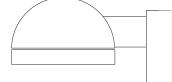
Notes: Job: Type:

# FORM 10 ROUND



# **CA/MA ARM MOUNT**

GENERAL DESCRIPTION: The Gardco Round arm mounted Form 10 products are cylindrical (CA) or semi-spherical (MA) cutoff luminaires using high intensity discharge lamps up to 1000 watts (400w 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.

CUTOFF PERFORMANCE: Flat glass lens luminaires provide full cutoff performance. Sag Lens luminaires provide cutoff performance.

| ORDERING   |               |              |         |         |        |         |  |  |
|--|---------------|--------------|---------|---------|--------|---------|--|--|
| PREFIX   | CONFIGURATION | 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**

| CA17 | 17 Diameter Cylindrical Luminaire    |  |  |  |  |  |
|------|--------------------------------------|--|--|--|--|--|
| MA17 | 17 Diameter Semi-Spherical Luminaire |  |  |  |  |  |
| CA22 | 22 Diameter Cylindrical Luminaire    |  |  |  |  |  |
| MA22 | 22 Diameter Semi-Spherical Luminaire |  |  |  |  |  |

## **DISTRIBUTION**

## **Horizontal Lamp**

| 1<br>3<br>4X <sup>1,2</sup> | Type III Type IV (22 only) | 1. 22 luminaires, 400w and below are<br>supplied with flat glass lens standard.<br>For wattages above 400w, "XF" flat<br>lens is supplied standard.<br>2. MH/PSMH 400w Type 4X luminaires |
|-----------------------------|----------------------------|---|
| FM                          | Type IV                    | require the E28/BT28 reduced jacket   |
| Q                           | Type V                     | lamp  |

## **Vertical Lamp**

VS Type V

In 400w and below, luminaires are supplied with an acrylic sag lens. A glass sag lens is supplied with luminaires above 400w. Medium base only on 17 luminaires only

## CONFIGURATION

| 1    | Single Assembly      | 3     | Triple at 90°  |  |
|------|----------------------|-------|----------------|--|
| 2    | Twin Assembly        | 3@120 | Triple at 120° |  |
| 2@90 | Twin Assembly at 90° | 4     | Quad Assembly  |  |

## WATTAGE

| CA17<br>50MH³<br>70MH³<br>100MH³<br>150MH³<br>175MH<br>200MH<br>250MH⁵<br>175PSMH⁴ | MA17<br>50MH³<br>70MH³<br>100MH³<br>150MH³<br>175MH<br>175PSMH⁴<br>70HPS<br>100HPS<br>150HPS6 | CA22<br>250MH<br>400MH<br>1000MH <sup>7,8,10</sup><br>250PSMH<br>320PSMH<br>400PSMH<br>450PSMH <sup>4</sup><br>750PSMH <sup>9</sup><br>875PSMH | MA:<br>250MH<br>400MH<br>250PS<br>320PS<br>350PS<br>400PS<br>450PS<br>250HF<br>400HF | H<br>H<br>SMH<br>SMH<br>SMH<br>MH<br>MH                          |
|--|---|--|--|--|
| 100HPS   |   | 1000PSMH <sup>8,10</sup>   |  |  |
| 150HPS <sup>6</sup>  |   | 250HPS<br>400HPS<br>750HPS <sup>7</sup>  | MH<br>PSMH<br>HPS  | Metal Halide<br>Pulse Start Metal Halide<br>High Pressure Sodium |

#### **VOLTAGE** 120 240 347 QUAD

120/208/240/277, Factory tied to 277V. 277 208 480

## FINISH

| BRP | Bronze Paint           | BLA        | Black Anodized              |
|-----|------------------------|------------|-----------------------------|
| BLP | Black Paint            | BRA        | Bronze Anodized             |
| WP  | White Paint            | NA         | Natural Anodized            |
| NP  | Natural Aluminum Pair  | nt         |                             |
| OC  | Optional Color Paint S | pecify RAL | designation ex: OC-RAL7024. |

SC Special Color Paint Specify. Must supply color chip. 3. Medium base lamp.

4. Available with vertical lamp optics only. 5. Available with horizontal lamp optics only.

6. Operates 55V lamp.

7. Uses BT37 lamps only

8. Available with 4X and VS optics only. 9. M149 only. Horizontal optics require MS750/PS/BU-HOR/BT37 Lamp 10. For 1000w CA22 with 4X optics, see

1000w lamp restrictions.

## 1000w Lamp Restrictions

| 1000W Lamp Heatherions                     |   |  |  |  |  |  |
|--|---|--|--|--|--|--|
| For CA2                                    | 2 with 4X Optics                                | s, 1000 Metal Halide, use:                                     |  |  |  |  |
| <u>Brand</u><br>Venture<br>G.E.            | Product Code<br>53702<br>18205                  | <u>Catalog Number</u><br>MS1000W/HOR/BT37/3K<br>MVR1000/U/BT37 |  |  |  |  |
| Venture                                    | 15332   | MH1000W/U/BT37   |  |  |  |  |
| For CA2                                    | For CA22 with 4X Optics, 1000 Pulse Start, use: |  |  |  |  |  |
| <b>Brand</b>                               | Product Code                                    | Catalog Number   |  |  |  |  |
| G.E.                                       | 10389   | MVR1000/U/BT37/PA  |  |  |  |  |
| Venture                                    | 49111   | MS1000W/HOR/T25/PS   |  |  |  |  |
| WARNING: Use of other lamps voids warranty |   |  |  |  |  |  |

## **OPTIONS**

|    |                                 |                   | B  |
|----|---------------------------------|-------------------|--|
| HS | Internal House Side Shield      | PCR               | Photocontrol Receptacle only   |
|    | Supplied standard w/FM optics.  |                   | N/A with MA units.   |
| F  | Fusing In Head. N/A above 400w. | POLY              | Polycarbonate Sag Lens<br>In lieu of flat glass. N/A w/4X optics, 750 - 1000w. |
| •  | 3                               |                   | In lieu of flat glass. N/A w/4X optics, 750 - 1000w.                           |
| LF | In-Line/In-Pole Fusing          | QS <sup>11</sup>  | Quartz Standby   |
| MF | Mast Arm Fitter                 | QST <sup>11</sup> | Quartz Standby - Timed Delay   |
| PC | Photocontrol and Receptacle     | QO.               | 11. Not available above 400w.  |
| _  | N/A with MA units or 480V       | DTEO              | Polo Ton Fittor 2 2/9" 2" Dia Tonon  |

Pole Top Fitter - 2 3/8" - 3" Dia. Tenon PTF2

PTF3 Pole Top Fitter - 3" - 3.5" Dia. Tenon PTF4 Pole Top Fitter - 3.5" - 4" Dia. Tenon

Extended Flat Glass Lens

Flat Glass lens with extended drop. Allows for the use of a larger lamp while providing full cutoff

Sag Glass Lens In lieu of flat glass.

Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The 4X optical system is protected by U.S. patent number 5690422.

Gardco Lighting 1611 Clovis Barker Road San Marcos, TX 78666

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SG

(800) 227-0758 (512) 753-1000 FAX: (512) 753-7855 www.sitelighting.com



# FORM 10 ROUND

# **CA/MA ARM MOUNT**

## **SPECIFICATIONS**

**GENERAL:** Each Gardco Form 10 arm mounted Hardtop is a cylindrical (CA) or semi-spherical (MA) cutoff luminaire for high intensity discharge lamps. 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, extended flat glass, sag glass or sag polycarbonate 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:** Each high power factor ballast is the separate component type, capable of providing reliable lamp starting down to -20°F/-29°C. The ballast is mounted on a unitized tray and secured within the luminaire, above the reflector system. 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 301°F/150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher.

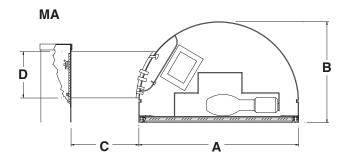
FINISH: Anodized housings are created with an Aluminum Association Architectural Class I anodizing process to achieve a bronze, black or natural aluminum finish. Painted units are finished with hardcoat, fade resistant, electrostatically applied polyurethane.

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

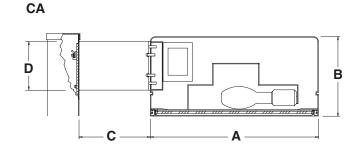
FULL CUTOFF PERFORMANCE: Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle of 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire

**CUTOFF PERFORMANCE:** Cutoff performance means a luminaire distribution where the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle at or above 90° above nadir, and 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around

## **DIMENSIONS**



| MA St | yle      |          |          | EPA      |                     |   | Avg.<br>Weight                   |          |
|-------|----------|----------|----------|----------|---------------------|---|----------------------------------|----------|
| Size  | Α        | В        | С        | D        | Single              | Twin                                      | Quad                             | Single   |
|       |          |          |          |          |                     |   |                                  |          |
|       | 17       | 11       | 5        | 5        | .8 ft²              | 1.6 ft <sup>2</sup>                       | $2.3\ ft^{\scriptscriptstyle 2}$ | 27 lbs   |
| MA17  | 43.18 cm | 27.94 cm | 12.70 cm | 12.70 cm | .07 m²              | .15 m²                                    | .21 m²                           | 12.25 kg |
|       | 22       | 14       | 7        | 5        | 1.3 ft <sup>2</sup> | 2.7 ft <sup>2</sup>                       | 3.7 ft <sup>2</sup>              | 40 lbs   |
| MA22  | 55.88 cm | 35.56 cm | 17.78 cm | 12.70 cm | .12 m²              | 2.7 ft <sup>2</sup><br>.25 m <sup>2</sup> | .34 m²                           | 18.14 kg |
|       |          |          |          |          | 1                   |   |                                  | ı        |



| CA Sty | /le      |          |          |          |        | EPA    |        | Avg.<br>Weight |
|--------|----------|----------|----------|----------|--------|--------|--------|----------------|
| Size   | Α        | В        | С        | D        | Single | Twin   | Quad   | Single         |
|        |          |          |          |          |        |        |        |                |
|        | 17"      | 8        | 5        | 5        | .7 ft² | 1.5    | 2.1    | 27 lbs         |
| CA17   | 43.18 cm | 20.32 cm | 12.70 cm | 12.70 cm | .07 m² | .14 m² | .20 m² | 12.25 kg       |
|        | 22"      | 11       | 7        | 5        | 1.2    | 2.3    | 3.3    | 42 lbs         |
| CA22   | 55.88 cm | 27.94 cm | 17.78cm  | 12.70 cm | .11 m² | .21 m² | .31 m² | 19.05 kg       |

