METAL HALIDE

(60 Hz., MINIMUM STARTING TEMPERATURE -20°F OR -30°C)

Input Volts	Catalog† Number	Circuit Type	Watts Input	Max• Input Current	Nom Open Circuit Voltage	Fuse Rating (Amps)	Wiring Dia	Dimensions			Non-PCB Capacitor (Page 158-159)						Total Weight (lbs)	Ignitor †† (Page 160-163)		U.L. Bench Top Rise Code 1029 (pg 115)
											Mfd	Min Volt	Dry Film		Oil Filled			Part Number	Max Dist To Lamp (ft)	
								Fig	A	B			Dia (in)	Ht (in)	Oval (in)	Ht (in)				
100 Watt Lamp, ANSI Code M90 or M140																				
120/277	71A5380	HX-HPF	129	2.6/1.2	280	6/3	K	1	1.5	2.9	12	280	1.50	2.90	—	—	5.5	LI533-H4	20	B/B
127/220	71A53H0	HX-HPF	129	2.2/1.3	280	5/3	K	1	1.7	2.9	12	280	1.50	2.90			5.5	LI533-H4	20	A/B
120/208/ 240/277	71A5390 **71A5390-001D**	HX-HPF	129	2.6/1.5/ 1.3/1.2	280	6/4/ 3/3	K	1	1.5	2.9	12	280	1.50	2.90	—	—	5.5	LI533-H4	20	B/A/ C/B
120/ 277/347	71A53A0	HX-HPF	129	2.6/ 1.2/1.0	280	6/ 3/2	K	1	1.7	2.9	12	280	1.50	2.90	—	—	5.5	LI533-H4	20	B/ B/B
120/ 277/347	**71A53A0-001D**	HX-HPF	129	2.6/ 1.2/1.0	280	6/ 3/2	K	1	1.7	2.9	12	280	1.50	2.90	—	—	5.5	LI533-H4	20	B/ B/B
480/ 120T	71A5340-T	HX-HPF	132	.6	260	2	K	1	1.7	2.9	10	300	1.50	2.90	—	—	5.5	LI533-H4	25	C
120/277	71A5383	CWA	128	1.1/.5	222	3/2	M	1	1.6	2.8	10	300	1.50	2.90	—	—	5.5	LI533-H4	2	C/C
277	71A5337-P✣	R-NPF	118	1.3	277	3	G	9	1.7	2.8	—	—	—	—	—	—	3.0	LI533-H4	2	A
		R-HPF		1.1							10	280	1.50	2.90	—	—	3.2			
277	71A5337-BP✣	R-NPF	118	1.3	277	3	H	9	1.8	3.1	—	—	—	—	—	—	3.0	Integral Ignitor	2	A
		R-HPF		1.1							10	280	1.50	2.90	—	—	3.2			
277	71A5337-J✣	R-NPF	118	1.3	277	3	J	11	1.8	3.9	—	—	—	—	—	—	3.3	J-Box with Integral Ignitor	2	C
		R-HPF		1.1							10	280	1.50	2.90	—	—	3.5			

† Ordering information:
Replacement/retrofit ballast kits indicated by **bold type** with suffix **-001D**. Refer to pages 117-120.
Original equipment ballasts - add proper suffix to catalog number:
-500D includes core & coil with dry-film capacitor
-510D includes core & coil with welded bracket and dry-film capacitor
-600 core & coil only (no capacitor)
-610 core & coil with welded bracket (no capacitor)

• For CWA circuits, figure is operating current. For HX and R circuits, figure is highest of starting, operating or open circuit current.

†† Each ballast requiring an ignitor is furnished standard with the **Short Range** ignitor model shown for use within fixtures. If a **Long Range** ignitor is required for remote mounting, specify on order. See pages 160-163 for additional information.

Canadian replacement/retrofit ballast kit indicated by **bold type.** Refer to pages 121-122.

✣ Includes auto-reset thermal protection

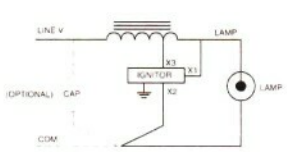


Fig. G

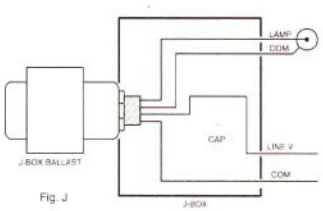


Fig. J

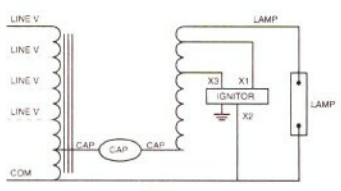


Fig. L

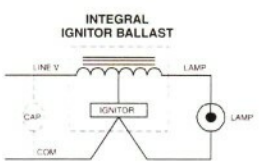


Fig. H

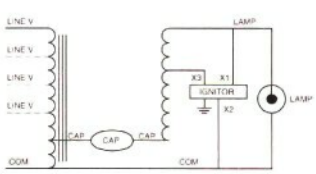


Fig. M

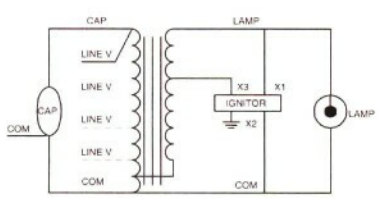


Fig. K

Encapsulated Core & Coil

Where quiet performance is required, the standard open core & coil ballasts are encapsulated (potted) in a cube-shaped steel can utilizing Class H (180°C) polyester compound. These ballasts carry a Class A noise rating up through 175 watts and Class B for 250 and 400 watts. As with the open core & coil, the capacitor (and ignitor where included) are mounted separately within the fixture.

Fluorescent Can (F-Can)

For indoor commercial applications of HID lighting such as offices, schools and retail stores, ballast noise must be minimized. Ballasts for these fixtures are most often encased and potted in fluorescent ballast type cans and utilize Class A (90°C) asphalt insulating materials (the same as used in fluorescent lamp ballasts).

The Advance line of F-can ballasts comes in two dual-voltage configurations: 120/277 volt for the US market, and 120/347 volt for the Canadian market. Each unit has built-in, automatically resetting, thermal protectors which disconnect the ballast from the power line in the event of overheating. All units are high power factor and include the capacitor within the can. All models for high pressure sodium and low-wattage metal halide lamps also include the ignitor in the can.

Indoor Enclosed

These units are designed for use indoors where the ballast must be mounted remotely from the luminaire. They are most typically used in factories where the luminaire may be mounted in a high-bay where very high ambient temperatures may be experienced. In these instances, the remotely-mounted ballast operates cooler, subsequently providing longer life because it is away from both the heat of the ceiling ambient and lamp heat within the fixture.

The case contains the core & coil potted in a Class H (180°C) heat-dissipating resin. The capacitor(s) and ignitor are contained within a separate compartment. Knockouts in both ends of the case facilitate hook-up in the most convenient manner. Wall mounting is accomplished through flanges on the top and bottom of the case. The ballast is a UL Listed product.

Outdoor Weatherproof

Weatherproof ballasts are designed for remote, pole-mounting outdoor applications under all weather conditions. They may also be placed inside of a transformer pole base, but care must be taken to avoid areas prone to flooding because weatherproof ballasts are not water-submersible.

The core & coil with its capacitor and ignitor (where required) are firmly mounted to the heat-sink base. An aluminum cover is placed over the core-&-coil assembly and is bolted with a weather-tight gasket to the base. An integral 1" threaded nipple with locknut facilities hook-up to electrical conduit or to the mounting bracket when used on a pole. The weatherproof ballast may also be placed nipple-up, with a drip loop in the leads, inside a pole base.

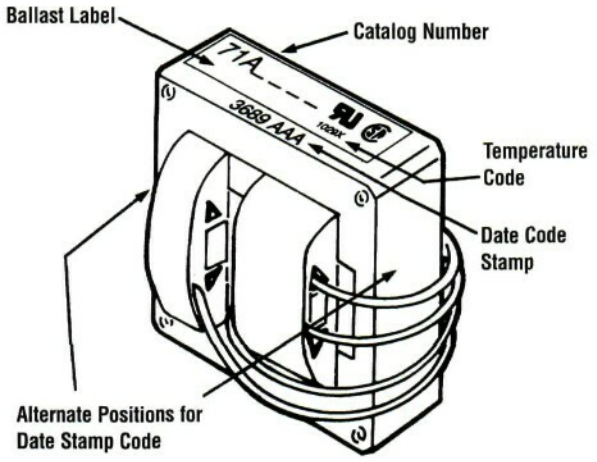
Postline

Lantern-type fixtures mounted on slender poles often require ballasts which will fit into these poles. Special, elongated core & coil ballasts are potted in resin in cylindrical cans having a 2.55" outside diameter. All include leads necessary for direct connection to a photocell.

The capacitor and ignitor (where required) are included within this can. A ½" threaded nipple is used for vertical mounting, and leads extend from both ends of the can for ease of installation. The input leads to the ballast also provide for proper connection to the photocell if such is included within the fixture.

To help prevent overheating, one to three feet of air space should be allowed in the pole above the ballast, and the ballast should be positioned against the post interior wall to provide a heat-sink. All units rated 100W and above now include a mounting kit consisting of an 18" chain to hang the ballast within the pole and a spring clip to force the ballast's cylindrical can to make line contact with the pole's interior surface to maximize heat transfer, thus prolonging the ballast life.

BALLAST DATE AND TEMPERATURE CODES



ADVANCE ® HID Core & Coil ballasts are date stamped on either the top surface or the side surface of the ballast core. The four-digit number represents the *week* and *year* of manufacture. The first two numbers indicate the week and the last two indicate the year the ballast was manufactured. The example shows a ballast manufactured during the 36th week of 1989. The three letters are an Advance factory code.

The ballast's UL Bench Top Rise Temperature Code is shown on the label (see below).

UL BENCH TOP RISE TEMPERATURE CODE

To facilitate UL inspection, each ballast's UL Bench Top Rise Temperature Code is shown on the Advance Core & Coil ballast label as 1029**X**, where 1029 is the UL Standard for HID Ballasts, and the **X** is the temperature code: **A**, **B**, **C**, etc. If a fixture is UL listed for 1029**C**, then automatically, all ballasts with an **A**, **B**, or **C** temperature classification are acceptable for use within that same fixture.

UL Bench Top Rise Letter Code	Temperature Range for Class H (180°C) Ballasts
A	less than 75°C
B	75°C < 80°C
C	80°C < 85°C
D	85°C < 90°C
E	90°C < 95°C
F	95°C < 100°C
etc.	etc.

CERTIFICATIONS

Indicates ballast is listed by Underwriters Laboratories, Inc. in accordance with UL 1029 Standard for HID Ballasts. Each ballast is marked appropriately.

Indicates ballast is component recognized by Underwriters Laboratories, Inc. in accordance with UL 1029 Standard for HID Ballasts. Each ballast is marked appropriately.

Indicates ballast is certified by Canadian Standards Association in accordance with CAN/CSA-22.2 No. 74-92.Each ballast is marked appropriately.

All HID Ballasts are designed and manufactured in accordance with the American National Standards Institute Standard for HID Ballasts, ANSI C82.4.

METAL HALIDE

(60 Hz., MINIMUM STARTING TEMPERATURE -20°F OR -30°C)

Input Volts	Catalog† Number	Circuit Type	Watts Input	Max• Input Current	Nom Open Circuit Voltage	Fuse Rating (Amps)	Wiring Dia	Dimensions			Non-PCB Capacitor (Page 158-159)						Total Weight (lbs)	Ignitor †† (Page 160-163)		U.L. Bench Top Rise Code 1029 (pg 115)
											Mfd	Min Volt	Dry Film		Oil Filled			Part Number	Max Dist To Lamp (ft)	
								Fig	A	B			Dia (in)	Ht (in)	Oval (in)	Ht (in)				
150 Watt Lamp, ANSI Code M102 (Medium Base) or M142																				
120/277	71A5482	HX-HPF	185	3.7/1.6	265	10/4	K	1	2.3	3.9	16	280	1.50	3.75	—	—	7.0	LI533-H4	10	C/B
120/208/240/277	71A5492	HX-HPF	185	3.7/2.1/1.8/1.6	265	10/5/5/4	K	1	2.3	3.9	16	280	1.50	3.75	—	—	7.0	LI533-H4	10	C/C/C/C
120/277/347	71A54A2	HX-HPF	185	3.7/1.6/1.3	265	10/4/3	K	1	2.3	3.9	16	280	1.50	3.75	—	—	7.0	LI533-H4	10	E/E/E
120/277/347	71A54A3	Super CWA	189	1.7/.8/.7	187	5/2/2	M	1	2.7	4.0	22	240	1.50	3.75	—	—	9.0	LI501-J4	15	C/B/A
277	71A5437-P✣	Linear Reactor HPF	173	1.5	277	4	G	9	2.5	3.8	14	280	1.50	2.90	—	—	4.2	LI533-H4	2	B
277	71A5437-BP✣	Linear Reactor HPF	173	1.5	277	4	H	9	2.5	4.0	14	280	1.50	2.90	—	—	4.2	Integral Ignitor	2	B
277	71A5437-J✣	Linear Reactor HPF	173	1.5	277	4	J	11	2.5	4.5	14	280	1.50	2.90	—	—	4.5	J-Box with Integral Ignitor	2	B
150 Watt Lamp, ANSI Code M81 (OSI Briteline/HQI, GE MQI ARC150, Philips MHN150/TD)																				
120/277	71A5480	HX-HPF	185	3.6/1.7	240	9/4	K	1	2.5	3.8	16	300	1.50	3.75	—	—	8.5	LI522-H5	20	C/A
120/208/240/277	71A5490	HX-HPF	185	3.6/2.1/1.8/1.6	240	9/6/5/4	K	1	2.5	3.8	16	300	1.50	3.75	—	—	8.5	LI522-H5	20	C/C/A/A
120/347	71A54C0	HX-HPF	185	3.6/1.30	240	9/4	K	1	2.5	3.8	16	300	1.50	3.75	—	—	8.5	LI522-H5	20	F/E
120/277	71A5486	CWA	189	1.7/.8	187	5/2	L	1	2.7	4.0	22.5	240	1.75	3.75	—	—	9.0	LI523-H5	2	F/E

† Ordering information:
Original equipment ballasts - add proper suffix to catalog number:
-500D includes core & coil with dry-film capacitor
-510D includes core & coil with welded bracket and dry-film capacitor
-600 core & coil only (no capacitor)
-610 core & coil with welded bracket (no capacitor)

• For CWA circuits, figure is operating current. For HX and Linear Reactor circuits, figure is highest of starting, operating or open circuit current.

†† Each ballast requiring an ignitor is furnished standard with the **Short Range** ignitor model shown for use within fixtures. If a **Long Range** ignitor is required for remote mounting, specify on order. See pages 160-163 for additional information.

✣ Includes auto-reset thermal protection

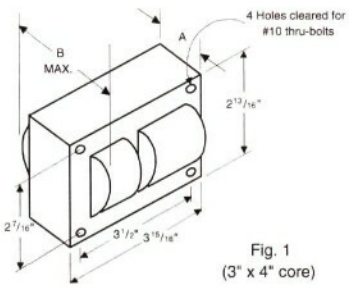


Fig. 1
(3" x 4" core)

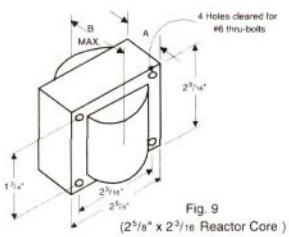


Fig. 9
(2 5/8" x 2 3/16 Reactor Core)

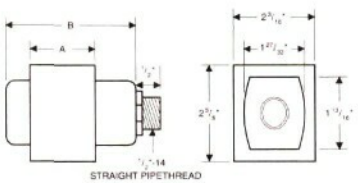
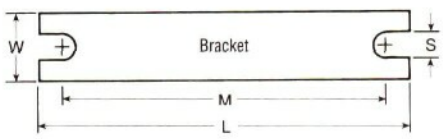


Fig. 11
J-Box Ballast



WELDED BRACKET DIMENSIONS

Ballast Dimensions Fig	L	W	M	S
1	5.1	1.00	4.50	0.25
9	4.0	0.75	3.50	0.28
11	Not Available			

DISCONTINUED CATALOG NUMBER TO REPLACEMENT NUMBER

Obsolete Catalog Numbers	Replacement Catalog Number	Page No.	Alternate Quadri-volt 120/208/240/277V
71A0401-791	....	....	....
71A1500	71A1580		....
71A1510	....	....	....
71A1530	71A1580	121	....
71A1540	....	....	....
71A15R0	....	....	....
71A1810	....	....	....
71A1820	....	....	....
71A1830	71A1580(CWA)**	121	....
71A2020	....	....	....
71A20R0	....	....	....
71A2300	71A2303	121	....
71A2310	....	....	....
71A2320	....	....	....
71A2330	71A2030(CWA)**	121	....
71A2340	....	....	....
71A2500	71A2501	122	71A2571/91
71A2502	71A2501	122	71A2571/91
71A2510	71A2511		71A2571/91
71A2512	71A2511		71A2571/91
71A2520	....		71A2571/91
71A2522	....		71A2571/91
71A2530	71A2531	122	71A2571/91
71A2532	71A2531	120	71A2571/91
71A2540	71A2541	122	....
71A2542	71A2541	122	....
71A2551	....	....	71A2571/91
71A2561	....	....	71A2571/91
71A25D1 (120/240/347V)	71A25A1 (120/277/347V)	122	71A2571/91
71A25R1	71A25N1		....
71A2801	71A2800	122	....
71A2803	71A2800	122	....
71A2810	....	....	71A2571/91(CWA)**
71A2820	....		71A2571/91(CWA)**
71A2840	71A2541(CWA)**	122	....
71A29G0	....	....	....
71A3000	71A3002	123	71A3072/92
71A3001	71A3002	123	71A3072/92
71A3010	....	....	71A3072/92
71A3011	....	....	71A3072/92
71A3012	....	....	71A3072/92
71A3020	....	....	71A3072/92
71A3021	....	....	71A3072/92
71A3022	....	....	71A3072/92
71A3030	71A3032	123	71A3072/92
71A3031	71A3032	123	71A3072/92
71A3040	71A3042	123	....
71A3041	71A3042	123	....
71A3052	....	....	71A3072/92
71A3062	....	....	71A3072/92
71A3140	71A3042	123	....
71A3150	....	....	71A3072/92
71A3320	....	....	71A3072/92(CWA)**
71A3330	71A3032(CWA)**	123	71A3072/92(CWA)**
71A3340	71A3042(CWA)**	123	....
71A3500	71A3502	124	71A3572/92
71A3501	71A3502	124	71A3572/92
71A3510	....	....	71A3572/92
71A3520	....	....	71A3572/92
71A3521	....	....	71A3572/92
71A3522	....	....	71A3572/92
71A3530	....	....	71A3572/92
71A3531	....	....	71A3572/92
71A3532	....	....	71A3572/92
71A3540	71A3542	124	....
71A3541	71A3542	124	....
71A3552	71A3572/92	124	71A3572/92
71A3562	71A3572/92	124	71A3572/92
71A3640	71A3542	124	....
71A3650	....	....	71A3572/92
71A3800	71A3502(CWA)**	124	71A3572/92(CWA)**
71A3810	....	....	71A3572/92(CWA)**
71A3820	....	....	71A3572/92(CWA)**
71A3825-791	....	....	....
71A3830	....	....	71A3572/92(CWA)**
71A3840	71A3542(CWA)**	124	....
71A4000	....	....	71A4071/91
71A4001	....	....	71A4071/91
71A4020	....	....	71A4071/91
71A4021	....	....	71A4071/91
71A4030	....	....	71A4071/91
71A4031	....	....	71A4071/91
71A4040	71A4041	125	....
71A4051	71A4071/91	125	71A4071/91
71A4061	71A4071/91	125	71A4071/91
71A4142	71A4041	125	71A4071/91
71A4152	....	....	71A4071/91
71A4310	....	....	....
71A4320	....	....	....
71A4401	....	....	71A4071/91(CWA)**
71A4411	....	....	71A4071/91(CWA)**
71A4421	....	....	71A4071/91(CWA)**
71A4431	....	....	71A4071/91(CWA)**
71A4441	71A4041(CWA)**	125	71A4071/91(CWA)**
71A5000	....	....	71A5070/90
71A5030*	....	....	71A5070/90
71A5050	....	....	71A5070/90
71A5060	....	....	71A5070/90
71A5102	....	....	71A5070/90
71A5122	....		71A5070/90
71A5142	71A5040	125	....
71A5227 (Reactor)	....	....	71A5292 (3x4 Core)
71A5228	....	....	....
71A5229 (Reactor)	....		71A5292 (3x4 Core)
71A5288	....	....	....
71A5289 (Reactor + Transformer)		....	71A5292 (3x4 Core)
71A52C2	71A52A2	127	71A5292 (3x4 Core)
71A5338	....	....	....
71A5386	....	....	....
71A5387 (Reactor + Transformer)			71A5390 (3x4 Core)
71A5388	....	....	....
71A53C0	71A53A0	128	71A5390 (3x4 Core)
71A5427 (Reactor)	....	....	71A5490 (3x4 Core)
71A5428 (Reactor)	....	....	71A5490 (3x4 Core)
71A5429 (Reactor)	....	....	71A5492 (3x4 Core)
71A5488 (Reactor + Autotransformer)		....	71A5490 (3x4 Core)
71A5489 (Reactor + Autotransformer)		....	71A5492 (3x4 Core)
71A5550	71A5570/90	130	71A5570/90
71A5560	71A5570/90	130	71A5570/90
71A5592	....	....	....
71A55B0	71A55A0	130	....
71A55D0 (120/240/347V)	71A55A0 (120/277/347V)	130	71A5570/90
71A55G0	71A55H0	130	....
71A55J0	71A55H0	130	....
71A55R0	71A55N0	130	....
71A5750	....	....	71A5770/90
71A5760	....	....	71A5770/90
71A5792	....	....	....
71A57D0 (120/240/347V)	71A57A0 (120/277/347V)	132	71A5770/90
71A57J0	71A55H0	130	....
71A57R0	71A57N0	130	....
71A6000	71A6001	135	71A6071/91
71A6010	71A6011	135	71A6071/91
71A6020	71A6021	135	71A6071/91
71A6030	71A6031	135	71A6071/91
71A6040	71A6041	135	71A6071/91
71A6051	71A6071/91	135	71A6071/91
71A6061	71A6071/91	135	71A6071/91
71A6084(120/277V)	71A6004(120V)	136	71A6034(277V)
71A6092	....	....	....
71A60D1 (129/240/347V)	71A60A1 (120/277/347V)	135	71A6071/91
71A60J1	71A60H1	135	....
71A60R1	71A60N1	135	....
71A6300 (Series)	71A6382(ILO)	135	....
71A6310 (Series)	....	....	....
71A6320 (Series)	....	....	....
71A6330 (Series)	71A6382(ILO)	135	....
71A6340 (Series)	71A6342(ILO)	135	....
71A6500	71A6502	137	71A6572/92
71A6501	71A6502	137	71A6572/92
71A6510	71A6512	137	71A6572/92
71A6511	71A6512	137	71A6572/92
71A6520	71A6522	137	71A6572/92
71A6521	71A6522	132	71A6572/92
71A6530	71A6532	132	71A6572/92
71A6531	71A6532	132	71A6572/92
71A6540	71A6542	115	....
71A6541	71A6542	115	....
71A6551	71A6572/92	137	71A6572/92
71A6561	71A6572/92	137	71A6572/92
71A6571	71A6572	137	71A6572/92
71A6591	71A6592	137	71A6572/92
71A65D2 (120/240/347V)	71A65A2 (120/277/347V)	137	71A6572/92
71A65R2	71A65N2	138	....
71A6700	71A6702	138	71A6772/92
71A6701	71A6702	138	71A6772/92
71A6710	71A6712	137	71A6772/92
71A6711	71A6712	137	71A6772/92

* Availability limited to existing stocks.

** The CWA ballasts offered as replacements are furnished with a capacitor which must be used in the ballast circuit as shown in the wiring diagram in this Atlas. The original ballast circuit in the lighting fixture may have been low or normal power factor, and therefore, no capacitor was used. If the CWA ballast with its capacitor does not fit in the fixture, contact Advance for assistance.

Advance Replacement ballasts shown are functionally equivalent to listed obsolete ballasts. Dimensional differences can exist.

Suffix "T" ballast catalog numbers indicate ballast is equipped with 120V output tap. Standard practice is to use 120V tap on quadri-volt ballast, where quadri-volt ballasts are available.

Where no replacement ballast is shown, ballast has been discontinued and inventories are exhausted.

Consult nearest Advance sales office for assistance.