

Lamp to Ballast

	ITEM NUMBER	DESCRIPTION	LAMP TYPE	NO. OF LAMPS	VOLTAGE	PAGE NUMBER
<b>MAGNETIC T12 RAPID START FLUORESCENT SYSTEMS</b>	48011	MB1x40/120RS-SRNK	F40T12	1	120	8, 10
	48120	MB1x40/277RS-SRNK	F40T12	1	277	8, 10
	48001	MB2x40/120RS-SRNK	F40T12 OR F30T12	2	120	8, 10
	48121	MB2x40/277RS-SRNK	F40T12 OR F30T12	2	277	8, 10
	48210	MB1x40/120RES-SRNK	F40T12	1	120	8, 10
<b>MAGNETIC T12 INSTANT START SLIMLINE FLUORESCENT SYSTEMS</b>	48122	MB2x48/120IS-SRNK	F48T12	2	120	8, 10
	48123	MB2x48/277IS-SRNK	F48T12	2	277	8, 10
	48124	MB1x96/120IS-SRNK	F96T12	1	120	8, 10
	48125	MB1x96/277IS-SRNK	F96T12	1	277	8, 10
	48018	MB2x96/120IS-SRNK	F96T12 OR F72T12	2	120	8, 10
	48126	MB2x96/277IS-SRNK	F96T12 OR F72T12	2	277	8, 10
<b>MAGNETIC T12 / HO (HIGH OUTPUT) FLUORESCENT SYSTEMS</b>	48127	MB1x96/HO/120RS-SRNK	F96T12/HO OR F72T12/HO	1	120	9, 12
	48128	MB1x96/HO/277RS-SRNK	F96T12/HO OR F72T12/HO	1	277	9, 12
	48025	MB2x96/HO/120RS-SRNK	F96T12/HO OR F72T12/HO	2	120	9, 12
	48027	MB2x96/HO/277RS-SRNK	F96T12/HO OR F72T12/HO	2	277	9, 12
<b>MAGNETIC T12 / VHO (VERY HIGH OUTPUT) FLUORESCENT SYSTEMS</b>	48129	MB1x96/VHO/120RS-SRNK	F96T12/VHO	1	120	9, 12
	48130	MB1x96/VHO/277RS-SRNK	F96T12/VHO	1	277	9, 12
	48131	MB2x96/VHO/120RS-SRNK	F96T12/VHO	2	120	9, 12
	48132	MB2x96/VHO/277RS-SRNK	F96T12/VHO	2	277	9, 12
<b>MAGNETIC T12 PREHEAT FLUORESCENT SYSTEMS</b>	48200	MB1x15/120PH/TP	F20/15/14T12	1	120	9, 12
	48201	MB1x20/120PH/TP	F20/15/14T12	1	120	9, 12
	48202	MB1x20/120PH	F20/15/14T12	1	120	9, 12
	48203	MB2x20/120PH/TP	F20/15/14T12	2	120	9, 12
<b>MAGNETIC T9 FLUORESCENT SYSTEMS</b>	48230	MB1x22/120CIRC	FC8T9	1	120	9, 12
	48231	MB1x32/120CIRC	FC12T9 OR FC16T9	1	120	9, 12

Specifications subject to change without notice

**TRADEMARKS**

**SYLVANIA, OCTRON, METALARC, LUMALUX AND QUICKSENSE ARE REGISTERED TRADEMARKS OF OSRAM SYLVANIA INC.**

**PENTRON AND QUICK 60+ ARE TRADEMARKS OF OSRAM SYLVANIA INC.**

**QUICKTRONIC AND DULUX ARE REGISTERED TRADEMARKS OF OSRAM GMBH UNDER LICENSE TO OSRAM SYLVANIA INC.**

	ITEM NUMBER	DESCRIPTION	ANSI CODE	LAMP WATTS	VOLTAGE	CIRCUIT TYPE	PAGE NUMBER
<b>METALARC METAL HALIDE MAGNETIC BALLAST KITS</b>	47007	M50/MULTI-KIT	M110	50	120/208/240/277	HX-HPF	14, 16
	47013	M70/MULTI-KIT	M98	70	120/208/240/277	HX-HPF	14, 16
	47019	M100/MULTI-KIT	M90	100	120/208/240/277	HX-HPF	14, 16
	47102	M150/MULTI-KIT	M102	150	120/208/240/277	HX-HPF	14, 16
	47021	M175/MULTI-KIT	M57/H39	175	120/208/240/277	CWA	14, 16
	47035	M175/480-KIT	M57/H39	175	480	CWA	14, 16
	47610	M250/MULTI-KIT	M58/H37	250	120/208/240/277	CWA	14, 16
	47611	M250/480-KIT	M58/H37	250	480	CWA	14, 16
	47056	M400/MULTI-KIT	M59/H33	400	120/208/240/277	CWA	14, 16
	47065	M400/480-KIT	M59/H33	400	480	CWA	14, 16
	47075	M2X400/DUAL-KIT	M59/H33	2-400	120/240	CWA	14, 16
	47076	M2X400/277-KIT	M59/H33	2-400	277	CWA	14, 16
	47091	M2X400/480-KIT	M59/H33	2-400	480	CWI	14, 16
	47079	M1000/MULTI-KIT	M47/H36	1000	120/208/240/277	CWA	14, 16
	47087	M1000/480-KIT	M47/H36	1000	480	CWA	14, 16
	47096	M1500/MULTI-KIT	M48	1500	120/208/240/277	CWA	14, 16
47095	M1500/480-KIT	M48	1500	480	CWA	14, 16	
<b>LUMALUX HIGH PRESSURE SODIUM MAGNETIC BALLAST KITS</b>	47281	LU50/DUAL-KIT	S68	50	120/240	HX-HPF	15, 18
	47301	LU70/MULTI-KIT	S62	70	120/208/240/277	HX-HPF	15, 18
	47316	LU100/MULTI-KIT	S54	100	120/208/240/277	HX-HPF	15, 18
	47318	LU100/480-KIT	S54	100	480	CWI	15, 18
	47335	LU150/MULTI-KIT	S55	150	120/208/240/277	HX-HPF	15, 18
	47336	LU150/480-KIT	S55	150	480	CWI	15, 18
	47357	LU250/MULTI-KIT	S50	250	120/208/240/277	CWA	15, 18
	47358	LU250/480-KIT	S50	250	480	CWA	15, 18
	47364	LU400/MULTI-KIT	S51	400	120/208/240/277	CWA	15, 18
	47376	LU400/480-KIT	S51	400	480	CWA	15, 18
	47389	LU1000/MULTI-KIT	S52	1000	120/208/240/277	CWA	15, 18
47391	LU1000/480-KIT	S52	1000	480	CWA	15, 18	
<b>MERCURY MAGNETIC BALLAST KITS</b>	47471	H100/DUAL-KIT	H38/H44	100	120/240	CWA	15, 18
	47472	H100/277-KIT	H38/H44	100	120/277	CWA	15, 18
	47489	H175/MULTI-KIT	H39	175	120/208/240/277	CWA	15, 18
	47490	H175/480-KIT	H39	175	480	CWA	15, 18
	47499	H250/MULTI-KIT	H37	250	120/208/240/277	CWA	15, 18
	47500	H250/480-KIT	H37	250	480	CWA	15, 18
	47509	H400/MULTI-KIT	H33	400	120/208/240/277	CWA	15, 18
	47510	H400/480-KIT	H33	400	480	CWA	15, 18
	47517	H2X400/120-KIT	H33	2-400	120	CWA	15, 18
	47518	H2X400/277-KIT	H33	2-400	277	CWA	15, 18
	47532	H2X400/480-KIT	H33	2-400	480	CWI	15, 18
	47524	H1000/MULTI-KIT	H36	1000	120/208/240/277	CWA	15, 18
	47525	H1000/480-KIT	H36	1000	480	CWA	15, 18
<b>LUMALUX HIGH PRESSURE SODIUM REACTOR BALLASTS</b>	47274	LU50/120R	S68	50	120	R-NPF	15, 18
	47284	LU70/120R	S62	70	120	R-NPF	15, 18
	47304	LU100/120R	S54	100	120	R-NPF	15, 18
	47319	LU150/120R	S55	150	120	R-NPF	15, 18
<b>LUMALUX HIGH POWER FACTOR CAPACITORS</b>	47945	CAP 22.5MFD 330 VAC					18
	47938	CAP 28MFD 330 VAC					18
	47926	CAP 40MFD 280 VAC					18
	47927	CAP 52MFD 280 VAC					18

Specifications subject to change without notice

## Overview

### Rapid Start Ballasts

These ballasts operate the popular 40W and 34W T12 lamps with a smooth start to ensure proper operation. A rapid start ballast removes the need for the separate starter required with pre-heat lamps and also eliminates the annoying flicker associated with pre-heat starting.

### Slimline Ballasts

Slimline ballasts are designed for use with single pin T12 lamps and do not require separate starters. Slimline ballasts start lamps with a high starting voltage to start the lamp without pre-heating the coils. Slimline lamps are specially constructed to utilize this starting method, and provide good system efficacy because no power is used to heat the coils.

### HO and VHO Ballasts

HO and VHO ballasts are rapid start T12 ballasts designed to operate the High Output and Very High Output T12 lamps popular in retail and industrial environments. They come in larger versions of the standard magnetic F-Can to handle the higher power loads of these systems.

### Circline and Pre-Heat Ballasts

These products are available for the most popular circline and pre-heat lamp types, and come in standard and thermally protected models. Pre-Heat ballasts also require the use of an external starter to ignite the lamps.

## Performance Guide

	LAMP TYPE	NO. OF LAMPS	ITEM NUMBER	DESCRIPTION	VOLTAGE (VAC)	INPUT WATTAGE (W)
<b>MAGNETIC T12 RAPID START FLUORESCENT SYSTEMS (HIGH POWER FACTOR)</b>	F40T12	1	48011	MB1x40/120RS-SRNK	120	50
	F40T12/SS	1				44
	F40T12	1	48120	MB1x40/277RS-SRNK	277	51
	F40T12/SS	1				46
	F40T12	2	48001	MB2x40/120RS-SRNK	120	87
	F40T12/SS	2				73
	F30T12	2				72
	F30T12/SS	2				66
<b>NORMAL POWER FACTOR</b>	F40T12	2	48121	MB2x40/277RS-SRNK	277	89
	F40T12/SS	2				75
	F30T12	2				73
	F30T12/SS	2				67
	F40T12	1	48210	MB1x40/120RES-SRNK	120	41
<b>MAGNETIC T12 INSTANT START SLIMLINE FLUORESCENT SYSTEMS (HIGH POWER FACTOR)</b>	F48T12	2	48122	MB2x48/120IS-SRNK	120	87
	F48T12/SS	2				77
	F48T12	2	48123	MB2x48/277IS-SRNK	277	88
	F48T12/SS	2				78
	F96T12	1	48124	MB1x96/120IS-SRNK	120	101
	F96T12/SS	1				88
	F96T12	1	48125	MB1x96/277IS-SRNK	277	101
	F96T12/SS	1				87
	F96T12	2	48018	MB2x96/120IS-SRNK	120	160
	F96T12/SS	2				131
	F96T12	2	48126	MB2x96/277IS-SRNK	277	161
	F96T12/SS	2				132



MB2X40/120RS

MB2X96/120 IS

	LAMP TYPE	NO. OF LAMPS	ITEM NUMBER	DESCRIPTION	VOLTAGE (VAC)	INPUT WATTAGE (W)
<b>MAGNETIC T12/HO FLUORESCENT SYSTEMS (HIGH POWER FACTOR)</b>	F96T12HO	1	48127	MB1x96/HO/120RS-SRNK	120	135
	F96T12/HO/SS	1				121
	F72T12HO	1				112
	F96T12HO	1	48128	MB1x96/HO/277RS-SRNK	277	137
	F96T12/HO/SS	1				123
	F72T12HO	1				114
	F96T12/HO	2	48025	MB2x96/HO/120RS-SRNK	120	240
	F96T12/HO/SS	2				216
	F72T12/HO	2				213
	F96T12/HO	2	48027	MB2x96/HO/277RS-SRNK	277	241
	F96T12/HO/SS	2				217
	F72T12/HO	2				215
<b>MAGNETIC T12/VHO FLUORESCENT SYSTEMS (HIGH POWER FACTOR)</b>	F96T12/VHO	1	48129	MB1x96/VHO/120RS-SRNK	120	218
	F96T12/VHO	1	48130	MB1x96/VHO/277RS-SRNK	277	215
	F96T12/VHO	2	48131	MB2x96/VHO/120RS-SRNK	120	445
	F96T12/VHO/SS	2				408
	F96T12/VHO	2	48132	MB2x96/VHO/277RS-SRNK	277	425
	F96T12/VHO/SS	2				390
<b>MAGNETIC T12 PREHEAT FLUORESCENT SYSTEMS (NORMAL POWER FACTOR)</b>	F14/15/20T12	1	48200*	MB1x15/120PH/TP	120	32/32/33
	F14/15/20T12	1	48201	MB1x20/120PH/TP	120	21/22/23
	F14/15/20T12	1	48202	MB1x20/120PH	120	21/22/23
	F14/15/20T12	2	48203*	MB2x20/120PH/TP	120	46/48/49
	<i>(* TRIGGER START)</i>					
<b>MAGNETIC T9 FLUORESCENT SYSTEMS (NORMAL POWER FACTOR)</b>	FC8T9	1	48230	MB1x22/120CIRC	120	29
	FC12T9	1	48231	MB1x32/120CIRC	120	41
	FC16T9	1				41



MB2X96/VHO/120 RS



MB2X96/HO/120 RS

## Specifications

	LAMP TYPE	ITEM NUMBER	DESCRIPTION	VOLTAGE (VAC)	LINE CURRENT (amps)	INPUT WATTAGE (W)	RATED <sup>1</sup> LUMENS (lm)	NO. OF LAMPS
<b>MAGNETIC T12 RAPID START FLUORESCENT SYSTEMS (HIGH POWER FACTOR)</b>	F40T12	48011	MB1x40/120RS-SR NK	120	0.45	50	3200	1
	F40T12/SS				0.40	44	2650	1
	F40T12	48120	MB1x40/277RS-SR NK	277	0.20	51	3200	1
	F40T12/SS				0.19	46	2650	1
	F40T12	48001	MB2x40/120RS-SR NK	120	0.74	87	3200	2
	F40T12/SS				0.65	73	2650	2
	F30T12				0.62	72	2200	2
	F30T12/SS				0.60	66	1925	2
F40T12	48121	MB2x40/277RS-SR NK	277	0.34	89	3200	2	
F40T12/SS				0.30	75	2650	2	
F30T12				0.27	73	2200	2	
F30T12/SS				0.26	67	1925	2	
<b>NORMAL POWER FACTOR</b>	F40T12	48210	MB1x40/120RES-SR NK	120	0.87	41	3200	1
<b>MAGNETIC T12 INSTANT START SLIMLINE FLUORESCENT SYSTEMS (HIGH POWER FACTOR)</b>	F48T12	48122	MB2x48/120IS-SR NK	120	0.77	87	2875	2
	F48T12/SS				0.68	77	2500	2
	F48T12	48123	MB2x48/277IS-SR NK	277	0.34	88	2875	2
	F48T12/SS				0.30	78	2500	2
	F96T12	48124	MB1x96/120IS-SR NK	120	0.90	101	6420	1
	F96T12/SS				0.76	88	5300	1
	F96T12	48125	MB1x96/277IS-SR NK	277	0.39	101	6420	1
	F96T12/SS				0.33	87	5300	1
	F96T12	48018	MB2x96/120IS-SR NK	120	1.39	160	6420	2
	F96T12/SS				1.20	131	5300	2
F96T12	48126	MB2x96/277IS-SR NK	277	0.60	161	6420	2	
F96T12/SS				0.52	132	5300	2	

<sup>1</sup> SUPERSAVER LUMENS BASED ON CW LAMP RATINGS. STANDARD LAMP LUMENS ON CW OR DESIGNER 41 LAMP RATINGS.

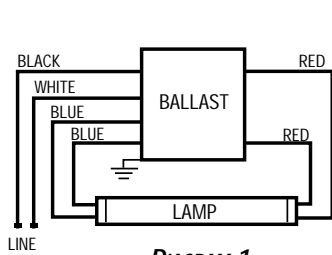


DIAGRAM 1

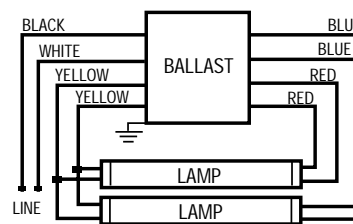


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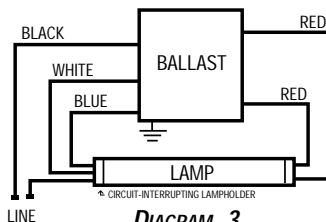


DIAGRAM 3

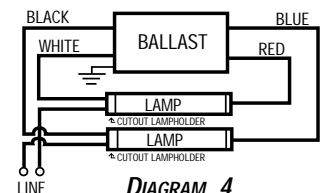
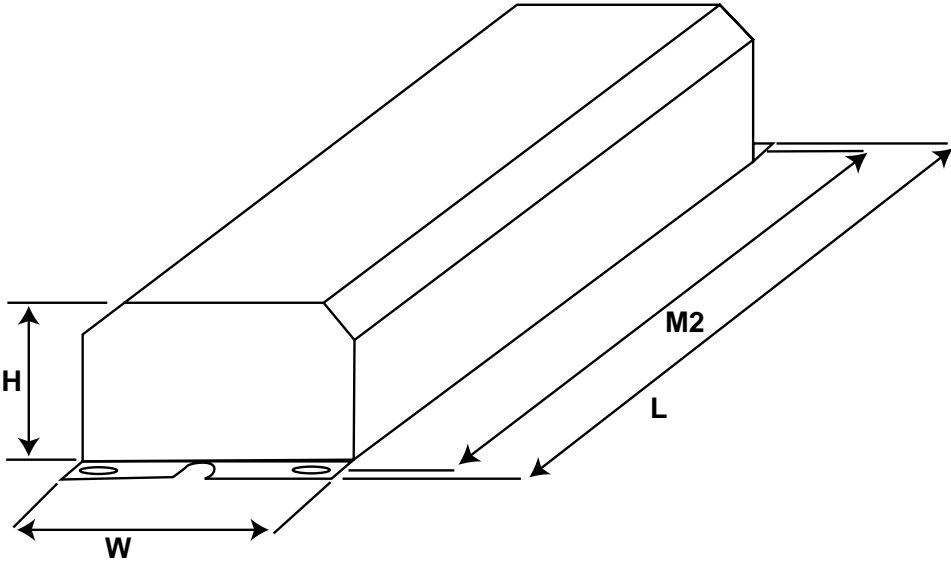


DIAGRAM 4

# Fluorescent Specifications

BALLAST FACTOR (BF)	BALLAST EFFICACY FACTOR	SYSTEM LUMENS	SYSTEM EFFICACY (lm/W)	CREST FACTOR	MIN. F/C START TEMP	THD %	SOUND RATING	CERTIFICATIONS				DIMENSIONS (inches)				WIRING DIAGRAM
								UL	SP®	E	CSA	LENGTH	WIDTH	HEIGHT	M2	
0.93 0.88	1.86 2.00	2976 2332	60 53	<1.70 1.70	50/10 60/15.5	<12% <13%	A A	x x	x x	x x	x x	9.468	2.36	1.5	8.906	1
0.94 0.88	1.83 1.92	3008 2332	59 51	<1.70 1.70	50/10 60/15.5	<12% <13%	A A	x x	x x	x x	x x	9.468	2.36	1.5	8.906	1
0.93 0.88	1.07 1.20	5952 4664	68 64	<1.70 1.80	50/10 60/15.5	<15% <18%	A A	x x	x x	x x	x x	9.468	2.36	1.5	8.906	2
0.92 0.92	1.27 1.40	4048 3542	56 54	<1.70 <1.85	50/10 60/15.5	<20% <18%	A A	x x	x x			9.468	2.36	1.5	8.906	
0.94 0.89 0.93 0.92	1.06 1.19 1.27 1.37	6016 4717 4092 3542	68 63 56 53	<1.70 1.80 <1.70 <1.85	50/10 60/15.5 50/10 60/15.5	<15% <18% <20% <18%	A A A A	x x x x	x x x x	x x x x	x x	9.468	2.36	1.5	8.906	2
0.77	1.87	2464	60	<1.70	50/10	<10%	A	x	x			6.5	1.93	1.5	6.000	3
0.93 0.94	1.07 1.23	5348 4700	61 61	<1.85 <1.90	50/10 60/15.5	<25% <25%	B B	x x	x x			9.6	3.125	1.75	8.926	4
0.93 0.94	1.06 1.21	5348 4700	61 60	<1.85 <1.90	50/10 60/15.5	<25% <25%	B B	x x	x x			9.6	3.125	1.75	8.926	5
0.93 0.93	.92 1.05	5971 4929	59 56	<1.85 <1.95	50/10 60/15.5	<32% <32%	B B	x x	x x			11.75	3.125	1.75	11.125	6
0.93 0.93	.92 1.06	5971 4929	59 57	<1.85 <1.95	50/10 60/15.5	<32% <32%	B B	x x	x x			11.75	3.125	1.75	11.125	6
0.93 0.93	0.58 0.71	11941 9858	75 75	<1.85 <1.90	50/10 60/15.5	<25% <25%	B B	x x	x x	x x	x x	11.75	3.125	1.75	11.125	4
0.93 0.93	0.57 0.70	11941 9858	74 75	<1.85 <1.90	50/10 60/15.5	<25% <25%	B B	x x	x x	x x	x x	11.75	3.125	1.75	11.125	5



## Specifications

LAMP TYPE	ITEM NUMBER	DESCRIPTION	VOLTAGE (VAC)	LINE CURRENT (amps)	INPUT WATTAGE (W)	RATED <sup>1</sup> LUMENS (lm)	NO. OF LAMPS	
<b>MAGNETIC T12/HO FLUORESCENT SYSTEMS (HIGH POWER FACTOR)</b>	F96T12HO	48127 MB1x96/HO/120RS-SRNK	120	1.19	135	9050	1	
	F96T12/HO/SS			1.10	121	8000	1	
	F72T12HO			1.02	112	6250	1	
	F96T12HO	48128 MB1x96/HO/277RS-SRNK	277	0.53	137	9050	1	
	F96T12/HO/SS			0.48	123	8000	1	
	F72T12HO			0.45	114	6250	1	
	F96T12/HO	48025 MB2x96/HO/120RS-SRNK	120	2.05	240	9050	2	
	F96T12/HO/SS			1.95	216	8000	2	
	F72T12/HO			1.87	213	6250	2	
	F96T12/HO	48027 MB2x96/HO/277RS-SRNK	277	0.90	241	9050	2	
	F96T12/HO/SS			0.84	217	8000	2	
	F72T12/HO			0.81	215	6250	2	
<b>MAGNETIC T12/VHO FLUORESCENT SYSTEMS (HIGH POWER FACTOR)</b>	F96T12/VHO	48129	MB1x96/VHO/120RS-SRNK	120	1.96	218	14000	1
	F96T12/VHO	48130	MB1x96/VHO/277RS-SRNK	277	0.81	215	14000	1
	F96T12/VHO	48131	MB2x96/VHO/120RS-SRNK	120	3.80	445	14000	2
	F96T12/VHO/SS				3.43	408	13000	2
	F96T12/VHO	48132	MB2x96/VHO/277RS-SRNK	277	1.57	425	14000	2
	F96T12/VHO/SS				1.42	390	13000	2
<b>MAGNETIC T12 PREHEAT FLUORESCENT SYSTEMS (NORMAL POWER FACTOR)</b>	F14/15/20T12	48200*	MB1x15/120PH/TP	120	0.53/0.58/0.60	32/32/33	750	1
	F14/15/20T12	48201°	MB1x20/120PH/TP	120	0.32/0.36/0.40	21/22/23	1175	1
	F14/15/20T12	48202°	MB1x20/120PH	120	0.32/0.36/0.40	21/22/23	1175	1
	F14/15/20T12	48203*	MB2x20/120PH/TP	120	0.65/0.67/0.71	46/48/49	1175	2
<i>(* TRIGGER START ° STARTER REQUIRED)</i>								
<b>MAGNETIC T9 FLUORESCENT SYSTEMS (NORMAL POWER FACTOR)</b>	FC8T9	48230	MB1x22/120CIRC	120	0.61	29	1050	1
	FC12T9	48231	MB1x32/120CIRC	120	0.87	41	1925	1
	FC16T9			120	0.87	41	2750	1

<sup>1</sup> SUPERSAVER LUMENS BASED ON CW LAMP RATINGS. STANDARD LAMP LUMENS ON CW OR DESIGNER 41 LAMP RATINGS.

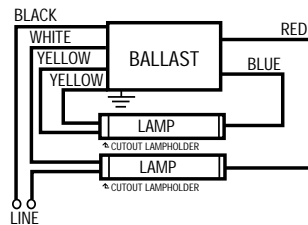


DIAGRAM 5

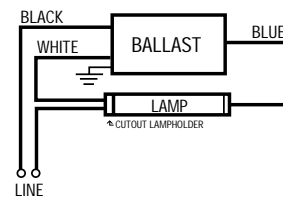


DIAGRAM 6

BALLAST FACTOR (BF)	BALLAST EFFICACY FACTOR	SYSTEM LUMENS	SYSTEM EFFICACY (lm/W)	CREST FACTOR	MIN. F/C START TEMP	THD %	SOUND RATING	CERTIFICATIONS				DIMENSIONS (inches)				WIRING DIAGRAM
								UL	SP®	E	CSA	LENGTH	WIDTH	HEIGHT	M2	
0.95	0.69	8598	64	<1.70	-20/-28.9	<32%	C	x	x			11.75	3.125	2.562	11.125	1
0.93	0.76	7440	61	<1.70	60/15.5	<32%	C	x	x							
0.92	0.82	5750	51	<1.70	-20/-28.9	<32%	C	x	x			11.75	3.125	2.562	11.125	
0.94	0.68	8507	62	<1.70	-20/-28.9	<32%	C	x	x			11.75	3.125	2.562	11.125	1
0.92	0.75	7360	60	<1.70	60/15.5	<32%	C	x	x							
0.91	0.80	5688	50	<1.70	-20/-28.9	<32%	C	x	x			11.75	3.125	2.562	11.125	
0.95	0.39	17195	72	<1.70	-20/-28.9	<20%	C	x	x	x	x	11.75	3.125	2.562	11.125	2
0.92	0.42	14720	68	<1.70	60/15.5	<20%	C	x	x	x	x					
0.96	0.45	12000	56	<1.70	-20/-28.9	<20%	C	x	x			11.75	3.125	2.562	11.125	
0.95	0.39	17195	71	<1.70	-20/-28.9	<20%	C	x	x	x	x	11.75	3.125	2.562	11.125	2
0.92	0.42	14720	68	<1.70	60/15.5	<20%	C	x	x	x	x					
0.95	0.44	11875	55	<1.70	-20/-28.9	<20%	C	x	x			11.75	3.125	2.562	11.125	
0.92	0.42	12880	59	<1.70	-20/-28.9	<32%	D	x	x			14.371	3.125	2.60	13.750	1
0.91	0.42	12740	59	<1.70	-20/-28.9	<32%	D	x	x			14.371	3.125	2.60	13.750	1
0.95	0.21	26600	60	<1.70	-20/-28.9	<20%	D	x	x			14.371	3.125	2.60	13.750	2
0.93	0.23	24180	59	<1.70	60/15.5	<20%	D	x	x							
0.93	0.22	26040	61	<1.70	-20/-28.9	<20%	D	x	x			14.371	3.125	2.60	13.750	2
0.91	0.24	23660	61	<1.70	60/15.5	<20%	D	x	x							
0.79	2.45	593	19	<1.70	50/10	<10%	A	x	x			6.50	1.93	1.50	6.00	3
0.82	3.90	964	46	<1.70	50/10	<10%	A	x	x			4.25	1.83	1.50	3.95	7
0.82	3.90	964	46	<1.70	50/10	<10%	A	x	x			3.10	1.65	1.25	2.85	7
0.65	1.41	1528	33	<1.70	50/10	<10%	A	x	x			6.50	2.4	1.625	6.00	2
0.80	2.75	840	29	<1.70	50/10	<10%	A	x	x			6.50	1.93	1.50	6.00	8
0.77	1.87	1482	36	<1.70	50/10	<10%	A	x	x			6.50	1.93	1.50	6.00	8
0.77	1.87	2118	52	<1.70	50/10	<10%	A	x	x			6.50	1.93	1.50	6.00	8

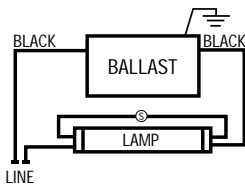


DIAGRAM 7

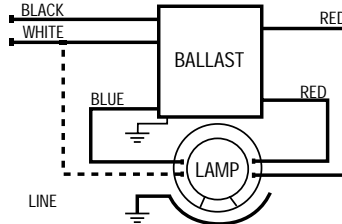


DIAGRAM 8

## Overview

SYLVANIA HID Ballasts are available in easy-to-use replacement kits for the range of metal halide, high pressure sodium and mercury lamps. These ballast kits help to eliminate the hassles of identifying what's required for a replacement or upgrade - as well as possible return trips for additional parts - by providing an array of components in each kit. Most kits are also multi-tap styles for 120, 208, 240 and 277V applications reducing the number of SKU's required while also minimizing hassles associated with selecting the wrong voltage product and needing to exchange it.

### METALARC Metal Halide Magnetic Ballast Kits

Named for SYLVANIA METALARC lamps, these kits include core and coil, capacitors, ignitors (where required), brackets and mounting hardware. Available for a broad range of metal halide lamps, most kits are also suitable for use with like wattage mercury lamps. Each is clearly labeled with the appropriate combinations.

### LUMALUX High Pressure Sodium Magnetic Ballast Kits

These kits, named for the SYLVANIA LUMALUX high pressure sodium lamps, include core and

coil, capacitors, ignitors, brackets and mounting hardware. These kits also use plug-in ignitors for ease of replacement as standard issue where others offer this feature only as an option.

### LUMALUX High Pressure Sodium Reactor Ballasts

Available for low wattage lamps, these ballasts are the simple reactor ballasts popular for 120V applications. Power factor correction capacitors are available for installations requiring higher power factors than normal.

### MERCURY Magnetic Ballast Kits

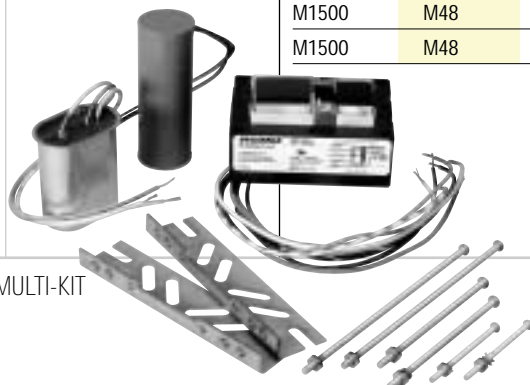
These kits are available for the array of available mercury lamps and include core and coil, capacitor, brackets and mounting hardware. Some models also offer dual lamp capability for multi-lamp applications.

With the broad array of SYLVANIA HID ballasts available and our convenient naming and part description system, the next time you're asked - "What ballast do I use with a SYLVANIA METALARC M400 lamp?" - the answer is easy: "Why, a SYLVANIA METALARC M400/MULTI-KIT, of course!".

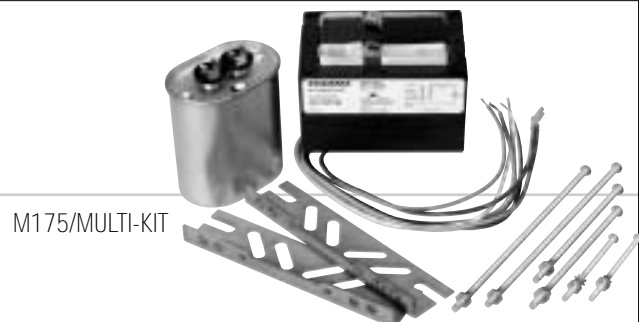
## Performance Guide

### METALARC METAL HALIDE MAGNETIC BALLAST KITS

LAMP TYPE	ANSI CODE	ITEM NUMBER	DESCRIPTION	VOLTAGE (VAC)	INPUT WATTS	CIRCUIT TYPE
MP50	M110	47007	M50/MULTI-KIT	120/208/240/277	65	HX-HPF
MP70	M98	47013	M70/MULTI-KIT	120/208/240/277	90	HX-HPF
MP100	M90	47019	M100/MULTI-KIT	120/208/240/277	129	HX-HPF
MP150	M102	47102	M150/MULTI-KIT	120/208/240/277	185	HX-HPF
M175/H39	M57/H39	47021	M175/MULTI-KIT	120/208/240/277	210	CWA
M175/H39	M57/H39	47035	M175/480-KIT	480	211	CWA
M250/H37	M58/H37	47610	M250/MULTI-KIT	120/208/240/277	289	CWA
M250/H37	M58/H37	47611	M250/480-KIT	480	290	CWA
M400/H33	M59/H33	47056	M400/MULTI-KIT	120/208/240/277	452	CWA
M400/H33	M59/H33	47065	M400/480-KIT	480	452	CWA
M400/H33	M59/H33	47075	M2X400/DUAL-KIT	120/240	890	CWA (SERIES LAMP)
M400/H33	M59/H33	47076	M2X400/277-KIT	277	890	CWA (SERIES LAMP)
M400/H33	M59/H33	47091	M2X400/480-KIT	480	900	CWI (SERIES LAMP)
MP1000	M47/H36	47079	M1000/MULTI-KIT	120/208/240/277	1065	CWA
MP1000	M47/H36	47087	M1000/480-KIT	480	1065	CWA
M1500	M48	47096	M1500/MULTI-KIT	120/208/240/277	1590	CWA
M1500	M48	47095	M1500/480-KIT	480	1590	CWA



M100/MULTI-KIT



M175/MULTI-KIT

**LUMALUX  
HIGH PRESSURE SODIUM  
MAGNETIC BALLAST KITS**

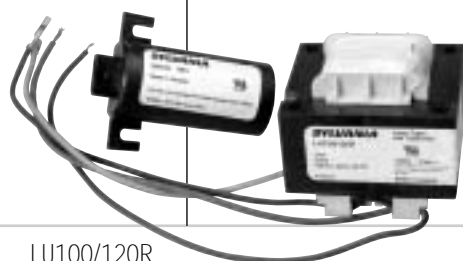
LAMP TYPE	ANSI CODE	ITEM NUMBER	DESCRIPTION	VOLTAGE (VAC)	INPUT WATTS	CIRCUIT TYPE
LU50	S68	47281	LU50/DUAL-KIT	120/240	76	HX-HPF
LU70	S62	47301	LU70/MULTI-KIT	120/208/240/277	91	HX-HPF
LU100	S54	47316	LU100/MULTI-KIT	120/208/240/277	127	HX-HPF
LU100	S54	47318	LU100/480-KIT	480	132	CWI
LU150	S55	47335	LU150/MULTI-KIT	120/208/240/277	195	HX-HPF
LU150	S55	47336	LU150/480-KIT	480	186	CWI
LU250	S50	47357	LU250/MULTI-KIT	120/208/240/277	300	CWA
LU250	S50	47358	LU250/480-KIT	480	300	CWA
LU400	S51	47364	LU400/MULTI-KIT	120/208/240/277	460	CWA
LU400	S51	47376	LU400/480-KIT	480	460	CWA
LU1000	S52	47389	LU1000/MULTI-KIT	120/208/240/277	1068	CWA
LU1000	S52	47391	LU1000/480-KIT	480	1068	CWA

**MERCURY  
MAGNETIC BALLAST KITS**

H38/H44	H38/H44	47471	H100/DUAL-KIT	120/240	120	CWA
H38/H44	H38/H44	47472	H100/277-KIT	120/277	120	CWA
H39	H39	47489	H175/MULTI-KIT	120/208/240/277	210	CWA
H39	H39	47490	H175/480-KIT	480	210	CWA
H37	H37	47499	H250/MULTI-KIT	120/208/240/277	291	CWA
H37	H37	47500	H250/480-KIT	480	288	CWA
H33	H33	47509	H400/MULTI-KIT	120/208/240/277	452	CWA
H33	H33	47510	H400/480-KIT	480	452	CWA
H33	H33	47517	H2X400/120-KIT	120	887	CWA (SERIES LAMP)
H33	H33	47518	H2X400/277-KIT	277	887	CWA (SERIES LAMP)
H33	H33	47532	H2X400/480-KIT	480	890	CWI (SERIES LAMP)
H36	H36	47524	H1000/MULTI-KIT	120/208/240/277	1065	CWA
H36	H36	47525	H1000/480-KIT	480	1065	CWA

**LUMALUX  
HIGH PRESSURE SODIUM  
REACTOR BALLASTS**

LU50	S68	47274	LU50/120R	120	64	RCTR
LU70	S62	47284	LU70/120R	120	85	RCTR
LU100	S54	47304	LU100/120R	120	118	RCTR
LU150	S55	47319	LU150/120R	120	166	RCTR



LU100/120R



LU400/MULTI-KIT

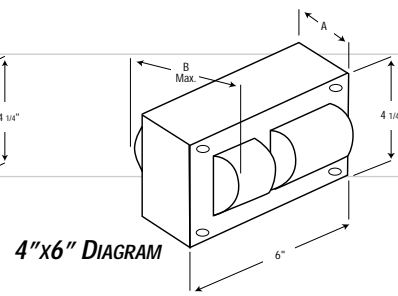
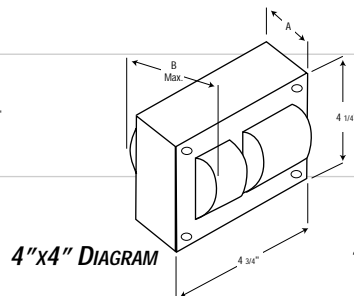
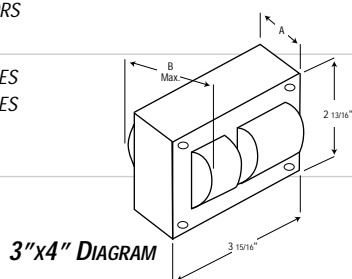
## Specifications

	LAMP TYPE	ANSI CODE	ITEM NUMBER	DESCRIPTION	VOLTAGE (VAC)	INPUT WATTS	CIRCUIT TYPE	OPERATING	LINE CURRENT (amps)		
									OPEN CIRCUIT	STARTING	
<b>METALARC METAL HALIDE MAGNETIC BALLASTS KITS</b>	MP50	M110	47007	M50/MULTI-KIT	120/208/240/277	65	HX-HPF	0.60/0.35/0.30/0.25	1.30/0.75/0.65/0.55	0.40/0.25/0.22/0.20	
	MP70	M98	47013	M70/MULTI-KIT	120/208/240/277	90	HX-HPF	0.80/0.45/0.40/0.35	1.50/0.90/0.75/0.65	0.70/0.40/0.35/0.30	
	MP100	M90	47019	M100/MULTI-KIT	120/208/240/277	129	HX-HPF	1.10/0.65/0.55/0.50	2.15/1.25/1.10/1.00	1.05/0.65/0.60/0.50	
	MP150	M102	47102	M150/MULTI-KIT	120/208/240/277	185	HX-HPF	1.6/1/0.8/0.7	3.6/2.2/1.8/1.55	1.3/0.95/0.65/0.55	
	M175/H39 MP175 MS175	M57/H39	47021	M175/MULTI-KIT	120/208/240/277	210	CWA	1.80/1.10/0.90/0.80	1.20/0.65/0.60/0.50	1.60/0.90/0.80/0.70	
	M175/H39 MP175 MS175	M57/H39	47035	M175/480-KIT	480	211	CWA	0.45	0.35	0.3	
	M250/H37 MP250 MS250	M58/H37	47610	M250/MULTI-KIT	120/208/240/277	289	CWA	2.5/1.45/1.25/1.10	2.40/1.30/1.20/1.00	1.80/1.10/0.90/0.80	
	M250/H37 MP250 MS250	M58/H37	47611	M250/480-KIT	480	290	CWA	0.6	0.6	0.45	
	M400/H33 MP400 MS400 MT400	M59/H33	47056	M400/MULTI-KIT	120/208/240/277	452	CWA	4.00/2.30/2.00/1.75	3.50/2.00/1.75/1.50	2.80/1.60/1.40/1.20	
	M400/H33 MP400 MS400 MT400	M59/H33	47065	M400/480-KIT	480	452	CWA	1	0.9	0.7	
	M400/H33 MP400 MS400 MT400	M59/H33	47075	M2X400/DUAL-KIT	120/240	890	CWA SERIES LAMP	7.70/3.85	6.05/3.05	4.00/2.00	
	M400/H33 MP400 MS400 MT400	M59/H33	47076	M2X400/277-KIT	277	890	CWA SERIES LAMP	3.4	2.6	1.75	
	M400/H33 MP400 MS400 MT400	M59/H33	47091	M2X400/480-KIT	480	900	CWI SERIES LAMP	1.9	1.75	0.75	
	M1000/H36 MS1000 MP1000 MT1000	M47/H36	47079	M1000/MULTI-KIT	120/208/240/277	1065	CWA	9.00/5.20/4.50/3.90	3.25/1.90/1.65/1.40	7.60/4.40/3.70/3.30	
	M1000/H36 MS1000 MP1000 MT1000	M47/H36	47087	M1000/480-KIT	480	1065	CWA	2.25	0.7	1.9	
	M1500	M48	47096	M1500/MULTI-KIT	120/208/240/277	1590	CWA	13.30/7.50/6.70/5.70	5.60/3.20/2.80/2.40	11.70/6.60/5.80/4.80	
	M1500	M48	47095	M1500/480-KIT	480	1590	CWA	3.4	1.4	2.9	

<sup>2</sup> OIL FILLED CAPACITORS

<sup>3</sup> DRY CAPACITORS

□ 1x22 $\mu$ F 480V SERIES  
1x24 $\mu$ F 480V SERIES



OPEN CIRCUIT VOLTAGE	DROP OUT VOLTAGE	MFD + VAC	CAPACITOR		UL BENCH TOP RISE CODE 1029	MAX DISTANCE TO LAMP	FUSE (amps)	BALLAST NET WEIGHT (LBS.)	VARIABLE DIMENSIONS (inches)			WIRING DIAG.
			DIAMETER	HEIGHT					A	B	DRAWING	
255	90/150/175/210	6µF 277VAC MIN <sup>3</sup>	1.4	2.7	1029A	3'	3/2/1.5/1.5	5	1.2	2.5	3X4	1
235	85/150/170/195	7µF 280VAC MIN <sup>3</sup>	1.4	2.7	1029B	3'	4/3/2/2	5	1.3	2.55	3X4	1
260	75/140/150/175	13.5µF 240VAC MIN <sup>3</sup>	1.4	3.9	1029D	3'	6/4/3/3	5	1.4	2.75	3X4	1
270	75/120/150/170	16µF 280VAC MIN <sup>3</sup>	1.5	3.9	1029D	15'	9/6/5/4	8	2.25	3.9	3X4	1
320	65/115/130/150	10µF 400VAC MIN <sup>2</sup>	1.5 X 3	3.6	1029D	SEE TABLE 1	6/3/3/3	8	2.22	3.35	3X4	2
320	240	10µF 400VAC MIN <sup>2</sup>	1.5 X 3	3.6	1029B	SEE TABLE 1	3	8	2.22	3.35	3X4	3
305	55/90/110/120	15µF 360VAC MIN <sup>2</sup>	1.8 X 2.9	3.5	1029B	SEE TABLE 1	6/4/3/3	10	1.6	3.2	4X4	2
305	210	15µF 360VAC MIN <sup>2</sup>	1.8 X 2.9	3.5	1029B	SEE TABLE 1	2	10	1.65	3.15	4X4	3
300	55/95/110/130	24µF 360VAC MIN <sup>2</sup>	1.8 X 3.9	4.5	1029D	SEE TABLE 1	15/8/6/6	15	2	3.8	4X4	2
300	220	24µF 360VAC MIN <sup>□</sup>	1.8 X 3.9	4.5	1029D	SEE TABLE 1	3	15	2	3.7	4X4	3
600	60	11.5µF 800VAC <sup>□</sup>	1.8 X 4.4 1.8 X 4.4	5.0 5.0	1029G	SEE TABLE 1	20/10	26	3.12	4.75	4X6	4
600	140	11.5µF 800VAC <sup>□</sup>	1.8 X 4.4 1.8 X 4.4	5.0 5.0	1029B	SEE TABLE 1	10	26	3.38	5	4X6	5
580	240	11.5µF 830VAC <sup>2</sup>	1.8 X 4.4 1.8 X 4.4	5.0 5.0	1029F	SEE TABLE 1	5	30	4	5.6	4X6	6
425	75/120/150/165	24µF 470VAC MIN <sup>2</sup>	1.8 X 4.4	5.0	1029D	SEE TABLE 1	30/15/15/10	24	3.13	5.35	4X6	7
425	320	24µF 470VAC MIN <sup>2</sup>	1.8 X 4.4	5.0	1029D	SEE TABLE 1	6	24	3.13	5.35	4X6	3
430	75/130/150/175	32µF 525VAC MIN <sup>2</sup>	2 X 4.4	5.0	1029G	SEE TABLE 1	40/25/25/20	32	4.25	6.45	4X6	7
430	300	32µF 525VAC MIN <sup>2</sup>	2 X 4.4	5.0	1029E	SEE TABLE 1	15	32	4.25	6.45	4X6	3

**TABLE 1 MAXIMUM DISTANCE: BALLAST TO LAMP**

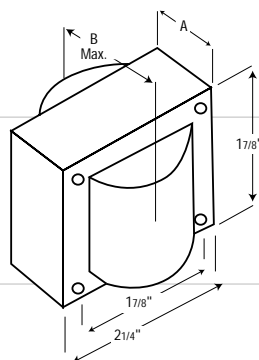
WATTAGE	LAMP TYPE	#10 WIRE		#12 WIRE		#14 WIRE		#16 WIRE		#18 WIRE	
100	H38	750	229	470	143	295	90	185	56	115	35
175	M57/H39	425	130	265	81	165	50	105	32	65	20
250	M58/H37	300	92	190	58	120	37	75	23	45	14
400	M59/H33	200	61	125	38	75	23	50	15	30	9
1000	M47/H36	325	99	205	63	125	38	80	24	50	15
1500	M48	225	69	140	43	85	26	55	17	35	11

## Specifications

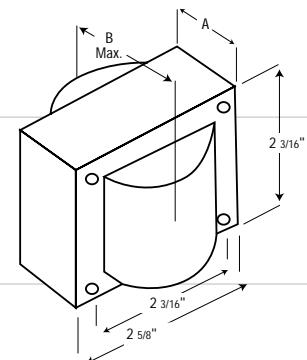
	LAMP TYPE	ANSI CODE	ITEM NUMBER	DESCRIPTION	VOLTAGE (VAC)	INPUT WATTS	CIRCUIT TYPE	OPERATING	LINE CURRENT (amps)																															
									OPEN CIRCUIT	STARTING																														
<b>LUMALUX High Pressure Sodium Magnetic Ballast Kits</b>	LU50	S68	47281	LU50/DUAL-KIT	120/240	76	HX-HPF	0.70/0.35	1.20/0.60	0.85/0.45																														
	LU70	S62	47301	LU70/MULTI-KIT	120/208/240/277	91	HX-HPF	0.80/0.50/0.40/0.35	1.50/0.90/0.75/0.65	0.85/0.50/0.45/0.40																														
	LU100	S54	47316	LU100/MULTI-KIT	120/208/240/277	127	HX-HPF	1.10/0.65/0.55/0.50	1.90/1.10/0.95/0.85	1.50/0.85/0.75/0.65																														
	LU100	S54	47318	LU100/480-KIT	480	132	CWI	0.3	0.15	0.15																														
	LU150	S55	47335	LU150/MULTI-KIT	120/208/240/277	195	HX-HPF	1.70/1.00/0.85/0.75	3.20/1.85/1.60/1.40	2.40/1.40/1.20/1.05																														
	LU150	S55	47336	LU150/480-KIT	480	186	CWI	0.4	0.15	0.2																														
	LU250	S50	47357	LU250/MULTI-KIT	120/208/240/277	300	CWA	2.65/1.55/1.35/1.15	1.80/1.05/0.90/0.80	1.55/0.90/0.80/0.70																														
	LU250	S50	47358	LU250/480-KIT	480	300	CWA	0.6	0.35	0.5																														
	LU400	S51	47364	LU400/MULTI-KIT	120/208/240/277	460	CWA	3.8/2.15/1.90/1.65	1.5/0.85/0.75/0.65	3.30/1.90/1.65/1.40																														
	LU400	S51	47376	LU400/480-KIT	480	460	CWA	1	0.4	0.8																														
	LU1000	S52	47389	LU1000/MULTI-KIT	120/208/240/277	1068	CWA	8.95/5.00/4.50/3.90	3.55/2.05/1.75/1.50	7.30/4.20/3.65/3.15																														
	LU1000	S52	47391	LU1000/480-KIT	480	1068	CWA	2.25	0.9	1.85																														
<b>MERCURY Magnetic Ballast Kits</b>	H38/H44	H38/H44	47471	H100/DUAL-KIT	120/240	120	CWA	1.05/0.55	0.4/0.2	0.70/0.35																														
	H38/H44	H38/H44	47472	H100/277-KIT	120/277	120	CWA	1.05/0.45	0.40/0.35	0.70/0.25																														
	H39	H39	47489	H175/MULTI-KIT	120/208/240/277	210	CWA	1.8/1.1/0.9/0.8	1.2/0.65/0.60/0.50	1.6/0.9/0.8/0.7																														
	H39	H39	47490	H175/480-KIT	480	211	CWA	0.45	0.35	0.3																														
	H37	H37	47499	H250/MULTI-KIT	120/208/240/277	291	CWA	2.6/1.45/1.3/1.1	1.9/1/0.95/0.8	2/1.2/1/0.85																														
	H37	H37	47500	H250/480-KIT	480	288	CWA	0.6	0.55	0.45																														
	H33	H33	47509	H400/MULTI-KIT	120/208/240/277	452	CWA	4/2.3/2/1.75	3.5/2/1.75/1.5	2.8/1.6/1.4/1.2																														
	H33	H33	47510	H400/480-KIT	480	452	CWA	1	0.9	0.7																														
	H33	H33	47517	H2X400/120-KIT	120	887	CWA SERIES LAMP	7.6	4.6	4.6																														
	H33	H33	47518	H2X400/277-KIT	277	887	CWA SERIES LAMP	3.2	2	2																														
	H33	H33	47532	H2X400/480-KIT	480	890	CWI SERIES LAMP	1.75	0.4	0.4																														
	H36	H36	47524	H1000/MULTI-KIT	120/208/240/277	1065	CWA	9.0/5.20/4.5/3.9	3.25/1.9/1.65/1.4	7.6/4.4/3.7/3.3																														
	H36	H36	47525	H1000/480-KIT	480	1065	CWA	2.25	0.7	1.9																														
<b>LUMALUX High Pressure Sodium Reactor Ballasts</b>	LU50	S68	47274	LU50/120R	120	64	RCTR	1.2	1	1.5																														
	LU70	S62	47284	LU70/120R	120	85	RCTR	1.7	1.25	2.1																														
	LU100	S54	47304	LU100/120R	120	118	RCTR	2.15	1.8	2.85																														
	LU150	S55	47319	LU150/120R	120	166	RCTR	3.2	2.35	4.2																														
	<p>◇ 1x7.5µF 500VAC SERIES                      1x9µF 500VAC SERIES                      ◇◇ 2x7µF 300VAC SERIES</p> <p style="text-align: center;"><b>LUMALUX HIGH POWER FACTOR CAPACITORS</b></p> <table border="1"> <thead> <tr> <th>BALLAST</th> <th>ITEM NUMBER</th> <th>DESCRIPTION</th> <th>CAPACITOR</th> <th>DIAMETER</th> <th>HEIGHT</th> </tr> </thead> <tbody> <tr> <td>LU50/120R</td> <td>47945</td> <td>CAP 22.5MFD 330VAC</td> <td>22.5µF 120VAC MIN</td> <td>1.6</td> <td>3.93</td> </tr> <tr> <td>LU70/120R</td> <td>47938</td> <td>CAP 28MFD 330VAC</td> <td>28µF 120VAC MIN</td> <td>1.75</td> <td>3.93</td> </tr> <tr> <td>LU100/120R</td> <td>47926</td> <td>CAP 40MFD 280VAC</td> <td>40µF 120VAC MIN</td> <td>1.75</td> <td>3.93</td> </tr> <tr> <td>LU150/120R</td> <td>47927</td> <td>CAP 52MFD 280 VAC</td> <td>52µF 120VAC MIN</td> <td>1.75</td> <td>4.88</td> </tr> </tbody> </table>											BALLAST	ITEM NUMBER	DESCRIPTION	CAPACITOR	DIAMETER	HEIGHT	LU50/120R	47945	CAP 22.5MFD 330VAC	22.5µF 120VAC MIN	1.6	3.93	LU70/120R	47938	CAP 28MFD 330VAC	28µF 120VAC MIN	1.75	3.93	LU100/120R	47926	CAP 40MFD 280VAC	40µF 120VAC MIN	1.75	3.93	LU150/120R	47927	CAP 52MFD 280 VAC	52µF 120VAC MIN	1.75
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OPEN CIRCUIT VOLTAGE	DROP OUT VOLTAGE	CAPACITOR			UL BENCH TOP RISE CODE 1029	MAX DISTANCE TO LAMP	FUSE (amps)	BALLAST NET WEIGHT (LBS.)	VARIABLE DIMENSIONS (inches)			WIRING DIAG.
		MFD + VAC	DIAMETER	HEIGHT					A	B	DRAWING	
128	90/180	6µF 290VAC MIN <sup>3</sup>	1.4	2.7	1029F	3	3/2	5	0.8	2	3X4	8
125	90/155/180/210	7µF 280VAC MIN <sup>3</sup>	1.4	2.7	1029D	3	4/2/2/2	5	1.1	2.13	3X4	1
120	95/165/190/220	9µF 290VAC MIN <sup>3</sup>	1.4	2.7	1029C	3	5/3/2/2	8	2.32	3.5	3X4	1
120	380	35µF 180VAC MIN <sup>3</sup>	1.6	3.9	1029B	3	1	8	2.15	3.15	3X4	9
130	95/165/190/220	13.5µF 290VAC MIN <sup>3</sup>	1.4	3.9	1029B	3	8/5/4/4	9	2.5	3.85	3X4	1
115	380	51µF 200VAC MIN <sup>3</sup>	1.75	4.9	1029D	3	1	9	3.15	4.55	3X4	9
205	70/120/140/160	35µF 240VAC MIN <sup>3</sup>	1.6	3.9	1029F	3	7/4/3/3	11	1.75	3.85	4X4	10
205	260	35µF 240VAC MIN <sup>3</sup>	1.6	3.9	1029F	3	2	11	1.75	3.85	4X4	11
185	70/120/140/160	55µF 240VAC MIN <sup>3</sup>	1.75	4.9	1029D	3	9/5/5/4	16	2.3	4	4X4	10
190	260	55µF 240VAC MIN <sup>3</sup>	1.75	4.9	1029D	3	3	16	2.3	4	4X4	11
415	90/155/180/210	26µF 470VAC MIN <sup>2</sup>	1.8 x 4.4	5.0	1029C	3	25/15/10/10	31	3.8	6	4X6	10
415	360	26µF 470VAC MIN <sup>2</sup>	1.8 x 4.4	5.0	1029F	3	6	31	3.8	6	4X6	11
250	70/140	8.7µF 280VAC MIN <sup>3</sup>	1.4	2.7	1029D	SEE TABLE 1	3/2	6	1	2	3X4	12
255	67/155	8.7µF 280VAC MIN <sup>3</sup>	1.4	2.7	1029D	SEE TABLE 1	1	6	0.92	1.8	3X4	14
320	65/115/130/150	10µF 400VAC MIN <sup>2</sup>	1.5 x 3.0	3.6	1029D	SEE TABLE 1	5	7	2.22	3.35	3X4	2
320	240	10µF 400VAC MIN <sup>2</sup>	1.5 x 3.0	3.6	1029B	SEE TABLE 1	1	7	2.22	3.35	3X4	3
305	65/115/130/150	15µF 360VAC MIN <sup>2</sup>	1.8 x 2.9	3.5	1029C	SEE TABLE 1	8/4/3/3	9	2.8	4.1	3X4	2
305	240	15µF 360VAC MIN <sup>2</sup>	1.8 x 2.9	3.5	1029D	SEE TABLE 1	2	9.5	3.0	4.2	3X4	3
300	55/95/110/130	24µF 360VAC MIN <sup>2</sup>	1.8 x 3.9	4.5	1029D	SEE TABLE 1	10/6/5/5	13	2.0	3.9	4X4	2
300	220	24µF 360VAC MIN <sup>2</sup>	1.8 x 3.9	4.5	1029D	SEE TABLE 1	3	13	2.0	3.7	4X4	3
545	65	16.5µF 500VAC MIN <sup>2</sup> ◇	1.8 x 3.7 1.5 x 3.9	4.3 4.5	1029E	SEE TABLE 1	20	24	3.0	4.375	4X6	5
545	150	16.5µF 500VAC MIN <sup>2</sup> ◇	1.8 x 3.7 1.5 x 3.9	4.3 4.5	1029A	SEE TABLE 1	8	24	3.0	4.375	4X6	5
545	260	14µF 300VAC MIN <sup>2</sup> ◇◇	1.8 x 3.0	3.6	1029F	SEE TABLE 1	5	24	3.0	4.5	4X6	6
425	75/120/150/165	24µF 470VAC MIN <sup>2</sup>	1.8 x 4.4	5.0	1029D	SEE TABLE 1	25/15/15/10	24	3.125	5.35	4X6	7
425	320	24µF 470VAC MIN <sup>2</sup>	1.8 x 4.4	5.0	1029D	SEE TABLE 1	6	24	3.125	5.35	4X6	3
120	90	22.5µF 120VAC MIN <sup>3</sup>	1.6	3.9	1029A	3	2	3	1.15	2.05	1.875X2.25	13
120	90	28µF 120VAC MIN <sup>3</sup>	1.75	3.9	1029B	3	4	4	1.3	2.2	2.2X2.625	13
120	90	40µF 120VAC MIN <sup>3</sup>	1.75	3.9	1029E	3	5	4	1.48	2.4	2.2X2.625	13
120	90	52µF 120VAC MIN <sup>3</sup>	1.75	4.9	1029E	3	8	5	2	2.92	2.2X2.625	13

**1.875"x2.25" DIAGRAM**

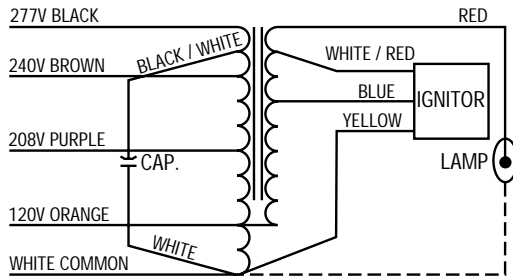


**2.2"x2.625" DIAGRAM**

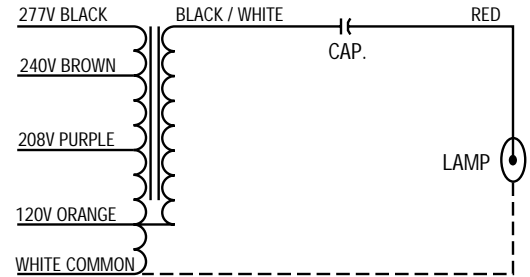


## Wiring Diagrams

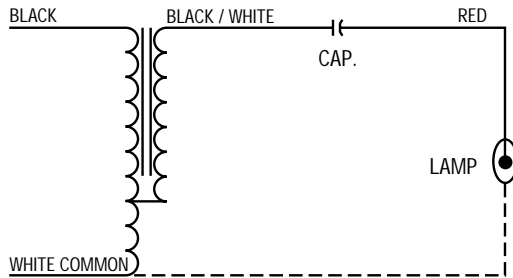
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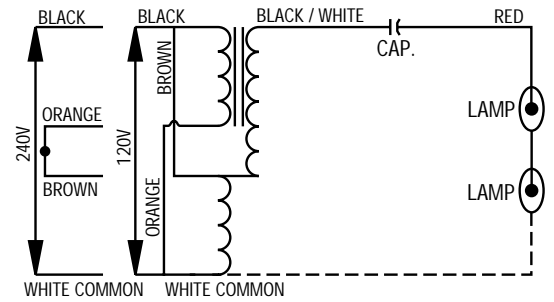
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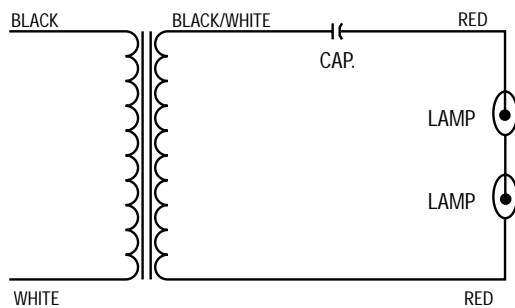
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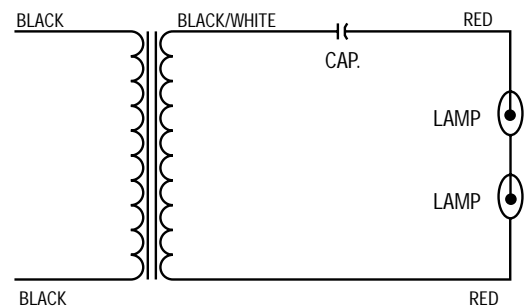
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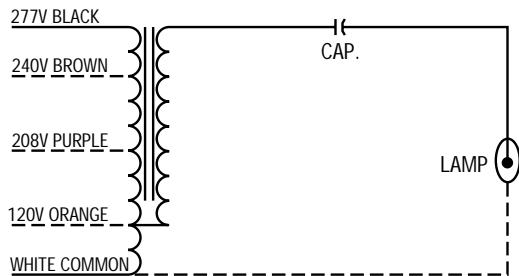
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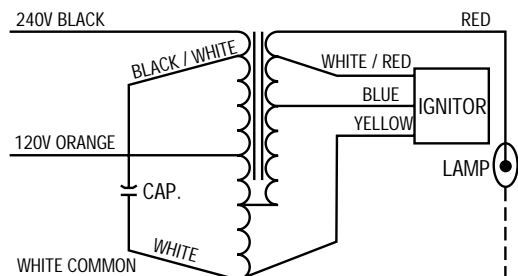
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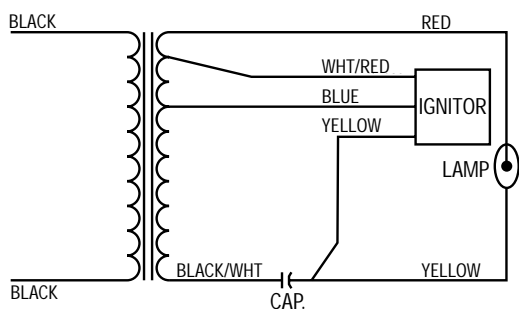
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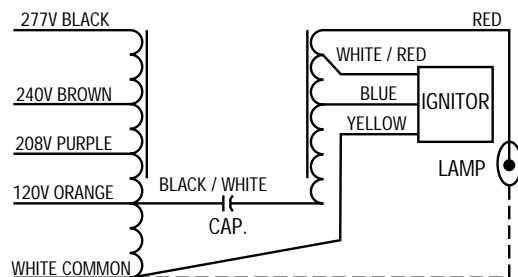
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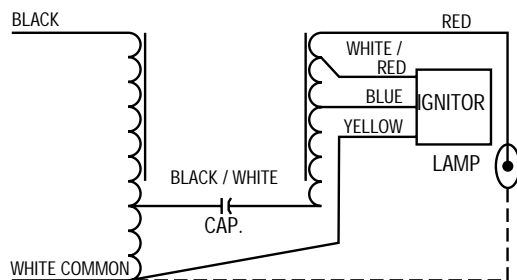
**DIAGRAM 9**



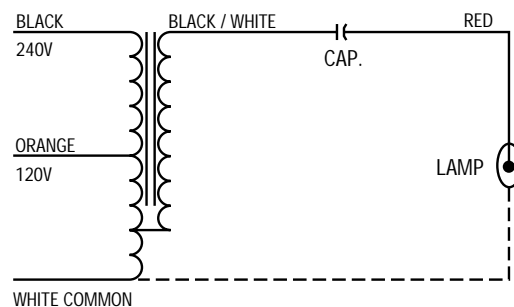
**DIAGRAM 10**



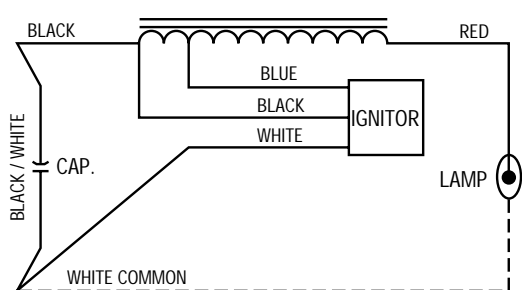
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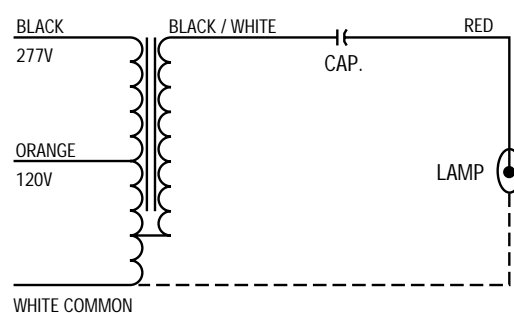
**DIAGRAM 12**



**DIAGRAM 13**



**DIAGRAM 14**



**American National Standards Institute (ANSI)** – An organization that develops voluntary product performance standards for several industries.

**Audible Noise (Sound)** – All fluorescent lamp ballasts produce some noise. Care should be taken when mounting the ballast to reduce vibration.

**Ballast Types** – There are three types of lighting ballasts. 1) Magnetic: an inefficient device that uses a core and coil assembly transformer to perform the minimum functions required to start and operate the lamp. 2) Hybrid or “low frequency electronic”: essentially a magnetic ballast with a few electronic components that switch off voltage to the lamp coil once the lamp has started. A minimal increase in efficiency is obtained via more expensive magnetic core material and the absence of power to the lamp coils during operation. 3) High frequency electronic: a ballast that operates lamps at frequencies above 20,000 Hz. Maximum efficiency is obtained through the use of electronic circuitry and optimum lamp operating characteristics.

**Ballast Efficacy Factor (BEF)** – Relative light output (ballast factor) divided by input power (watts). Used to measure the level of efficiency of similar ballast models.

**Ballast Factor (BF)** – Relative light output as compared to a reference ballast.

**Capacitor** – Device for temporarily storing electrical energy.

**Class P Thermal Protector** – A switching device that interrupts the power supply of an electrical device if internal temperatures rise to levels  $\geq 105^{\circ}\text{C}$  thereby minimizing potential overheating of the device.

**Coil** – Windings of copper or aluminum wire.

**Core** – Component of an electromagnetic ballast that is surrounded by the coil. The core is comprised of steel laminations or solid ferrite material.

**Core & Coil Ballast** – Another term for the assembled components of an electromagnetic power regulating device.

**CWA Circuit** – Constant Wattage Autotransformer.

**CWI Circuit** – Constant Wattage Isolated.

**Grounding** – The ballast case and fixture must always be grounded. The grounding helps assure safety, proper lamp starting, and acceptable EMI/RFI performance.

**HX-HPF Circuit – (Autolag)** – High Reactance Autotransformer – High power factor.

**Ignitor** – A high voltage ignition source to provide the necessary breakdown voltage.

**Multi-tap** – A ballast that provides multiple input voltages.

**Parallel vs. Series** – Ballasts with parallel lamp circuitry have the benefit of companion lamps remaining lit, even if one of the lamps operated by the ballast should fail. Systems with series lamp wiring (magnetic ballasts and many competitors electronic types) result in all lamps operated on the ballast going out if one should fail.

**Polychlorinated Biphenyls (PCBs)** – This material formerly used in ballast capacitors is now considered hazardous and disposal is regulated. A ballast should be assumed to contain PCBs unless stated otherwise on the ballast label (contact manufacturer for confirmation). **OSRAM SYLVANIA ballasts do not contain PCBs.**

**Preheat** – A class of fluorescents requiring a starter, which allows the lamp and filaments to be properly heated before allowing the ballast to supply the correct current flow.

**R-NPF Circuit** – Reactor Normal Power Factor.

**Rapid Start** – A class of fluorescents in which the ballast provides a continuous, minute amount of current to keep the electrodes heated. This circuit is a modern version of the trigger start system and requires lamps designated for this circuit. In the rapid start tow-lamp circuit, one end of each lamp is connected to a separate winding. The other end of each lamp is connected to a common winding.

**Socket Wiring/Lamp Connections** – Proper connection to good quality sockets, wired according to the diagram shown on the product label, is essential. As some applications may not require the use of all the ballast output leads, unconnected leads should be capped individually and insulated to at least 600 volts.

**Trigger Start** – A circuit used to eliminate the starter and start the preheat lamp almost instantly. In this circuit each electrode is connected to a separate winding in the ballast so that the electrode is continuously heated.

#### Certifications –



All SYLVANIA ballasts unless otherwise indicated bear the seal of Underwriters Laboratories Inc.



SYLVANIA ballasts unless otherwise indicated bear the seal of Canadian Standards Association.



Indicates SYLVANIA ballast complies with National Energy Conservation Amendments of 1988 (unless otherwise indicated).



Indicates SYLVANIA ballast complies with Canadian Energy Standards (unless otherwise indicated).

### Magnetic Ballast Limited Warranty

OSRAM SYLVANIA Products Inc. ("OS") warrants SYLVANIA fluorescent magnetic ballasts and high intensity discharge (HID) magnetic ballasts to be free from defects in material and workmanship

and to operate from the date of manufacture for the time periods specified below.

Magnetic Ballast Type	Ballast Warranty Period*
Fluorescent Magnetic	36 months
High Intensity Discharge (HID) Magnetic	24 months

\*Note - Warranty periods are based on typical 4000 hr/12 months operation; longer operating cycles may limit warranty period. Contact OS for details.

#### TERMS AND CONDITIONS

SYLVANIA magnetic fluorescent and HID ballasts must be installed and operated under suitable environmental conditions and in accordance with the latest National Electrical Code, Underwriters Laboratory Bulletins, ANSI Specifications, CSA standards, and in accordance with OS installation instructions, where applicable. This warranty will not apply if conditions demonstrate abnormal use or stress, such as operating temperatures in excess of maximum rated temperatures, under/over voltage conditions, excessive switching cycles or operating hours, dirty or cracked sockets, or improper lamp or ballast installation.

#### WARRANTY ACTIVATION / SERVICE CLAIMS

Warranty is activated after installation. Service claims can be made by contacting 1-800-LIGHTBULB (press \*5) to initiate the process for problem resolution.

#### REPLACEMENT OF PRODUCT

OS shall correct any defects by replacing or repairing, at OS's option, any ballast determined to be defective under the terms of this warranty. Note: Labor costs are not reimbursed by OS.

#### RETURN OF DEFECTIVE BALLAST

After contacting OS and receiving a return AUTHORIZATION NUMBER, the purchaser may be requested to promptly return the ballast at the purchaser's expense to OS after receiving instructions as to if, when and where to ship the ballast. Failure to follow this procedure shall void this warranty.

#### LIMITS OF LIABILITY

The foregoing shall constitute the sole and exclusive remedy of the purchaser and the sole and exclusive liability of OS. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OR IS TO BE IMPLIED. OS will not, under any circumstance, whether as a result of breach of contract or warranty, tort, or otherwise, be liable for any costs or damages, including lost profits or revenues, incidental, special or consequential damages.

OS reserves the right to examine all failed ballasts and reserves the right to be the sole judge as to whether any ballasts are defective and covered under this warranty. This warranty does not cover lamps operated by the ballast.

**QUESTIONS?** Please call customer service at 1-800-LIGHTBULB (800-544-4828) or contact your local OSRAM SYLVANIA representative.

	ITEM NUMBER	DESCRIPTION	LEAD LENGTHS (IN INCHES)				
			BLACK	WHITE	RED	BLUE	YELLOW
<b>MAGNETIC T12</b> <b>RAPID START FLUORESCENT</b> <b>SYSTEMS</b>	48011	MB1x40/120RS-SRNK	22	22	26	36	
	48120	MB1x40/277RS-SRNK	22	22	26	36	
	48001	MB2x40/120RS-SRNK	22	22	26	26	36
	48121	MB2x40/277RS-SRNK	22	22	26	26	36
	48210	MB1x40/120RES-SRNK	12	30	36	30	
<b>MAGNETIC T12</b> <b>INSTANT START, SLIMLINE</b> <b>FLUORESCENT SYSTEMS</b>	48122	MB2x48/120IS-SRNK	32	32	25	25	
	48123	MB2x48/277IS-SRNK	8	34	25	25	25
	48124	MB1x96/120IS-SRNK	8	48		48	
	48125	MB1x96/277IS-SRNK	8	48		48	
	48018	MB2x96/120IS-SRNK	70	70	46	46	
	48126	MB2x96/277IS-SRNK	8	62	46	46	62
<b>MAGNETIC T12</b> <b>HIGH OUTPUT</b> <b>FLUORESCENT SYSTEMS</b>	48127	MB1x96/HO/120RS-SRNK	22	22	44	68	
	48128	MB1x96/HO/277RS-SRNK	22	22	44	68	
	48025	MB2x96/HO/120RS-SRNK	22	22	44	44	68
	48027	MB2x96/HO/277RS-SRNK	22	22	44	44	68
<b>MAGNETIC T12/VHO</b> <b>FLUORESCENT SYSTEMS</b>	48129	MB1x96/VHO/120RS-SRNK	22	22	44	68	
	48130	MB1x96/VHO/277RS-SRNK	22	22	44	68	
	48131	MB2x96/VHO/120RS-SRNK	22	22	44	44	68
	48132	MB2x96/VHO/277RS-SRNK	22	22	44	44	68
<b>MAGNETIC T12 PREHEAT</b> <b>FLUORESCENT SYSTEMS</b>	48200	MB1x15/120PH/TP	12	12	13	13	
	48201	MB1x20/120PH/TP	10				
	48202	MB1x20/120PH	10				
	48203	MB2x20/120PH/TP	12	12	20	20	36
<b>MAGNETIC T9</b> <b>FLUORESCENT SYSTEMS</b>	48230	MB1x22/120CIRC	12	12	13	13	
	48231	MB1x32/120CIRC	12	30	36	30	

## Magnetic Fluorescent Ballasts

Lamp Type	# of Lamps	Voltage	Advance	OSRAM SYLVANIA		MagneTek	Valmont
			Description	NAED	Description	Description	Description
<b>T12 Rapid Start</b>							
F40T12	1	120	R-140-TP MarkIII	48011	MB1x40/120RS-SRNK	412-L-SLH-TC-P	8G1074W
F40T12	1	277	V-140-TP MarkIII	48120	MB1x40/277RS-SRNK	458-L-SLH-TC-P	8G1084W
F40T12 or F30T12	2	120	R-2S40-TP MarkIII	48001	MB2x40/120RS-SRNK	446-L-SLH-TC-P	8G1024W
F40T12 or F30T12	2	277	V-2S40-TP MarkIII	48121	MB2x40/277RS-SRNK	443-L-SLH-TC-P	8G1034W
F40T12	1	120	RL-140-TP	48210	MB1x40/120RES-SRNK	413-CTC-P	8G1075
<b>T12 Instant Start Slimline</b>							
F48T12	2	120	SM-2E40-S-TP	48122	MB2x48/120IS-SRNK	213-TC-P	8G1600W
F48T12	2	277	VSM-2E40-S-TP	48123	MB2x48/277IS-SRNK	532-BR-TC-P	8G1710W
F96T12	1	120	RSM-175-S-TP	48124	MB1x96/120IS-SRNK	822-BR-TC-P	8G1762W
F96T12	1	277	VSM-175-S-TP	48125	MB1x96/277IS-SRNK	828-BR-TC-P	8G1764W
F96T12 or F72T12	2	120	R-2E75-S-TP MarkIII	48018	MB2x96/120IS-SRNK	806-SLH-TC-P	8G1004W
F96T12 or F72T12	2	277	V-2E75-S-TP MarkIII	48126	MB2x96/277IS-SRNK	827-SLH-TC-P	8G1014W
<b>T12 Rapid Start HO ( High Output)</b>							
F96T12/HO or F72T12/HO	1	120	RS-110-TP	48127	MB1x96/HO/120RS-SRNK	481-LH-TC-P	-
F96T12/HO or F72T12/HO	1	277	VS-110-TP	48128	MB1x96/HO/277RS-SRNK	479-LH-TC-P	-
F96T12/HO or F72T12/HO	2	120	R-2S110-TP MarkIII	48025	MB2x96/HO/120RS-SRNK	480-SLH-TC-P	-
F96T12/HO or F72T12/HO	2	277	V-2S110-TP MarkIII	48027	MB2x96/HO/277RS-SRNK	487-SLH-TC-P	-
<b>T12 Rapid Start VHO ( Very High Output)</b>							
F96T12/VHO	1	120	RC-2S102-TP	48129	MB1x96/VHO/120RS-SRNK	951-S-TC-P	-
F96T12/VHO	1	277	VC-2S102-TP	48130	MB1x96/VHO/277RS-SRNK	957-S-TC-P	-
F96T12/VHO	2	120	RS-2S200-TP	48131	MB2x96/VHO/120RS-SRNK	930-K-TC-P	8G1201W
F96T12/VHO	2	277	VS-2S200-TP	48132	MB2x96/VHO/277RS-SRNK	937-K-TC-P	8G1211W
<b>T12 Preheat Start/Trigger Start*</b>							
F20/15/14T12	1	120	RLQ-120-TP	48200*	MB1x15/120PH/TP	546-B-TC-P	8G3560
F20/15/14T12	1	120	LC-14-20-C-TP	48201	MB1x20/120PH/TP	200-H2P	-
F20/15/14T12	1	120	LC-14-20-C	48202	MB1x20/120PH	200-H2	89G457
F20/15/14T12	2	120	RL-2SP20-TP	48203*	MB2x20/120PH/TP	447-LR-TC-P	8G3912
<b>T9 Circline</b>							
FC8T9	1	120	RLQS-122-TP-W	48230	MB1x22/120CIRC	547-RS-WS-TC-P	8G1091G11
FC12T9 or FC16T9	1	120	RLCS-140-TP-W	48231	MB1x32/120CIRC	445-RS-WS-TC-P	8G1085G11

THIS CROSS REFERENCE GUIDE IS INTENDED AS AN AID FOR IDENTIFYING COMPARABLE PRODUCTS AS A CONVENIENCE TO THE USER. OSRAM SYLVANIA DOES NOT WARRANT OR GUARANTEE THE ACCURACY OR CORRECTNESS OF THE CONTENT. PLEASE REFER TO THE OSRAM SYLVANIA CATALOG FOR VERIFICATION OF PRODUCT SPECIFICATIONS APPROPRIATE FOR THE APPLICATION. INFORMATION IN THIS CROSS REFERENCE IS SUBJECT TO CHANGE AT ANY TIME WITHOUT PRIOR NOTICE. PLEASE CONTACT 1-800-LIGHTBULB FOR ADDITIONAL INFORMATION.

ANSI CODE	Lamp Watts	Voltage	Circuit Type	Advance	OSRAM SYLVANIA		MagneTek	Valmont
				Description	NAED	Description	Description	Description

Magnetic HID Ballasts

**Metal Halide Magnetic Ballast Kits**

M110	50	120/208/240/277	HX-HPF	-	47007	M50/MULTI-KIT	11310-95-500K	-
M98	70	120/208/240/277	HX-HPF	71A5292-001D	47013	M70/MULTI-KIT	11310-510-500K	16V8229W18F
M90	100	120/208/240/277	HX-HPF	71A5390-001D	47019	M100/MULTI-KIT	11310-90-500K	16V7229W18F
M102	150	120/208/240/277	HX-HPF	-	47102	M150/MULTI-KIT	11310-543-500K	-
M57/H39	175	120/208/240/277	CWA	71A5570-001	47021	M175/MULTI-KIT	1130-91R-500K	16V1299W18F
M57/H39	175	480	CWA	71A5540-001	47035	M175/480-KIT	1130-31-500K	16V1294W18F
M58/H37	250	120/208/240/277	CWA	71A5740-001	47610	M250/MULTI-KIT	1130-92R-500K	-
M58/H37	250	480	CWA	71A5740-001	47611	M250/480-KIT	1130-32R-500K	-
M59/H33	400	120/208/240/277	CWA	71A6071-001	47056	M400/MULTI-KIT	1130-93R-500K	16V3309W18F
M59/H33	400	480	CWA	71A6041-001	47065	M400/480-KIT	1130-33R-500K	16V3314W18F
M59/H33	2-400	120/240	CWA	-	47075	M2X400/DUAL-KIT	-	-
M59/H33	2-400	277	CWA	-	47076	M2X400/277-KIT	-	-
M59/H33	2-400	480	CWI	-	47091	M2X400/480-KIT	-	-
M47/H36	1000	120/208/240/277	CWA	71A6572-001	47079	M1000/MULTI-KIT	1130-97-500K	16V5299W18F
M47/H36	1000	480	CWA	71A6542-001	47087	M1000/480-KIT	1130-57-500K	16V5294W18F
M48	1500	120/208/240/277	CWA	71A6772-001	47096	M1500/MULTI-KIT	1130-99R-500K	16V6299W18F
M48	1500	480	CWA	71A6742-001	47095	M1500/480-KIT	1130-69R-500K	16V6294W18F

**High Pressure Sodium Magnetic Ballast Kits**

S68	50	120/240	HX-HPF	-	47281	LU50/DUAL-KIT	-	-
S62	70	120/208/240/277	HX-HPF	71A7971-001D	47301	LU70/MULTI-KIT	12310-153-500K	17V7119W18F
S54	100	120/208/240/277	HX-HPF	71A8071-001D	47316	LU100/MULTI-KIT	12310-90-500K	17V6119W18F
S54	100	480	CWI	71A8041-001D	47318	LU100/480-KIT	12310-30R-500K	17V6114W18F
S55	150	120/208/240/277	HX-HPF	71A8172-001D	47335	LU150/MULTI-KIT	12310-165-500K	17V1119W18F
S55	150	480	CWI	71A8142-001D	47336	LU150/480-KIT	12310-160S-500K	17V1114W18F
S50	250	120/208/240/277	CWA	71A8271-001D	47357	LU250/MULTI-KIT	1230-92S-500K	17V2239W18F
S50	250	480	CWA	71A8241-001D	47358	LU250/480-KIT	1230-32S-500K	17V2234W18F
S51	400	120/208/240/277	CWA	71A8473-001D	47364	LU400/MULTI-KIT	1230-93U-500K	17V3239W18F
S51	400	480	CWA	71A8443-001D	47376	LU400/480-KIT	1230-33U-500K	17V3234W18F
S52	1000	120/208/240/277	CWA	71A8773-001	47389	LU1000/MULTI-KIT	1230-97S-500K	17V5299W18F
S52	1000	480	CWA	71A8743-001	47391	LU1000/480-KIT	1230-57S-500K	17V5294W18F

**Mercury Magnetic Ballast Kits**

H38/H44	100	120/240	CWA	-	47471	H100/DUAL-KIT	-	-
H38/H44	100	120/277	CWA	-	47472	H100/277-KIT	-	-
H39	175	120/208/240/277	CWA	71A3072-001D	47489	H175/MULTI-KIT	1030-91-500K	15V4499W18F
H39	175	480	CWA	71A3042-001D	47490	H175/480-KIT	1030-31-500K	15V4494W18F
H37	250	120/208/240/277	CWA	71A3572-001D	47499	H250/MULTI-KIT	1030-92-500K	15V5499W18F
H37	250	480	CWA	71A3542-001D	47500	H250/480-KIT	1030-32-500K	15V5494W18F
H33	400	120/208/240/277	CWA	71A4071-001D	47509	H400/MULTI-KIT	1030-93-500K	15V6499W18F
H33	400	480	CWA	71A4041-001D	47510	H400/480-KIT	1030-33-500K	15V6494W18F
H33	2-400	120	CWA	71A4300-001	47517	H2X400/120-KIT	2030-13-500K	-
H33	2-400	277	CWA	71A4330-001	47518	H2X400/277-KIT	2030-17-500K	-
H33	2-400	480	CWI	71A4340-001	47532	H2X400/480-KIT	2030-33-500K	-
H36	1000	120/208/240/277	CWA	71A5070-001	47524	H1000/MULTI-KIT	1030-97-500K	15V7499W18F
H36	1000	480	CWA	71A5040-001	47525	H1000/480-KIT	1030-57-500K	15V7494W18F

**High Pressure Sodium Reactor Ballasts**

S68	50	120	R-NPF	71A7807	47274	LU50/120R	1233-35U	-
S62	70	120	R-NPF	71A7907	47284	LU70/120R	1233-142U	-
S54	100	120	R-NPF	71A8007	47304	LU100/120R	1233-10U	-
S55	150	120	R-NPF	71A8107	47319	LU150/120R	1233-154U	-

## For Sales and Technical Information Call: OSRAM SYLVANIA Lamp Sales Offices

### Industrial/Commercial Products

Location	Sales Office Address		Phone	Fax
<b>Boston, MA</b>	100 Endicott Street, Danvers, MA 01923	New England Sales	978-750-2016	978-750-2008
		OSRAM SYLVANIA Headquarters Switchboard	978-777-1900	
<b>Charlotte, NC</b>	2201 Coronation Blvd., Suite #155, Charlotte, NC 28227		704-845-8200	704-845-8038
<b>Chicago, IL</b>	800 Devon Avenue, Elk Grove Village, IL 60007		847-593-3400	847-593-3448
<b>Dallas, TX</b>	2040 McKenzie Drive, Carrollton, TX 75006		972-247-7800	972-247-4364
<b>Detroit, MI</b>	3200 Greenfield Road, Suite #240, Dearborn, MI 48120		313-240-7334	313-593-3763
<b>Denver, CO</b>	1401 17th Street, Suite #440, Denver, CO 80202		303-295-3898	303-295-3755
<b>Los Angeles, CA</b>	2401 East Katella Avenue, Suite #220, Anaheim, CA 92806		714-978-2101	714-978-0137
<b>Philadelphia, PA</b>	Valleybrook Corp, Center, 101 Lindenbrook Dr., Suite #450, Malvern PA 19355		610-640-3300	610-640-3320
<b>St. Louis, MO</b>	16090 Swingley Ridge Road, Suite #310, Chesterfield, MO 63017		314-532-9009	314-532-9229
<b>Teaneck, NJ</b>	Glenpointe Ctr. West, 2nd Floor, 300 Frank Burr Blvd., Teaneck, NJ 07666		201-928-2100	201-928-2107

### Consumer Products

<b>Boston, MA</b>	100 Endicott Street, Danvers, MA 01923	National Sales	978-750-2839	978-750-2008
		OSRAM SYLVANIA Headquarters Switchboard	978-777-1900	

## For Orders and General Information Call: OSRAM SYLVANIA National Customer Support Center

Division	Address		Phone	Fax
<b>Industrial/Commercial</b>	18725 N. Union Street, Westfield, IN 46074		800-255-5042	800-255-5043
<b>Consumer Products</b>	18725 N. Union Street, Westfield, IN 46074		800-842-7010	800-842-7011
<b>OEM &amp; Special Markets</b>	18725 N. Union Street, Westfield, IN 46074		800-762-7191	800-762-7192
<b>National Accounts</b>	18725 N. Union Street, Westfield, IN 46074	Industrial/Commercial	800-562-4671	800-562-4674
		Consumer Products	800-562-4672	800-562-4674
		Government	800-562-8315	
<b>Photo-Optic</b>	18725 N. Union Street, Westfield, IN 46074		888-677-2627	800-762-7192



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