

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

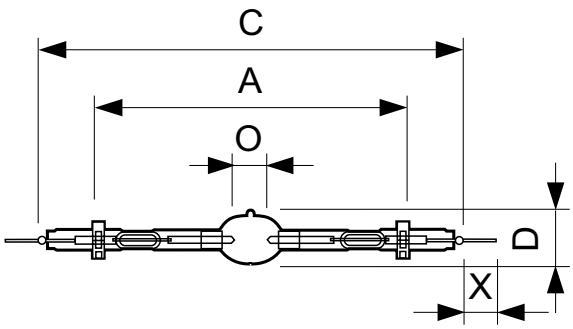
- Professional sports lighting and floodlighting

MASTER MHN-SA

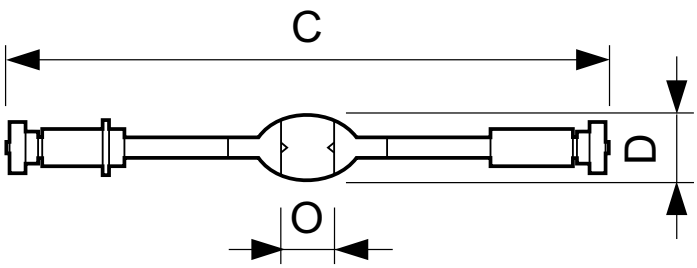
Versions



Dimensional drawing



Product	D (max)	O	X	A	C (max)
MASTER MHN-SA 2000W/956 400V XW HO UNP/1	41 mm	25 mm	34 mm	226 mm	369 mm
MASTER MHN-SA 1800W/956 230V XW UNP/1	41 mm	25 mm	25 mm	318 mm	369 mm
MASTER MHN-SA 2000W/956 400V XW UNP/1	41 mm	25 mm	25 mm	226 mm	369 mm



Product	D (max)	O	C (max)
MASTER MHN-SA 1800W/956 (P)SFC 400V	41 mm	25 mm	364 mm
MASTER MHN-SA 1800W/956 (P)SFC 230V	41 mm	25 mm	364 mm

MASTER MHN-SA

Approval and Application	
Energy Efficiency Label (EEL)	A+
Controls and Dimming	
Dimmable	no
General Information	
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 (CL)
Bulb Shape	TD40

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/ 1000 h	Mercury (Hg) Content (Nom)
20075400	MASTER MHN-SA 1800W/956 (P)SFC 230V	1980 kWh	92 mg
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	2035 kWh	250 mg
20079200	MASTER MHN-SA 2000W/956 400V XW UNP/1	2244 kWh	225 mg
20106500	MASTER MHN-SA 1800W/956 230V XW UNP/1	1980 kWh	92 mg
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	2304 kWh	215 mg

Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
20075400	MASTER MHN-SA 1800W/956 (P)SFC 230V	17.3 A	130 V	110 V	120 V
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	10.5 A	220 V	185 V	205 V
20079200	MASTER MHN-SA 2000W/956 400V XW UNP/1	11.3 A	220 V	185 V	205 V

Order Code	Full Product Name	Lamp Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
20106500	MASTER MHN-SA 1800W/956 230V XW UNP/1	17.3 A	130 V	110 V	120 V
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	11.8 A	220 V	185 V	205 V

Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated) (Nom)
20075400	MASTER MHN-SA 1800W/956 (P)SFC 230V	1800.0 W
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	1850.0 W
20079200	MASTER MHN-SA 2000W/956 400V XW UNP/1	2040.0 W

Order Code	Full Product Name	Power (Rated) (Nom)
20106500	MASTER MHN-SA 1800W/956 230V XW UNP/1	1800.0 W
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	2095.0 W

General Information (1/2)

Order Code	Full Product Name	Cap-Base	Life To 10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)
20075400	MASTER MHN-SA 1800W/956 (P)SFC 230V	(P)SFC	2000 h	3200 h	6100 h
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	(P)SFC	2400 h	3600 h	6100 h
20079200	MASTER MHN-SA 2000W/956 400V XW UNP/1	X830R	1400 h	2100 h	3700 h

Order Code	Full Product Name	Cap-Base	Life To 10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)
20106500	MASTER MHN-SA 1800W/956 230V XW UNP/1	X830R	2300 h	3000 h	5000 h
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	X830R	2300 h	3000 h	5000 h

General Information (2/2)

Order Code	Full Product Name	Life To 5% Failures (Nom)
20075400	MASTER MHN-SA 1800W/956 (P)SFC 230V	1300 h
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	1700 h
20079200	MASTER MHN-SA 2000W/956 400V XW UNP/1	1000 h
20106500	MASTER MHN-SA 1800W/956 230V XW UNP/1	1800 h
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	1700 h

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
20075400	MASTER MHN-SA 1800W/956 (P)SFC 230V	980 °C
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	980 °C
20079200	MASTER MHN-SA 2000W/956 400V XW UNP/1	980 °C
20106500	MASTER MHN-SA 1800W/956 230V XW UNP/1	980 °C
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	1015 °C

Light Technical (1/2)

Order Code	Full Product Name	Chromaticity Coordinate Y (Nom)	Colour Rendering Index (Nom)	Lumen Maintenance 1000 h (Nom)	Lumen Maintenance 2000 h (Nom)
20075400	MASTER MHN-SA 1800W/956 (P)SFC 230V	339	86	95 %	91 %
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	339	86	90 %	81 %
20079200	MASTER MHN-SA 2000W/956 400V XW UNP/1	362	85	88 %	79 %
20106500	MASTER MHN-SA 1800W/956 230V XW UNP/1	339	86	92 %	80 %
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	366	81	96.5 %	92.5 %

Light Technical (2/2)

Order Code	Full Product Name	Lumen Maintenance 5000 h (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Nom)
20075400	MASTER MHN-SA 1800W/956 (P)SFC 230V	76 %	86 lm/W	155000 lm
20076100	MASTER MHN-SA 1800W/956 (P)SFC 400V	71 %	86 lm/W	160000 lm
20079200	MASTER MHN-SA 2000W/956 400V XW UNP/1	70 %	98 lm/W	200000 lm
20106500	MASTER MHN-SA 1800W/956 230V XW UNP/1	60 %	86 lm/W	155000 lm
24183600	MASTER MHN-SA 2000W/956 400V XW HO UNP/1	78 %	108 lm/W	226000 lm



© 2017 Philips Lighting Holding B.V. All rights reserved. Philips Lighting reserves the right to make changes in specifications and/or to discontinue any product at any timewithout notice or obligation and will not be liable for any consequences resulting from the use of this publication.

www.lighting.philips.com
2017, March 16 - data subject to change