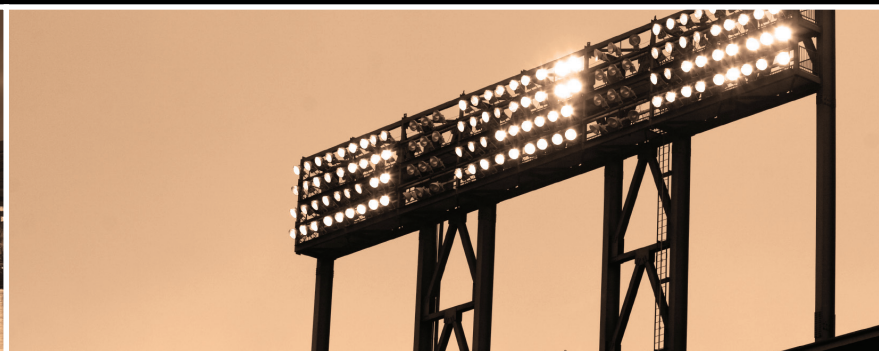




HID ELECTROMAGNETIC

CONTENTS	72	How to Read a Product Code
	73	Pulse Start
	76	Standard Metal Halide
	78	High Pressure Sodium
	81	Capacitor/Ignitor Guide



How to Read Our Product Code:

M59/400CWA/5T/K



A. Primary ANSI Designation

B. Primary Lamp Wattage

C. Circuit Type

CWA = Constant Wattage Auto-Transformer

HX = High Reactor

R = Reactor

D. Voltage

2T = 2-Tap 120/277V

4T = 4-Tap 120/208/240/277V

5T = 5-Tap 120/208/240/277/480V

E. Suffix

K = Kit

Haleco
LIGHTING TECHNOLOGIES®

HID CORE & COIL BALLASTS



Input Volts	Product Number	Product Code	Circuit Type	Input Power (Watts)	Max Input Current (Amps)	Nom. Open Circuit Volts	Fuse Rating (Amps)	Dimensions			Capacitor		Ignitor (IGN/)	Kit Weight (lbs)		UL Bench Top Rise	Spec Page
								Fig	A Max	B Max	Mfd	Volts		Total Weight	Ballast Weight		
50 Watt Pulse Start MH Lamp, ANSI Code M110																	
120	55132	M110/50HX/2T/K	HX-HPF	72	1.25	260	3	E	1.05	2.10	6	280	MH1	4.92	4.00	A	149
277					0.54		2									B	
70 Watt Pulse Start MH Lamp, ANSI Code M98																	
120	55134	M98/70HX/4T/K	HX-HPF	88	1.60	255	4	E	1.45	2.80	8	280	MH1	6.15	5.00	A	160
208					0.95		3									A	
240					0.80		2									A	
277					0.70		2									A	
100 Watt Pulse Start MH Lamp, ANSI Code M90																	
120	55136	M90/100HX/4T/K	HX-HPF	129	2.80	270	6	E	1.50	2.90	12	280	MH1	6.60	5.50	A	159
208					1.60		4									B	
240					1.40		3									A	
277					1.20		3									A	
125 Watt Pulse Start MH Lamp, ANSI Code M150																	
120	55170	M150/125CWA/4T/K	Super CWA	150	1.25	228	4	E	1.70	3.10	12	280	MH1	6.00	5.60	A	158
208					0.75		3									A	
240					0.65		2									A	
277					0.55		2									A	
150 Watt Pulse Start MH Lamp, ANSI Code M102																	
120	55138	M102/150HX/4T/K	HX-HPF	185	3.60	263	10	E	2.25	3.90	16	280	MH1	8.40	7.29	A	148
208					2.08		5									A	
240					1.80		5									A	
277					1.56		4									B	

Ballast Dimensions

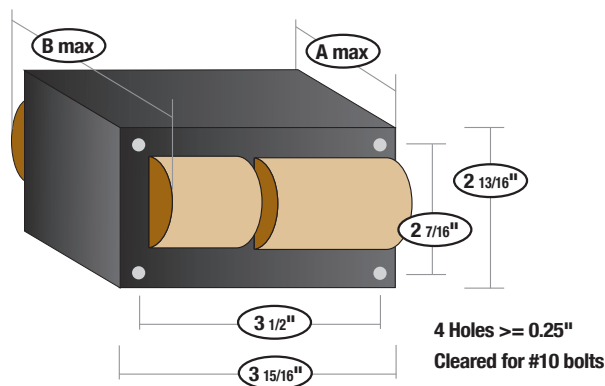
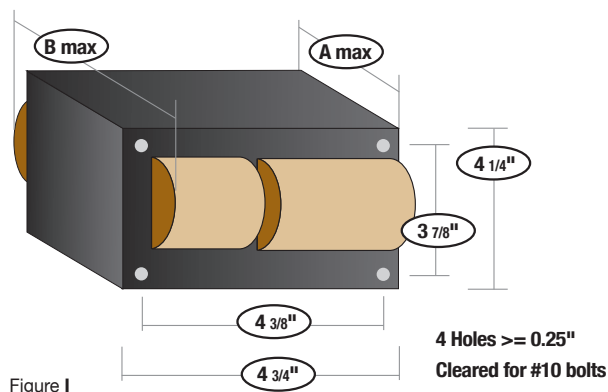


Figure E



	Input Volts	Product Number	Product Code	Circuit Type	Input Power (Watts)	Max Input Current (Amps)	Nom. Open Circuit Volts	Fuse Rating (Amps)	Dimensions			Capacitor		Ignitor (IGN/)	Kit Weight (lbs)		UL Bench Top Rise	Spec Page		
									Fig	A Max	B Max	Mfd	Volts		Total Weight	Ballast Weight				
250 Watt Pulse Start MH Lamp, ANSI Code M138 or M153																				
Fluorescent Electronic	120					2.50		8										A		
	208	55160	M138/250CWA/4T/K	Super CWA	283	1.40	283	5	I	1.65	3.50	17	300	MH1	12.10	8.80		B	156	
	240					1.20		4										A		
	277					1.10		3										B		
Electronic Sign	120					2.50		7										B		
	208					1.44		4										B		
	240	55174	M138/250CWA/5T/K	Super CWA	284	1.25	283	4	I	1.58	3.75	16	350	MH1	10.50	10.00		A	157	
	277					1.09		3										A		
Compact Fluorescent	120					3.11		8										A		
	208	55148	M132/320CWA/4T/K	Super CWA	355	1.75	291	6	I	1.82	3.66	21	345	MH1	10.79	9.59		A	152	
	240					1.52		5										A		
	277					1.32		3										A		
HID Electronic	120					3.07		8										A		
	208					1.77		6										A		
	240	55176	M132/320CWA/5T/K	Super CWA	363	1.53	291	5	I	1.82	4.13	21	345	MH1	10.60	9.90		A	153	
	277					1.33		3										A		
HID Electromagnetic	120					0.77		3										C		
	350 Watt Pulse Start MH Lamp, ANSI Code M131																			
	120					3.50		10											B	
	208	55150	M131/350CWA/4T/K	Super CWA	397	2.00	270	7	I	1.75	3.80	22.5	345	MH1	12.50	11.20		A	150	
Spec Sheet	240					1.75		5										A		
	277					1.50		5										A		
	120					3.50		10										A		
	208					2.02		7										C		
Reference Material	240	55172	M131/350CWA/5T/K	Super CWA	397	1.75	294	5	I	1.93	4.13	22.5	345	MH1	12.80	10.30		B	151	
	277					1.51		5										C		
	480					0.87		3										C		

Ballast Dimensions

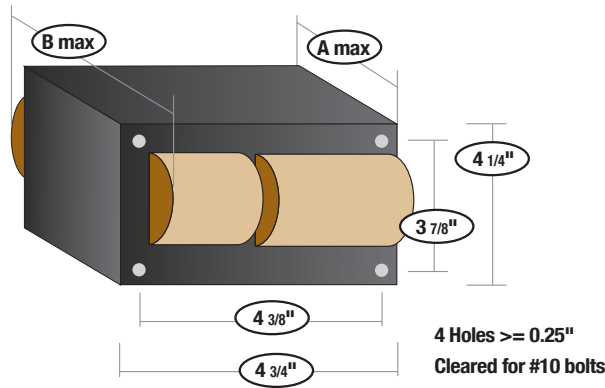


HID CORE & COIL BALLASTS



Input Volts	Product Number	Product Code	Circuit Type	Input Power (Watts)	Max Input Current (Amps)	Norm. Open Circuit Volts	Fuse Rating (Amps)	Dimensions			Capacitor		Ignitor (IGN/)	Kit Weight (lbs)		UL Bench Top Rise	Spec Page	
								Fig	A Max	B Max	Mfd	Volts		Total Weight	Ballast Weight			
400 Watt Pulse Start MH Lamp, ANSI Code M135 or M155																		
120					3.86		10											D
208	55162	M135/400CWA/4T/K	Super CWA	454	2.15	270	7	I	1.89	3.82	26	330	MH1	10.90	9.90			D
240					1.88		5											D
277					1.67		5											E
120					3.85		10											D
208	55178	M135/400CWA/5T/K	Super CWA	454	2.20	275	7	I	2.11	4.53	26	330	MH1	13.80	11.22			E
240					1.92		5											E
277					1.67		5											E
480					0.96		3											E

Ballast Dimensions



Fluorescent Electronic

Electronic Sign

Compact Fluorescent

HID Electronic

HID Electromagnetic

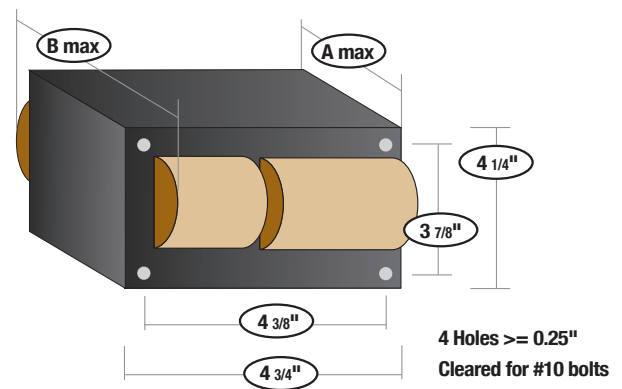
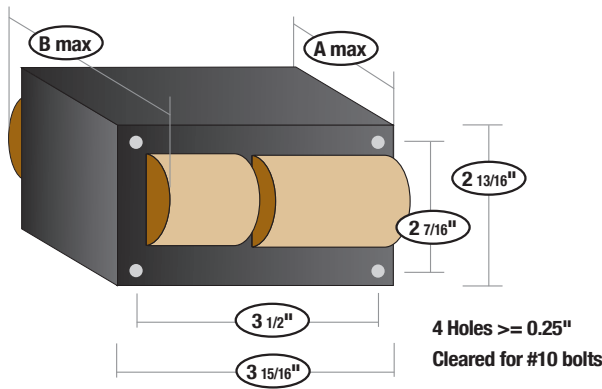
Spec Sheet

Reference Material



	Input Volts	Product Number	Product Code	Circuit Type	Input Power (Watts)	Max Input Current (Amps)	Nom. Open Circuit Volts	Fuse Rating (Amps)	Dimensions			Capacitor		Ignitor (IGN/)	Kit Weight (lbs)		UL Bench Top Rise	Spec Page	
									Fig	A Max	B Max	Mfd	Volts		Total Weight	Ballast Weight			
Fluorescent Electronic	175 Watt MH Lamp, ANSI Code M57																		
	120					1.95		5										D	
	208	55140	M57/175CWA/4T/K	CWA	215	1.13	305	3	E	2.45	3.75	10	400	-	9.34	7.10	D	163	
	240					0.98		3									C		
	277					0.85		2									D		
Electronic Sign	120					1.92		5									C		
	208					1.09		3									C		
	240	55142	M57/175CWA/5T/K	CWA	219	0.95	303	3	E	2.42	4.02	10	400	-	8.20	6.90	D	164	
	277					0.82		2									C		
	480					0.46		2									D		
Compact Fluorescent	250 Watt MH Lamp, ANSI Code M58																		
	120					2.40		8									A		
	208	55144	M58/250CWA/4T/K	CWA	284	1.43	307	5	I	1.65	3.54	15	400	-	9.65	8.50	A	165	
	240					1.22		4									B		
	277					1.06		3									A		
HID Electronic	120					2.40		8									A		
	208					1.38		5									A		
	240	55146	M58/250CWA/5T/K	CWA	280	1.19	308	4	I	1.65	3.62	15	400	-	10.10	8.90	A	166	
	277					1.04		3									A		
480					0.60		2									A			

Ballast Dimensions

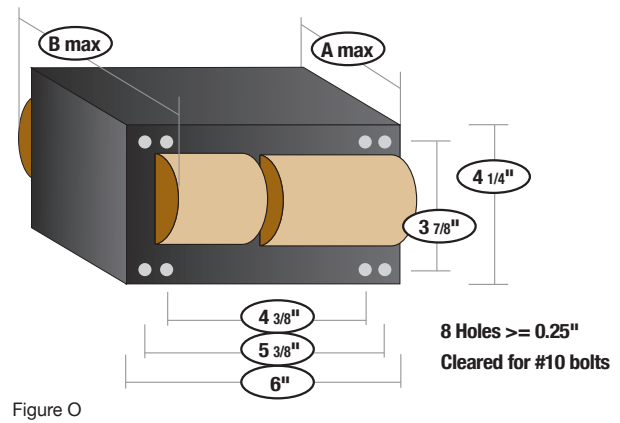
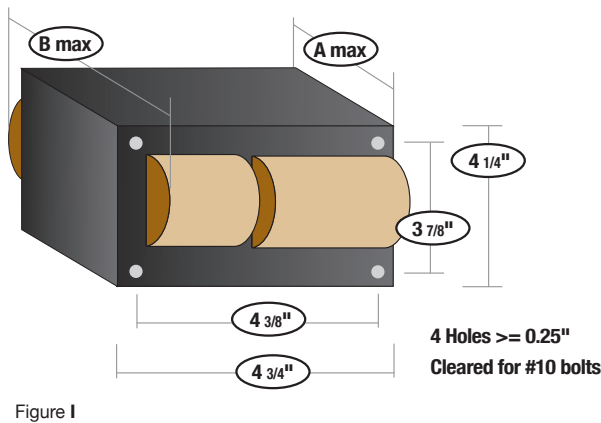


HID CORE & COIL BALLASTS



Input Volts	Product Number	Product Code	Circuit Type	Input Power (Watts)	Max Input Current (Amps)	Nom. Open Circuit Volts	Fuse Rating (Amps)	Dimensions			Capacitor		Ignitor (IGN/)	Kit Weight (lbs)		UL Bench Top Rise	Spec Page	
								Fig	A Max	B Max	Mfd	Volts		Total Weight	Ballast Weight			
400 Watt MH Lamp, ANSI Code M59																		
120					3.90		10										D	
208	55152	M59/400CWA/4T/K	CWA	458	2.30	300	7	I	2.05	3.95	24	400	-	12.20	11.10	F	167	
240					2.00		5									E		
277					1.70		5									E		
120					4.10		10									D		
208	55154	M59/400CWA/5T/K	CWA	441	2.47	318	8	I	2.30	4.53	24	400	-	13.70	11.90	E	168	
240					2.10		5									E		
277					1.84		5									E		
480					1.07		5									E		
1000 Watt MH Lamp, ANSI Code M47																		
120					9.15		20										D	
208	55156	M47/1000CWA/4T/K	CWA	1090	5.35	440	15	O	3.46	5.31	24	480	-	23.38	21.38	B	161	
240					4.64		10									A		
277					4.06		10									B		
120					9.14		20										C	
208	55158	M47/1000CWA/5T/K	CWA	1090	5.29	439	15	O	3.46	5.71	24	480	-	24.50	22.00	A	162	
240					4.55		10									A		
277					3.99		10									A		
480					2.33		6									A		

Ballast Dimensions



	Input Volts	Product Number	Product Code	Circuit Type	Input Power (Watts)	Max Input Current (Amps)	Nom. Open Circuit Volts	Fuse Rating (Amps)	Dimensions			Capacitor		Ignitor (IGN/)	Kit Weight (lbs)		UL Bench Top Rise	Spec Page	
									Fig	A Max	B Max	Mfd	Volts		Total Weight	Ballast Weight			
Fluorescent Electronic	35 Watt HPS Lamp, ANSI Code S76																		
	120	55102	S76/35R/120/K	*R-HPF	46	0.90	120	2	A	0.59	1.65	20	120	HPS1	1.97	1.14	A	183	
	50 Watt HPS Lamp, ANSI Code S68																		
	120	55104	S68/50R/120/K	*R-HPF	62	0.90	120	3	A	0.83	1.85	20	120	HPS1	2.40	1.48	A	182	
Electronic Sign	70 Watt HPS Lamp, ANSI Code S62																		
	120	55106	S62/70R/120/K	*R-HPF	86	1.30	120	3	A	1.24	2.44	28	120	HPS1	3.22	2.17	A	180	
	120					1.40		5									A		
	208	55108	S62/70HX/4T/K	HX-HPF	91	0.82	123	3	E	1.50	3.10	7	280	HPS1	6.79	5.75	A	179	
	240					0.70		2									A		
277					0.62		2									A			
Compact Fluorescent	100 Watt HPS Lamp, ANSI Code S54																		
	120	55110	S54/100R/120/K	*R-HPF	115	2.10	120	5	A	1.50	2.80	46	120	HPS1	3.63	2.59	A	176	
	120					2.25		7									B		
	208	55112	S54/100HX/4T/K	HX-HPF	130	1.30	123	5	E	2.00	3.80	10	280	HPS1	8.26	7.20	A	175	
	240					1.13		3									A		
277					0.98		3									A			
HID Electronic	150 Watt HPS Lamp, ANSI Code S55																		
	120	55114	S55/150R/120/K	*R-HPF	170	2.50	120	8	A	2.01	3.19	55	120	HPS1	5.46	4.41	A	178	
	120					2.85		10									C		
	208	55116	S55/150HX/4T/K	HX-HPF	188	1.65	120	5	E	2.50	3.80	14	280	HPS1	8.73	7.52	A	177	
	240					1.43		5									A		
277					1.23		4									A			

*Ballast operates at High Power Factor when capacitor (not included with kit) is installed. If the capacitor is omitted, ballast will operate at Normal Power Factor.

Ballast Dimensions

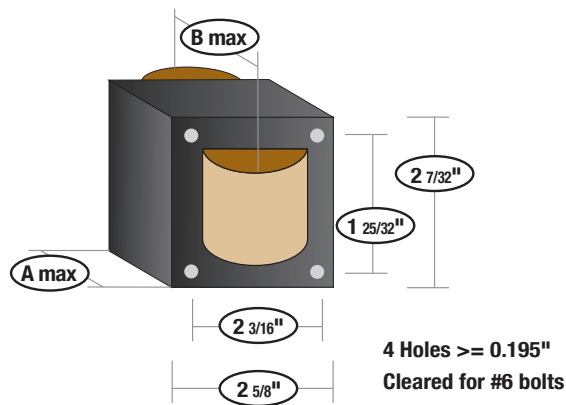


Figure A

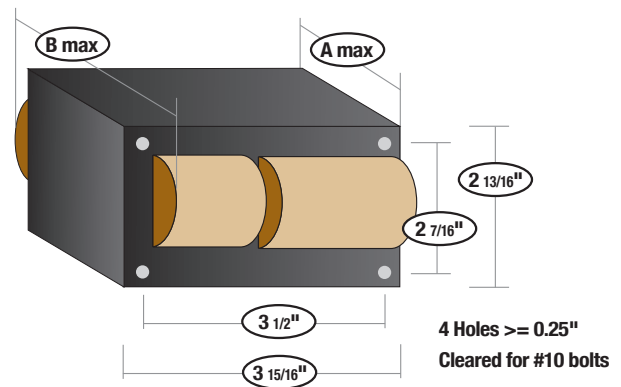
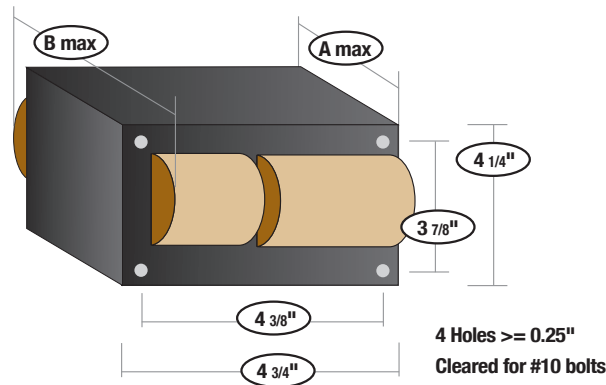


Figure E

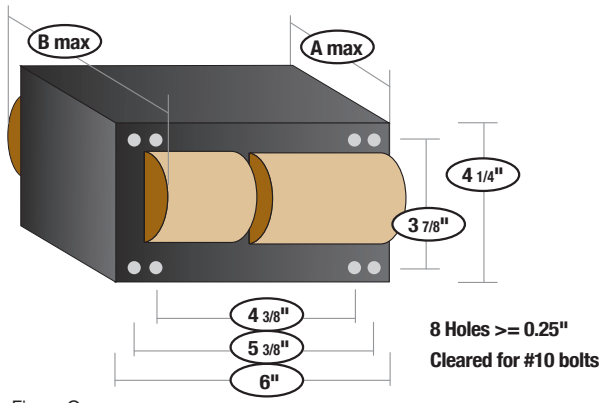
Input Volts	Product Number	Product Code	Circuit Type	Input Power (Watts)	Max Input Current (Amps)	Norm. Open Circuit Volts	Fuse Rating (Amps)	Dimensions			Capacitor		Ignitor (IGN/)	Kit Weight (lbs)		UL Bench Top Rise	Spec Page
								Fig	A Max	B Max	Mfd	Volts		Total Weight	Ballast Weight		
200 Watt HPS Lamp, ANSI Code S66																	
120					2.10		6									D	
208	55118	S66/200CWA/4T/K	CWA	240	1.20	188	4	I	1.20	3.30	28	240	HPS2	9.21	8.00	F	181
240					1.05		3									F	
277					0.92		3									G	
250 Watt HPS Lamp, ANSI Code S50																	
120					2.53		8									B	
208	55120	S50/250CWA/4T/K	CWA	300	1.46	189	5	I	1.81	3.43	35	280	HPS2	10.48	9.33	B	169
240					1.24		4									B	
277					1.06		4									B	
120					2.50		8									B	
208					1.50		5									B	
240	55122	S50/250CWA/5T/K	CWA	300	1.30	185	4	I	1.97	4.25	35	280	HPS2	13.60	12.10	B	170
277					1.10		4									B	
480					0.70		2									B	
400 Watt HPS Lamp, ANSI Code S51																	
120				455	4.00		15									C	
208	55124	S51/400CWA/4T/K	CWA	467	2.40	190	8	I	2.31	4.14	55	300	HPS2	15.24	13.67	C	171
240				469	2.10		8									C	
277				465	1.70		5									C	
120					4.00		10									D	
208					2.30		6									C	
240	55126	S51/400CWA/5T/K	CWA	465	2.00	190	5	I	2.65	4.35	55	240	HPS2	17.37	15.50	C	172
277					1.73		5									B	
480					1.00		3									B	

Ballast Dimensions



	Input Volts	Product Number	Product Code	Circuit Type	Input Power (Watts)	Max Input Current (Amps)	Nom. Open Circuit Volts	Fuse Rating (Amps)	Dimensions			Capacitor		Ignitor (IGN/)	Kit Weight (lbs)		UL Bench Top Rise	Spec Page	
									Fig	A Max	B Max	Mfd	Volts		Total Weight	Ballast Weight			
Fluorescent Electronic	1000 Watt HPS Lamp, ANSI Code S52																		
	120					10.00		20										H	
	208	55128	S52/1000CWA/4T/K	CWA	1100	5.20	430	15	O	3.74	5.99	26	525	HPS3	29.77	28.00	H	173	
	240					4.50		10									H		
	277					4.00		10									H		
Electronic Sign	120					9.50		20									E		
	208					5.30		15									E		
	240	55130	S52/1000CWA/5T/K	CWA	1100	4.80	443	10	O	6.18	3.88	26	525	HPS3	29.20	27.20	E	174	
	277					4.30		10									E		
	480					2.50		8									E		

Ballast Dimensions



Compact Fluorescent

HID Electronic

HID Electromagnetic

Spec Sheet

Reference Material

HID CORE & COIL BALLASTS

CAPACITOR GUIDE

Product Number	Product Code	Halco Ballast Code	Mfd	Volts	Diam. (mm)	Diam. (in)	Height (mm)	Height (in)
DRY FILM								
55851	CAP/MH50	M110/50HX/2T/K	6	280	35	1.38	48	1.89
55853	CAP/MH70	M98/70HX/4T/K	8	280	30	1.19	68	2.68
55855	CAP/MH100	M90/100HX/4T/K	12	280	30	1.19	78	3.08
55857	CAP/MH150	M102/150HX/4T/K	16	280	35	1.38	78	3.08
55859	CAP/MH175	M57/175CWA/4T/K	10	400	35	1.38	78	3.08
		M57/175CWA/5T/K						
55861	CAP/MH250	M58/250CWA/4T/K	15	400	40	1.58	78	3.08
		M58/250CWA/5T/K						
55871	CAP/MH250PS	M138/250CWA/4T/K	18.5	330	35	1.38	78	3.08
55863	CAP/MH320PS	M132/320CWA/4T/K	21	345	40	1.58	79	3.08
		M132/320CWA/5T/K						
55865	CAP/MH350PS	M131/350CWA/4T/K	22.5	345	40	1.58	78	3.08
		M131/350CWA/5T/K						
55873	CAP/MH400PS	M135/400CWA/4T/K	26	330	40	1.58	93	3.66
		M135/400CWA/5T/K						
55868	CAP/MH400/DRY	M59/400/CWA/4T/K	24	400	45	1.77	93	3.66
55801	CAP/HPS50/120	S76/35R/120/K	20	120	30	1.19	68	2.68
		S68/50R/120/K						
55803	CAP/HPS70/120	S62/70R/120/K	28	120	30	1.19	78	3.08
55805	CAP/HPS70	S62/70HX/4T/K	7	300	30	1.19	68	2.68
55807	CAP/HPS100/120	S54/100R/120/K	46	120	40	1.58	68	2.68
55809	CAP/HPS100	S54/100HX/4T/K	10	280	30	1.19	78	3.08
55811	CAP/HPS150/120	S55/150R/120/K	55	120	40	1.58	78	3.08
55813	CAP/HPS150	S55/150HX/4T/K	14	280	35	1.38	78	3.08
55815	CAP/HPS200	S66/200CWA/4T/K	28	240	40	1.58	68	2.68
55817	CAP/HPS250	S50/250CWA/4T/K	35	280	40	1.58	78	3.08
		S50/250CWA/5T/K						
55870	CAP/HPS400/DRY	S51/400/CWA/4T/K	55	240	40	1.58	78	3.08
		S51/400/CWA/5T/K						
OIL-FILLED								
55867	CAP/MH400/OIL	M59/400CWA/4T/K	24	400	45	1.78	83	3.27
		M59/400CWA/5T/K						
55869	CAP/MH1000	M47/1000CWA/4T/K	24	480	50	1.97	103	4.06
		M47/1000CWA/5T/K						
55819	CAP/HPS400	S51/400CWA/4T/K	55	240	50	1.97	103	4.06
		S51/400CWA/5T/K						
55821	CAP/HPS1000	S52/1000CWA/4T/K	26	525	50	1.97	104	5.63
		S52/1000CWA/5T/K						

IGNITOR GUIDE

Product Number	Product Code	Ballast	Diam. (mm)	Diam. (in)	Height (mm)	Height (in)
55907	IGN/MH1	50W - 400W PS MH	35.6	1.4	66.0	2.6
55901	IGN/HPS1	35W - 150W HPS				
55903	IGN/HPS2	200W - 400W HPS				
55905	IGN/HPS3	1000W HPS	43.2	1.7	63.5	2.5

Fluorescent Electronic

Electronic Sign

Compact Fluorescent

HID Electronic

HID Electromagnetic

Spec Sheet

Reference Material