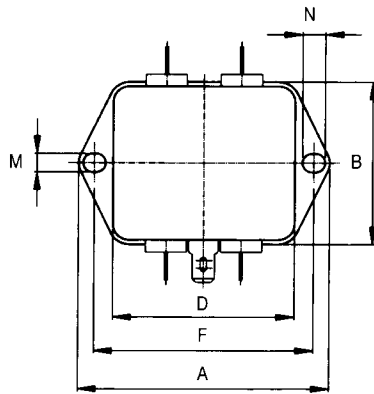


Housing H21, K1

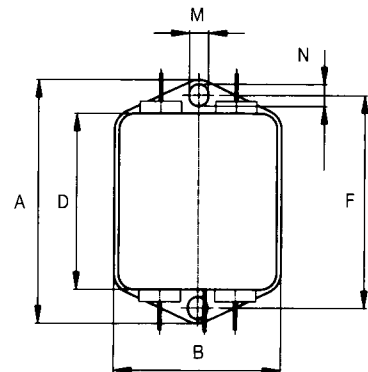
## TOP VIEW



Housing F1, F2, G1



Housing H1, H2, J1, J11, J2



Housing H21, K1, K2, K21

# Filter connections



These are the standard types of input and output connections available for Schaffner's range of filter families.

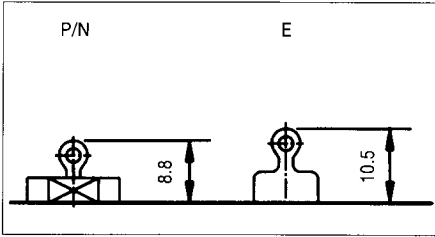
Schaffner can also produce filters with other popular output connectors, or user-specific interfaces, to custom order. Please call your local sales office to discuss any custom requirements.

## Cross reference list AWG to copper area in mm<sup>2</sup>

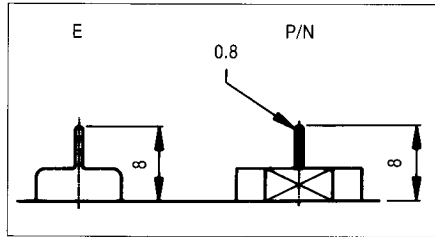
AWG number	Cu mm <sup>2</sup> (approx)
22	0.33
20	0.54
18	0.83
16	1.34
14	2.15
12	3.44

1 inch = 25.4mm

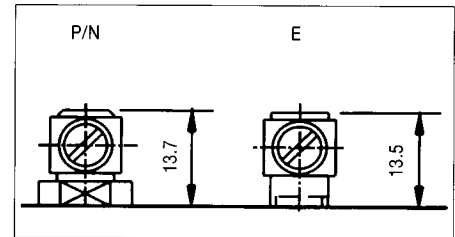
### Dimensions in mm



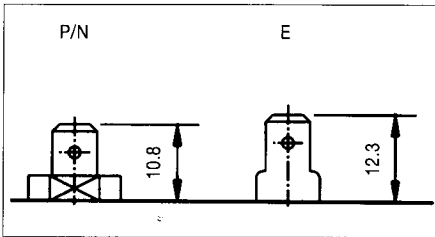
**Type /01**  
Solder lug with a hole capable of accommodating several small wires



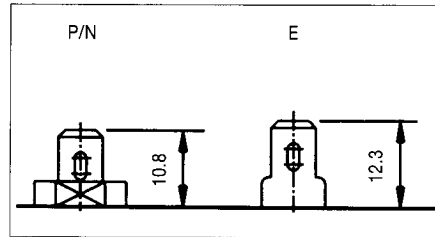
**Type /02**  
Pin suitable for direct assembly onto through-hole printed-circuit boards



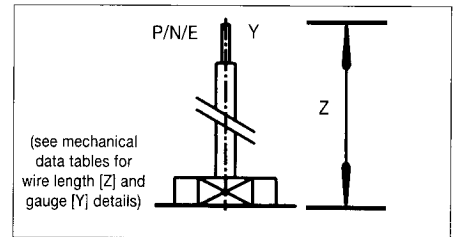
**Type /03**  
Clamp terminal with M4 screw



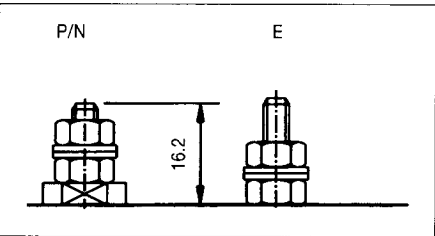
**Type /05**  
Industry-standard size fast-on terminal, 6.3 x 0.8mm



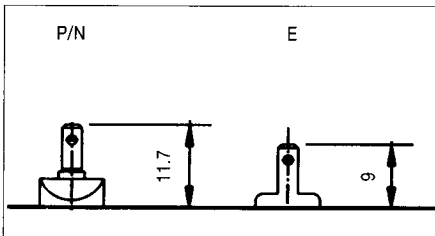
**Type /06**  
Industry-standard size fast-on which may also be used as a solder lug, 6.3 x 0.8mm



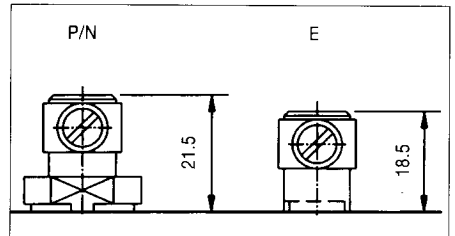
**Type /07**  
Insulated wire, stripped ready for soldering. Wire gauge varies according to filter



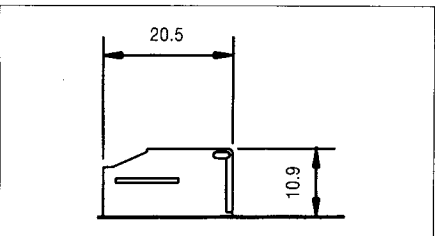
**Type /08** = M4 screw  
**Type /09** = M5 screw  
**Type /10** = UNC 8-32 screw



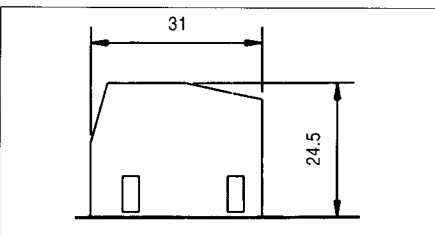
**Type /13** = Fast-on, 2.8 x 0.5mm



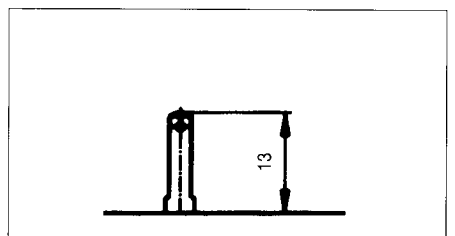
**Type /23**  
Clamp terminal with M5 screw



**Type /29**  
Safety terminal block



**Type /33**  
Safety terminal block



**Type /16** = Solder/fast-on, 2.8 x 0.5mm  
**Type /38** = Fast-on, 2.8 x 0.8mm