



Pacific Ballast® HID Catalog



About us

For over 25 years, McWong International, Inc. has been bridging the best of East and West in order to achieve for our valued customers an unparalleled mix of innovation, quality, and service. A California corporation, McWong has grown to become a leader in the design and manufacture of high quality lighting control equipment and related electrical components. Our teams on both sides of the Pacific take great pride in the fact that the majority of our growth comes from organic nurturing of business with long-term, world-class customers. Reliable, competitive products paired with committed customer service year in and year out have enabled sustained growth over more than two decades.

Today, the pace of technological change has quickened and competition continues to intensify. We are meeting these challenges through heightened investment in capable individuals, promising technologies and advanced manufacturing facilities. McWong's disciplined approach to quality management, customer service, and cost control ensures that we are well-poised to accelerate our pace of growth as we partner with our stakeholders to achieve a brighter, more sustainable, more successful future.

Pacific Ballast® HID

For more than a decade, major US customers have come to rely on McWong's Pacific Ballast HID. In an unrelenting process of ongoing improvement, we strive to ensure delivery of our core values in every product .

Innovation:

- One of the coolest, quietest lines in the industry
- Broad product offering – over 350 UL recognized models and growing
- UL 200°C Insulation System standard production for all core & coil units
- EISA compliant offering one of the broadest in the market
- Enhanced ANSI waveform compliance testing

Quality:

- ISO9001 certified production facilities
- Automated In-line Testing with individually trackable date codes on 100% of our ballasts
- Quality construction, precision coil windings
- Automated Vacuum Pressure Impregnation
- Automated Arc Welding ensures tight, noise-free cores

Service:

- Custom design capabilities
- Expanded warehousing to support North American customers
- Unsurpassed after sales service and support
- New / Unique Offerings:
 - F-Can line — 50, 70, 100, 150W — watch for more models coming soon.
 - Magnetic Regulated Lag “Mag Reg” — HPS 70, 100, 150, 200, 310, 250, 400W and MP 175, 400W
 - Bi-level Dimming Compatible line
 - New offering of Ultra-high efficiency ballasts. (Efficiencies >90%) — Linear Reactors and special designed Pulse-CWA units.
 - Auto-shutoff Igniters now available; Long-Range Igniters coming soon...

This catalog offers just a partial list of our common items. Contact McWong for additional SKUs.

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Pacific Ballast® HID Model Numbers

4	MP	400		SAA		
2	MH	70	HX	SC		/T
5	MH	250		SCA		-PS
1	HPS	1000		SCA	48	T
1	MP	175	R	SC	277	
3	HPS	310	MR	SC	63	-TAB
A	B	C	D	E	F	G

Coil :
Precision
wound,
Al/Al
Cu/Al
Cu/Cu
Cu/Cu/Cu

Input Volt Tap Code:
12 (120)
27 (277)
48 (480)
53 (240, 277, 347)
62 (347, 480)
63 (240, 277, 480)
72 (240, 480)
73 (277, 347, 480)
74 (240, 277, 347, 480)
82 (120, 240)
83 (120, 240, 277)
84 (120, 240, 277, 480)
Blank = default, see
position 'A' notes.

Suffix Codes:
/T (T) = 120T;
-TAB = fast-on
quick connect tabs in
lieu of lead wires;
-PS = MH pulse start,
non-EISA compliant.

Reference add'l
ordering suffices in the
footnotes of each spec
sheet and/or catalog
listing.

Circuit Type:
Blank (default) = CWA
HX = High Reactance
MR = MagReg
R = Linear Reactor

Lamp Watts (Nominal): 35 – 2000W

Number of Input Taps: 1, 2, 3, 4, 5, 6;
if no voltage tap suffix code appears in position 'F',
then default applies:
'5' = 120/208/240/277/480
'4' = 120/208/240/277
'2' = Dual 480V/120T.

Lamp Type:
HPS = High Pressure Sodium
MH (absent of '-PS' suffix) =
Standard Metal Halide (probe/switch start);
MH (followed by '-PS' suffix) =
non-EISA Pulse Start Metal Halide;
MP = EISA Pulse Start Metal Halide

PACIFIC BALLAST® LIMITED WARRANTY

McWong International, Inc. ("MCWONG"), 2544 Industrial Blvd., West Sacramento, California 95691, warrants its lamp ballasts to be free from defect in material and workmanship from the date of manufacture by MCWONG for the following time periods:

- 🔌 High Intensity Discharge (HID)..... 3 Years
- 🔌 Electromagnetic Fluorescent (Residential)..... 2 Years
- 🔌 Electromagnetic Fluorescent (Commercial)..... 3 Years
- 🔌 Electronic Fluorescent (Residential)..... 2 Years
- 🔌 Electronic Fluorescent (Commercial)..... 5 Years

Date codes for electromagnetic ballast(s) are stamped in the underside of the ballast can.

Date codes for electronic ballast(s) can be found on the label and/or stamped into the underside of the can.

Date codes for HID Ballast(s) can be found imprinted on the end of the lamination and/or on date code label applied to coils.

Pacific Ballast® labels show our toll free number – 888-600-9188 allowing convenient contact directly with a qualified technical support administrator. Warranty claims may also be submitted online by visiting www.mcwonginc.com and clicking on Technical Support / Warranty.

This warranty is not applicable to any ballast subjected to abnormal stresses. Validity of this warranty is also conditioned upon proper storage, installation, use and maintenance. This warranty is not applicable to any PACIFIC BALLAST® product not installed and operated in accordance with:

- 🔌 The National Electrical Code (NEC)
- 🔌 The standards for safety of Underwriter's Laboratories, Inc. (UL)
- 🔌 The standards of the American National Standards Institute (ANSI)
- 🔌 Relevant electrical ratings and Maximum Temperature Ratings
- 🔌 The specific instructions provided by MCWONG for the installation of the product(s)

If it appears that the product does not meet the warranty specified above, the Purchaser must notify MCWONG of its claim in writing at the address above and, after receiving proper authorization, must promptly return the product(s) at purchaser's expense to MCWONG – unless prior arrangement has been made with MCWONG for other RGA dispositioning. MCWONG shall correct any defects, at MCWONG's option, by either repairing any defective part(s), by making available a replacement ballast, or by extending a credit in the amount of the ballast purchase price.

The standards and conditions of any tests concerning any PACIFIC BALLAST® claimed to have not performed to this warranty shall be mutually agreed upon in writing and MCWONG shall be notified of, and may be represented at any such tests. This express limited warranty is extended by MCWONG only to the original or first end-user purchaser.

NO IMPLIED STATUTORY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY BEYOND THE AFOREMENTIONED BALLAST WARRANTY PERIOD. This warranty is exclusive of all other statutory, written or oral warranties and no other warranties of any kind, statutory or otherwise, are given or herein expressed.

Under no circumstances, whether as a result of breach of contract, breach of warranty, tort, strict liability or otherwise, will MCWONG be liable for consequential, incidental, special or exemplary damages, including, but not limited to, loss of profits, loss of use or damage to any property or equipment, cost of capital, cost of substitute products, facilities or services, downtime costs or claims of any kind or any loss or damage arising out of, resulting from, or concerning any aspect of this agreement or from the products or services furnished.

METAL HALIDE



Input Volts (V)	Cat.No.	Circuit Type	(W) Input Power	# of Taps	Max Input Current (A)	Ballast Dimensions			(lbs) Net WT	Wiring Diagram	Pacific Ignitor/ Starter	Capacitor		1029 Class		EISA
						A(in)	B(in)	Fig				(µF)	VAC min	H 180	N 200	
50 Watt Lamp, ANSI Code M110, M148																
120/208 240/277	4MH50HXSA	HX-HPF	70	4	1.2/0.8 0.6/0.5	1.0	2.5	1	3.1	A	MHR1	6	280	AA AA	AA AA	
70 Watt Lamp, ANSI Code M98, M143																
120/208 240/277	4MH70HXSA	HX-HPF	85	4	1.6/0.9 0.8/0.7	1.5	2.9	1	4.5	A	MHR1	8	280	AA AA	AA AA	
480 120T	2MH70HXSC/T	HX-HPF	88	2	0.5	1.5	2.8	1	5.0	B	MHR1	8	280	C	A	
100 Watt Lamp, ANSI Code M90, M140																
120/208 240/277	4MH100HXSA	HX-HPF	120	4	2.4/1.4 1.2/1.1	1.6	3.0	1	4.8	A	MHR1	12	280	BA AA	AA AA	
480 120T	2MH100HXSC/T	HX-HPF	120	2	0.6	1.6	2.8	1	5.0	C	MHR1	12	280	C	A	
150 Watt Lamp, ANSI Code M102, M142																
120/208 240/277	4MH150HXSA	HX-HPF	182	4	3.4/2.0 1.7/1.5	2.3	3.8	1	6.8	A	MHR1	16	280	BB AA	AA AA	EX
480 120T	2MH150HXSC/T	HX-HPF	185	2	0.9	2.3	3.9	1	7.0	D	MHR1	16	280	E	A	EX
120/208 240/277	4MP150SCA	PS-CWA	186	4	1.6/1.0 0.8/0.7	2.4	3.9	1	6.9	E	HPS24	16	330	CC CB	AA AA	EX

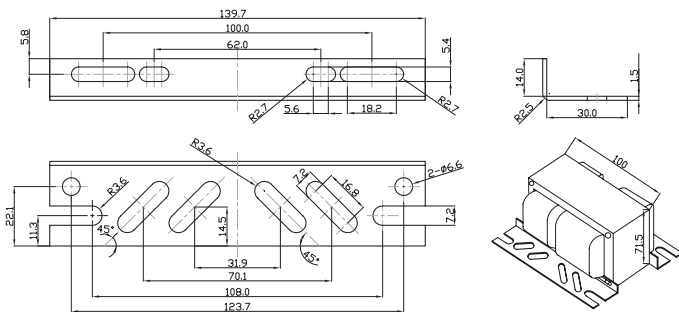
EX: Meets EISA under exception for >50°C ambient temperature for wet/damp location fixture

Ordering Information (Add suffix for options)

- WB With welded foot bracket
- I With ignitor
- DC With dry film capacitor, subject to availability
- OC With oil filled capacitor, subject to availability
- K Distributor replacement kit (includes bracket, capacitor and ignitor as necessary.)

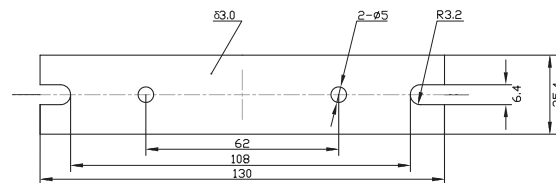
Contact McWong for specialty bracket/accessory availability

Kit Bracket Dimensions



For Ballast Dimensions Fig 1

Welded Foot Bracket Dimensions



For Ballast Dimensions Fig 1

Note: Bracket Dimensions in millimeters, where 1millimeter = 1/25.4 inch

BALLAST DIMENSIONS

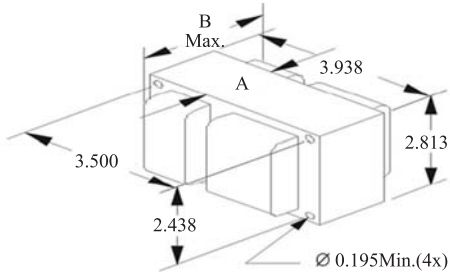


Fig. 1

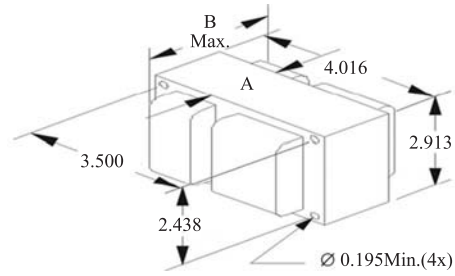


Fig. 2

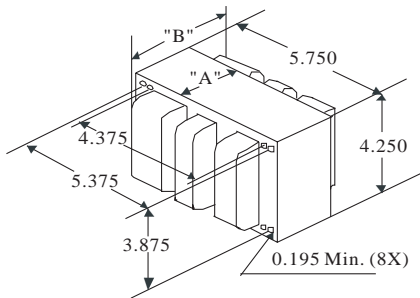


Fig. 3

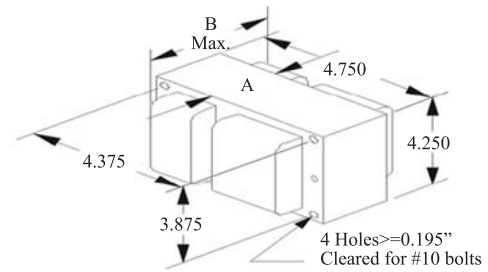


Fig. 4

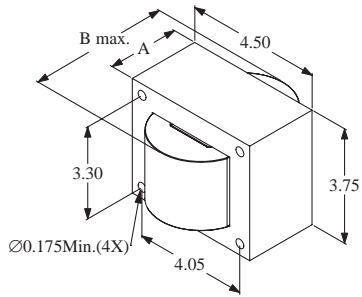


Fig. 5

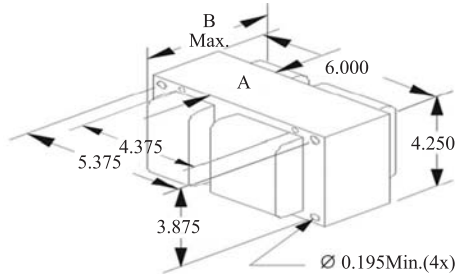


Fig. 6

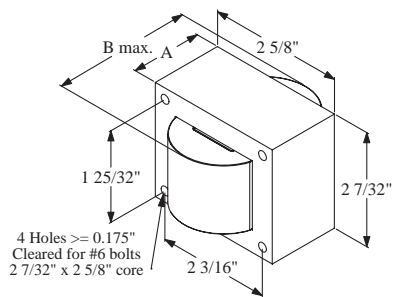


Fig. 7

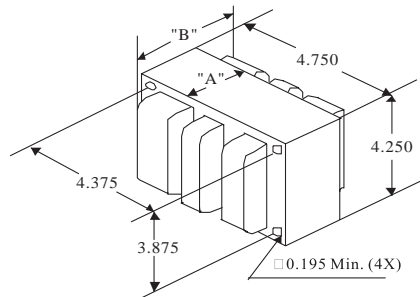


Fig. 8

WIRING DIAGRAMS

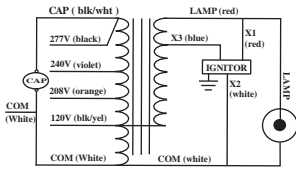


Fig. A

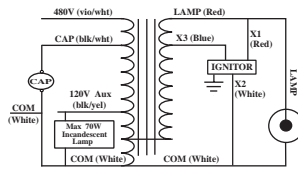


Fig. B

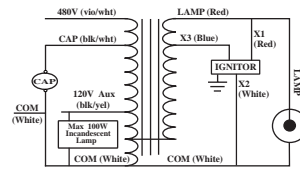


Fig. C

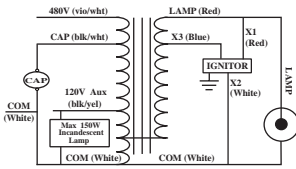


Fig. D

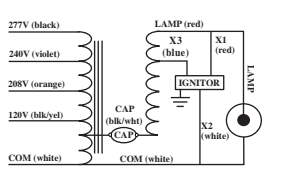


Fig. E

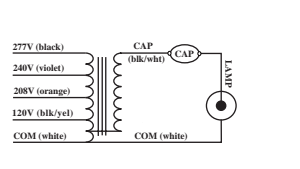


Fig. F

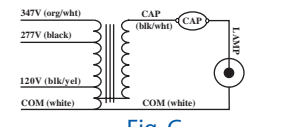


Fig. G

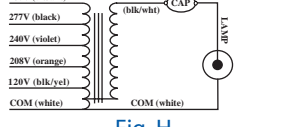


Fig. H

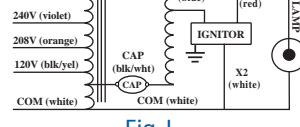


Fig. I

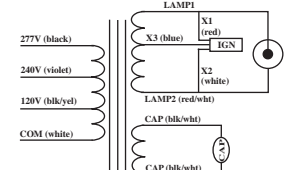


Fig. J

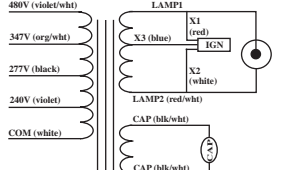


Fig. K

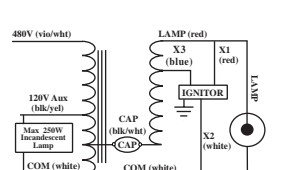


Fig. L

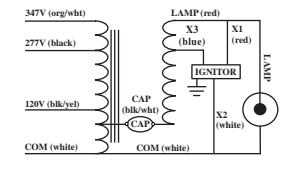


Fig. M

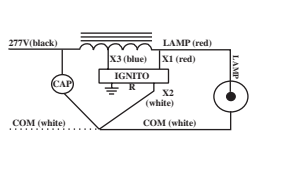


Fig. N

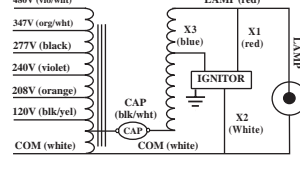


Fig. O

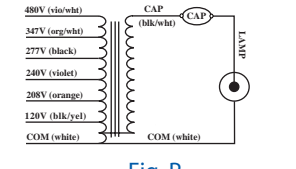


Fig. P

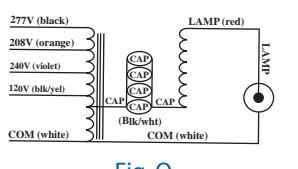


Fig. Q

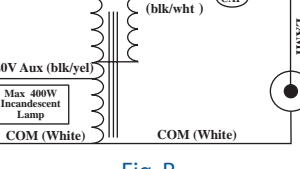


Fig. R

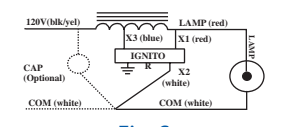


Fig. S

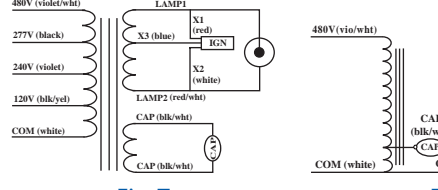


Fig. T

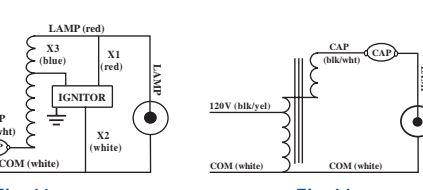


Fig. U



Fig. V

METAL HALIDE

Input Volts (V)	Cat.No.	Circuit Type	(W) Input Power	# of Taps	Max Input Current (A)	Ballast Dimensions			(lbs) Net WT	Wiring Diagram	Pacific Ignitor/ Starter	Capacitor		1029 Class		EISA
						A(in)	B(in)	Fig				(µF)	VAC min	H 180	N 200	
750 Watt Lamp, ANSI Code M149; or 775 Watt Lamp, ANSI Code M181 (Pulse Start)																
120/208 240/277	4MP750SCA	PS-CWA	842	4	7.2/4.1 3.6/3.1	2.6	4.8	6	17.0	E	MHR2	24	480	CB CC	AA AA	
120 277/347	3MP750SCA03	PS-CWA	810	3	7.2 3.1/2.5	2.8	4.8	6	18.8	M	MHR2	24	480	B AA	A AA	
120/208 240/277 480	5MP750SCA	PS-CWA	810	5	7.2/4.1 3.6/3.1 1.8	2.8	4.8	6	18.8	I	MHR2	24	480	BB AA A	AA AA A	
120/208 240/277 347/480	6MP750SCA	PS-CWA	810	6	7.2/4.1 3.6/3.1 2.5/1.8	2.8	4.8	6	18.8	O	MHR2	24	480	BB AA AA	AA AA AA	
875 Watt Lamp, ANSI CODE M166 (Pulse Start)*																
*See 1000 Watt Lamp																
1000 Watt Lamp, ANSI Code M47																
120	1MH1000SAA-12	CWA	1070	1	90	3.0	5.0	6	18.7	V	n/a	24	480	D	A	
120/208 240/277	4MH1000SCA	CWA	1076	4	9.2/5.3 4.6/4.0	3.0	4.9	6	18.9	F	n/a	24	480	DC CC	AA AA	
120 277/347	3MH1000SCA03	CWA	1070	3	8.9/4.0 3.1	3.3	5.4	6	21.6	G	n/a	24	480	DB C	AA A	
120/208 240/277 480	5MH1000SCA	CWA	1087	5	9.2/5.3 4.6/4.0 2.3	3.3	5.2	6	19.9	H	n/a	24	480	DC CB C	AA AA A	
120/208 240/277 347/480	6MH1000SCA	CWA	1070	6	8.9/5.3 4.5/4.0 3.1/2.3	3.3	5.4	6	21.6	P	n/a	24	480	DC CB CC	AA AA AA	
1000 Watt Lamp, ANSI Code M141, M47; or 875* Watt Lamp, ANSI Code M166 (Pulse Start)																
120/208 240/277	4MP1000SCA	PS-CWA	1090	4	9.2/5.3 4.6/4.0	3.0	5.1	6	20.1	E	HPS1K	24*	400	CB BB	AA AA	
120 277/347	3MP1000SCA03	PS-CWA	1075	3	8.9/4.0 3.1	3.3	5.4	6	22.0	M	HPS1K	24*	480	CA B	AA A	
120/208 240/277 480	5MP1000SCA	PS-CWA	1070	5	8.8/5.1 4.5/3.9 2.3	3.3	5.2	6	21.4	I	HPS1K	24*	480	CB BA B	AA AA A	
120/208 240/277 347/480	6MP1000SCA	PS-CWA	1075	6	8.9/5.3 4.5/4.0 3.1/2.3	3.3	5.4	6	22.0	O	HPS1K	24*	480	CB BA BB	AA AA AA	
1000 Watt Lamp, ANSI Code CS11000/PAR64/G38																
120/208 240/277	4MH1000CSI	CWACSI	1140	4	10.4/5.9 5.2/5.0	4.1	6.1	6	29.5	Q	◆	165	280	II JJ	EE FF	

* 875 Watt Lamp requires 22µ F, 480V capacitor

Ordering Information (Add suffix for options)

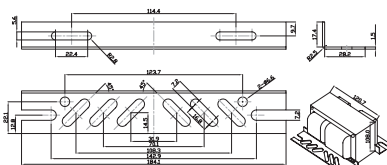
- WB With welded foot bracket
- I With ignitor
- DC With dry film capacitor, subject to availability

◆ Customer Supplied Ignitor

- OC With oil filled capacitor, subject to availability
- K Distributor replacement kit (includes bracket, capacitor and ignitor as necessary.)

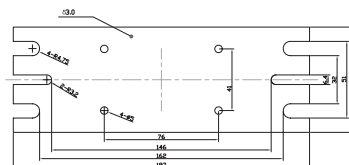
Contact Manufacturer's rep for specialty bracket/accessory availability

Kit Bracket Dimensions



For Ballast Dimensions Fig 6

Welded Foot Bracket Dimensions:



For Ballast Dimensions Fig 6

Note: Bracket Dimensions in millimeters, where 1 millimeter = 1/25.4 inch

HIGH PRESSURE SODIUM

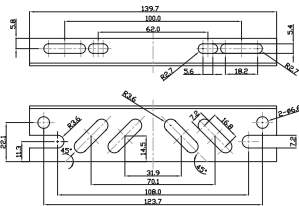


Input Volts (V)	Cat.No.	Circuit Type	(W) Input Power	# of Taps	Max Input Current (A)	Ballast Dimensions			(lbs) Net WT	Wiring Diagram	Pacific Ignitor/ Starter	Capacitor		1029 Class	
						A(in)	B(in)	Fig				(μF)	VAC min	H 180	N 200
100 Watt Lamp, ANSI Code S54															
120	1HPS100SCA120	R-NPF	116	1	2.1	1.8	3.0	7	2.5	S	HPSR1	n/a	n/a	A	
120/208 240/277	4HPS100HXSCA	HX-HPF	130	4	2.2/1.3 1.1/1.0	2.0	3.4	1	6.0	A	HPSR1	10	280	BB BB	
480 120T	2HPS100HXSC/T	HX-HPF	132	2	0.6	2.0	3.4	1	6.2	C	HPSR1	10	280	C	
120/240 277/480	4HPS100MRSC84	REG LAG	137	4	1.1/0.6 0.5/0.3	1.3	3.1	8	8.5	T	HPSR1	16	280	A AA AA	A AA AA
150 Watt Lamp, ANSI Code S55															
120	1HPS150SCA120	R-NPF	168	1	3.1	2.4	3.5	7	3.3	S	HPSR1	n/a	n/a	C	
120/208 240/277	4HPS150HXSCA	HX-HPF	182	4	3.0/1.7 1.5/1.3	2.6	4.1	1	7.4	A	HPSR1	14	280	DC BB	
480 120T	2HPS150HXSC/T	HX-HPF	188	2	0.8	3.0	4.3	1	8.6	D	HPSR1	14	280	F	B
120/240 277/480	4HPS150MRSC84	REG LAG	186	4	2.0/1.0 0.9/0.5	1.0	3.5	8	11.6	T	HPSR1	16	300	A AA A	A AA A

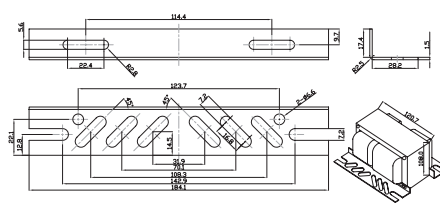
Ordering Information (Add suffix for options)

- WB With welded foot bracket
 - I With ignitor
 - DC With dry film capacitor, subject to availability
 - OC With oil filled capacitor, subject to availability
 - K Distributor replacement kit (includes bracket, capacitor and ignitor as necessary.)
- Contact Manufacturer's rep for specialty bracket/accessory availability

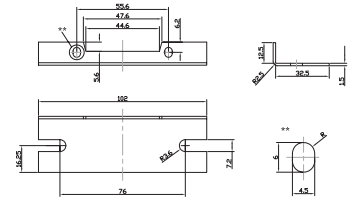
Kit Bracket Dimensions



For Ballast Dimensions Fig 1

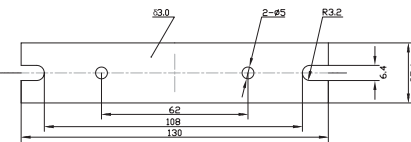


For Ballast Dimensions Fig 8

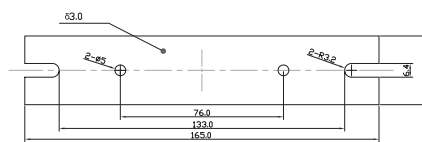


For Ballast Dimensions Fig 7

Welded Foot Bracket Dimensions



For Ballast Dimensions Fig 1



For Ballast Dimensions Fig 8

Note: Bracket Dimensions in millimeters, where 1 millimeter = 1/25.4 inch

HIGH PRESSURE SODIUM



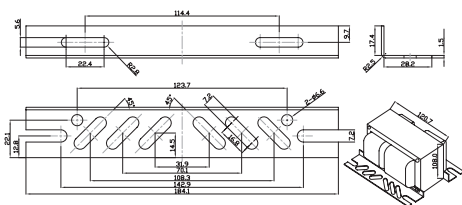
Input Volts (V)	Cat.No.	Circuit Type	(W) Input Power	# of Taps	Max Input Current (A)	Ballast Dimensions			(lbs) Net WT	Wiring Diagram	Pacific Ignitor/ Starter	Capacitor		1029 Class	
						A(in)	B(in)	Fig				(µF)	VAC min	H 180	N 200
310 Watt Lamp, ANSI Code S67															
120 240/277	3HPS310MRSC83	REG LAG	370	3	3.2 1.6/1.5	2.8	4.8	3	19.8	J	HPS24	17	460	B AA	A AA
240/277 347/480	4HPS310MRSC74	REG LAG	372	4	1.6/1.4 1.1/0.8	2.8	4.8	3	20.0	K	HPS24	17	460	AA AA	AA AA
400 Watt Lamp, ANSI Code S51															
120/208 240/277	4HPS400SCA	CWA	453	4	3.8/2.2 1.9/1.7	2.3	4.2	4	12.4	E	HPS24	55	240	DD DD	AA AA
120/208 240/277	4HPS400SAC	CWA	455	4	3.9/2.3 2/1.7	2.3	4.2	4	13.1	E	HPS24	55	240	DD DC	AA AA
120/277 347	3HPS400SAC03	CWA	462	3	3.9/1.7 1.4	2.3	4.3		13.0	M	HPS24	55	240	ED C	AA A
480	1HPS400SCA48T	CWA	450	1	0.9	2.6	4.7	4	13.5	L	HPS24	55	240	D	A
120/208 240/277 480	5HPS400SCA	CWA	450	5	3.8/2.2 1.9/1.6 0.9	2.6	4.7	4	13.5	I	HPS24	55	240	EE ED D	A AA AA
120/208 240/277 480	5HPS400SAC	CWA	462	5	3.9/2.3 2.0/1.7 1.0	2.3	4.3	4	13.0	I	HPS24	55	240	EE DD C	A AA AA
120/208 240/277 347/480	6HPS400SCA	CWA	450	5	3.8/2.2 1.9/1.6 1.3/0.9	2.6	4.7	4	13.5	O	HPS24	55	240	EE ED DD	AA AA AA
120/208 240/277 347/480	6HPS400SAC	CWA	400	6	3.9/2.3 2.0/1.7 1.4/1.0	2.3	4.3	4	13.0	O	HPS24	55	240	EE DD CC	AA AA AA
120/240 277	3HPS400MRSC83	REG LAG	481	3	4.3/2.1 1.8	3.5	5.4	3	24.2	J	HPS24	24	430	CB B	AA A
240/277 347/480	4HPS400MRSC74	REG LAG	481	4	2.2/1.9 1.5/1.1	3.5	5.4	3	24.6	K	HPS24	24	430	AA AA	AA AA

Ordering Information (Add suffix for options)

- WB With welded foot bracket
- I With ignitor
- DC With dry film capacitor, subject to availability

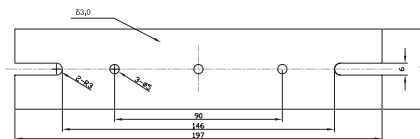
- OC With oil filled capacitor, subject to availability
 - K Distributor replacement kit (includes bracket, capacitor and ignitor as necessary.)
- Contact Manufacturer's rep for specialty bracket/accessory availability

Kit Bracket Dimensions

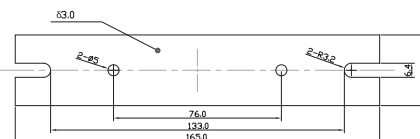


For Ballast Dimensions Fig 3, 4

Welded Foot Bracket Dimensions



For Ballast Dimensions Fig 3



For Ballast Dimensions Fig 4

Note: Bracket Dimensions in millimeters, where 1 millimeter = 1/25.4 inch

IGNITOR / STARTER



Lamp Compatibility	Cat. No.	Pulse Voltage (kV)*	Pulse Width (μS)**	Dimensions					Net WT (lbs)	Ballast To Lamp Distance (ft)	Max Case Temp. (°C)
				A (in)	B (in)	C (in)	Φ or D (in)	Fig			
Ignitor for Metal Halide Lamps											
50-150W	MHR1	3~4	≥ 1	2.6	14	n/a	1.3	9	0.3	25	105
175-450W	MHR3	3~4	≥ 1	2.6	14	n/a	1.3	9	0.3	10	105
750W	MHR2	3~4	≥ 1.5	2.9	14	2	1.3	10	0.5	15	105
1000W	HPS1K	3~5	≥ 4	2.4	2.9	14	40	11	0.5	15	105
Ignitor for Metal Halide Lamps											
35-150W	HPSR1	2.5~4	≥ 1	2.6	14	n/a	33	9	0.3	10	105
200-400W	HPS24	2.5~4	≥ 1	2.6	14	n/a	33	9	0.3	10	105
1000W	HPS1K	3~5	≥ 4	2.4	2.9	14	40	11	0.5	15	105

* With a dummy lamp load of 20pF

** At 2250 volts for HPSR1 and HPS24; 2700 volts for MHR1, MHR3, MHR2 and HPS1K

Lamp Compatibility	Cat. No.	Pulse Voltage (kV)*	Pulse Width (μS)**	Dimensions					Net WT (lbs)	Ballast To Lamp Distance (ft)	Max Case Temp. (°C)
				A (in)	B (in)	C (in)	Φ or D (in)	Fig			
Auto Shut Off Ignitor for Metal Halide Lamps											
35-400W	MHR1-AS	3.0~4.0	≥ 1	2.9	14	2	1.3	10	0.5	25	105
Auto Shut Off Ignitor for High Pressure Sodium Lamps											
35-150W	HPSR1-AS	2.5~4.0	≥ 1	2.9	14	2	1.3	10	0.5	10	105
200-400W	HPS24-AS	2.5~4.0	≥ 1	2.9	14	2	1.3	10	0.5	10	105
Long Range Ignitor											
175W-750W	MHR4-LR	3.0~4.0	≥ 3	2.9	14	2	1.3	10	0.5	50	105

* With a dummy lamp load of 20pF

** At 2250 volts for HPSR1-AS and HPS24-AS; 2700 volts for MHR1-AS, MHR4-LR

IGNITOR/STARTER

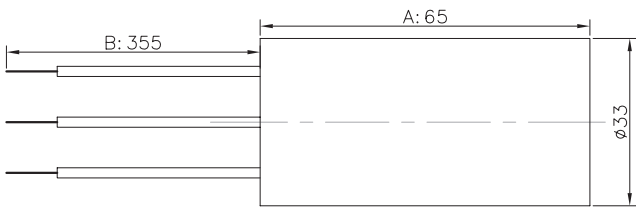


Fig. 9

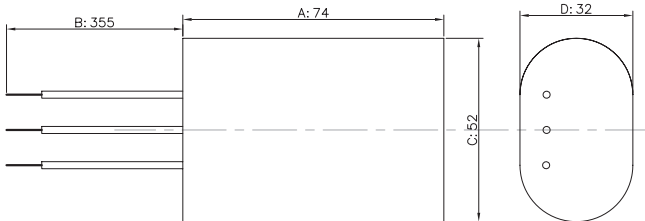


Fig. 10

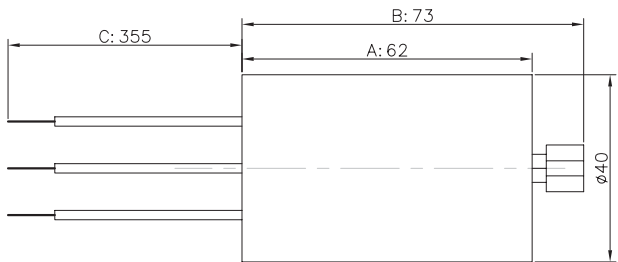
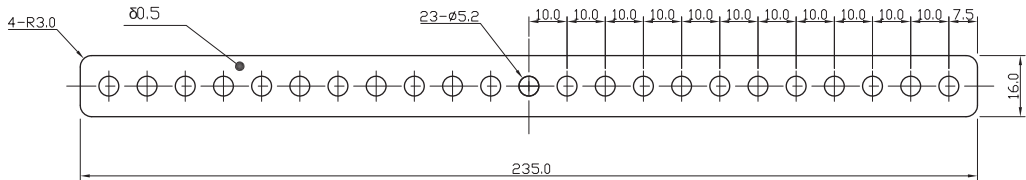


Fig. 11

CAPACITOR/IGNITOR BRACKET DIMENSIONS



Note: Ignitor Dimensions in millimeters, where 1 millimeter = 1/25.4 inch



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