



# Product description

## MH-NaSc

Sodium Scandium Metal Halide Lamps consisting of a gasfilled glass bulb, which alternatively are clear or internal coated, and a quartz discharge tube (DT).

### Benefits

- Energy saving solution with better color appearance and rendering property for conventional version.

### Features

- Quartz discharge tube containing high-pressure mercury and a mixture of Sodium and Scandium halides, which contribute to multi-lines spectra; with Ar to aid ignition.
- Better colour rendering index around 60
- Luminous efficacy up to 90 lm/W
- Universal operation position permitted

### Application

- Stadium and sports facilities lighting
- Industrial and commercial lighting—factory
- supermarket and exhibition hall etc.
- Public lighting—square, station, port, airport etc.
- Decorative flood lighting—monument, buildings e.g.
- hotel

# MH-NaSc

## Versions



E39/E40, Clear

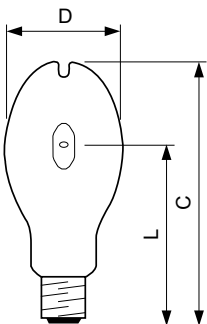
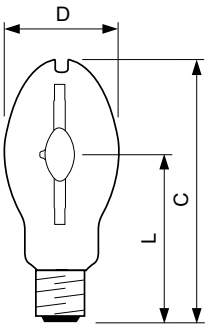


E40 & E39 Coated



E26/E27, Clear

## Dimensional drawing



Product	D (max)	L (min)	C (max)
MH 100W/640 E27 CL 1SL/24	56 mm	83 mm	141 mm
MH 150W/640 E27 CL 1SL/24	56 mm	83 mm	141 mm
MH 150W/640 E27 CL 1SL/24	56 mm	83 mm	141 mm
MH 100W/640 E27 CL 1SL/24	56 mm	83 mm	141 mm
MH 70W/640 E27 CL 1SL/24	56 mm	83 mm	141 mm
MH 70W/640 E27 CL 1SL/24	56 mm	83 mm	141 mm
MH Quartz 400W/637 E40 CO U 1SL/6	121 mm	184 mm	290 mm
MH 400W/640 E40 CL U 1SL/6	121 mm	184 mm	290 mm

Product	D (max)	L (min)	C (max)
MH 250W/637 E40 CO U 1SL/12	91 mm	149 mm	226 mm
MH - 250W/640 E40 CL U 1SL/12	91 mm	149 mm	226 mm
MH 175W/640 E40 CL U 1SL/12	91 mm	146 mm	226 mm

### Controls and Dimming

Dimmable No

### Operating and Electrical

Power (Rated) (Min) - W

### General Information

Operating Position H

System Description -

### Light Technical

Color Designation Cool White (CW)

Approval and Application

Order Code	Full Product Name	Energy	Energy	Mercury
		Consumption	Efficiency	(Hg)
		kWh/1000 h	Label (EEL)	Content (Nom)
928480200097	MH 175W/640 E40 CL U 1SL/12	192 kWh	A+	28 mg
928480300097	MH - 250W/640 E40 CL U 1SL/12	275 kWh	A+	33 mg
928480400097	MH 400W/640 E40 CL U 1SL/6	440 kWh	A+	38 mg
928480310097	MH 250W/637 E40 CO U 1SL/12	275 kWh	A+	33 mg
928480410097	MH Quartz 400W/637 E40 CO U 1SL/6	440 kWh	A+	38 mg
928484400092	MH 70W/640 E27 CL 1SL/24	-	-	12 mg

Order Code	Full Product Name	Energy	Energy	Mercury
		Consumption	Efficiency	(Hg)
		kWh/1000 h	Label (EEL)	Content (Nom)
928484400093	MH 70W/640 E27 CL 1SL/24	-	-	12 mg
928484500092	MH 100W/640 E27 CL 1SL/24	110 kWh	A+	10.2 mg
928484500093	MH 100W/640 E27 CL 1SL/24	110 kWh	A+	10.2 mg
928484600092	MH 150W/640 E27 CL 1SL/24	165 kWh	-	11 mg
928484600093	MH 150W/640 E27 CL 1SL/24	165 kWh	-	11 mg

Operating and Electrical

Order Code	Full Product Name	Lamp Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)	Power (Rated) (Max)	Power (Rated) (Nom)
928480200097	MH 175W/640 E40 CL U 1SL/12	1.5 A	147 V	117 V	132 V	- W	175.0 W
928480300097	MH - 250W/640 E40 CL U 1SL/12	2.1 A	148 V	118 V	133 V	- W	250.0 W
928480400097	MH 400W/640 E40 CL U 1SL/6	3.25 A	150 V	120 V	135 V	440.0 W	400.0 W
928480310097	MH 250W/637 E40 CO U 1SL/12	2.1 A	148 V	118 V	133 V	- W	250.0 W
928480410097	MH Quartz 400W/637 E40 CO U 1SL/6	3.25 A	150 V	120 V	135 V	440.0 W	400.0 W
928484400092	MH 70W/640 E27 CL 1SL/24	0.98 A	100 V	75 V	85 V	- W	70.0 W
928484400093	MH 70W/640 E27 CL 1SL/24	0.98 A	100 V	75 V	85 V	- W	70.0 W
928484500092	MH 100W/640 E27 CL 1SL/24	1.1 A	110 V	90 V	100 V	- W	100.0 W
928484500093	MH 100W/640 E27 CL 1SL/24	1.1 A	110 V	90 V	100 V	- W	100.0 W
928484600092	MH 150W/640 E27 CL 1SL/24	1.8 A	105 V	85 V	95 V	- W	150.0 W
928484600093	MH 150W/640 E27 CL 1SL/24	1.8 A	105 V	85 V	95 V	- W	150.0 W

General Information

Order Code	Full Product Name	Cap-Base	Life To	Life To	Life To
			20% Failures (Nom)	50% Failures (Nom)	5% Failures (Nom)
928480200097	MH 175W/640 E40 CL U 1SL/12	E40	-	10000 h	-
928480300097	MH - 250W/640 E40 CL U 1SL/12	E40	-	10000 h	-
928480400097	MH 400W/640 E40 CL U 1SL/6	E40	-	20000 h	-
928480310097	MH 250W/637 E40 CO U 1SL/12	E40	-	10000 h	-
928480410097	MH Quartz 400W/637 E40 CO U 1SL/6	E40	-	16000 h	-
928484400092	MH 70W/640 E27 CL 1SL/24	E27	5000 h	10000 h	2000 h

Order Code	Full Product Name	Cap-Base	Life To	Life To	Life To
			20% Failures (Nom)	50% Failures (Nom)	5% Failures (Nom)
928484400093	MH 70W/640 E27 CL 1SL/24	E27	5000 h	10000 h	2000 h
928484500092	MH 100W/640 E27 CL 1SL/24	E27	5000 h	10000 h	2000 h
928484500093	MH 100W/640 E27 CL 1SL/24	E27	5000 h	10000 h	2000 h
928484600092	MH 150W/640 E27 CL 1SL/24	E27	5000 h	10000 h	2000 h
928484600093	MH 150W/640 E27 CL 1SL/24	E27	5000 h	10000 h	2000 h

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928480200097	MH 175W/640 E40 CL U 1SL/12	400 °C
928480300097	MH - 250W/640 E40 CL U 1SL/12	400 °C
928480400097	MH 400W/640 E40 CL U 1SL/6	400 °C
928480310097	MH 250W/637 E40 CO U 1SL/12	400 °C
928480410097	MH Quartz 400W/637 E40 CO U 1SL/6	400 °C
928484400092	MH 70W/640 E27 CL 1SL/24	450 °C

Order Code	Full Product Name	Bulb Temperature (Max)
928484400093	MH 70W/640 E27 CL 1SL/24	450 °C
928484500092	MH 100W/640 E27 CL 1SL/24	450 °C
928484500093	MH 100W/640 E27 CL 1SL/24	450 °C
928484600092	MH 150W/640 E27 CL 1SL/24	450 °C
928484600093	MH 150W/640 E27 CL 1SL/24	450 °C

## Light Technical (1/2)

Order Code	Full Product Name	Chromaticity	Chromaticity	Color Code	Correlated Color Temperature (Nom)	Color	Lumen	Lumen Maintenance 2000 h (Nom)
		Coordinate X (Nom)	Coordinate Y (Nom)			Rendering Index (Nom)	Maintenance 1000 h (Nom)	
928480200097	MH 175W/640 E40 CL U 1SL/12	375	390	640	4300 K	60	-	80 %
928480300097	MH - 250W/640 E40 CL U 1SL/12	390	390	640	4000 K	60	-	80 %
928480400097	MH 400W/640 E40 CL U 1SL/6	390	400	640	3900 K	60	-	85 %
928480310097	MH 250W/637 E40 CO U 1SL/12	405	395	637	3600 K	61	85 %	-
928480410097	MH Quartz 400W/637 E40 CO U 1SL/6	405	395	637	3700 K	61	85 %	-
928484400092	MH 70W/640 E27 CL 1SL/24	390	380	640	4000 K	60	-	75 %
928484400093	MH 70W/640 E27 CL 1SL/24	390	380	640	4000 K	60	-	75 %
928484500092	MH 100W/640 E27 CL 1SL/24	375	385	640	4000 K	65	-	75 %
928484500093	MH 100W/640 E27 CL 1SL/24	375	385	640	4000 K	65	-	75 %
928484600092	MH 150W/640 E27 CL 1SL/24	385	390	640	4000 K	65	-	75 %
928484600093	MH 150W/640 E27 CL 1SL/24	385	390	640	4000 K	65	-	75 %

## Light Technical (2/2)

Order Code	Full Product Name	Lumen	Luminous	Luminous	Luminous
		Maintenance 5000 h (Nom)	Efficacy (rated) (Nom)	Flux (Rated) (Min)	Flux (Rated) (Nom)
928480200097	MH 175W/640 E40 CL U 1SL/12	-	80 lm/W	11050 lm	14000 lm
928480300097	MH - 250W/640 E40 CL U 1SL/12	-	82 lm/W	17450 lm	20500 lm
928480400097	MH 400W/640 E40 CL U 1SL/6	-	97.5 lm/W	34000 lm	39000 lm
928480310097	MH 250W/637 E40 CO U 1SL/12	-	76 lm/W	17200 lm	19000 lm
928480410097	MH Quartz 400W/637	-	83.5 lm/W	25900 lm	33400 lm

Order Code	Full Product Name	Lumen	Luminous	Luminous	Luminous
		Maintenance 5000 h (Nom)	Efficacy (rated) (Nom)	Flux (Rated) (Min)	Flux (Rated) (Nom)
	E40 CO U 1SL/6				
928484400092	MH 70W/640 E27 CL 1SL/24	60 %	80 lm/W	4200 lm	5600 lm
928484400093	MH 70W/640 E27 CL 1SL/24	60 %	80 lm/W	4200 lm	5600 lm
928484500092	MH 100W/640 E27 CL 1SL/24	60 %	90 lm/W	7200 lm	9000 lm
928484500093	MH 100W/640 E27 CL 1SL/24	60 %	90 lm/W	7200 lm	9000 lm
928484600092	MH 150W/640 E27 CL 1SL/24	60 %	90 lm/W	12150 lm	13500 lm
928484600093	MH 150W/640 E27 CL 1SL/24	60 %	90 lm/W	12150 lm	13500 lm

## Mechanical and Housing

## MH-NaSc

Order Code	Full Product Name	Bulb Finish	Bulb Shape
928480200097	MH 175W/640 E40 CL U 1SL/12	Clear	ED90
928480300097	MH - 250W/640 E40 CL U 1SL/12	Clear	ED90
928480400097	MH 400W/640 E40 CL U 1SL/6	Clear	ED120
928480310097	MH 250W/637 E40 CO U 1SL/12	Coated glass	ED90
928480410097	MH Quartz 400W/637 E40 CO U 1SL/6	Coated glass	ED120
928484400092	MH 70W/640 E27 CL 1SL/24	Clear	ED55

Order Code	Full Product Name	Bulb Finish	Bulb Shape
928484400093	MH 70W/640 E27 CL 1SL/24	Clear	ED55
928484500092	MH 100W/640 E27 CL 1SL/24	Clear	ED55
928484500093	MH 100W/640 E27 CL 1SL/24	Clear	ED55
928484600092	MH 150W/640 E27 CL 1SL/24	Clear	ED55
928484600093	MH 150W/640 E27 CL 1SL/24	Clear	ED55

