

Lighting Capacitors

FILM CAPACITORS FOR HIGH INTENSITY DISCHARGE (HID) AND SIGN BALLAST LIGHTING



Applications

- Area Lighting
- HID Magnetic Ballast Kits for Greenhouses or Hydroponics
- High / Low Bay / Warehousing
- Horticultural Lighting
- Parking Lot Installations
- Sign Ballast Kits
- Sports Lighting
- Street Lamp Fixtures
- Street Lighting

Aerovox produces both oil-filled and dry capacitors for the HID and sign ballast lighting markets. Constructed with film designed to withstand the rigors of the application, these units are built to operate up to 105°C.

HID lighting capacitors are built with a $\pm 3\%$ tolerance on capacitance, and are designed to operate for a minimum of 60,000 hours. Sign ballast capacitors are constructed with film/foil technology and have tolerances based on application requirements.

Highlights

- Made to EIA-456-A standards
- Metal or plastic case
- Wet or dry construction
- Life test temperature to 105°C
- 18 AWG wire lead termination
- RoHS compliant
- Dual rated HID
- Dual or triple value caps for sign ballasts
- UL-810 fault current protection

Specifications

Capacitance Range:	1 to 75 μF for HID; 1.4 to 2.6 μF with dual or triple rating for sign ballasts
HID Capacitance Tolerance:	$\pm 3\%$
AC Voltage Range:	120 VAC to 660 VAC for HID; 550 VAC to 1,200 VAC for sign ballasts
Temperature Range:	-40°C to +105°C for HID; 0°C to +85°C for sign ballasts
Approval Certification:	UL, cUL UL construction only for dry HID

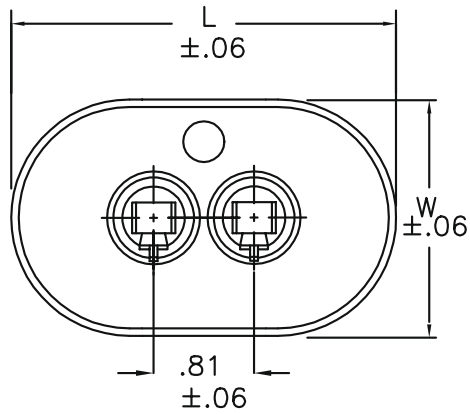
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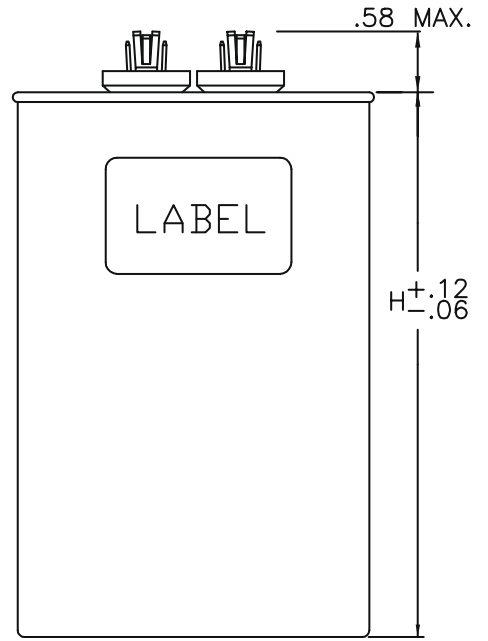
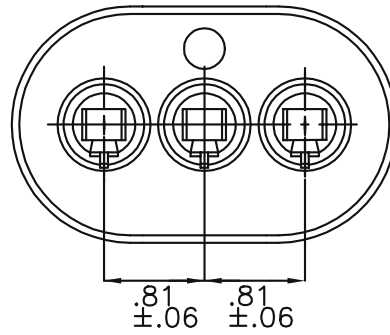
Oval Oil-Filled Case Sizes

Base Size	Description	L Inches	W Inches
A	1¼" Oval	2.16	1.31
B	1½" Oval	2.69	1.56
C	1¾" Oval	2.91	1.91
D	2" Oval	3.66	1.97

Oval Single Cover Configuration



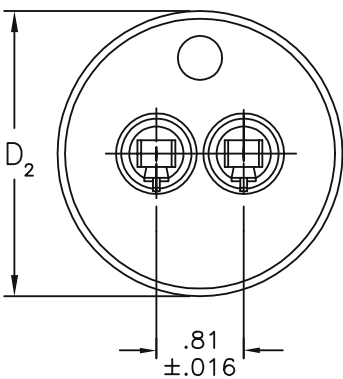
Oval Dual Cover Configuration



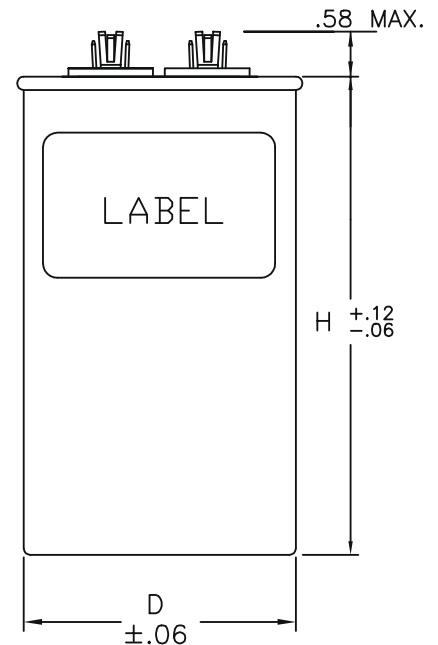
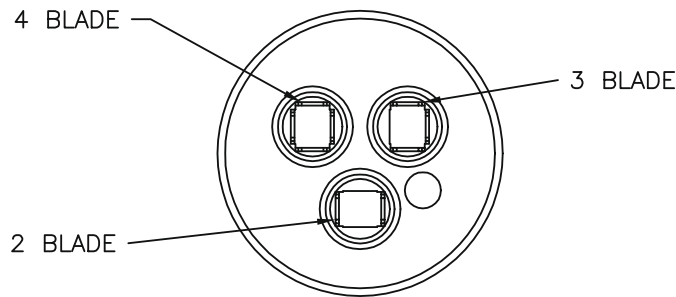
Round Oil-Filled Case Sizes

Base Size	Description	D Inches	D ₂ 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



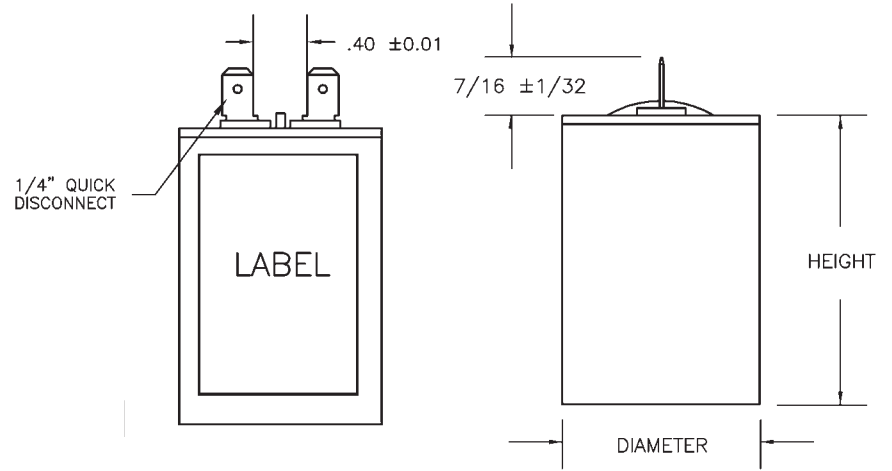
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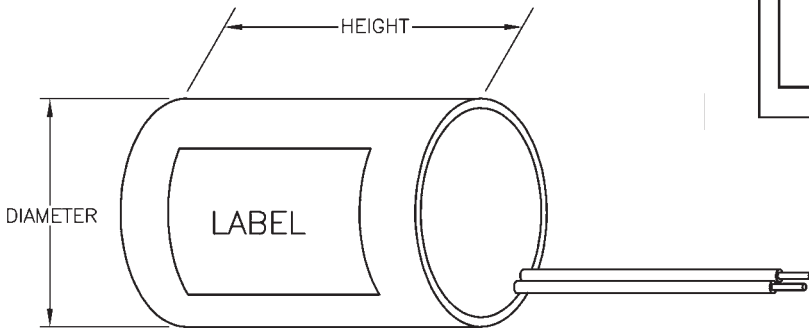
Dry Plastic Case Sizes

Base Size	Diameter Inches (mm)
AA	1.18 (30)
BB	1.58 (40)
CC	1.77 (45)
DD	1.97 (50)

Quick Connect

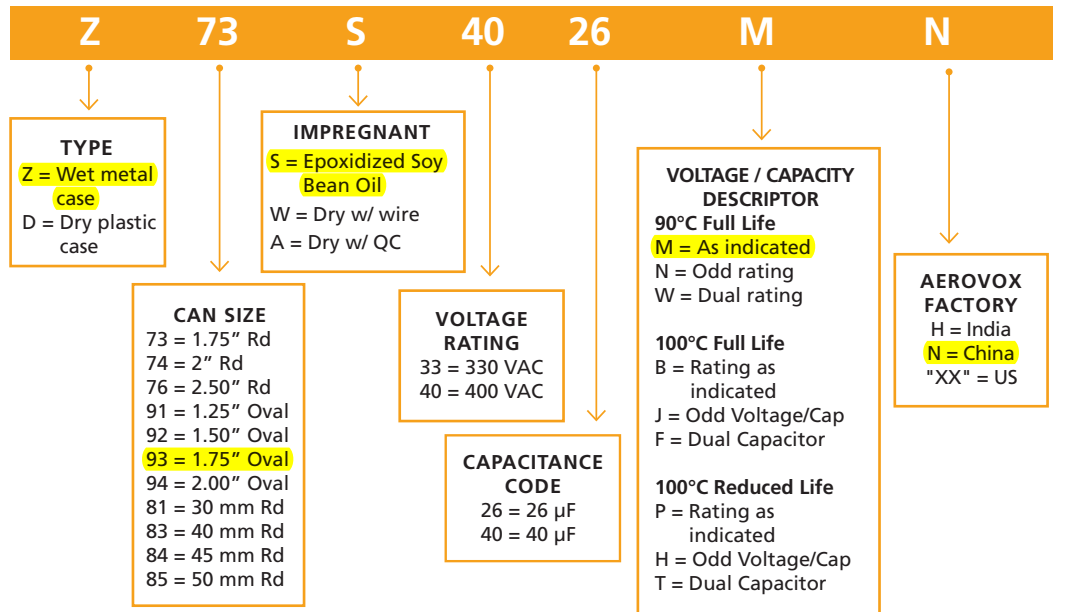


Wire Lead



Part Numbering System

Aerovox's part numbering system is a descriptive part number made of several different components such as can size, voltage rating, etc. The descriptors are explained below using Z73S4026MN as a representative part number:



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FILM CAPACITORS FOR HIGH INTENSITY DISCHARGE (HID)
AND SIGN BALLAST LIGHTING

Oil-Filled, Oval Metal Case

Rated for 60,000 hours

CAP (μF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
240 VAC, 90°C Case Temperature			
35	Z92S2435MN	B	3.75 (95.3)
40	Z92S2440MN	B	3.75 (95.3)
45	Z92S2445MN	B	3.75 (95.3)
52	Z92S2452MN	B	3.75 (95.3)
55	Z92S2455MN	B	3.75 (95.3)

300 VAC, 90°C Case Temperature

5	Z91S3005MN	A	2.19 (55.6)
6	Z91S3006MN	A	2.19 (55.6)
12	Z91S3012MN	A	2.88 (73.2)
14	Z92S3014MN	B	2.75 (69.9)
28	Z93S3028MN	C	3.13 (79.5)
40	Z93S3040MN	C	3.25 (82.6)
55	Z93S3055MN	C	3.88 (98.6)
64	Z93S3064MN	C	4.25 (108)

330 VAC, 90°C Case Temperature

7	Z91S3307MN	A	2.19 (55.6)
8	Z91S3308MN	A	2.19 (55.6)
10	Z91S3310MN	A	2.69 (68.3)
12	Z91S3312MN	A	2.88 (73.2)
14	Z91S3314MN	A	2.88 (73.2)
16	Z91S3316MN	A	3.75 (95.3)
17.5	Z92S3317NN	B	3.13 (79.5)
24	Z93S3324MN	C	2.75 (69.9)
26	Z93S3326MN	C	3.13 (79.5)
29	Z93S3329MN	C	3.13 (79.5)
30	Z93S3330MN	C	3.13 (79.5)
34	Z93S3334MN	C	3.13 (79.5)
35	Z93S3335MN	C	3.13 (79.5)
48	Z93S3348MN	C	3.88 (98.6)

CAP (μF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
400 VAC, 90°C Case Temperature			
10	Z92S4010MN	B	2.75 (69.9)
15	Z93S4015MN	C	2.75 (69.9)
21	Z93S4021MN	C	3.13 (79.5)
22.5	Z93S4022NN	C	3.13 (79.5)
24	Z93S4024MN	C	3.13 (79.5)

480 VAC, 90°C Case Temperature

3	Z91S4803MN	A	2.25 (57.2)
4	Z91S4804MN	A	2.69 (68.3)
5	Z91S4805MN	A	2.88 (73.2)
6	Z92S4806MN	B	2.75 (69.9)
10	Z92S4810MN	B	2.75 (69.9)
12	Z93S4812MN	C	3.13 (79.5)
15	Z92S4815MN	B	3.75 (95.3)
20	Z93S4820MN	C	3.75 (95.3)
21	Z93S4821MN	C	3.75 (95.3)
22	Z93S4822MN	C	3.88 (98.6)
24	Z93S4824PN	C	3.88 (98.6)
26	Z93S4826MN	C	3.88 (98.6)
28	Z93S4828PN	C	3.88 (98.6)

525 VAC, 90°C Case Temperature

16	Z93S5216NN	C	3.13 (79.5)
24	Z93S5224NN	C	4.25 (108.0)
26	Z93S5226NN	C	4.25 (108.0)
26	Z94S5226NN	D	2.88 (73.2)
32	Z93S5232NN	C	4.75 (120.7)
32	Z94S5232NN	D	3.75 (95.3)

CAP (μF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)	VAC
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400-525 VAC, 100°C Case Temperature

24	Z94S4024BN	D	3.25 (82.6)	400
24	Z94S4824BN	D	3.75 (95.3)	480
21	Z94S5221JN	D	3.75 (95.3)	525
26	Z94S5226JN	D	3.75 (95.3)	525