

# Product description

## MHN-TD Essential

Double-envelope, double-ended Metal Halide lamps

### Benefits

- All types have UV-Blocking for reduced health and fading risks

### Features

- Quartz discharge tube containing high-pressure mercury and a mixture of dysprosium, holmium and thulium halides (MHW-TD), with sodium and thallium added for colour correction and arc stabilisation
- Double-ended lamps housed in a tubular clear UV-Block quartz evacuated outer envelope
- Burning position horizontal +/- 45°

### Application

- Indoors – accent lighting, general lighting in downlighters, e.g. in shops and malls
- Downlighters, uplighters and wall-washers, e.g. in shops and malls
- Outdoors – floodlighting monuments, facades and billboards

### Versions

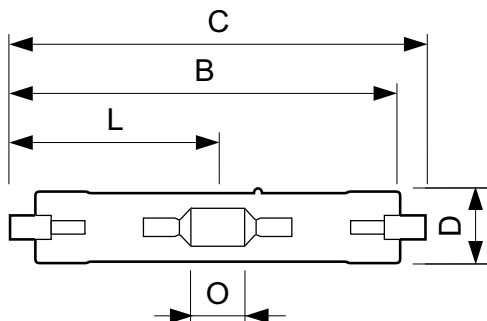


70 W RX7s

150 W RX7s

# MHN-TD Essential

## Dimensional drawing



| Product                               | O       |
|---------------------------------------|---------|
| MHN-TD Essential 150W/730 Rx7s 1CT/12 | 17.8 mm |
| MHN-TD Essential 70W/730 RX7s 1CT/12  | 7.7 mm  |
| MHN-TD Essential 70W/742 RX7s 1CT/12  | 7.7 mm  |
| MHN-TD Essential 150W/742 RX7s 1CT/12 | 17.8 mm |

| Approval and Application      |        |
|-------------------------------|--------|
| Energy Efficiency Label (EEL) | A+     |
| Controls and Dimming          |        |
| Dimmable                      | No     |
| General Information           |        |
| Cap-Base                      | RX7S   |
| Life To 20% Failures (Nom)    | 7000 h |
| Life To 50% Failures (Nom)    | 8000 h |
| Life To 5% Failures (Min)     | 4000 h |
| Life To 5% Failures (Nom)     | 4000 h |
| Light Technical               |        |
| Color Rendering Index (Max)   | -      |
| Color Rendering Index (Min)   | -      |
| Color Rendering Index (Nom)   | 70     |
| Mechanical and Housing        |        |
| Bulb Finish                   | Clear  |

## Approval and Application

| Order Code   | Full Product Name                     | Energy Consumption kWh/1000 h | Mercury (Hg) Content (Nom) |
|--------------|---------------------------------------|-------------------------------|----------------------------|
| 928480500195 | MHN-TD Essential 70W/742 RX7s 1CT/12  | 83 kWh                        | 11 mg                      |
| 928481000192 | MHN-TD Essential 70W/730 RX7s 1CT/12  | 83 kWh                        | 13.4 mg                    |
| 928480600195 | MHN-TD Essential 150W/742 RX7s 1CT/12 | 165 kWh                       | 12.3 mg                    |
| 928481100192 | MHN-TD Essential 150W/730 Rx7s 1CT/12 | 165 kWh                       | 18 mg                      |

## Operating and Electrical (1/2)

| Order Code   | Full Product Name                     | Lamp               |               |               |               |
|--------------|---------------------------------------|--------------------|---------------|---------------|---------------|
|              |                                       | Current (EM) (Nom) | Voltage (Max) | Voltage (Min) | Voltage (Nom) |
| 928480500195 | MHN-TD Essential 70W/742 RX7s 1CT/12  | 0.98 A             | 100 V         | 80 V          | 90 V          |
| 928481000192 | MHN-TD Essential 70W/730 RX7s 1CT/12  | 0.98 A             | 98 V          | 78 V          | 90 V          |
| 928480600195 | MHN-TD Essential 150W/742 RX7s 1CT/12 | 1.8 A              | 108 V         | 88 V          | 98 V          |

| Order Code   | Full Product Name                     | Lamp               |               |               |               |
|--------------|---------------------------------------|--------------------|---------------|---------------|---------------|
|              |                                       | Current (EM) (Nom) | Voltage (Max) | Voltage (Min) | Voltage (Nom) |
| 928481100192 | MHN-TD Essential 150W/730 Rx7s 1CT/12 | 1.8 A              | 106 V         | 86 V          | 96 V          |

## Operating and Electrical (2/2)

| Order Code   | Full Product Name                    | Power (Rated) (Nom) |
|--------------|--------------------------------------|---------------------|
| 928480500195 | MHN-TD Essential 70W/742 RX7s 1CT/12 | 75.0 W              |

| Order Code   | Full Product Name                    | Power (Rated) (Nom) |
|--------------|--------------------------------------|---------------------|
| 928481000192 | MHN-TD Essential 70W/730 RX7s 1CT/12 | 75.0 W              |

## MHN-TD Essential

| Order Code   | Full Product Name                     | Power (Rated) (Nom) |
|--------------|---------------------------------------|---------------------|
| 928480600195 | MHN-TD Essential 150W/742 RX7s 1CT/12 | 150.0 W             |

| Order Code   | Full Product Name                     | Power (Rated) (Nom) |
|--------------|---------------------------------------|---------------------|
| 928481100192 | MHN-TD Essential 150W/730 Rx7s 1CT/12 | 150.0 W             |

### General Information

| Order Code   | Full Product Name                    | Life To 20% Failures (Min) | Life To 50% Failures (Min) |
|--------------|--------------------------------------|----------------------------|----------------------------|
| 928480500195 | MHN-TD Essential 70W/742 RX7s 1CT/12 | 6500 h                     | 8000 h                     |
| 928481000192 | MHN-TD Essential 70W/730 RX7s 1CT/12 | 5800 h                     | 7500 h                     |

| Order Code   | Full Product Name                     | Life To 20% Failures (Min) | Life To 50% Failures (Min) |
|--------------|---------------------------------------|----------------------------|----------------------------|
| 928480600195 | MHN-TD Essential 150W/742 RX7s 1CT/12 | 6500 h                     | 8000 h                     |
| 928481100192 | MHN-TD Essential 150W/730 Rx7s 1CT/12 | 6500 h                     | 8000 h                     |

### Luminaire Design Requirements

| Order Code   | Full Product Name                    | Bulb Temperature (Max) |
|--------------|--------------------------------------|------------------------|
| 928480500195 | MHN-TD Essential 70W/742 RX7s 1CT/12 | 500 °C                 |
| 928481000192 | MHN-TD Essential 70W/730 RX7s 1CT/12 | 500 °C                 |

| Order Code   | Full Product Name                     | Bulb Temperature (Max) |
|--------------|---------------------------------------|------------------------|
| 928480600195 | MHN-TD Essential 150W/742 RX7s 1CT/12 | 650 °C                 |
| 928481100192 | MHN-TD Essential 150W/730 Rx7s 1CT/12 | 650 °C                 |

### Light Technical (1/3)

| Order Code   | Full Product Name                    | Chromaticity Coordinate X (Nom) | Chromaticity Coordinate Y (Nom) | Color Code | Color Designation |
|--------------|--------------------------------------|---------------------------------|---------------------------------|------------|-------------------|
| 928480500195 | MHN-TD Essential 70W/742 RX7s 1CT/12 | 370                             | 370                             | 742        | Cool White (CW)   |
| 928481000192 | MHN-TD Essential 70W/730 RX7s 1CT/12 | 434                             | 402                             | 730        | Warm White (WW)   |

| Order Code   | Full Product Name                     | Chromaticity Coordinate X (Nom) | Chromaticity Coordinate Y (Nom) | Color Code | Color Designation |
|--------------|---------------------------------------|---------------------------------|---------------------------------|------------|-------------------|
| 928480600195 | MHN-TD Essential 150W/742 RX7s 1CT/12 | 370                             | 370                             | 742        | -                 |
| 928481100192 | MHN-TD Essential 150W/730 Rx7s 1CT/12 | 434                             | 400                             | 730        | Warm White (WW)   |

### Light Technical (2/3)

| Order Code   | Full Product Name                     | Correlated Color Temperature (Nom) | Lumen Maintenance 10000 h (Min) | Lumen Maintenance 10000 h (Nom) | Lumen Maintenance 2000 h (Min) | Lumen Maintenance 2000 h (Nom) | Lumen Maintenance 5000 h (Min) | Lumen Maintenance 5000 h (Nom) | Luminous Efficacy (rated) (Nom) | Luminous Flux (Rated) (Min) |
|--------------|---------------------------------------|------------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------|
| 928480500195 | MHN-TD Essential 70W/742 RX7s 1CT/12  | 4200 K                             | 40 %                            | 50 %                            | 79 %                           | 85 %                           | 68 %                           | 75 %                           | 75 lm/W                         | 5000 lm                     |
| 928481000192 | MHN-TD Essential 70W/730 RX7s 1CT/12  | 3000 K                             | 45 %                            | 55 %                            | 59 %                           | 65 %                           | 53 %                           | 60 %                           | 80 lm/W                         | 5200 lm                     |
| 928480600195 | MHN-TD Essential 150W/742 RX7s 1CT/12 | 4200 K                             | 60 %                            | 70 %                            | 74 %                           | 80 %                           | 68 %                           | 75 %                           | 81 lm/W                         | 11600 lm                    |
| 928481100192 | MHN-TD Essential 150W/730 Rx7s 1CT/12 | 3000 K                             | 50 %                            | 60 %                            | 69 %                           | 75 %                           | 58 %                           | 65 %                           | 87 lm/W                         | 12200 lm                    |

### Light Technical (3/3)

| Order Code   | Full Product Name                    | Luminous Flux (Rated) (Nom) |
|--------------|--------------------------------------|-----------------------------|
| 928480500195 | MHN-TD Essential 70W/742 RX7s 1CT/12 | 5500 lm                     |
| 928481000192 | MHN-TD Essential 70W/730 RX7s 1CT/12 | 6000 lm                     |

| Order Code   | Full Product Name                     | Luminous Flux (Rated) (Nom) |
|--------------|---------------------------------------|-----------------------------|
| 928480600195 | MHN-TD Essential 150W/742 RX7s 1CT/12 | 12900 lm                    |
| 928481100192 | MHN-TD Essential 150W/730 Rx7s 1CT/12 | 13800 lm                    |

Mechanical and Housing

| Order Code   | Full Product Name                    | Bulb Material   | Bulb Shape |
|--------------|--------------------------------------|-----------------|------------|
| 928480500195 | MHN-TD Essential 70W/742 RX7s 1CT/12 | UV-Block Quartz | T21        |
| 928481000192 | MHN-TD Essential 70W/730 RX7s 1CT/12 | -               | T21        |

| Order Code   | Full Product Name                     | Bulb Material | Bulb Shape |
|--------------|---------------------------------------|---------------|------------|
| 928480600195 | MHN-TD Essential 150W/742 RX7s 1CT/12 | -             | T24        |
| 928481100192 | MHN-TD Essential 150W/730 Rx7s 1CT/12 | -             | T24        |

Color Rendering Diagrams

