

Features:

- Compact size and low weight.
- Low leakage flux with strong insulation.
- Standard footprint with various inductance options.
- Custom versions and evaluation tools available.

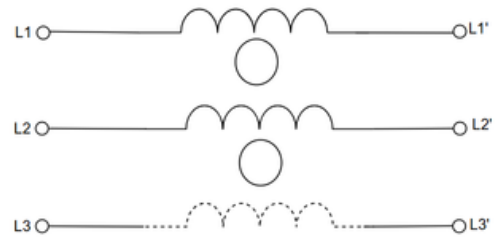
Applications:

- AC and DC filtering in midsize power applications.
- Ideal for drives, PV inverters, fast chargers, and UPS systems and supports charging stations and switch-mode power supplies.
- Provides low leakage current and high grid disturbance immunity.
- electronic devices, automation, and converters.


DATASHEET

Common Mode Choke series - CMC72

This Series chokes filter EMI noise on AC power lines up to 600 VAC and 1000 DC lines in photovoltaic systems. They suppress noise from switched electronics or high-speed controllers and are used in PCB-integrated filters or with single-phase filters for low-leakage EMI suppression.

Type Circuit Diagram:

Technical Specifications:

Operating voltage	:600 VAC/1000 VDC
Rated current	:16 to 50 A @ 60°C
Operating frequency	:DC to 400 Hz
Rated inductance	:0.2mH to 3mH
Temperature range (operation and storage)	:-40°C to +125°C (40/125/21) acc. IEC60068-1
Cooling	:Forced cooling
Flammability corresponding to	:UL 94 V-0
Design Corresponding to	:UL 1283

Ordering Information

Model Number	Part Number	Current Ratings (A)	Inductance (mH)	Resistance (R _{DC}) mΩ	Length pin(L)	Ø Pin(D)	Choke Size	Min.Weight (g)
CMC72-2100-16-1	E115619-1	16	1	5	4.5 +0.5/-0	2.0 ±0.1	1	135
CMC72-2100-25-0.6	E115620-1	25	0.6	3	4.5 +0.5/-0	2.4 ±0.1	1	140
CMC72-2100-36-0.5	E115621-1	36	0.5	1.5	4.5 +0.5/-0	2.2 ±0.1	2	190
CMC72-2100-50-0.3	E115622-1	50	0.3	1	5 +0.5/-0	2.5 ±0.1	2	180
CMC72-2200-16-1	E115623-1	16	1	5	4.5 +0.5/-0	2.0 ±0.1	3	140
CMC72-2200-25-0.6	E115624-1	25	0.6	3	4.5 +0.5/-0	2.4 ±0.1	3	140
CMC72-2200-36-0.5	E115625-1	36	0.5	1.5	4.5 +0.5/-0	2.2 ±0.1	4	190
CMC72-2200-50-0.3	E115626-1	50	0.3	1	5 +0.5/-0	2.5 ±0.1	4	185
CMC72-2200-16-3	E115627-1	16	3	9	4.5 +0.5/-0	2.0 ±0.1	4	180
CMC72-2200-25-2	E115628-1	25	2	4.8	5 +0.5/-0	2.65 ±0.1	5	280
CMC72-2200-36-1.5	E115629-1	36	1.5	3	4.5 +0.5/-0	2.2 ±0.1	6	450
CMC72-2200-50-0.8	E115630-1	50	0.8	2	5 +0.5/-0	2.5 ±0.1	6	460
CMC72-3100-16-0.8	E115631-1	16	0.8	5	4.5 +0.5/-0	2.0 ±0.1	7	175
CMC72-3100-25-0.5	E115632-1	25	0.5	2.8	5 +0.5/-0	2.5 ±0.1	7	185
CMC72-3100-36-0.4	E115633-1	36	0.4	1.5	4.5 +0.5/-0	2.2 ±0.1	8	290
CMC72-3100-50-0.2	E115634-1	50	0.2	1	5 +0.5/-0	2.5 ±0.1	8	790
CMC72-3200-16-0.8	E115635-1	16	0.8	5.5	4.5 +0.5/-0	2.0 ±0.1	9	175
CMC72-3200-25-0.5	E115636-1	25	0.5	2.8	5 +0.5/-0	2.5 ±0.1	9	190
CMC72-3200-36-0.4	E115637-1	36	0.4	2	4.5 +0.5/-0	2.2 ±0.1	10	290
CMC72-3200-50-0.2	E115638-1	50	0.2	1	5 +0.5/-0	2.5 ±0.1	10	180
CMC72-3200-16-1.3	E115639-1	16	1.3	6.5	4.5 +0.5/-0	2.0 ±0.1	9	180
CMC72-3200-25-0.9	E115640-1	25	0.9	3.5	5 +0.5/-0	2.65 ±0.1	11	300
CMC72-3200-36-0.8	E115641-1	36	0.8	2.3	4.5 +0.5/-0	2.2 ±0.1	12	490
CMC72-3200-50-0.3	E115642-1	50	0.3	1.5	5 +0.5/-0	2.5 ±0.1	12	460

Test conditions:

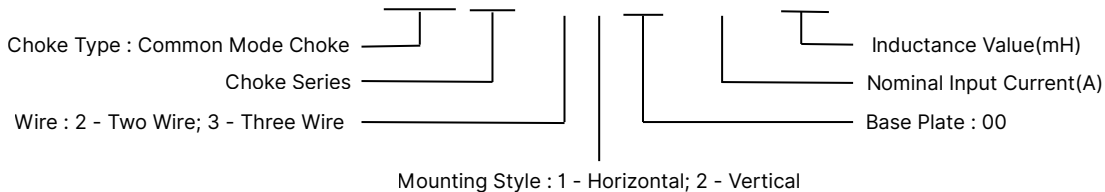
Measuring frequency: 1 kHz; 500 µA >0.16 mH <1.6 mH; 50 µA >1.6 mH <160 mH

Inductance tolerance: +50%, -30%

Resistance tolerance: ±15% @ 25°C Electrical characteristics @ 25°C: ±2°C

Product Selector

CMC 72 – X XXX –YY –ZZ



Example:

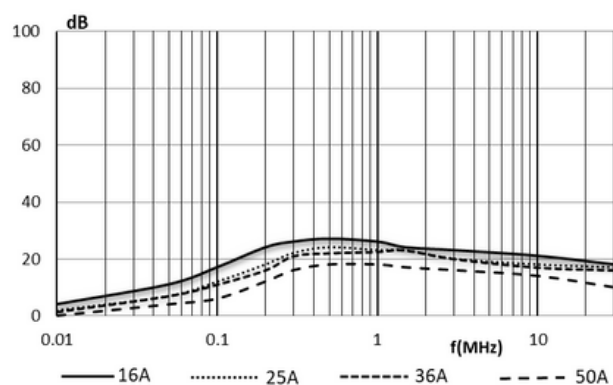
CMC72-21-50-0.3 = 2-wire choke with Horizontal mounting designed for 50 A with an inductance of 0.3 mH

CMC72-32-16-1.3 = 3-wire choke with Vertical mounting designed for 16 A with an inductance of 1.3 mH

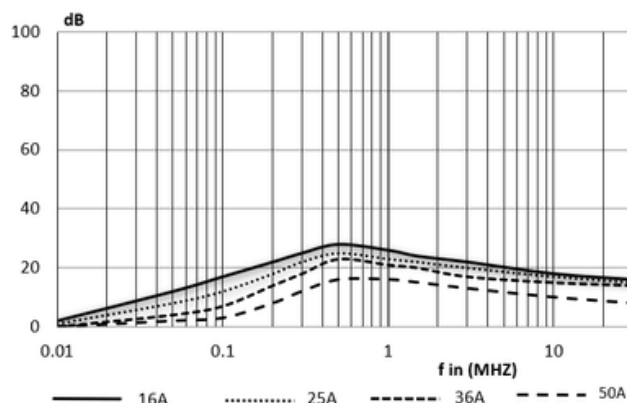
Insertion Loss :

As Per CISPR 17; C=50Ω/50Ω D=50Ω/50Ω

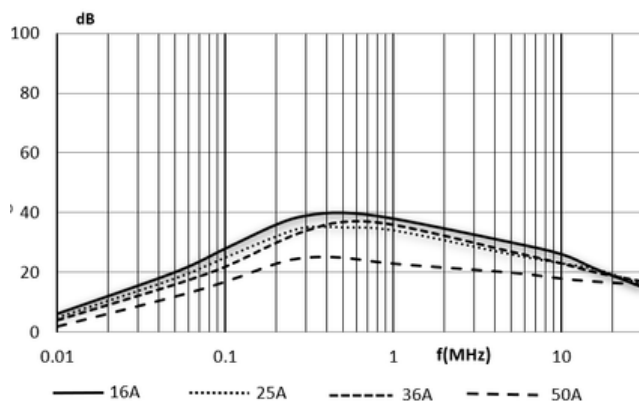
Graph 1: CMC72-21 & CMC72-22
1mH, 0.6mH, 0.5mH, 0.3mH



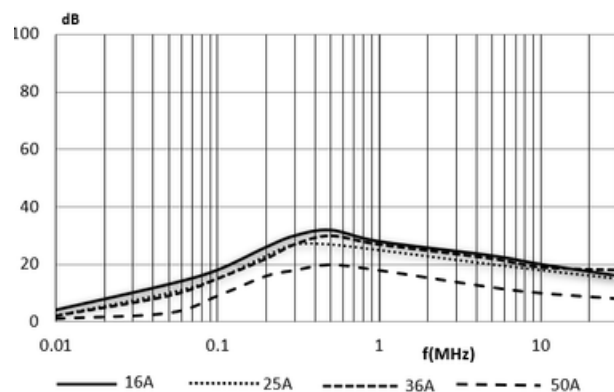
Graph 2: CMC72-31 & CMC72-32
0.80mH, 0.5mH, 0.4mH, 0.2mH



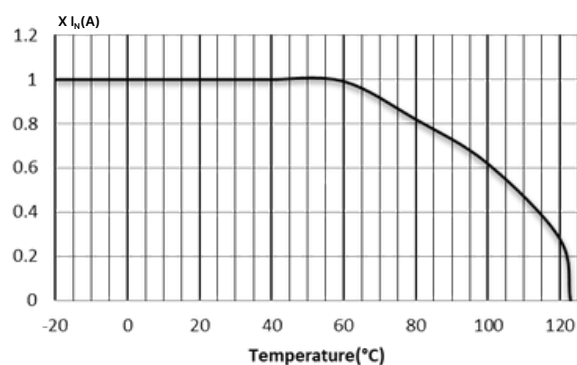
Graph 3: CMC72-22
3mH, 2mH, 1.5mH, 0.8mH



Graph 4: CMC72-32
1.3mH, 0.9mH, 0.8mH, 0.3mH



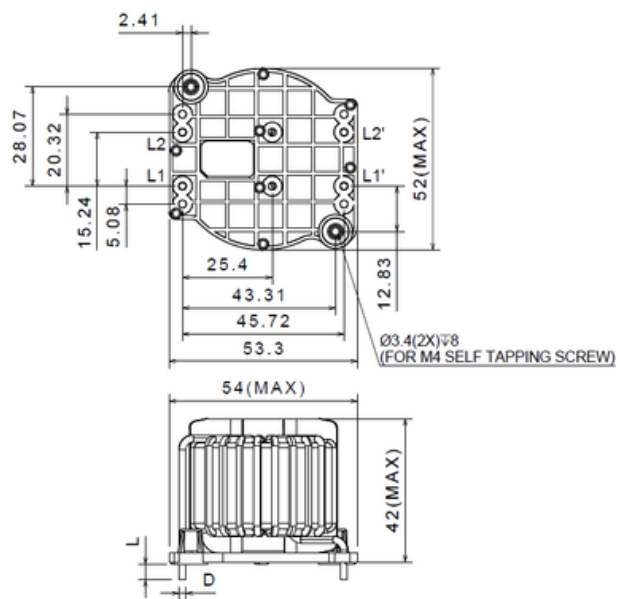
Thermal Derating



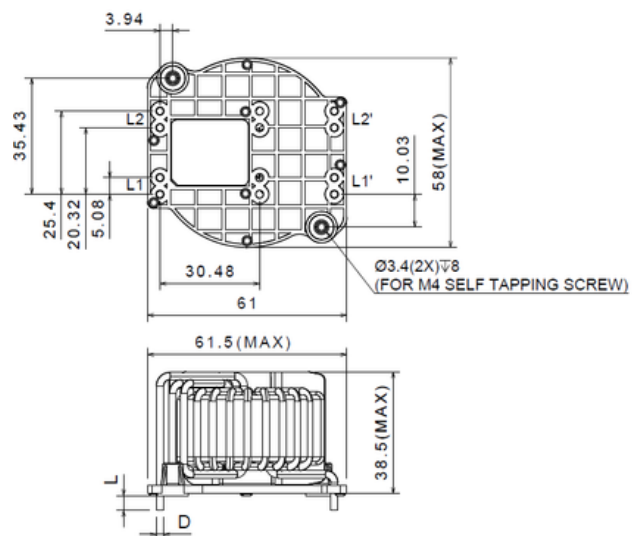
If the ambient temperature exceeds the specified limit, the nominal current needs to be reduced according to the thermal Derating graph shown above.

Mechanical Information : Two Wire

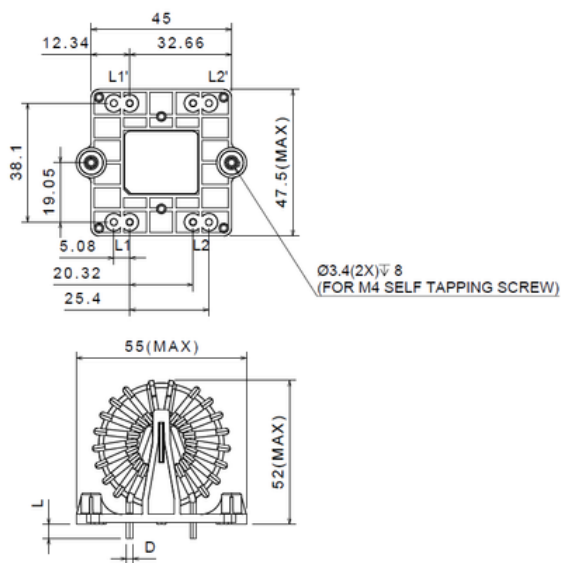
Size 1



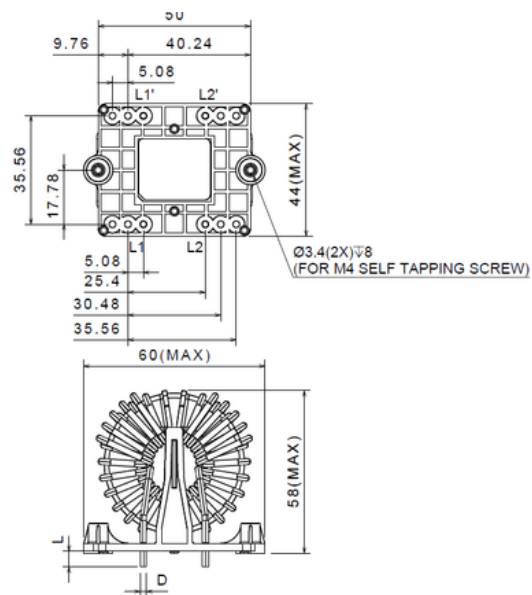
Size 2



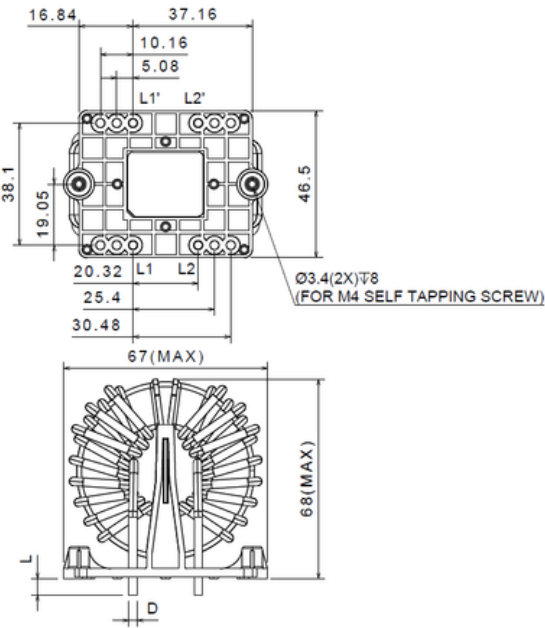
Size 3



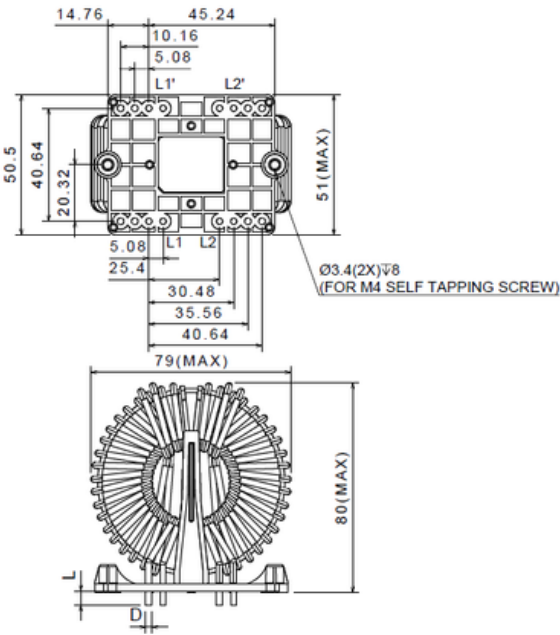
Size 4



Size 5

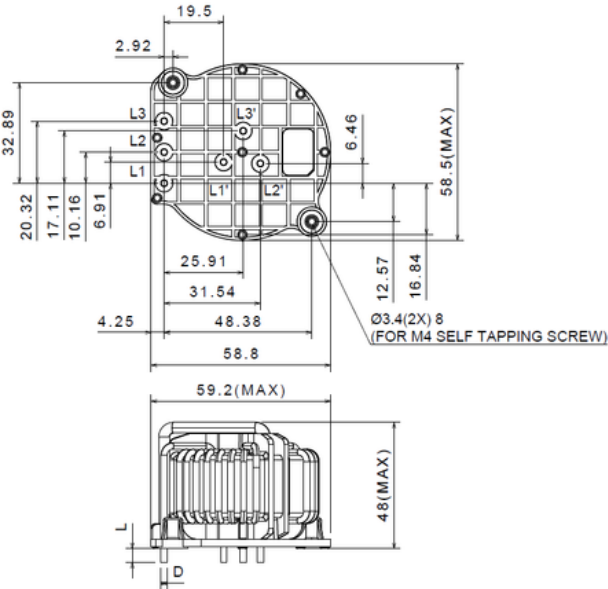


Size 6

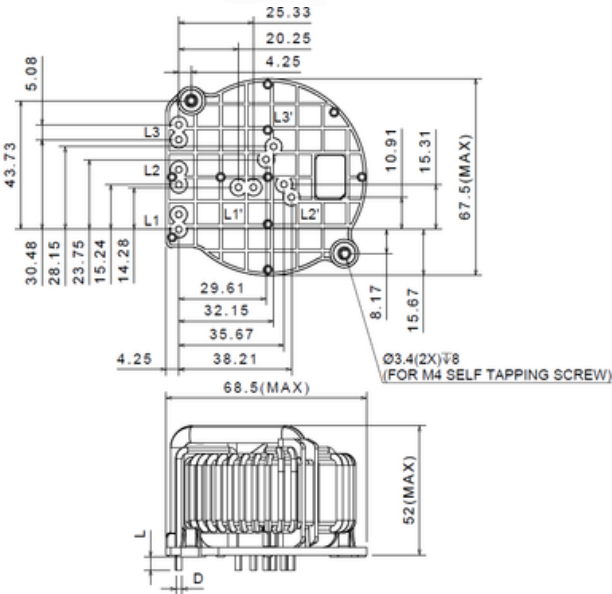


Mechanical Information :Three Wire

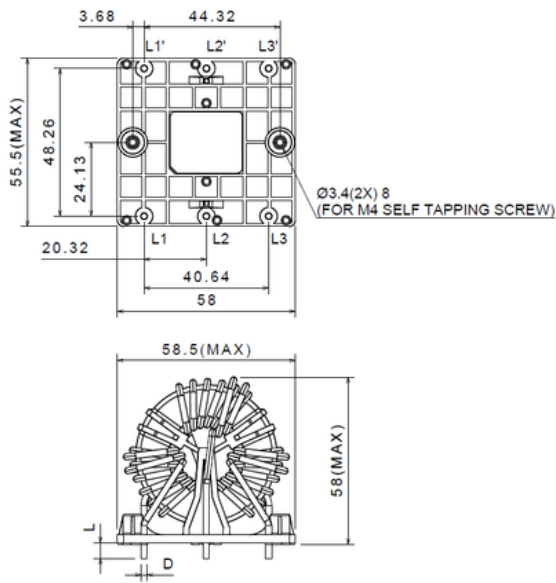
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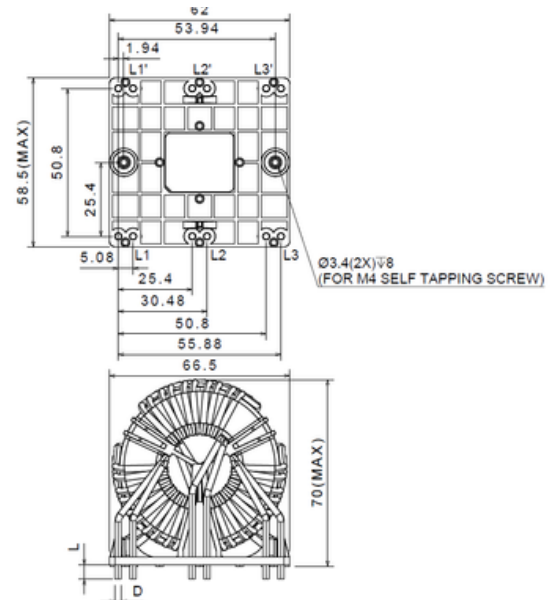
Size 8



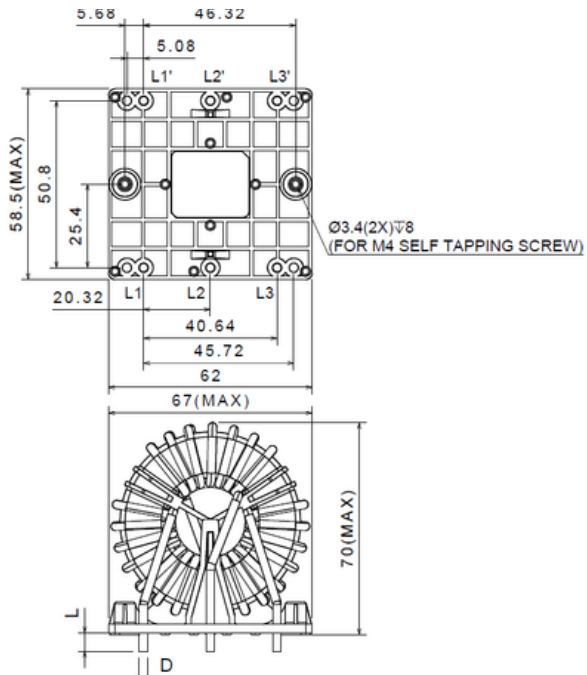
Size 9



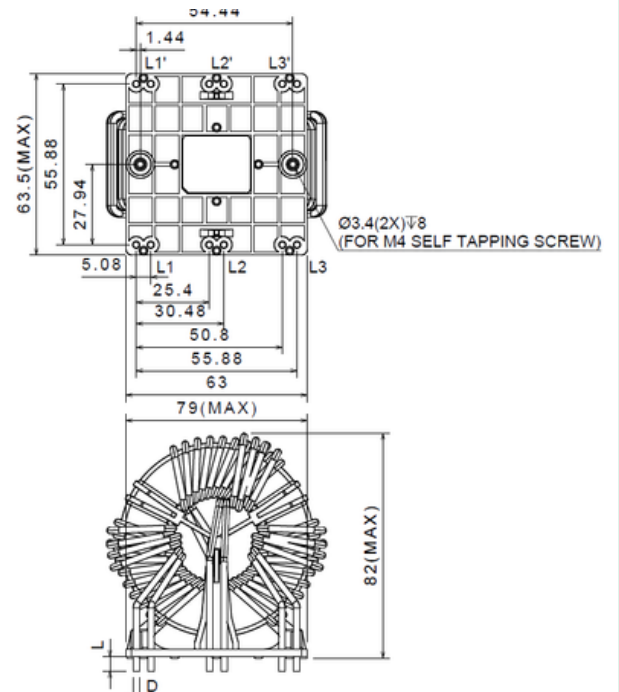
Size 10



Size 11



Size 12



All Dimension in mm; Tolerance According : ISO 2768-m