



Gardco Form 10 LED round post top luminaires are cutoff luminaires featuring LED arrays. These products provide performance excellence and feature advanced Gardco LED thermal management technology. High performance Class 1 LED systems offer the potential for energy savings up to 50% when compared to HID systems.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

### Ordering guide

example: CP17L-32L-450-NW-G2-P11-2-120-F1-BK

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting <sup>1</sup>	Distr. <sup>2</sup>	Voltage	Controls	Electrical	Luminaire	Finish
<b>CP17L</b> 17" Cylindrical Luminaire LED	<b>32L</b> 32 LEDs	<b>450</b> 450mA	<b>NW-G2</b> Neutral White 4000K, 70CRI Generation 2	<b>P11</b> <b>P12</b> <b>P21</b> <b>P22</b> <b>P31</b> <b>P32</b> <b>P33</b> <b>P41</b> <b>P42</b> <b>P43</b> <b>T14</b> <b>T15</b> <b>T16</b> <b>T24</b> <b>T25</b> <b>T26</b> <b>T34</b> <b>T35</b> <b>T36</b> <b>T37</b> <b>T44</b> <b>T45</b> <b>T46</b> <b>T47</b>	<b>2</b> Type 2	<b>120</b> 120V	<b>DD</b> 0-10V Dimming Driver  <b>Photoelectric/Receptacle Systems</b> (Twist Lock Receptacle)  <b>TLRD5</b> Twist Lock Receptacle 5 Pin <sup>4,5</sup>  <b>TLRPC</b> Twist Lock Receptacle with Photocell <sup>3,4,5</sup>	<b>Fusing</b> <b>F1</b> Single (120, 277, 347VAC) <sup>3</sup> <b>F2</b> Double (208, 240, 480VAC) <sup>3</sup> <b>F3</b> Canadian Double Pull (208, 240, 480VAC) <sup>3</sup>	<b>HIS</b> Internal House Side Shield <sup>6</sup>	<b>BRA</b> Bronze Anodized <b>BLA</b> Black Anodized <b>NA</b> Natural Anodized <b>BK</b> Black paint <b>BZ</b> Bronze paint <b>WH</b> White paint <b>MGY</b> Medium Gray paint <u>Customer specified</u> <b>RAL</b> Specify optional color (ex: RAL7024) <b>CC</b> Custom color (Must supply color chip for required factory quote)
<b>MP17L</b> 17" Semi-Spherical Luminaire LED		<b>900</b> 900mA				<b>208</b> 208V				
<b>CP22L</b> 22" Cylindrical Luminaire LED	<b>48L</b> 48 LEDs	<b>700</b> 700mA	<b>WW-G2</b> Warm White 3000K, 70CRI Generation 2	<b>3</b> Type 3	<b>240</b> 240V	<b>UNV</b> 120-277V 50hz/60hz	<b>FP1</b> Single (120, 277, 347VAC) <sup>3</sup> <b>FP2</b> Double (208, 240, 480VAC) <sup>3</sup> <b>FP3</b> Canadian Double Pull (208, 240, 480VAC) <sup>3</sup>	<b>Pole Mount Fusing</b> <b>FP1</b> Single (120, 277, 347VAC) <sup>3</sup> <b>FP2</b> Double (208, 240, 480VAC) <sup>3</sup> <b>FP3</b> Canadian Double Pull (208, 240, 480VAC) <sup>3</sup>		
<b>MP17L</b> 17" Semi-Spherical Luminaire LED		<b>900</b> 900mA			<b>240</b> 240V					
<b>CP22L</b> 22" Cylindrical Luminaire LED	<b>48L</b> 48 LEDs	<b>560</b> 560mA	<b>CW-G2</b> Cool White 5700K, 70CRI Generation 2	<b>4</b> Type 4	<b>120-277V</b> 50hz/60hz	<b>HVU</b> 347-480V 50hz/60hz				
<b>MP22L</b> 22" Semi-Spherical Luminaire LED		<b>650</b> 650mA			<b>277</b> 277V					
<b>CP22L</b> 22" Cylindrical Luminaire LED	<b>96L</b> 96 LEDs	<b>560</b> 560mA	<b>CW-G2</b> Cool White 5700K, 70CRI Generation 2	<b>5</b> Type 5	<b>347-480V</b> 50hz/60hz	<b>HVU</b> 347-480V 50hz/60hz				
<b>MP22L</b> 22" Semi-Spherical Luminaire LED		<b>650</b> 650mA			<b>277</b> 277V					

### Retrofit kit ordering guide

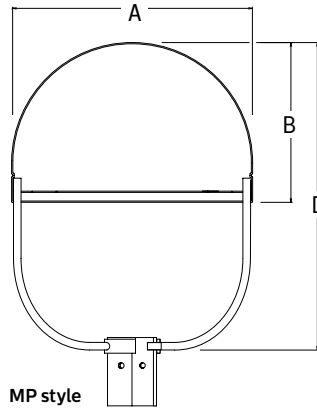
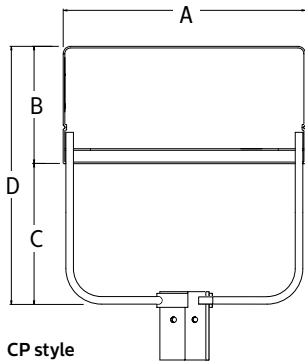
Prefix	Number of LEDs	Drive Current	LED Color - Generation	Distr. <sup>2</sup>	Voltage	Controls	Electrical
<b>CP/MP17L-RK</b> 17" Cylindrical or Semi-Spherical Retrofit Kit	<b>32L</b> 32 LEDs	<b>450</b> 450mA	<b>NW-G2</b> Neutral White 4000K, 70CRI Generation 2	<b>2</b> Type 2	<b>120 347</b> 120V 347V	<b>DD</b> 0-10V Dimming Driver	<b>Surge Protection</b> <b>SP1</b> Standard 10KVA <b>SP2</b> Increased 20KVA
<b>CP/MP22L-RK</b> 22" Cylindrical or Semi-Spherical Retrofit Kit		<b>900</b> 900mA			<b>208 480</b> 208V 480V		
<b>CP/MP17L-RK</b> 17" Cylindrical or Semi-Spherical Retrofit Kit	<b>48L</b> 48 LEDs	<b>900</b> 900mA	<b>WW-G2</b> Warm White 3000K, 70CRI Generation 2	<b>3</b> Type 3	<b>240 UNV</b> 240V 120-277V		
<b>CP/MP22L-RK</b> 22" Cylindrical or Semi-Spherical Retrofit Kit		<b>560</b> 560mA			<b>208 480</b> 208V 480V		
<b>CP/MP17L-RK</b> 17" Cylindrical or Semi-Spherical Retrofit Kit	<b>96L</b> 96 LEDs	<b>560</b> 560mA	<b>CW-G2</b> Cool White 5700K, 70CRI Generation 2	<b>4</b> Type 4	<b>120-277V</b> 50hz/60hz		
<b>CP/MP22L-RK</b> 22" Cylindrical or Semi-Spherical Retrofit Kit		<b>560</b> 560mA			<b>277 UNV</b> 277V 347-480V		
<b>CP/MP17L-RK</b> 17" Cylindrical or Semi-Spherical Retrofit Kit	<b>96L</b> 96 LEDs	<b>560</b> 560mA	<b>CW-G2</b> Cool White 5700K, 70CRI Generation 2	<b>5</b> Type 5	<b>347-480V</b> 50hz/60hz		
<b>CP/MP22L-RK</b> 22" Cylindrical or Semi-Spherical Retrofit Kit		<b>560</b> 560mA			<b>277 UNV</b> 277V 347-480V		

1. Shipped as a separate accessory.
2. Types 2,3, and 4 optics are field rotatable; Type 5 optics feature unitized lens.
3. Must specify input voltage.
4. Works with 3-pin or 5-pin NEMA photocell/dimming device.
5. Not offered with MA17L or MA22L.
6. Not available in Type 5.

# CP/MP17L & CP/MP22L Form 10 LED luminaires

## Site & Area – Round Post Top

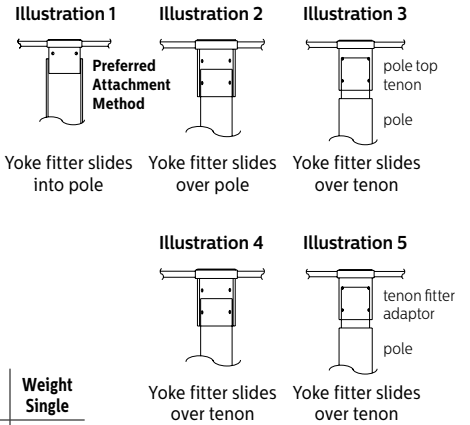
### Dimensions and EPA



Size	A	B	C	D	EPA's Single	Weight Single
CP17	17" 43.18 cm	8" 20.32 cm	10" 25.40 cm	18" 45.32 cm	.7ft <sup>2</sup> .07m <sup>2</sup>	31lbs. 14.06 kg
CP22	22" 55.88 cm	11" 27.94 cm	11" 27.94 cm	22" 55.88 cm	1.0ft <sup>2</sup> .09m <sup>2</sup>	50lbs. 22.68 kg

Size	A	B	C	D	EPA's Single	Weight Single
MP17	17" 43.18 cm	11" 27.94 cm	10" 25.40 cm	21" 53.34 cm	.7ft <sup>2</sup> .07m <sup>2</sup>	31lbs. 14.06 kg
MP22	22" 55.88 cm	14" 35.56 cm	11" 27.94 cm	25" 63.50 cm	1.0ft <sup>2</sup> .09m <sup>2</sup>	50lbs. 22.68 kg

### Mounting illustrations



Refer to Table below for mounting ordering information.

See Mounting Illustrations above for more information.	Poles			Tenons				
	SR53 MIN O.D. 2.88" MAX O.D. 3.00"	RA4/SRS4 CP / MP 17 MIN O.D. 3.58" MAX O.D. 3.85"	CP / MP 22 MIN O.D. 3.50" MAX O.D. 4.00"	RA5/SRS5 MIN I.D. 4.62" MAX O.D. 4.85"	T2 2 3/8" O.D. X 4"	T3 2 7/8" O.D. X 4"	T3 3" O.D. X 4"	T4 4" O.D. X 6"
MP17	P11 (ill. 2)	P12 (ill. 1)		Not Available	T14 (ill. 3)	T15 (ill. 3)	T16 (ill. 3)	Not Available
CP17	P21 (ill. 2)	P22 (ill. 1)		Not Available	T24 (ill. 4)	T25 (ill. 3)	T26 (ill. 3)	Not Available
MP22	P31 (ill. 5)	P32 (ill. 2)		P33 (ill. 1)	T34 (ill. 4)	T35 (ill. 4)	T36 (ill. 4)	T37 (ill. 3)
CP22	P41 (ill. 5)	P42 (ill. 2)		P43 (ill. 1)	T44 (ill. 4)	T45 (ill. 4)	T46 (ill. 4)	T47 (ill. 3)

## LED Wattage and Lumen Values Form 10 CP17L-MP17L & CP22L-MP22L

Order Code	LED Qty	System Current (mA)	Color Temp (K)	Ave System Watts <sup>1</sup> (W)	Type 2			Type 3			Type 4			Type 5		
					Lumen Output <sup>2,3</sup>	BUG Rating	Efficacy (lm/W)	Lumen Output <sup>2,3</sup>	BUG Rating	Efficacy (lm/W)	Lumen Output <sup>2,3</sup>	BUG Rating	Efficacy (lm/W)	Lumen Output <sup>2,3</sup>	BUG Rating	Efficacy (lm/W)
CP17L-32L-450-NW-G2-x	32	450	4000	47	5256	B1-U0-G1	111	5037	B1-U0-G1	106	5203	B1-U0-G1	110	5141	B3-U0-G1	108
CP17L-32L-900-NW-G2-x	32	900	4000	96	9331	B2-U0-G2	98	8942	B2-U0-G2	93	9236	B2-U0-G2	97	9126	B4-U0-G2	95
CP17L-48L-700-NW-G2-x	48	700	4000	110	11448	B2-U0-G2	104	10971	B2-U0-G2	100	11332	B2-U0-G2	103	11197	B4-U0-G2	102
MP17L-32L-450-NW-G2-x	32	450	4000	47	5256	B1-U0-G1	111	5037	B1-U0-G1	106	5203	B1-U0-G1	110	5141	B3-U0-G1	108
MP17L-32L-900-NW-G2-x	32	900	4000	96	9331	B2-U0-G2	98	8942	B2-U0-G2	93	9236	B2-U0-G2	97	9126	B4-U0-G2	95
MP17L-48L-700-NW-G2-x	48	700	4000	110	11448	B2-U0-G2	104	10971	B2-U0-G2	100	11332	B2-U0-G2	103	11197	B4-U0-G2	102
CP22L-48L-900-NW-G2-x	48	900	4000	144	14334	B3-U0-G2	100	13840	B2-U0-G2	96	14008	B2-U0-G2	97	14269	B4-U0-G2	99
CP22L-96L-560-NW-G2-x	96	560	4000	171	19274	B3-U0-G2	113	18610	B3-U0-G3	109	18836	B3-U0-G3	110	19187	B5-U0-G3	112
CP22L-96L-650-NW-G2-x	96	650	4000	199	21852	B3-U0-G3	110	21099	B3-U0-G3	106	21355	B3-U0-G3	108	21753	B5-U0-G3	110
MP22L-48L-900-NW-G2-x	48	900	4000	144	14334	B3-U0-G2	100	13840	B2-U0-G2	96	14008	B2-U0-G2	97	14269	B4-U0-G2	99
MP22L-96L-560-NW-G2-x	96	560	4000	171	19274	B3-U0-G2	113	18610	B3-U0-G3	109	18836	B3-U0-G3	110	19187	B5-U0-G3	112
MP22L-96L-650-NW-G2-x	96	650	4000	199	21852	B3-U0-G3	110	21099	B3-U0-G3	106	21355	B3-U0-G3	108	21753	B5-U0-G3	110

- Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
- Values shown are for luminaires without the DL options. Contact outdoorlighting.applications@signify.com if any approximate estimates are required for design purposes.
- Lumen values based on tests performed in compliance with IESNA LM-79.

# CP/MP17L & CP/MP22L Form 10 LED luminaires

## Site & Area – Round Post Top

### Specifications

#### Description

The Gardco Form 10 LED round luminaires are cutoff luminaires featuring LED arrays. Form 10 LED round luminaires provide performance excellence and advanced Gardco LED thermal management technology. High performance Class 1 LED systems offer the potential for energy savings up to 50% when compared to HID systems. Housings are one-piece seamless spun aluminum and finished with either Architectural Class 1 anodizing, with hardcoat, fade resistant, electrostatically applied TGIC polyester powdercoat or polyurethane. Optional twin glow rings at post tops are available in (4) colors and are illuminated by the primary source. Luminaires provide full cutoff performance.

#### Housing

Housing is one piece, .100" (.25cm) seamless aluminum with integral rolled circumferential reveal and lower section aperture incorporating a returned flange stiffener to protect against housing edge deformation.

#### Yoke

The 9/16" (1.42cm) diameter parallel yokes of high strength, low mass schedule 40 steel are precision contoured to match the CP or MP housing silhouette. Welds or fasteners are not visible at the luminaire or pole attachment. The yoke is electrogalvanized and coated with satin black polyurethane or polyester powder coat.

#### Lens

One piece, diecast aluminum door frame retains the optically clear, heat and impact resistant tempered flat glass, in a sealed manner using hollow section, high compliance, memory retentive extruded silicone rubber. Concealed stainless steel hinge and two (2) fasteners secure lens assembly to luminaire.

#### Thermal Management

Form 10 LED round luminaires utilize extruded aluminum integral thermal radiation fins to provide the excellent thermal management so critical to long LED system life.

#### Electrical

Luminaires include a complete prewired LED driver assembly, provided as part of the optical assembly. Luminaires include an LED driver that accepts 120V through 277V, or 347V through 480V, 50hz to 60hz, input. Driver output is based on the LED wattage selected. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F / 150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. Power factor is not less than 90%. Luminaires consume 0.0 watts in the off state. Surge protector standard. 10KA per ANSI/IEEE C62.41.2.

#### LED Optical System

LED arrays are set to achieve IES Type II, Type III, Type IV and Type V distributions. Individual LED arrays are replaceable. Optical systems are field rotatable. Luminaires feature high performance Class 1 LED systems.

#### Finish

Anodized housings are created with an Aluminum Association Architectural Class I anodizing process to achieve a bronze, black or natural aluminum finish. Painted units are finished with hardcoat, fade resistant, electrostatically applied TGIC polyester powdercoat or polyurethane.

#### Labels

UL/cUL listed to the UL 1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40° to 40°C (-40° to 104°F). The quality systems of this facility have been registered by UL to the ISO 9001 series standards. Most Form 10 configurations are DesignLights Consortium® qualified. Consult DLC Qualified Products list for more details.

#### Limited Warranty

5 year limited warranty. See [signify.com/outdoorluminaires](http://signify.com/outdoorluminaires) for complete details and exclusions.

#### Predicted Lumen Depreciation Data

Ambient Temperature °C	System Current	LED Current	Calculated L <sub>70</sub> hrs <sup>1,2</sup>	L <sub>70</sub> per TM21 <sup>2,3</sup>	Lumen Maintenance @ 60,000hrs
25 °C	900 mA	900 mA	>100,000	>60,000	98%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM 21-11. Published L70 hours limited to 6 times actual LED test hours.

