

## DESCRIPTION

The Lumark Warrior offers a variety of lamp and mounting options in high pressure sodium and metal halide, and can be installed, lamped and serviced with the most basic tools. U.L. listed and labeled for wet locations. CSA certified. The Warrior is the ideal floodlight for many area outdoor lighting situations, including parking lots, construction and storage sites, rail yards, light industrial locations, marinas and service areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

## SPECIFICATION FEATURES

### Construction

**RETAINING SCREWS:** Corrosion-resistant captive retaining screws.  
**HOUSING:** Weather-resistant, die-cast aluminum housing with integral door hinges is finished in dark bronze polyester powder coat.  
**HOUSING DOOR:** Watertight die-cast aluminum housing door is finished in dark bronze polyester powder coat. Cast ridge for water tight seal against gasketing.  
**GASKET:** Full circumference, high-temperature foam-in-place silicone gasketing seals out external contaminants.

### Electrical

**SOCKET:** Mogul-base porcelain socket, except 100W Metal Halide and below has medium-base.  
**BALLAST:** High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HPS and -30°C (-20°F) for MH and MP. Medium base socket for MH 150W and lower.

### Mounting

Variable mountings of either 3/16" galvanized steel trunnion (shown below) or integral die-cast aluminum slipfitter (shown in photo to right). Slipfitter fits 2 3/8" - 3" O.D. tenon. Heavy-duty steel yoke provides flexibility in mounting and aiming from a variety of surfaces.

### Optical

**REFLECTOR:** Specular aluminum reflector delivers sharp beam cutoff. **LENS:** Clear tempered-glass lens is heat and impact-resistant.



## WR WARRIOR

**100 - 400W**

**Pulse Start Metal Halide**

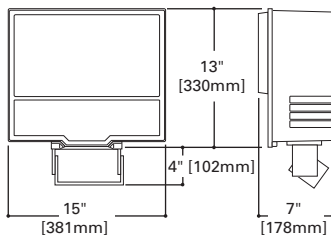
**Metal Halide**

**High Pressure Sodium**

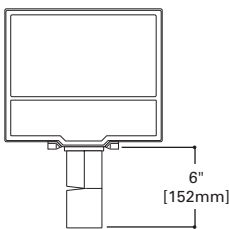
**SLIPFITTER-, TRUNNION-  
OR YOKE-MOUNTED FLOODLIGHT**

## DIMENSIONS

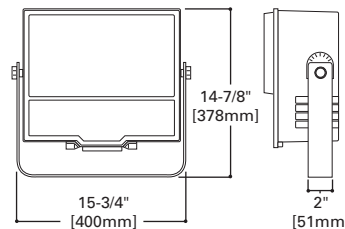
### TRUNNION MOUNT



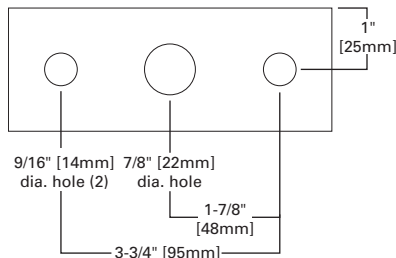
### SLIPFITTER MOUNT



### YOKE MOUNT



## TRUNNION YOKE MOUNT DRILL PATTERN



LAMP TYPE	WATTAGE
Pulse Start Metal Halide (MP)	100, 150, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400, 250/400W
High Pressure Sodium (HP)	100, 150, 250, 400W

## TECHNICAL DATA

U.L. Wet Location Listed  
 CSA Certified  
 25°C Maximum Ambient Temperature  
 External Supply Wiring 90°C Minimum  
 Internal Supply Wiring 150°C Minimum  
 EISA Compliant ©

## ENERGY DATA

### High Reactance Ballast Input Watts

100W HPS NPF (130 Watts)  
 100W MP NPF (128 Watts)  
 150W HPS HPF (190 Watts)  
 150W MP HPF (185 Watts)

### CWI Ballast Input Watts

250W HPS HPF (300 Watts)

### CWA Ballast Input Watts

200W MP HPF (227 Watts) ©  
 250W MP HPF (283 Watts) ©  
 320W MP HPF (365 Watts) ©  
 350W MP HPF (400 Watts) ©  
 400W HPS HPF (465 Watts)  
 400W MP HPF (452 Watts) ©

## EPA

**Effective Projected Area:** 1.3 @ 45°

## SHIPPING DATA

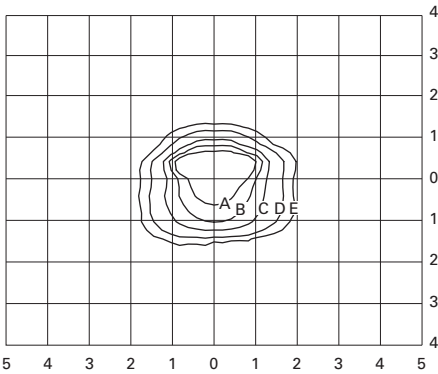
**Approximate Net Weight:**  
 35 lbs. (16 kgs.)



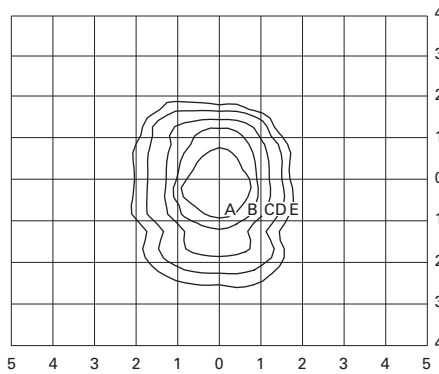
ADH082294

2012-04-24 16:55:15

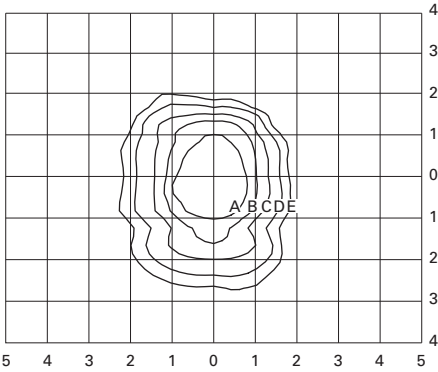
PHOTOMETRICS



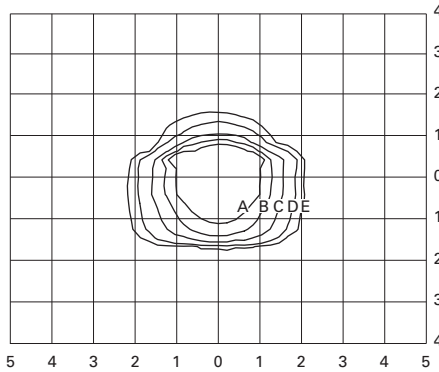
**MPWR-65S-250**  
250—Watt MP  
22,000—Lumen Clear Lamp



**MPWR-65S-320**  
320—Watt MP  
30,000—Lumen Clear Lamp



**MPWR-65S-400**  
400—Watt MP  
42,000—Lumen Clear Lamp



**HPWR-65S-400**  
400—Watt HP  
50,000—Lumen Clear Lamp

**Footcandle Table**

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
20'	4.50	2.25	1.13	0.56	0.23
25'	2.88	1.44	0.72	0.36	0.14
30'	2.00	1.00	0.50	0.20	0.10

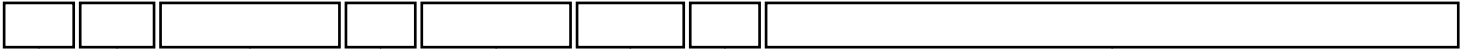
**Footcandle Table**

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
20'	4.50	2.25	1.13	0.56	0.23
25'	2.88	1.44	0.72	0.36	0.14
30'	2.00	1.00	0.50	0.20	0.10

ORDERING INFORMATION

Sample Number: MPWR-65S-100-120V



<p><b>Lamp Type</b>  <b>MP</b>=Pulse Start Metal Halide  <b>MH</b>=Metal Halide<sup>1</sup>  <b>HP</b>=High Pressure Sodium</p> <p><b>Series</b>  <b>WR</b>= Warrior</p>	<p><b>Distribution</b>  <b>65</b>=6H x 5V Beam Spread</p> <p><b>Mounting</b>  <b>S</b>: Slipfitter  <b>T</b>: Trunnion  <b>Y</b>: Yoke</p>	<p><b>Lamp Wattage</b> <sup>2</sup>  <b>MP</b>  <b>100</b>=100W  <b>150</b>=150W  <b>200</b>= 200W  <b>250</b>= 250W  <b>320</b>= 320W  <b>350</b>= 350W  <b>400</b>= 400W  <b>MH</b>  <b>175</b>= 175W<sup>1</sup>  <b>250</b>= 250W<sup>1</sup>  <b>400</b>= 400W<sup>1</sup>  <b>250/400</b>: 250/400W<sup>1</sup>                      (Wired 250)  <b>HP</b>  <b>100</b>= 100W  <b>150</b>= 150W  <b>250</b>= 250W  <b>400</b>= 400W</p>	<p><b>Voltage</b> <sup>3</sup>  <b>120V</b>  <b>208V</b>  <b>240V</b>  <b>277V</b>  <b>347V</b> <sup>4</sup>  <b>480V</b>  <b>MT</b>  <b>TT</b> <sup>4</sup>  <b>5T</b> <sup>5</sup></p>	<p><b>Options</b> <sup>6</sup>  <b>F1</b>=Single Fuse (120, 277 or 347V only)  <b>F2</b>=Double Fuse (208, 240 or 480V only)  <b>Q</b>= Quartz Restrike (Hot Strike Only)  <b>EM</b>= Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts)  <b>EM/SC</b>: Emergency Separate Circuit  <b>LL</b>= Lamp Included  <b>CEC</b>= California Title 20 Compliant Ballast (Applies to 200-320W and 400W MP only)  <b>PER</b>= NEMA Twistlock Photocontrol Receptacle  <b>PC</b>= Button Type Photocontrol<sup>7</sup>  <b>C23</b>= 3' of 12-3 Cord, Prewired (Specify Single Voltage)  <b>C42</b>= 2' of 14-3 Cord, Prewired (Specify Single Voltage)  <b>C43</b>= 3' of 14-3 Cord, Prewired (Specify Single Voltage)  <b>C63</b>= 3' of 16-3 Cord, Prewired (Specify Single Voltage)</p>	<p><b>Accessories</b>  <b>TYSXX</b>=Trunnion or Yoke Slipfitter for 2 3/8", 3", or 3 1/2" O.D. Tenon  <b>WG/WR</b>=Wireguard  <b>VG/WR</b>=Vandal Shield  <b>RABXX</b>: Right Angle Pipe Bracket for Slipfitter  <b>SAB-XX</b>: Steel Angle Bracket for Trunnion  <b>TV/WR-XX</b>: Top Visor  <b>OA/RA1013</b>: Photocontrol Shorting Cap  <b>OA/RA1014</b>: NEMA Photocontrol 120V  <b>OA/RA1016</b>: NEMA Photocontrol - Multi-Tap  <b>OA/RA1027</b>: NEMA Photocontrol 480V  <b>OA/RA1201</b>: NEMA Photocontrol 347V</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

- Notes: 1 Metal Halide available in non-U.S. markets only.  
 2 Medium-base socket for Metal Halide 150W and lower.  
 3 Products also available in non-US voltages and 50HZ for international markets.  
 4 88% efficient EISA Compliant fixtures not available in 347V or TT Voltages.  
 5 5T available in 400W MH only.  
 6 Must be listed in the order shown and separated by a dash.  
 7 PC option not available with trunnion or yoke mount.

VOLTAGE CHART	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 480V)

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: XP40

<p><b>Series</b>  <b>X</b>=Slipfitter  <b>W</b>=Trunnion</p>	<p><b>Lamp Type</b>  <b>S</b>=High Pressure Sodium  <b>P</b>=Pulse Start Metal Halide</p>	<p><b>Lamp Wattage</b>  <b>15</b>=150W (Available in Pulse Start Metal Halide only)  <b>25</b>=250W  <b>32</b>=320W (Available in Trunnion Mount only)  <b>40</b>=400W</p>
----------------------------------------------------------------------	---------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

NOTES:  
 Options not available with stock products. Order Accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. 320W available in MP only. Refer to In-Stock Guide for availability.

## DESCRIPTION

The Lumark Warrior offers a variety of lamp and mounting options in high pressure sodium and metal halide, and can be installed, lamped and serviced with the most basic tools. U.L. listed and labeled for wet locations. CSA certified. The Warrior is the ideal floodlight for many area outdoor lighting situations, including parking lots, construction and storage sites, rail yards, light industrial locations, marinas and service areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

## SPECIFICATION FEATURES

### Construction

**RETAINING SCREWS:** Corrosion-resistant captive retaining screws.  
**HOUSING:** Weather-resistant, die-cast aluminum housing with integral door hinges is finished in dark bronze polyester powder coat.  
**HOUSING DOOR:** Watertight die-cast aluminum housing door is finished in dark bronze polyester powder coat. Cast ridge for water tight seal against gasketing.  
**GASKET:** Full circumference, high-temperature foam-in-place silicone gasketing seals out external contaminants.

### Electrical

**SOCKET:** Mogul-base porcelain socket, except 100W Metal Halide and below has medium-base.  
**BALLAST:** High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HPS and -30°C (-20°F) for MH and MP. Medium base socket for MH 150W and lower.

### Mounting

Variable mountings of either 3/16" galvanized steel trunnion (shown below) or integral die-cast aluminum slipfitter (shown in photo to right). Slipfitter fits 2 3/8" - 3" O.D. tenon. Heavy-duty steel yoke provides flexibility in mounting and aiming from a variety of surfaces.

### Optical

**REFLECTOR:** Specular aluminum reflector delivers sharp beam cutoff. **LENS:** Clear tempered-glass lens is heat and impact-resistant.



## WR WARRIOR

**100 - 400W**

**Pulse Start Metal Halide**

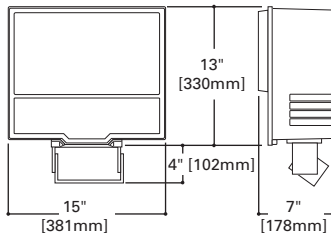
**Metal Halide**

**High Pressure Sodium**

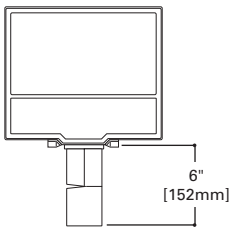
**SLIPFITTER-, TRUNNION-  
OR YOKE-MOUNTED FLOODLIGHT**

## DIMENSIONS

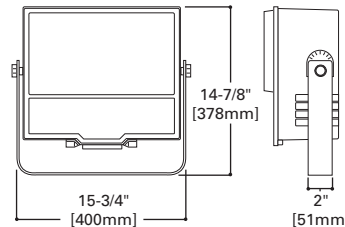
### TRUNNION MOUNT



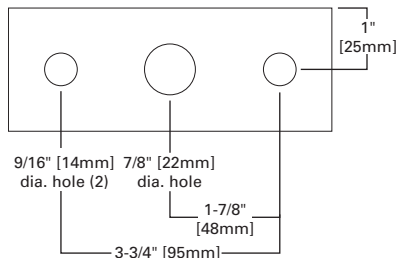
### SLIPFITTER MOUNT



### YOKE MOUNT



## TRUNNION YOKE MOUNT DRILL PATTERN



LAMP TYPE	WATTAGE
Pulse Start Metal Halide (MP)	100, 150, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400, 250/400W
High Pressure Sodium (HP)	100, 150, 250, 400W

## TECHNICAL DATA

U.L. Wet Location Listed  
 CSA Certified  
 25°C Maximum Ambient Temperature  
 External Supply Wiring 90°C Minimum  
 Internal Supply Wiring 150°C Minimum  
 EISA Compliant ©

## ENERGY DATA

### High Reactance Ballast Input Watts

100W HPS NPF (130 Watts)  
 100W MP NPF (128 Watts)  
 150W HPS HPF (190 Watts)  
 150W MP HPF (185 Watts)

### CWI Ballast Input Watts

250W HPS HPF (300 Watts)

### CWA Ballast Input Watts

200W MP HPF (227 Watts) ©  
 250W MP HPF (283 Watts) ©  
 320W MP HPF (365 Watts) ©  
 350W MP HPF (400 Watts) ©  
 400W HPS HPF (465 Watts)  
 400W MP HPF (452 Watts) ©

## EPA

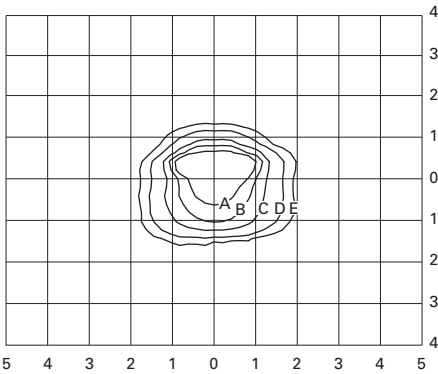
**Effective Projected Area:** 1.3 @ 45°

## SHIPPING DATA

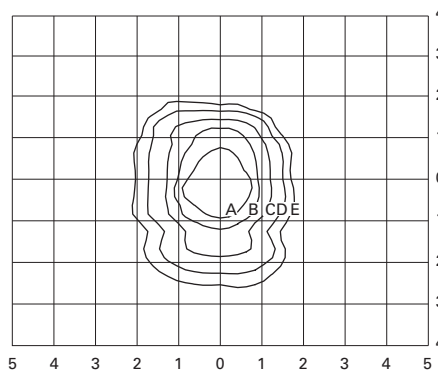
**Approximate Net Weight:**  
 35 lbs. (16 kgs.)



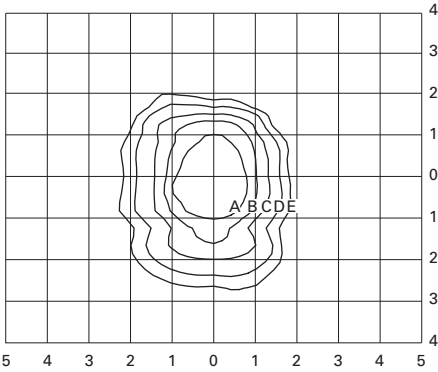
PHOTOMETRICS



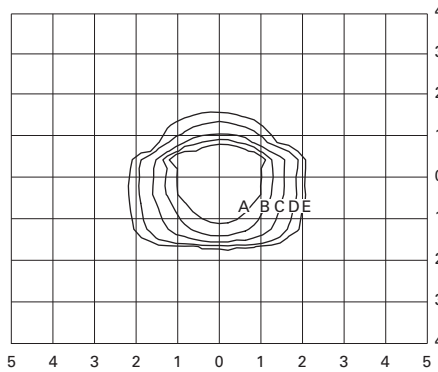
**MPWR-65S-250**  
250—Watt MP  
22,000—Lumen Clear Lamp



**MPWR-65S-320**  
320—Watt MP  
30,000—Lumen Clear Lamp



**MPWR-65S-400**  
400—Watt MP  
42,000—Lumen Clear Lamp



**HPWR-65S-400**  
400—Watt HP  
50,000—Lumen Clear Lamp

**Footcandle Table**

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
20'	4.50	2.25	1.13	0.56	0.23
25'	2.88	1.44	0.72	0.36	0.14
30'	2.00	1.00	0.50	0.20	0.10

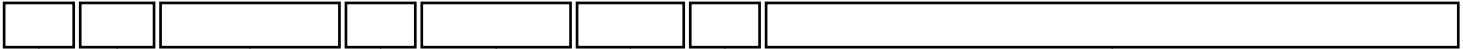
**Footcandle Table**

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
20'	4.50	2.25	1.13	0.56	0.23
25'	2.88	1.44	0.72	0.36	0.14
30'	2.00	1.00	0.50	0.20	0.10

ORDERING INFORMATION

Sample Number: MPWR-65S-100-120V



**Lamp Type**

**MP**=Pulse Start Metal Halide  
**MH**=Metal Halide<sup>1</sup>  
**HP**=High Pressure Sodium

**Series**  
**WR**= Warrior

**Distribution**

**65**=6H x 5V Beam Spread

**Mounting**

**S**: Slipfitter  
**T**: Trunnion  
**Y**: Yoke

**Lamp Wattage** <sup>2</sup>

**MP**  
**100**=100W  
**150**=150W  
**200**= 200W  
**250**= 250W  
**320**= 320W  
**350**= 350W  
**400**= 400W  
**MH**  
**175**= 175W<sup>1</sup>  
**250**= 250W<sup>1</sup>  
**400**= 400W<sup>1</sup>  
**250/400**= 250/400W<sup>1</sup>  
 (Wired 250)

**HP**  
**100**= 100W  
**150**= 150W  
**250**= 250W  
**400**= 400W

**Voltage** <sup>3</sup>

**120V**  
**208V**  
**240V**  
**277V**  
**347V** <sup>4</sup>  
**480V**  
**MT**  
**TT** <sup>4</sup>  
**5T** <sup>5</sup>

**Options** <sup>6</sup>

**F1**=Single Fuse (120, 277 or 347V only)  
**F2**=Double Fuse (208, 240 or 480V only)  
**Q**= Quartz Restrike (Hot Strike Only)  
**EM**= Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts)  
**EM/SC**: Emergency Separate Circuit  
**LL**= Lamp Included  
**CEC**= California Title 20 Compliant Ballast (Applies to 200-320W and 400W MP only)  
**PER**= NEMA Twistlock Photocontrol Receptacle  
**PC**= Button Type Photocontrol<sup>7</sup>  
**C23**= 3' of 12-3 Cord, Prewired (Specify Single Voltage)  
**C42**= 2' of 14-3 Cord, Prewired (Specify Single Voltage)  
**C43**= 3' of 14-3 Cord, Prewired (Specify Single Voltage)  
**C63**= 3' of 16-3 Cord, Prewired (Specify Single Voltage)

**Accessories**

**TYSXX**=Trunnion or Yoke Slipfitter for 2 3/8", 3", or 3 1/2" O.D. Tenon  
**WG/WR**=Wireguard  
**VG/WR**=Vandal Shield  
**RABXX**: Right Angle Pipe Bracket for Slipfitter  
**SAB-XX**: Steel Angle Bracket for Trunnion  
**TV/WR-XX**: Top Visor  
**OA/RA1013**: Photocontrol Shorting Cap  
**OA/RA1014**: NEMA Photocontrol 120V  
**OA/RA1016**: NEMA Photocontrol - Multi-Tap  
**OA/RA1027**: NEMA Photocontrol 480V  
**OA/RA1201**: NEMA Photocontrol 347V

- Notes:** <sup>1</sup> Metal Halide available in non-U.S. markets only.  
<sup>2</sup> Medium-base socket for Metal Halide 150W and lower.  
<sup>3</sup> Products also available in non-US voltages and 50HZ for international markets.  
<sup>4</sup> 88% efficient EISA Compliant fixtures not available in 347V or TT Voltages.  
<sup>5</sup> 5T available in 400W MH only.  
<sup>6</sup> Must be listed in the order shown and separated by a dash.  
<sup>7</sup> PC option not available with trunnion or yoke mount.

**VOLTAGE CHART**

MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 480V)

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: XP40



**Series**  
**X**=Slipfitter  
**W**=Trunnion

**Lamp Type**  
**S**=High Pressure Sodium  
**P**=Pulse Start Metal Halide

**Lamp Wattage**  
**15**=150W (Available in Pulse Start Metal Halide only)  
**25**=250W  
**32**=320W (Available in Trunnion Mount only)  
**40**=400W

**NOTES:**  
 Options not available with stock products. Order Accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. 320W available in MP only. Refer to In-Stock Guide for availability.