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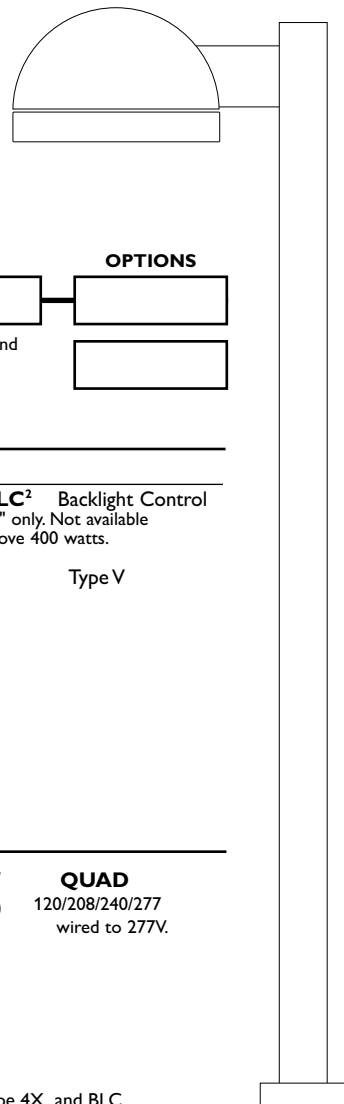
## Featuring MasterColor Elite Electronic HID Systems

# Form 10 Round

## CA / MA Arm Mount

Page 1 of 3

The Philips Gardco Round arm mounted Form 10 products are cylindrical (CA) or semi-spherical (MA) cutoff luminaires providing the greatest energy efficiency when utilized with MasterColor Elite high performance ceramic metal halide electronic systems. Luminaires may also utilize other high intensity discharge lamps up to 875 watts (400 watts in the MA). Housings are one-piece seamless spun aluminum and finished with either Architectural Class 1 anodizing or electrostatically applied polyurethane. Luminaires can accept one of six (6) interchangeable and rotatable precision segmented optical systems. Flat glass lens luminaires provide full cutoff performance. Sag Lens luminaires provide cutoff performance.



PREFIX	MOUNTING	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX	MOUNTING	DISTRIBUTION
<b>CA17</b> 17" Diameter Cylindrical Luminaire <b>MA17</b> 17" Diameter Semi-Spherical Luminaire <b>CA22</b> 22" Diameter Cylindrical Luminaire <b>MA22</b> 22" Diameter Semi-Spherical Luminaire	<b>1</b> Single Pole Mount <b>2</b> Twin Pole Mount at 180° <b>2@90</b> Twin Pole Mount at 90° <b>3</b> 3-way Pole Mount at 90° <b>3@120°</b> 3-way Pole Mount at 120° <b>4</b> 4-way Pole Mount	<b>Horizontal Lamp</b> <b>1</b> Type 1 <b>BLC<sup>2</sup></b> Backlight Control <b>3</b> Type 1II 22" only. Not available <b>4X<sup>1,2</sup></b> Type IV above 400 watts. <b>FM</b> Type 1V <b>Q</b> Type V

1. 22" luminaires only. 400 watts and below are supplied with flat glass lens standard.

2. PSMH 400 watt Type 4X and BLC luminaires require the E28/BT28 reduced jacket lamp.

### WATTAGE

	17"	22"
Pulse Start MH Magnetic Ballast	<b>50MH<sup>1</sup> E</b> <b>70MH<sup>1</sup> E</b> <b>100MH<sup>1</sup> E</b>	<b>175PSMH<sup>1</sup> E</b> <b>200MH<sup>1</sup> E</b> <b>250PSMH<sup>1</sup> E</b> <b>250PS90<sup>1</sup> E</b> <b>320PSMH<sup>10</sup> E</b> <b>350PSMH<sup>10</sup> E</b> <b>400PSMH<sup>2</sup> E</b>
MasterColor Elite Electronic System		<b>750PSMH<sup>1</sup></b> <b>875PSMH<sup>1</sup></b> <b>210MCE-3K<sup>11,12</sup> E</b> <b>210MCE-4K<sup>11,12</sup> E</b> <b>315MCE-3K<sup>11,12</sup> E</b> <b>315MCE-4K<sup>11,12</sup> E</b>
Pulse Start MH Electronic Ballast		<b>250PSE<sup>11</sup> E</b> <b>320PSE<sup>10,11</sup> E</b>
High Pressure Sodium Magnetic Ballast	<b>70HPS</b> <b>100HPS</b>	<b>150HPS</b> <b>250HPS</b> <b>400HPS</b> <b>750HPS<sup>1</sup></b>

**E** Wattages marked with Circle "E" meet federal energy efficiency standards applicable to 50 watt through 400 watt pulse start metal halide luminaires only.

### VOLTAGE

<b>120</b>	<b>347</b>	<b>QUAD</b>
<b>208</b>	<b>480</b>	120/208/240/277
<b>240</b>		wired to 277V.
<b>277</b>		
<b>200-277</b>		
CMPE, MCE		
and PSE types only.		

- PSMH 400 watts Type 4X and BLC luminaires require the E28/BT28 reduced jacket lamp.
- Medium base lamp.
- Available in CA Style only. Not available in MA Style.
- 250 watt Pulse Start Metal Halide with a 90% efficient magnetic ballast. Complies with California Title 20. Available in 120, 208, 240 or 277V only.
- Requires E28/BT28 lamp.
- 120V or 200 - 277V only. Not available with QS, QST, Q924 or QT924 options.
- "-3K" suffix specifies a 3000°K lamp and "-4K" suffix specifies a 4000°K lamp.

**FINISH**

<b>BRP</b>	Bronze Paint
<b>BLP</b>	Black Paint
<b>WP</b>	White Paint
<b>NP</b>	Natural Aluminum Paint
<b>BRA</b>	Bronze Anodized
<b>BLA</b>	Black Anodized
<b>NA</b>	Natural Anodized
<b>OC</b>	Optional Color Paint Specify Optional Color or RAL ex: RAL7024.
<b>SC</b>	Special Paint Specify. Must supply color chip.

**OPTIONS**

<b>F<sup>10,11</sup></b>	Fusing	<b>PTF2</b>	Pole Top Fitter - 2 3/8 - 3" Dia. Tenon
<b>LF<sup>9,10</sup></b>	In-Line/In-Pole Fusing	<b>PTF3</b>	Pole Top Fitter - 3 - 3.5" Dia. Tenon
<b>PC<sup>9,11</sup></b>	Photocontrol and Receptacle	<b>PTF4</b>	Pole Top Fitter - 3.5 - 4" Dia. Tenon
<b>PCR<sup>9</sup></b>	Photocontrol Receptacle only		
<b>HS<sup>12</sup></b>	Internal House Side Shield		
<b>QS<sup>13</sup></b>	Quartz Standby		
<b>QST<sup>13</sup></b>	Quartz Standby - Timed Delay		
<b>Q924<sup>13</sup></b>	Quartz Emergency		
<b>QT924<sup>13</sup></b>	Quartz Emergency - Timed Delay		
<b>SG<sup>14</sup></b>	Sag Glass Lens		
<b>MF<sup>15</sup></b>	Mast Arm Fitter		

(Note 13) QS / Q924 Table	
HID Lamp Watts	Maximum Quartz Lamp Watts
175 watts or less	100 Watts
Above 175 watts up to 400 watts	150 Watts
17" luminaires limited to 100 watt quartz lamp maximum regardless of HID wattage. QS, QST, Q924 and QT924 options are not available in luminaires above 400 watt HID.	

9. Available in CA Style only. Not available in MA Style.

10. In Head. Not available above 400W. Provide Specific input voltage.

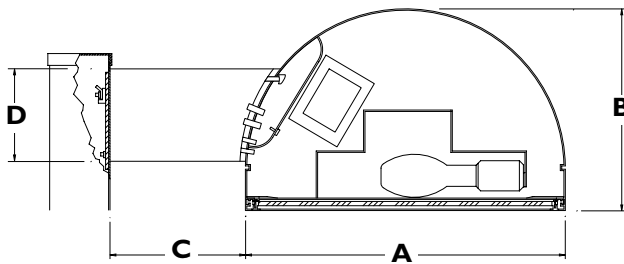
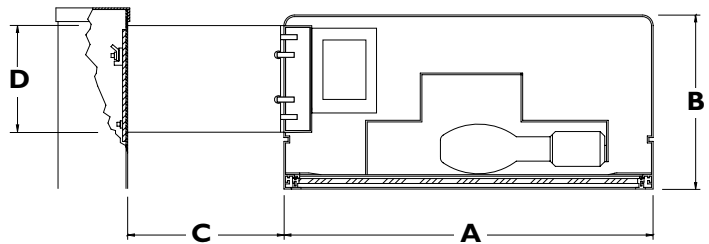
11. Not available in 480V. Provide specific input voltage.

12. Supplied standard with FM optics.

13. See QS/Q924 Table. Separate 120V power source is required.

14. In lieu of flat glass. Available on 22" luminaires only.

15. Requires 2 3/8" mast arm. Not available with MA17.

**DIMENSIONS AND EPA****MA****CA**

MA Style					EPA			Avg. Weight
Size	A	B	C	D	Single	Twin	Quad	Single
MA17	17"	11"	5"	5"	.8 ft²	1.6 ft²	2.3 ft²	27 lbs
	43.18 cm	27.94 cm	12.70 cm	12.70 cm	.07 m²	.15 m²	.21 m²	12.25 kg
MA22	22"	14"	7"	5"	1.3 ft²	2.7 ft²	3.7 ft²	40 lbs
	55.88 cm	35.56 cm	17.78 cm	12.70 cm	.12 m²	.25 m²	.34 m²	18.14 kg

CA Style					EPA			Avg. Weight
Size	A	B	C	D	Single	Twin	Quad	Single
CA17	17"	8"	5"	5"	.7 ft²	1.5 ft²	2.1 ft²	27 lbs
	43.18 cm	20.32 cm	12.70 cm	12.70 cm	.07 m²	.14 m²	.20 m²	12.25 kg
CA22	22"	11"	7"	5"	1.2 ft²	2.3 ft²	3.3 ft²	42 lbs
	55.88 cm	27.94 cm	17.78cm	12.70 cm	.11 m²	.21 m²	.31 m²	19.05 kg

## SPECIFICATIONS

**GENERAL:** Each Gardco Form 10 arm mounted Hardtop is a cylindrical (CA) or semi-spherical (MA) cutoff luminaire providing the greatest energy efficiency when utilized with MasterColor Elite high performance ceramic metal halide electronic systems. Internal components are totally enclosed, rain-tight, dust-tight and corrosion resistant. No venting of optical system or electrical components is required or permitted. Luminaires are completely assembled with no disassembly required for installation. Lamping requires no lifting or hinging the luminaire housing, disturbing wiring or exposing uninsulated live parts.

**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. Units are offered in profiles of 17" (43.18cm) or 22" (55.88cm) diameter.

**ARM:** Extruded aluminum arm is secured to prewired fixture by contractor. Assembly is suitable for mounting to pole without requiring access to luminaire. Internal extruded channels capture tie rods for proper luminaire to pole alignment.

**LENS:** One piece, diecast aluminum door frame retains the optically clear, heat and impact resistant tempered flat glass or sag glass lens 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.

**OPTICAL SYSTEMS:** The segmented Form Ten optical system is homogeneous sheet aluminum, electrochemically brightened, anodized and sealed. The segmented reflectors are set in faceted arc tube image duplicator patterns to achieve IES Types I, III, IV and V distributions. With the 4X optics, the reflector facets form a conical fan around the arc tube with each facet positioned to be precisely tangent to the top of the arc tube. The mogul base lampholder is glazed porcelain with a nickel plated screw shell and is securely attached to the reflector assembly. 50MH, 70MH and 100MH units have medium base lampholders. All horizontal Metal Halide units in the 22" housings have lamp stabilizers ensuring precise arc tube positioning.

**ELECTRICAL:** All electrical components are UL recognized and factory tested. Electronic and magnetic HID ballasts are high power factor and mounted on a unitized plate. Magnetic HID ballasts are the separate component type. Electronic and magnetic HID ballasts are capable of providing reliable lamp starting down to -20°F / -29°C.

Luminaires provided with the MasterColor Elite high performance ceramic metal halide electronic systems include high power factor electronic ballasts, designed specifically for the system selected.

**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:** All luminaires bear UL or CUL (where applicable) Wet Location labels.

**WARRANTY:** 5 year limited warranty. See [philips.com/warranties](http://philips.com/warranties) for complete details and exclusions.

