

## Motor Run & General Purpose AC Capacitors

### AC FILM CAPACITORS FOR MOTOR RUN, UPS AND GENERAL PURPOSE APPLICATIONS



#### Applications

- UPS Systems
- HVAC Systems
- Single Phase Motors
- Phase Converters
- Pumps
- Compressors
- White Goods (e.g. Washing Machines, Refrigerators)
- Blowers/Fans
- Unitary/Window Air Conditioners
- Condensing Units
- Dehumidifiers
- Power Factor Correction

Aerovox's line of SuperMet capacitors are manufactured using state-of-the-art, self-healing metallized polypropylene film technology. Designed to operate in environments where there is a requirement for an internal protective device, these capacitors incorporate a UL-approved pressure-sensitive interrupter to remove the capacitor from the circuit at end of life.

Each capacitor is filled with our patented, environmentally-friendly ESO (Epoxidized Soybean Oil). Used as the dielectric fluid, the soybean oil protects metallized film from corrosion, aids optimum heat transfer, and helps suppress the degrading effects of corona, which may otherwise cause premature failures. Proprietary processing with vacuum and heat cycles ensures complete removal of moisture, resulting in superior capacitance stability and long term reliability.

SuperMet capacitors are available in single and dual ratings, and in industry-standard round and oval, oil-filled, metal can designs as well as a European styled aluminum or plastic can with a mounting stud on the bottom.

All capacitors are built to UL810 standards, and designed to meet or exceed EIA-456-A performance standards.

#### Highlights

- Made to EIA-456-A standards
- Aluminum, steel or plastic\* case options
- Special high temperature 90°C versions available
- UL-810 fault current protection
- RoHS compliant

\*Available upon request



#### Specifications

<b>Capacitance Range:</b>	0.5 $\mu$ F to 120 $\mu$ F
<b>Capacitance Tolerance:</b>	$\pm$ 10% standard; $\pm$ 3% to $\pm$ 6% optional
<b>AC Voltage Range:</b>	120 VAC to 660 VAC
<b>Temperature Range:</b>	-40°C to +70°C standard; +90°C optional
<b>Approval Certification:</b>	UL, cUL, CE2, IEC 60252

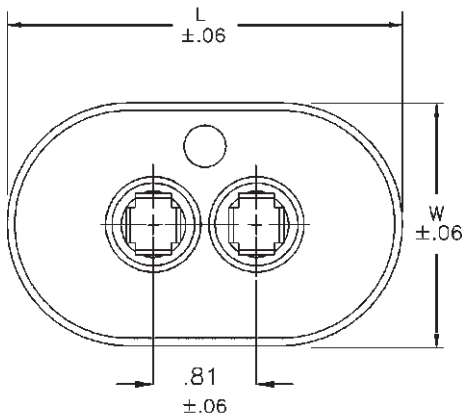
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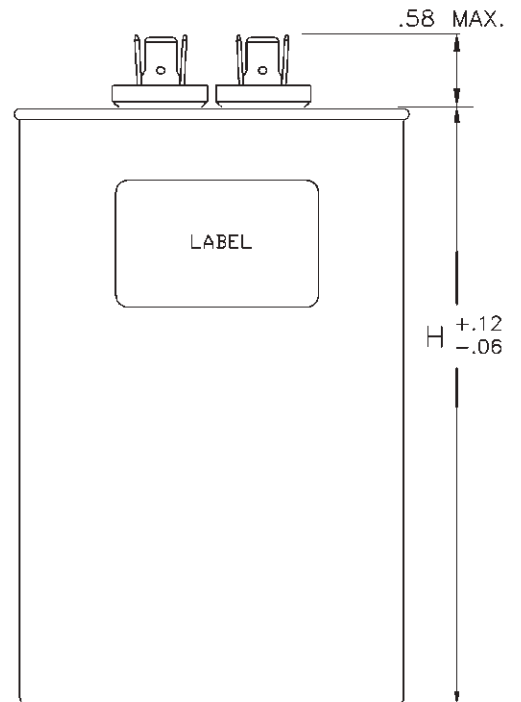
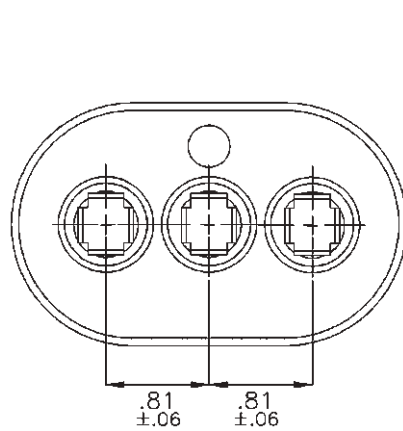
## Oval Oil-Filled Case Sizes

Base Size	Description	L Inches	W Inches
<b>A</b>	<b>1¼" Oval</b>	<b>2.16</b>	<b>1.31</b>
C	1¾" Oval	2.91	1.91
D	2" Oval	3.66	1.97

Oval Single Cover Configuration



Oval Dual Cover Configuration



Tolerance on all case dimensions is  $\pm 0.06$ .

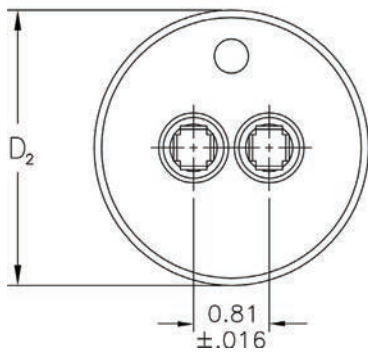
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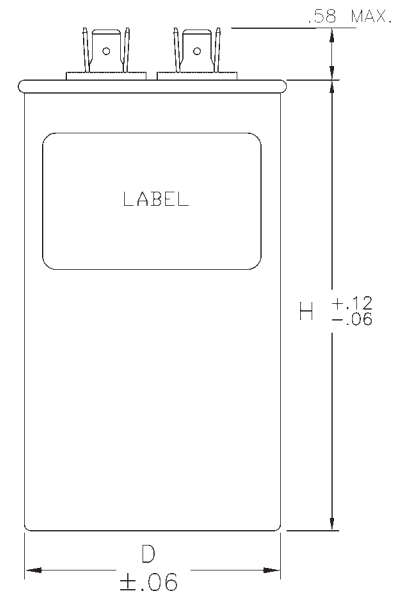
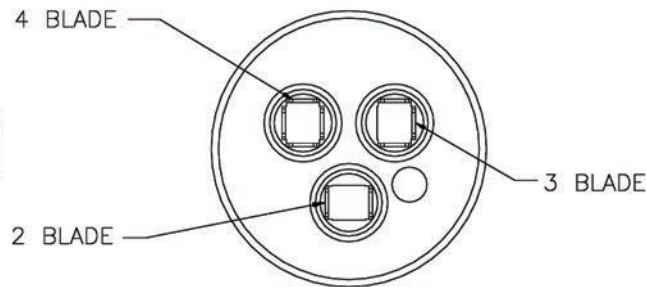
## Round Oil-Filled Case Sizes

Base Size	Description	D Inches	D <sub>2</sub> Inches
P	1¾" Round	1.75	1.87
S	2" Round	2.00	2.12
T	2½" Round	2.50	2.62

### Round Single Cover Configuration



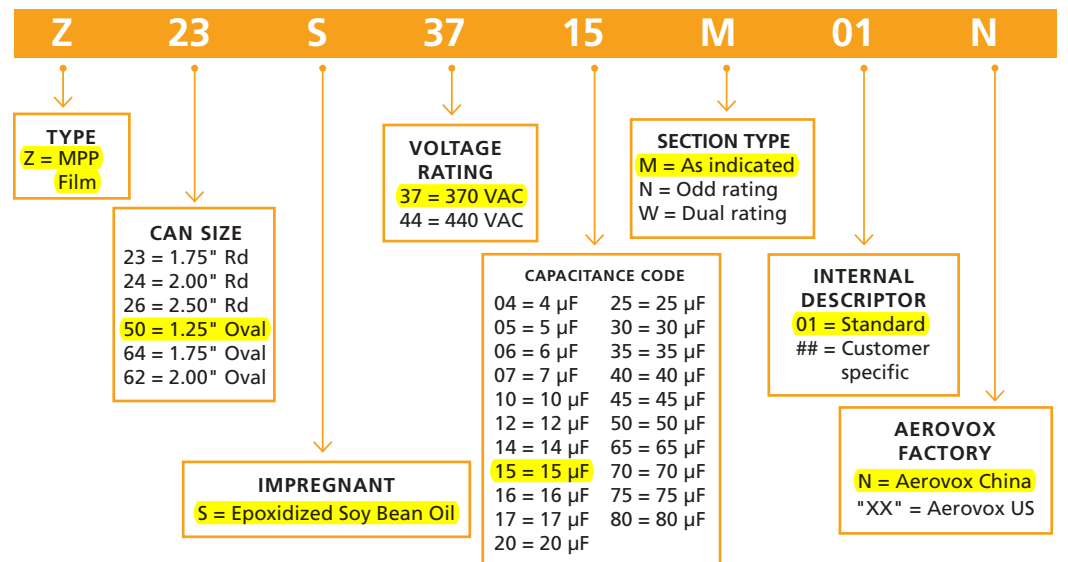
### Round Dual Cover Configuration



For 1.75" and 2.00" OD units, spacing is 0.78" rather than 0.81"

## Part Numbering System

Aerovox's SuperMet part numbering system is a descriptive part number made up of several different components such as can size, voltage rating, etc. The descriptors are explained here using Z23S3715M01N as a representative part number:



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### SuperMet Oval Oil Filled Metal Case Single Rating

Rated for 60,000 hour duty @ 70°C

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
<b>370 VAC, 70°C Case Temperature</b>			
3	Z50S3703M	A	1.56 (39.6)
4	Z50S3704M	A	1.56 (39.6)
5	Z50S3705M	A	1.56 (39.6)
6	Z50S3706M	A	2.38 (60.5)
7.5	Z50S3707N	A	2.38 (60.5)
10	Z50S3710M	A	2.75 (69.9)
12.5	Z50S3712N	A	3.25 (82.6)
<b>15</b>	<b>Z50S3715M</b>	<b>A</b>	<b>3.94 (100.1)</b>
20	Z64S3720M	C	2.38 (60.5)
25	Z64S3725M	C	2.75 (69.9)

### 440 VAC, 70°C Case Temperature

3	Z50S4403M	A	1.56 (39.6)
5	Z50S4405M	A	2.12 (53.8)
7.5	Z50S4407N	A	3.15 (80.0)
10	Z50S4410M	A	3.25 (82.6)
15	Z50S4415M	A	4.13 (104.9)
25	Z64S4425M	C	3.25 (82.6)

### SuperMet Round Oil Filled Metal Case Single Rating

Rated for 60,000 hour duty @ 70°C

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
<b>370 VAC, 70°C Case Temperature</b>			
4	Z23S3704M	P	2.16 (54.9)
5	Z23S3705M	P	2.16 (54.9)
6	Z23S3706M	P	2.16 (54.9)
7.5	Z23S3707N	P	2.16 (54.9)
10	Z23S3710M	P	2.36 (59.9)
12.5	Z23S3712N	P	2.36 (59.9)
15	Z23S3715M	P	2.56 (65.0)
20	Z23S3720M	P	2.75 (69.9)
25	Z23S3725M	P	3.15 (80.0)
30	Z23S3730M	P	3.15 (80.0)
35	Z23S3735M	P	4.25 (108.0)
40	Z24S3740M	S	3.55 (90.2)
45	Z24S3745M	S	3.95 (100.3)
50	Z24S3750M	S	3.88 (98.6)

### 440 VAC, 70°C Case Temperature

15	Z23S4415M	P	3.25 (82.6)
20	Z23S4420M	P	3.15 (80.0)
25	Z23S4425M	P	3.54 (89.9)
30	Z24S4430M	S	3.75 (95.3)
35	Z24S4435M	S	3.94 (100.1)
40	Z24S4440M	S	4.33 (110.0)
45	Z26S4445M	T	3.35 (85.1)
50	Z26S4450M	T	3.25 (82.6)
55	Z26S4455M	T	3.25 (82.6)
60	Z26S4460M	T	3.75 (95.3)

For additional ratings about steel cases or shorter heights, please contact us.