



# Switch Start Metal Halide Standard

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High performance, Long life and Superior light quality A compact, energy efficient metal halide lamp that provides crisp, sparkling light with long life and high efficiency.

### Features

- Long life up to 20,000 hours for 360 and 400 watt lamps.
- Up to 100 lumens per watt.

### Application

- Ideal for industrial and retail high/low bays, and parking lots.

### Versions



E26, BD-17, Clear



E26, BD-17, Coated



ED17, ED28, Clear



E39/E40/41, ED-37, Clear

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## Versions

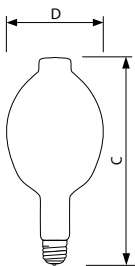
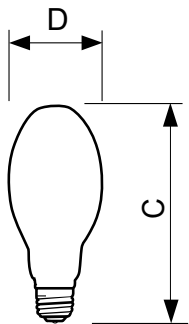
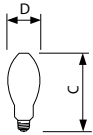


E39/E40/41, BT-56, Clear



E39, BT-37, Clear

## Dimensional drawing



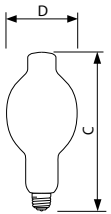
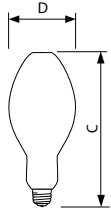
| Product          | D        | C (max)  |
|------------------|----------|----------|
| MH175/U/M 12PK   | 2.125 in | 5.438 in |
| MH175/C/U/M 12PK | 2.125 in | 5.438 in |

| Product           | D        | C (max)  |
|-------------------|----------|----------|
| MH250/U UPC 3PK   | 3.5 in   | 8.313 in |
| MH250/U 12PK      | 3.5 in   | 8.313 in |
| MH400/U/ED28 3PK  | 3.5 in   | 8.313 in |
| MH150/U/M 12PK    | 2.125 in | 5.438 in |
| MH175/U 12PK      | 3.5 in   | 8.313 in |
| MH175/U UPC 3PK   | 3.5 in   | 8.313 in |
| MH400/U/ED28 12PK | 3.5 in   | 8.313 in |

| Product      | D    | C (max)   |
|--------------|------|-----------|
| MH1500/U 6PK | 7 in | 15.4 in   |
| MH1000/U 6PK | 7 in | 15.375 in |

# Switch Start Metal Halide Standard

## Dimensional drawing



| Product     | D        | C (max) |
|-------------|----------|---------|
| MH400/U 6PK | 4.625 in | 11.5 in |

| Product           | D      | C (max) |
|-------------------|--------|---------|
| MH1000/U/BT37 6PK | 4.6 in | 11.5 in |

### Approval and Application

Energy Saving Product Not Applicable

### Light Technical

Color Code 640

### Mechanical and Housing

Bulb Material Hard Glass

## Approval and Application

| Order Code | Full Product Name | Mercury (Hg)  |                            |                         |
|------------|-------------------|---------------|----------------------------|-------------------------|
|            |                   | Content (Max) | Mercury (Hg) Content (Nom) | Picogram Per Lumen Hour |
| 313585     | MH175/U/M 12PK    | 24.0 mg       | -                          | -                       |
| 313593     | MH175/C/U/M 12PK  | 24.0 mg       | -                          | -                       |
| 140855     | MH175/U UPC 3PK   | -             | 28 mg                      | 255.1 pg/lm.h           |
| 287334     | MH175/U 12PK      | -             | 28 mg                      | 255.1 pg/lm.h           |
| 140822     | MH250/U UPC 3PK   | -             | 33 mg                      | 215.1 pg/lm.h           |
| 274845     | MH250/U 12PK      | -             | 33 mg                      | 215.1 pg/lm.h           |
| 426023     | MH400/U/ED28 12PK | 52.0 mg       | -                          | -                       |

| Order Code | Full Product Name | Mercury (Hg)  |                            |                         |
|------------|-------------------|---------------|----------------------------|-------------------------|
|            |                   | Content (Max) | Mercury (Hg) Content (Nom) | Picogram Per Lumen Hour |
| 140848     | MH400/U/ED28 3PK  | 52.0 mg       | -                          | -                       |
| 354621     | MH150/U/M 12PK    | -             | 23 mg                      | 199.4 pg/lm.h           |
| 274498     | MH400/U 6PK       | -             | 38 mg                      | 102.6 pg/lm.h           |
| 131623     | MH1500/U 6PK      | -             | 228.0 mg                   | -                       |
| 415224     | MH1000/U 6PK      | 151.0 mg      | -                          | 176 pg/lm.h             |
| 321505     | MH1000/U/BT37 6PK | -             | 151.0 mg                   | 176 pg/lm.h             |

## Operating and Electrical

| Order Code | Full Product Name | Lamp Current (Nom) | Voltage (Max) | Voltage (Min) | Voltage (Nom) | Re-Ignition Time (Min) (Max) |
|------------|-------------------|--------------------|---------------|---------------|---------------|------------------------------|
| 313585     | MH175/U/M 12PK    | 1.5 A              | 147 V         | 117 V         | 132 V         | 15 min                       |

## Switch Start Metal Halide Standard

| Order Code | Full Product Name | Lamp Current (Nom) | Voltage (Max) | Voltage (Min) | Voltage (Nom) | Re-Ignition Time (Min) (Max) |
|------------|-------------------|--------------------|---------------|---------------|---------------|------------------------------|
| 313593     | MH175/C/U/M 12PK  | 1.5 A              | 147 V         | 117 V         | 132 V         | 15 min                       |
| 140855     | MH175/U UPC 3PK   | 1.5 A              | 147 V         | 117 V         | 132 V         | 8 min                        |
| 287334     | MH175/U 12PK      | 1.5 A              | 147 V         | 117 V         | 132 V         | 8 min                        |
| 140822     | MH250/U UPC 3PK   | 2.1 A              | 148 V         | 118 V         | 133 V         | 8 min                        |
| 274845     | MH250/U 12PK      | 2.1 A              | 148 V         | 118 V         | 133 V         | 8 min                        |
| 426023     | MH400/U/ED28 12PK | 3.25 A             | 150 V         | 120 V         | 135 V         | 12 min                       |
| 140848     | MH400/U/ED28 3PK  | 3.25 A             | 150 V         | 120 V         | 135 V         | 12 min                       |
| 354621     | MH150/U/M 12PK    | 1.5 A              | 120 V         | 100 V         | 110 V         | 15 min                       |
| 274498     | MH400/U 6PK       | 3.25 A             | 150 V         | 120 V         | 135 V         | 12 min                       |
| 131623     | MH1500/U 6PK      | 6.2 A              | 283 V         | 253 V         | 268 V         | 15 min                       |
| 415224     | MH1000/U 6PK      | 4.1 A              | 288 V         | 238 V         | 263 V         | 15 min                       |
| 321505     | MH1000/U/BT37 6PK | 4.1 A              | -             | -             | 263 V         | 15 min                       |

### General Information

| Order Code | Full Product Name | Cap-Base | Life To 50%    |                             | Operating Position |
|------------|-------------------|----------|----------------|-----------------------------|--------------------|
|            |                   |          | Failures (Nom) | Main Application            |                    |
| 313585     | MH175/U/M 12PK    | E26      | 10000 h        | General Lighting (G)        | Universal          |
| 313593     | MH175/C/U/M 12PK  | E26      | 10000 h        | General Lighting (G)        | Universal          |
| 140855     | MH175/U UPC 3PK   | E39      | 10000 h        | General and Street Lighting | Universal          |
| 287334     | MH175/U 12PK      | E39      | 10000 h        | General and Street Lighting | Universal          |
| 140822     | MH250/U UPC 3PK   | E39      | 10000 h        | General and Street Lighting | Universal          |
| 274845     | MH250/U 12PK      | E39      | 10000 h        | General and Street Lighting | Universal          |
| 426023     | MH400/U/ED28 12PK | E39      | 20000 h        | General Lighting (G)        | Universal          |

| Order Code | Full Product Name | Cap-Base | Life To 50%    |                      | Operating Position |
|------------|-------------------|----------|----------------|----------------------|--------------------|
|            |                   |          | Failures (Nom) | Main Application     |                    |
| 140848     | MH400/U/ED28 3PK  | E39      | 20000 h        | General Lighting (G) | Universal          |
| 354621     | MH150/U/M 12PK    | E26      | 10000 h        | General Lighting (G) | Universal          |
| 274498     | MH400/U 6PK       | E39      | 20000 h        | General Lighting (G) | Universal          |
| 131623     | MH1500/U 6PK      | E39      | 6000 h         | General Lighting (G) | Base Up +/- 15 D   |
| 415224     | MH1000/U 6PK      | E39      | 12000 h        | General Lighting (G) | Universal          |
| 321505     | MH1000/U/BT37 6PK | E39      | 12000 h        | General Lighting (G) | Universal          |

### Luminaire Design Requirements

| Order Code | Full Product Name | Bulb Temperature (Max) |
|------------|-------------------|------------------------|
| 313585     | MH175/U/M 12PK    | 450 °C                 |
| 313593     | MH175/C/U/M 12PK  | 400 °C                 |
| 140855     | MH175/U UPC 3PK   | 400 °C                 |
| 287334     | MH175/U 12PK      | 400 °C                 |
| 140822     | MH250/U UPC 3PK   | 400 °C                 |
| 274845     | MH250/U 12PK      | 400 °C                 |
| 426023     | MH400/U/ED28 12PK | 400 °C                 |

| Order Code | Full Product Name | Bulb Temperature (Max) |
|------------|-------------------|------------------------|
| 140848     | MH400/U/ED28 3PK  | 400 °C                 |
| 354621     | MH150/U/M 12PK    | 400 °C                 |
| 274498     | MH400/U 6PK       | 400 °C                 |
| 131623     | MH1500/U 6PK      | 430 °C                 |
| 415224     | MH1000/U 6PK      | 430 °C                 |
| 321505     | MH1000/U/BT37 6PK | 450 °C                 |

### Light Technical (1/2)

| Order Code | Full Product Name | Chromaticity Coordinate X (Nom) | Chromaticity Coordinate Y (Nom) | Color Designation | Correlated Color Temperature (Nom) | Color Rendering Index (Nom) | Lumen Maintenance - 10% Life | Lumen Maintenance - 40% Life |
|------------|-------------------|---------------------------------|---------------------------------|-------------------|------------------------------------|-----------------------------|------------------------------|------------------------------|
|            |                   |                                 |                                 |                   |                                    |                             |                              |                              |
| 313585     | MH175/U/M 12PK    | 0.385                           | 0.390                           | Cool White (CW)   | 4000 K                             | 65                          | -                            | -                            |
| 313593     | MH175/C/U/M 12PK  | 0.395                           | 0.390                           | Cool White (CW)   | 3700 K                             | 65                          | -                            | 65 %                         |

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| Order Code | Full Product Name | Chromaticity       | Chromaticity       | Color Designation | Correlated Color Temperature (Nom) | Color                 | Lumen                  |                              |
|------------|-------------------|--------------------|--------------------|-------------------|------------------------------------|-----------------------|------------------------|------------------------------|
|            |                   | Coordinate X (Nom) | Coordinate Y (Nom) |                   |                                    | Rendering Index (Nom) | Maintenance - 10% Life | Lumen Maintenance - 40% Life |
| 140855     | MH175/U UPC 3PK   | 0.375              | 0.400              | Cool White (CW)   | 4000 K                             | 65                    | 90 %                   | 68 %                         |
| 287334     | MH175/U 12PK      | 0.375              | 0.400              | Cool White (CW)   | 4000 K                             | 65                    | 90 %                   | 68 %                         |
| 140822     | MH250/U UPC 3PK   | 0.385              | 0.395              | Cool White (CW)   | 4000 K                             | 65                    | -                      | -                            |
| 274845     | MH250/U 12PK      | 0.385              | 0.395              | Cool White (CW)   | 4000 K                             | 65                    | -                      | -                            |
| 426023     | MH400/U/ED28 12PK | 0.390              | 0.400              | Cool White (CW)   | 4000 K                             | 57                    | -                      | -                            |
| 140848     | MH400/U/ED28 3PK  | 0.390              | 0.400              | Cool White (CW)   | 4000 K                             | 57                    | -                      | -                            |
| 354621     | MH150/U/M 12PK    | 0.385              | 0.390              | White (WH)        | 4000 K                             | 65                    | -                      | 65 %                         |
| 274498     | MH400/U 6PK       | 0.385              | 0.395              | Cool White (CW)   | 3900 K                             | 65                    | -                      | 65 %                         |
| 131623     | MH1500/U 6PK      | 0.385              | 0.390              | White (WH)        | 4000 K                             | 65                    | -                      | 65 %                         |
| 415224     | MH1000/U 6PK      | 0.385              | 0.390              | White (WH)        | 4000 K                             | 65                    | -                      | 65 %                         |
| 321505     | MH1000/U/BT37 6PK | 0.385              | 0.390              | Cool White (CW)   | 4000 K                             | 65                    | -                      | 65 %                         |

### Light Technical (2/2)

| Order Code | Full Product Name | Luminous Efficacy | Luminous Efficacy | Design Mean Lumens | Luminous Flux | Luminous Flux | Order Code | Full Product Name | Luminous Efficacy | Luminous Efficacy | Design Mean Lumens | Luminous Flux | Luminous Flux |
|------------|-------------------|-------------------|-------------------|--------------------|---------------|---------------|------------|-------------------|-------------------|-------------------|--------------------|---------------|---------------|
|            |                   | (rated) (Min)     | (rated) (Nom)     |                    | (Rated) (Min) | (Rated) (Nom) |            |                   | (rated) (Min)     | (rated) (Nom)     |                    | (Rated) (Min) | (Rated) (Nom) |
| 313585     | MH175/U/M 12PK    | 70 lm/W           | 80 lm/W           | 9100 lm            | -             | 14000 lm      | 140848     | MH400/U/ED28 3PK  | 80 lm/W           | 90 lm/W           | 24000 lm           | 32000 lm      | 36000 lm      |
| 313593     | MH175/C/U/M 12PK  | 72 lm/W           | 80 lm/W           | 8380 lm            | 12600 lm      | 13300 lm      | 354621     | MH150/U/M 12PK    | -                 | 90 lm/W           | 8775 lm            | -             | 13500 lm      |
| 140855     | MH175/U UPC 3PK   | 70 lm/W           | 84 lm/W           | 8775 lm            | 12250 lm      | 14700 lm      | 274498     | MH400/U 6PK       | 85 lm/W           | 97.5 lm/W         | 25350 lm           | 34000 lm      | 39000 lm      |
| 287334     | MH175/U 12PK      | 70 lm/W           | 84 lm/W           | 8775 lm            | 12250 lm      | 14700 lm      | 131623     | MH1500/U 6PK      | -                 | 113 lm/W          | 136000 lm          | -             | 170000 lm     |
| 140822     | MH250/U UPC 3PK   | 76.5 lm/W         | 85 lm/W           | 13500 lm           | 19125 lm      | 21250 lm      | 415224     | MH1000/U 6PK      | -                 | 110 lm/W          | 71500 lm           | -             | 110000 lm     |
| 274845     | MH250/U 12PK      | 76.5 lm/W         | 85 lm/W           | 13500 lm           | 19125 lm      | 21250 lm      | 321505     | MH1000/U/BT37 6PK | -                 | 110 lm/W          | 71500 lm           | -             | 110000 lm     |
| 426023     | MH400/U/ED28 12PK | 80 lm/W           | 90 lm/W           | 24000 lm           | 32000 lm      | 36000 lm      |            |                   |                   |                   |                    |               |               |

### Mechanical and Housing

| Order Code | Full Product Name | Bulb Finish | Bulb Shape | Order Code | Full Product Name | Bulb Finish | Bulb Shape |
|------------|-------------------|-------------|------------|------------|-------------------|-------------|------------|
| 313585     | MH175/U/M 12PK    | Clear (CL)  | BD17       | 140848     | MH400/U/ED28 3PK  | Clear (CL)  | ED28       |
| 313593     | MH175/C/U/M 12PK  | Coated      | BD17       | 354621     | MH150/U/M 12PK    | Clear (CL)  | ED17       |
| 140855     | MH175/U UPC 3PK   | Clear (CL)  | ED28       | 274498     | MH400/U 6PK       | Clear (CL)  | ED37       |
| 287334     | MH175/U 12PK      | Clear (CL)  | ED28       | 131623     | MH1500/U 6PK      | Clear (CL)  | BT56       |
| 140822     | MH250/U UPC 3PK   | Clear (CL)  | ED28       | 415224     | MH1000/U 6PK      | Clear (CL)  | BT56       |
| 274845     | MH250/U 12PK      | Clear (CL)  | ED28       | 321505     | MH1000/U/BT37 6PK | Clear (CL)  | BT37       |
| 426023     | MH400/U/ED28 12PK | Clear (CL)  | ED28       |            |                   |             |            |

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