

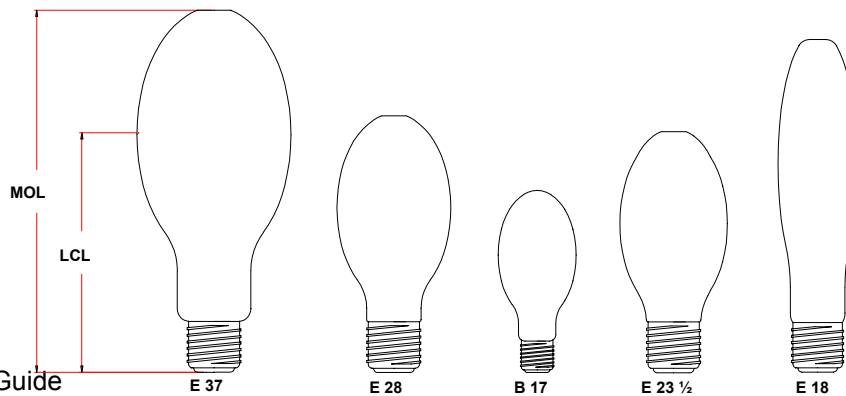
# HID Lamp Guide

The following is a list of HID lamps available, and used by NRL

Lamp manufacturer catalog number cross reference (Mercury Vapor)				
Part Number	ANSI	General Electric	Osram / Sylvania	Philips
700-0171	H39KC-175/DX	HR175DX39	H39KC-175/DX	H39KC-175/DX
700-0251	H37KC-250/DX	HR250DX39	H37KC-250/DX	H37KC-250/DX
700-0401	H33GL-400/DX	HR400DX33	H33GL-400/DX	H33GL-400/DX

Lamp manufacturer catalog number cross reference (Metal Halide)				
Part Number	ANSI	General Electric	Osram / Sylvania	Philips
701-0175	M57PE-175	MVR175/U	M175/U	MH175/U
701-0250	M58PG-250	MVR250/U	M250/U	MH250/U
701-0400	M59PJ-400/U	MVR400/U	M400/U	MH400/U

Lamp manufacturer catalog number cross reference (High Pressure Sodium)				
Part Number	ANSI	General Electric	Osram / Sylvania	Philips
702-0032	S76HA-35	LU35/Med	LU35/Med	C35S76/M
702-0052	S68LP-50	LU50/Med	LU50/Med	C50S68/M
702-0072	S62LG-70	LU70/Med	LU70/Med	C70S62/M
702-0102	S54SG-100	LU100/Med	LU100/Med	C100S54/M
702-0152	S55RN-150	LU150/Med	LU150/55/Med	C150S55/M
702-0070	S62ME-70	LU70	LU70	C70S62
702-0100	S54SB-100	LU100	LU100	C100S54
702-0150	S55SC-150	LU150/55	LU150/55	C150S55
702-0250	S50VA-250	LU250	LU250	C250S50
702-0400	S51WA-400	LU400	LU400	C400S51



HID Lamp & Ballast Guide

Lamp Type	Lamp Watts	Bulb Type	Base Type	Light Center Length (LCL)	Maximum Over All Length (MOL)
Mercury / Metal Halide	175 & 250	E28	E39 (Mogul)	5" (127mm)	8-1/4" (210mm)
Mercury / Metal Halide	400	E37	E39 (Mogul)	7" (178mm)	11-5/16" (287mm)
High Pressure Sodium	35 to 150	B17	E26/24 (Medium)	3-13/32" (87mm)	5-7/16" (138mm)
High Pressure Sodium	50 to 150	E23½	E39 (Mogul)	5" (127mm)	7-3/4" (197mm)
High Pressure Sodium	250 & 400	E18	E39 (Mogul)	5-3/4" (146mm)	9-3/4" (248mm)

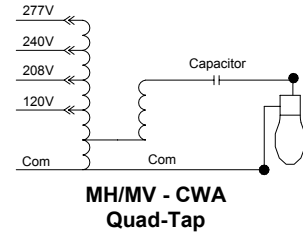
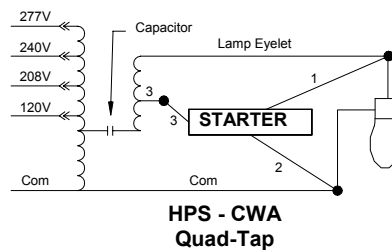
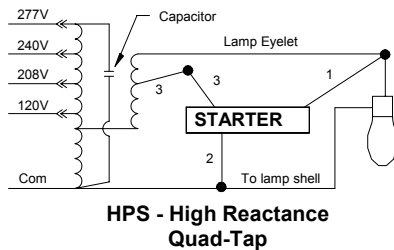
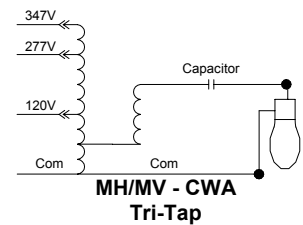
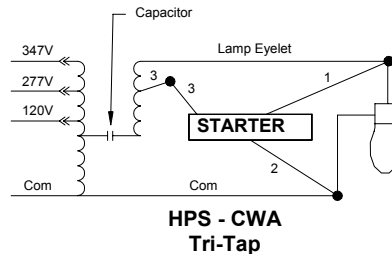
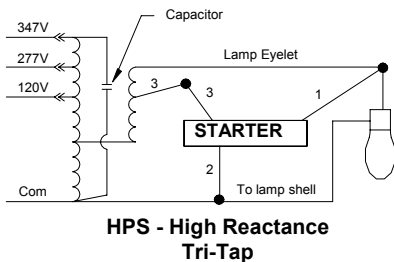
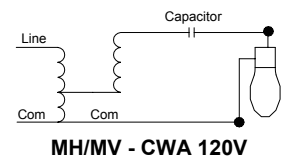
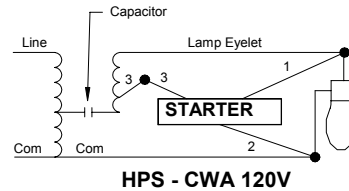
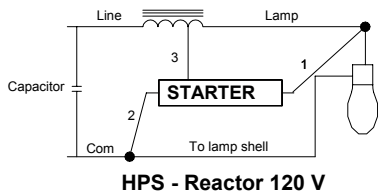
# HID Lamp & Ballast Guide

Lamp Data			Ballast Type
Type	Wattage	ANSI Code	
Mercury Vapor	175	H 39	CWA
	250	H 37	
	400	H 33	
Metal Halide or Mercury Vapor	175	M 57	CWA
	250	M 58	
	400	M 59	
High Pressure Sodium	35	S 76	R
	50	S 68	
	70	S 62	
	100	S 54	HX-HPF
	150	S 55	
	250	S 50	
	400	S 51	

Fixture Wattage	Lumens	
	Per Watt	Per Fixture
205	42	8,600
285	42	12,100
454	50	22,500
213	66	14,000
293	73	21,000
458	79	36,000
43	52	2,250
60	67	4,000
94	68	6,400
128	74	9,500
189	85	16,000
300	93	28,000
467	109	51,000

Ballast Operating Characteristics					
Lamp Type	Circuit Type	Lamp Regulation	Input Voltage Dip Tolerance	Starting Current (opposed to operating)	Lamp Regulation
High Pressure Sodium	CWA	± 10%	35%	Lower	20 to 30%
	CWI	± 10%	35%	Lower	20 to 30%
	HX-HPF	± 5%	25%	Higher	25%
	R	± 5%	25%	Higher	25%
Metal Halide	CWA	± 10%	50%	Lower	20%
	CWI	± 10%	50%	Higher	11 to 17%
Mercury Vapor	CWA	± 10%	50%	Lower	10%
	CWI	± 13%	60%	Lower	4%

## Typical Wiring Diagrams



# HID Ballast Guide

## HID Ballast

Lamp Type	Wattage	ANSI #	Voltage	Part Number	Starting Temperature
Mercury Vapor	175	H39	120 V 60Hz.	730-1710	-30°C (-22°F)
			120/208/240/277V 60Hz.	730-1770	
	250	H37	120 V 60Hz.	730-2510	
			120/208/240/277V 60Hz.	730-2570	
	400	H33	120 V 60Hz.	730-4010	
			120/208/240/277V 60Hz.	730-4070	
Metal Halide or Mercury Vapor	175	M57/H39	120 V 60Hz.	731-1710	-30°C (-22°F)
			120/208/240/277V 60Hz.	731-1770	
			120/277/347V 60Hz.	731-1780	
	250	M58/H37	120 V 60Hz.	731-2510	
			120/208/240/277V 60Hz.	731-2515 *	
			120/277/347V 60Hz.	731-2570	
	400	M59/H33	120 V 60Hz.	731-2580	
			120 V 60Hz.	731-4010	
			220 V 50Hz.	731-4015 *	
			220 V 50Hz.	731-4020	
			220 V 50Hz.	731-4025 *	
			120/208/240/277V 60Hz.	731-4070	
High Pressure Sodium	35	S76	120 V 60Hz.	731-4080	-40°C (-40°F)
	50	S62	120 V 60Hz.	732-0311	
	70	S62	120 V 60Hz.	732-0511	
			120/208/240/277V 60Hz.	732-0710	
	100	S54	120/208/240/277V 60Hz.	732-0770	
			120/277/347V 60Hz.	732-0780	
			120 V 60Hz.	732-0110	
	150	S55	120/208/240/277V 60Hz.	732-0170	
			120/277/347V 60Hz.	732-0180	
			120 V 60Hz.	732-1510	
	250	S50	120/208/240/277V 60Hz.	732-1570	
			120/277/347V 60Hz.	732-1580	
			120 V 60Hz.	732-2510	
	400	S51	120 V 60Hz.	732-2515 *	
			120/208/240/277V 60Hz.	732-2570	
			120/277/347V 60Hz.	732-2580	
			120 V 60Hz.	732-4010	
			220 V 50Hz.	732-4015 *	
220 V 50Hz.			732-4020		
400	S51	120/208/240/277V 60Hz.	732-4025 *		
		120/277/347V 60Hz.	732-4070		
			120/208/240/277V 60Hz.	732-4070	
			120/277/347V 60Hz.	732-4080	

\* For use with A-Achiever (aluminum floodlight only).