

ArenaVision



ArenaVision – now with even greater optical efficiency

Since it was first introduced in 1988, Philips ArenaVision has proven to be the best floodlighting system ever for sports lighting applications, most of which have to fulfill the highest specifications to enable television coverage of national and international events.

ArenaVision – a great partner

ArenaVision is an integrated system that is supplied by one manufacturer as part of a complete system. Philips is the only manufacturer to provide all relevant technologies from lamp to gear to floodlight, so that everything works in synergy. With ArenaVision, the key disciplines of lamp, optic and gear design were brought together with a single mission: to create the best possible floodlight that will operate effectively for many years.

Thanks to the innovative new Philips MHN-SE 2000 W compact single ended metal-halide lamp and high-tech single-piece precision optics, the new 2 kW ArenaVision MVF404 offers much higher optical efficiency than ever before.

In addition to increased light output and optical efficiency, the upgraded 2 kW ArenaVision floodlight boasts many improvements, such as easy lamp fitting and replacement, a new safety knife connector system and a breakthrough electronic hot-restrike solution – while continuing to offer all the benefits of its predecessor as well.

The ArenaVision range includes two floodlights: The ArenaVision MVF404, dedicated to outdoor sports stadiums and large indoor arenas, is specially designed to increase dramatically the theatrical and emotional value of sports for TV-audiences, spectators and players. The ArenaVision MVF403 is ideal for indoor sports halls as well as many outdoor sports and other illumination uses.

Both come with a variety of reflectors and lamps and offer a choice of optical systems and three levels of power output for every conceivable application.

www.philips.com/lighting

MVF403



MVF404



Exclusive lamp technology only in ArenaVision



The innovative ArenaVision MVF404 floodlight is fitted with a new compact single-ended lamp, which has been developed specifically and exclusively for ArenaVision and brings out the best in the game.

This new Philips Short-Arc MASTER MHN-SE 2000 W / 956 lamp is a quartz metal-halide lamp designed to meet high demanding lighting and TV broadcasting requirements, e.g. excellent color rendering ($R_a > 90$), daylight appearance (T_c 5600K) and hot re-strike capabilities to ensure immediate re-ignition after a short power cut. Its single-ended GX22 lamp base enables it to be mounted in the lampholder in an axial position, without an outer envelope and is suitable only for a mains voltage of 380-415 V/50 Hz. Together with the special optics designed around the axial concept, this ensures maximum optical efficiency and enables accurate light distribution with a minimum of spill light.

Sports floodlighting

The new lamp has been developed for universal burning positions to allow the floodlights to be mounted in any standard positions needed.

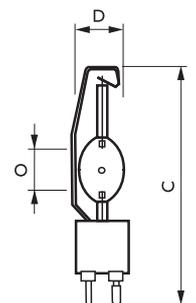
The hot-restrikeable MASTER MHN-SE 2000 W lamp operates in combination with a standard Philips gear unit.

Lamp specifications

	Power (W)	Supply voltage (V)	Light output (Lm)	Luminous efficacy (Lm/W)	Cap/ base	Operating position	Average lifetime (h)	Lamp current (A nominal)	Lamp voltage (V nominal)
MHN-SE 2000W/956 400V	2000	400	202.000	101	GX22	Universal	5000	11.6	205

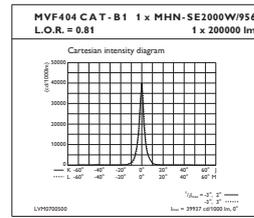
	Color rendering (R_a)	Color temperature (K)	Chromaticity coordinate X	Chromaticity coordinate Y
MHN-SE 2000W/956 400V	90	5600	0.320	0.355

Lamp dimensions	C		D	O
	Nom.	Max.	Max.	Nom.
MHN-SE 2000W/956 400V	196	198	41	25

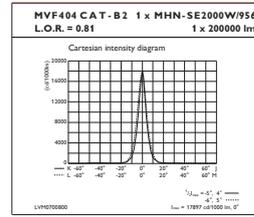




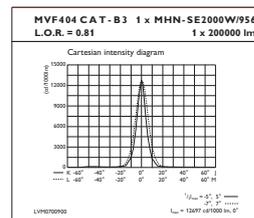
Cat B1 reflector (extra narrow beam)



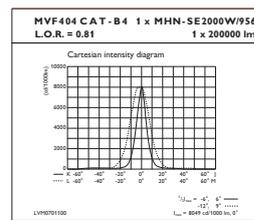
Cat B2 reflector (narrow beam)



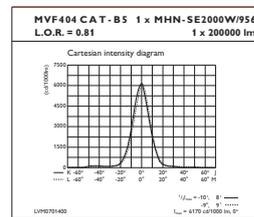
Cat B3 reflector (medium beam)



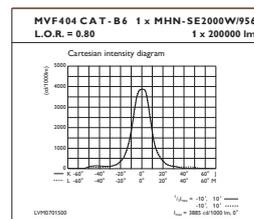
Cat B4 reflector (medium beam)



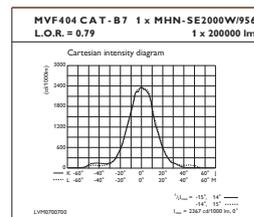
Cat B5 reflector (medium beam)



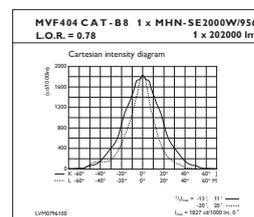
Cat B6 reflector (wide beam)



Cat B7 reflector (wide beam)



Cat B8 reflector (wide beam)





Increased optical efficiency

The ArenaVision MVF404 floodlights have been designed with the latest 2000 W axial lamp-optical concept providing more light, which is controlled by the world-class design optical system to give greater efficiency.

Consequently, even fewer luminaires are required for the application coverage, allowing substantial savings on capital, energy and maintenance.

Like the previous 2 kW version, the innovative ArenaVision MVF404 offers a choice of several distinct beam distributions, each with sharp cut-off characteristics. The new mono-block optics, which have been designed specifically for the new axial lamp-optic concept using the highest-purity aluminum, enable greater freedom in lighting design than ever before.



Lower installation and maintenance costs

Thanks to the new compact lamp and a simple spring-clip device, lamping and relamping have been made much easier, and can be done with one hand. The lamp can easily be fitted into the lamp socket, while tight tolerances mean there is no room for error. On-site handling is more straightforward, quicker and therefore cheaper.

Safety knife connector system

In the ArenaVision MVF404, safety is ensured by means of the built-in safety knife connector system, which automatically disconnects the mains power when the rear-access back cover is opened, without the need for an additional relay or contactor or any extra cabling. This can also give rise to savings on capital and installation costs.



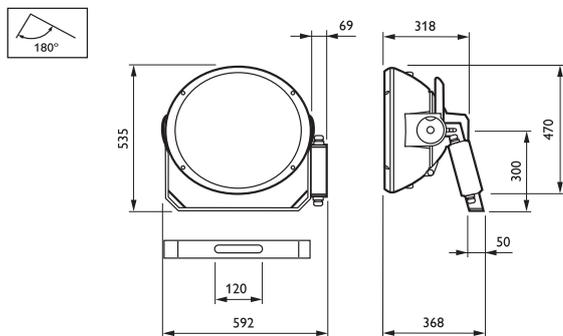
Breakthrough electronic hot-restrike option

The (optional) hot-restrike version of the ArenaVision MVF404 is designed to ensure immediate re-ignition after a short power cut, so as to prevent long periods without light. The floodlight comes equipped with a special electronic compact hot-restrike module, which is permanently fixed to the luminaire. Thanks to innovations in technology, with the new electronic hot-restrike system everything is incorporated into a single module with integral timer to provide the most economical solution.

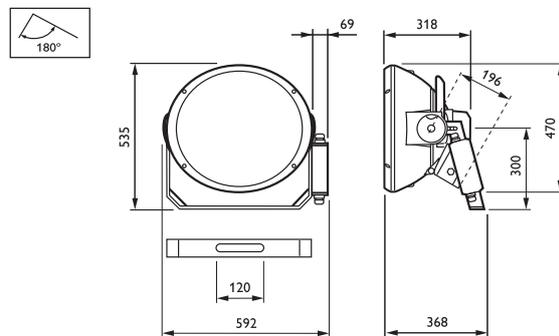


ArenaVision	
Type	MVF404
Light source	HID: 1 x MASTER MHN-SE / GX22-HR / 2000 W
Lamp included	Yes (light color 956)
Optic	Beam category B1 (B1) Beam category B2 (B2) Beam category B3 (B3) Beam category B4 (B4) Beam category B5 (B5) Beam category B6 (B6) Beam category B7 (B7) Beam category B8 (B8)
Optical cover	Front-glass for downlighting (DOWN) and uplighting versions (UP)
Ignitor	Series (SI), integral Hot-restrike, electronic (HRE), integral
Options	Aiming memory (AM) to safeguard the original aiming position of the luminaire during servicing Hot re-strike versions enabling immediate restoration of lighting after power supply failure Uplighting versions available for architectural lighting Special cable sleeve version for tropical regions
Materials and finishing	Housing and rear cover: non-corrosive, high-pressure die-cast aluminum Glass: chemically toughened, 1.6 mm thick (for downlighting versions), ceramic 3 mm thick (for uplighting versions) Mounting bracket: hot-dipped galvanized, painted steel Clips: stainless steel (to secure the back cover) Reflector: anodized and brightened 99.99% aluminum Finishing in raw aluminum

Installation	On mast headframe, ceiling, wall and floor mounting The lamp is easily installed and lamping/relamping can be done with one hand only Precision aiming facilities at both top and bottom of the housing for use in conjunction with the ZVF403 PAD accessory Adjustment of mounting bracket: 360° Ambient temperature outdoor: 35°C (25°C indoor) Drag factor (Cx): 0.93 Projected area in 70° position: 0.20 m ² Max adjustment from the horizontal: -90 / +90°
Maintenance	Lamp access by opening clips of rear cover (tool-less) Equipped with knife connector system, which automatically disconnects the mains power when the rear-access back cover is opened (no need for additional relay/contactor or any extra cabling) No internal cleaning required
Accessories	External louver (ZVF403 GS), precision (ZVF403 PAD) aiming device
Remarks	Equipped with series ignitor (SI) and terminal block in aluminum connection box on the bracket Color filters for architectural lighting are available on request Wire mesh to prevent large glass falling out Pre-wired 380 - 415 V / 50 Hz gear trays (ZVF320) are available, to be ordered separately
Main applications	Outdoor sport stadiums



MVF404 SI



MVF404 HRE



ArenaVision MVF404 sports flood-lighting luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MVF404 MHN-SE2000W/956 380-415V B1 SI	15.00	502008 00
MVF404 MHN-SE2000W/956 380-415V B2 SI	15.00	502015 00
MVF404 MHN-SE2000W/956 380-415V B3 SI	15.00	502022 00
MVF404 MHN-SE2000W/956 380-415V B4 SI	15.00	502039 00
MVF404 MHN-SE2000W/956 380-415V B5 SI	15.00	502046 00
MVF404 MHN-SE2000W/956 380-415V B6 SI	15.00	502053 00
MVF404 MHN-SE2000W/956 380-415V B7 SI	15.00	502060 00
MVF404 MHN-SE2000W/956 B8 SI	15.06	604092 00

Please contact your local Philips representative for additional configurations

Accessories



Precision aiming device

Product ID	EOC
ZVF403 PAD	I40438 00



External louver

Product ID	EOC
ZVF403 GS	239996 00

ArenaVision MVF404 sports flood-lighting luminaire with precision aiming device (ZVF403 PAD)



Side view of ArenaVision MVF404 with connection box on the bracket



The ArenaVision MVF404 floodlight is fitted with a Philips Short-Arc MASTER MHN-SE 2000W lamp.



Built-in safety knife connector system, which automatically disconnects the mains power when the rear-access back cover is opened.



Compact lamp with conventional hot-restrike ignitor (HRE)

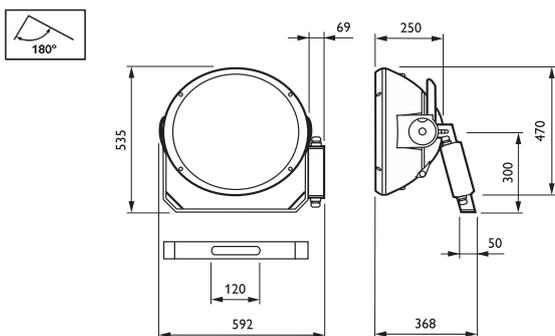






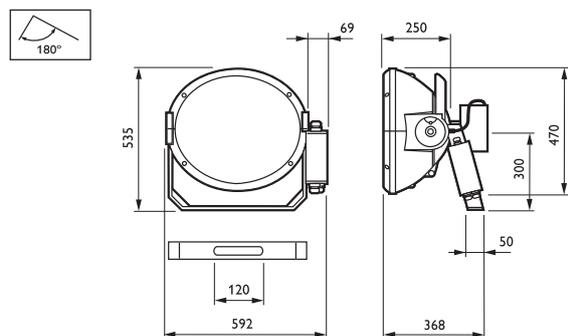
Stade Yves du Manoir, Montpellier, France
Photography: Pierre Crouzet

ArenaVision	
Type	MVF403
Light source	HID: 1 x MASTER MHN-SA / XW / 1800 W 1 x MASTER MHN-LA / XWH / 1000 W
Lamp included	Yes (K or light color 842 or 956)
Optic	Beam category A1 (A1) Beam category A2 (A2) Beam category A3 (A3) Beam category A4 (A4) Beam category A5 (A5) Beam category A6 (A6) Beam category A7 (A7) Beam category A8 (A8)
Optical cover	Front glass for downlighting (DOWN) and uplighting versions (UP)
Ignitor	Series (SI), 1000 W, integral Semi-parallel (SP), external on a separate gear tray (ZVF320) Hot-restrike (HR), integral
Options	Aiming memory (AM) to safeguard the original aiming position of the luminaire during servicing Hot re-strike versions enabling immediate restoration of lighting after power supply failure Uplighting versions available for architectural lighting Special cable sleeve version for tropical regions
Materials and finishing	Housing and rear cover: non-corrosive, high-pressure die-cast aluminum Glass: chemically toughened, 1.6 mm thick (for downlighting versions), ceramic 3 mm thick (for uplighting versions) Mounting bracket: hot-dipped galvanized, painted steel Clips: stainless steel (to secure the back cover) Reflector: anodized and brightened 99.99% aluminum Finishing in raw aluminum



MVF403 SP/SI

Installation	On mast headframe, ceiling, wall and floor mounting The lamp only needs to be installed mechanically; electrical connection achieved by closing the rear cover Precision aiming facilities at both top and bottom of the housing for use in conjunction with the ZVF403 PAD accessory Adjustment of mounting bracket: 360° Ambient temperature outdoor: MASTER MHN-SA 1800 W lamp version: 35°C (25°C indoor) MASTER MHN-LA 1000 W lamp version: 45°C (and indoor) Drag factor (Cx): 0.93 Projected area in 70° position: 0.20 m² Max adjustment from the horizontal: -90 / +90°
Maintenance	Lamp access by opening clips of rear cover (tool-less) Equipped with safety switch to cut off current when luminaire is opened (requires additional contactor - supplied by others) No internal cleaning required
Accessories	External louver (ZVF403 GS), precision (ZVF403 PAD) and simple (ZVF403 SAD) aiming devices
Remarks	Equipped with aluminum connection box with series ignitor (SI) or semi-parallel ignitor (SP) installed on a separate gear tray (ZVF320) Color filters for architectural lighting are available on request Wire mesh to prevent large glass falling out Pre-wired 220 - 240 V / 50 Hz gear trays (ZVF320) are available, to be ordered separately
Main applications	Outdoor sport stadiums, indoor sport halls, architectural floodlighting



MVF403 HR



ArenaVision MVF403 sports flood-lighting luminaire

Preferred selection

Product ID	Weight (kg)	European Order Code (EOC)
MVF403 MHN-LA1000W/956 A1 SI	14.50	502657 00
MVF403 MHN-LA1000W/956 A2 SI	14.50	502664 00
MVF403 MHN-LA1000W/956 A3 SI	14.50	502671 00
MVF403 MHN-LA1000W/956 A4 SI	14.50	502688 00
MVF403 MHN-LA1000W/956 A5 SI	14.50	502695 00
MVF403 MHN-LA1000W/956 A6 SI	14.50	502701 00
MVF403 MHN-LA1000W/956 A7 SI	14.50	502718 00
MVF403 MHN-LA1000W/956 A8 SI	14.50	502725 00

Please contact your local Philips representative for additional configurations

Accessories



Precision aiming device

Product ID	EOC
ZVF403 PAD	140438 00



External louver

Product ID	EOC
ZVF403 GS	239996 00



Simple aiming device

Product ID	EOC
ZVF403 SAD	503098 00



