



# Product Description

## MASTER MHN-SA

Compact quartz metal halide lamps with double-pinch

### Benefits

- Allows compact and very efficient luminaire systems with high precision optics for good beam control and minimal spill light
- Very good colour rendering creates a pleasant ambience with high visual comfort for players and spectators
- Continuous spectral distribution offers a superior solution for (semi-) professional stadiums with regular TV coverage

### Features

- Very compact source (Short Arc) with high luminous efficacy and superior colour rendering
- Double-pinch concept results in long lifetime
- Natural white colour appearance, high colour rendering and good colour stability
- Daylight colour temperature eases transition from daylight to artificial lighting

### Application

- Professional sports lighting and floodlighting

### Warnings and Safety

- Use only in totally enclosed luminaire, even during testing (IEC61167, IEC 62035, IEC60598)
- The luminaire must be able to contain hot lamp parts if the lamp ruptures
- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

# MASTER MHN-SA

## Approval and Application

Energy Efficiency Label (EEL) A+

## Controls and Dimming

Dimmable No

## Operating and Electrical

Voltage (Max) 220 V

Voltage (Min) 185 V

Voltage (Nom) 205 V

## General Information

Life To 5% Failures (Nom) 1700 h

Operating Position P15

## Light Technical

Chromaticity Coordinate X (Nom) 330

Colour Code 956

Colour Designation Daylight

Correlated Colour Temperature (Nom) 5600 K

## Mechanical and Housing

Bulb Finish Clear

Bulb Shape TD40

## Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/ 1000 h	Mercury (Hg) Content (Nom)
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	2035 kWh	250 mg
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	2305 kWh	215 mg

## Operating and Electrical

Order Code	Full Product Name	Lamp Current (EM) (Nom)	Power (Rated) (Nom)
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	10.5 A	1850.0 W

Order Code	Full Product Name	Lamp Current (EM) (Nom)	Power (Rated) (Nom)
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	11.8 A	2095.0 W

## General Information

Order Code	Full Product Name	Cap- Base	Life To 10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	(P)SFC	2400 h	3600 h	6100 h

Order Code	Full Product Name	Cap- Base	Life To 10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	X830R	2300 h	3000 h	5000 h

## Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	980 °C
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	1015 °C

## Light Technical (1/2)

## MASTER MHN-SA

Order Code	Full Product Name	Chromaticity Coordinate Y (Nom)	Colour		Lumen Maintenance 1000 h (Nom)	Lumen Maintenance 2000 h (Nom)
			Rendering Index (Nom)	Index (Nom)		
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	339	86		90 %	81 %
24183600	MASTER MHN-SA	366	81		96.5 %	92.5 %

Order Code	Full Product Name	Chromaticity Coordinate Y (Nom)	Colour		Lumen Maintenance 1000 h (Nom)	Lumen Maintenance 2000 h (Nom)
			Rendering Index (Nom)	Index (Nom)		
	2000W/956 400V XW HO UNP/1					

### Light Technical (2/2)

Order Code	Full Product Name	Lumen Maintenance	Luminous Efficacy (rated)	Luminous Flux (Rated) (Nom)
		5000 h (Nom)	(Nom)	(Nom)
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	71 %	86 lm/W	160000 lm

Order Code	Full Product Name	Lumen Maintenance	Luminous Efficacy (rated)	Luminous Flux (Rated) (Nom)
		5000 h (Nom)	(Nom)	(Nom)
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	78 %	108 lm/W	226000 lm

