



# ArenaVision MVF403 – world-class performance

## ArenaVision MVF403

ArenaVision MVF403 takes sports floodlighting to the highest level, offering very high light output, optical efficiency, ease of installation, reliability and flexibility. It is ideal for indoor sports halls (1000 W version) as well as many outdoor sports and other lighting applications. The integrated system of oval optics and compact double-ended MHN-LA 1000W or MHN-SA HO 2000W lamps ensures outstanding system efficiency and low glare. A built-in reflector skirt reduces spill light and glare even further. The MHN-SA HO 2000W/956 and MHN-LA 1000W/956 lamps meet the highest international CTV requirements. With the MHN-LA 1000W/842 lamp, the natural color rendering and comfortable atmosphere are well suited to TV and filming as well as other floodlighting applications. Hot re-strike versions are available for all lamp types, enabling immediate restoration of lighting after power supply failure. The (optional) flicker-free version of ArenaVision MVF403 MHN-LA 1000W is designed to ensure that the flicker effect is fully eliminated in order to guarantee perfect images filmed with super-slow-motion cameras at sports events. The flicker-free version of ArenaVision MVF403 comes equipped with a special electronic ignitor, which works in combination with Philips' electronic flicker-free ballast GearUnits (ECM330), to be ordered separately.

### Benefits

- Innovative floodlights designed around Philips' world-class double-ended lamps; dedicated optics ensure maximum optical efficiency and enable accurate light distribution with a minimum of spill light
- Philips quartz metal-halide lamps meet the most demanding lighting and TV broadcast requirements with excellent color rendering
- The flicker-free version completely eliminates flicker effect, thereby guaranteeing perfect images filmed with super-slow-motion cameras

# ArenaVision MVF403

## Features

- High-output double-ended metal-halide lamps with excellent color rendering and lifetime
- Dedicated precision optics
- Safety switch
- Electronic hot-restrike
- Complete Philips lamp, optic and gear system
- Flicker-free light version for super-slow-motion cameras

## Application

- Outdoor sport stadiums
- Indoor sport halls

## Specifications

|                      |  |
|----------------------|--|
| <b>Type</b>          | MVF403   |
| <b>Light source</b>  | HID:<br>- 1 x MASTER MHN-SA HO / XW / 2000 W<br>- 1 x MASTER MHN-LA / XWH / 1000 W   |
| <b>Lamp included</b> | Yes (K or light color 842 or 956)  |
| <b>Optic</b>         | Beam category A1 (A1)<br>Beam category A2 (A2)<br>Beam category A3 (A3)<br>Beam category A4 (A4)<br>Beam category A5 (A5)<br>Beam category A6 (A6)<br>Beam category A7 (A7)<br>Beam category A8 (A8) (not for MHN-SA 2000 W version) |
| <b>Optical cover</b> | Front glass for downlighting (DOWN) and uplighting versions (UP)   |
| <b>Ignitor</b>       | Series (SI / ESI), integral<br>Hot-restrike (HRE), integral  |

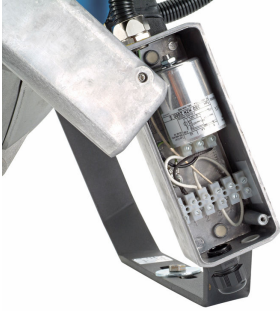
|                                |  |
|--------------------------------|--|
| <b>Options</b>                 | Aiming memory (AM) to safeguard the original aiming position of the luminaire during servicing<br>Hot re-strike versions enabling immediate restoration of lighting after power supply failure (not available for flicker-free version)<br>Uplighting versions available for architectural lighting<br>Special cable sleeve version for tropical regions                                   |
| <b>Materials and finishing</b> | Housing and rear cover: non-corrosive, high-pressure die-cast aluminum<br>Optical cover: chemically toughened glass, 3 mm thick (for downlighting versions), ceramic 3 mm thick (for uplighting versions)<br>Mounting bracket: zinc nickel treated<br>Clips: stainless steel (to secure the back cover)<br>Reflector: anodised and brightened 99.99% aluminum<br>Finishing in raw aluminum |

## Specifications

|                     |   |
|---------------------|---|
| <b>Installation</b> | On mast headframe, ceiling, wall and floor mounting<br>The lamp only needs to be installed mechanically; electrical connection achieved by closing the rear cover<br>Precision aiming facilities at both top and bottom of the housing for use in conjunction with the ZVF403 PAD accessory<br>Adjustment of mounting bracket: 360°<br>Ambient temperature outdoor:<br>- MASTER MHN-SA HO 2000 W lamp version: 35 °C (for outdoor use only)<br>- MASTER MHN-LA 1000 W lamp version: 45 °C (outdoor and indoor)<br>Drag factor (Cx): 0.93<br>Projected area in 70° position: 0.20 m2 |
|---------------------|---|

|                    |  |
|--------------------|--|
| <b>Maintenance</b> | Max adjustment from the horizontal: -90 / +90°<br>Lamp access by opening clips of rear cover (tool-less)<br>Equipped with safety switch to cut off current when luminaire is opened (requires additional contactor - supplied by others)<br>No internal cleaning required  |
| <b>Accessories</b> | External glare shield (ZVF403 GS), precision (ZVF403 PAD) and simple (ZVF403 SAD) aiming devices   |
| <b>Remarks</b>     | Equipped with aluminum connection box with series ignitor (SI / ESI)<br>Wire mesh to prevent large glass falling out<br>Pre-wired 230V-240 V / 50 Hz and 380-400-415-430 V / 50 Hz gear units (ECB/ECP330) and 220-480 V / 50-60 Hz electronic flicker-free ballast gear unit (ECM330) are available, to be ordered separately |

## Product details



Electrical connection box equipped with series ignitor

### Application conditions

Maximum dimming level Not applicable

### Approval and application

Mech. impact protection code IK08

Surge protection (common/differential) -

### Controls and dimming

Dimmable No

### General information

Luminaire light beam spread -

CE mark Yes

Optical cover/lens type DOWN

Flammability mark NO

Gear -

Number of gear units -

Number of light sources 1

Product family code MVF403

### Light technical

Standard tilt angle side entry -

Standard tilt angle post-top -

### Mechanical and housing

Colour Aluminum

## General information

| Order Code | Full Product Name             | Light source colour | Lamp family code | Lamp power | Optic type            |
|------------|-------------------------------|---------------------|------------------|------------|-----------------------|
| 50265700   | MVF403 MHN-LA1000W/956 A1 SI  | 956 daylight        | MHN-LA           | 1000 W     | Beam category A1 (A1) |
| 50266400   | MVF403 MHN-LA1000W/956 A2 SI  | 956 daylight        | MHN-LA           | 1000 W     | Beam category A2 (A2) |
| 50267100   | MVF403 MHN-LA1000W/956 A3 SI  | 956 daylight        | MHN-LA           | 1000 W     | Beam category A3 (A3) |
| 50268800   | MVF403 MHN-LA1000W/956 A4 SI  | 956 daylight        | MHN-LA           | 1000 W     | Beam category A4 (A4) |
| 50269500   | MVF403 MHN-LA1000W/956 A5 SI  | 956 daylight        | MHN-LA           | 1000 W     | Beam category A5 (A5) |
| 50270100   | MVF403 MHN-LA1000W/956 A6 SI  | 956 daylight        | MHN-LA           | 1000 W     | Beam category A6 (A6) |
| 50271800   | MVF403 MHN-LA1000W/956 A7 SI  | 956 daylight        | MHN-LA           | 1000 W     | Beam category A7 (A7) |
| 39888200   | MVF403 MHN-LA1000W/956 A4 HRE | 956 daylight        | MHN-LA           | 1000 W     | Beam category A4 (A4) |
| 39889900   | MVF403 MHN-LA1000W/956 A5 HRE | 956 daylight        | MHN-LA           | 1000 W     | Beam category A5 (A5) |
| 39890500   | MVF403 MHN-LA1000W/956 A6 HRE | 956 daylight        | MHN-LA           | 1000 W     | Beam category A6 (A6) |
| 06935500   | MVF403 MHN-SA2000W A7 SI AM   | -                   | MHN-SA           | 2000 W     | Beam category A7 (A7) |
| 06945400   | MVF403 MHN-SA2000W A1 SI      | -                   | MHN-SA           | 2000 W     | Beam category A1 (A1) |
| 06946100   | MVF403 MHN-SA2000W A2 SI      | -                   | MHN-SA           | 2000 W     | Beam category A2 (A2) |
| 06947800   | MVF403 MHN-SA2000W A3 SI      | -                   | MHN-SA           | 2000 W     | Beam category A3 (A3) |
| 06948500   | MVF403 MHN-SA2000W A4 SI      | -                   | MHN-SA           | 2000 W     | Beam category A4 (A4) |
| 06949200   | MVF403 MHN-SA2000W A5 SI      | -                   | MHN-SA           | 2000 W     | Beam category A5 (A5) |
| 06950800   | MVF403 MHN-SA2000W A6 SI      | -                   | MHN-SA           | 2000 W     | Beam category A6 (A6) |
| 06951500   | MVF403 MHN-SA2000W A7 SI      | -                   | MHN-SA           | 2000 W     | Beam category A7 (A7) |

| Order Code | Full Product Name                   | Light source | Lamp family | Lamp power | Optic type               |
|------------|-------------------------------------|--------------|-------------|------------|--------------------------|
|            |                                     | colour       | code        |            |                          |
| 06890700   | MVF403 MHN-SA2000W/956<br>A2 HRE AM | 956 daylight | MHN-SA      | 2000 W     | Beam category A2<br>(A2) |
| 06894500   | MVF403 MHN-SA2000W/956<br>A6 HRE AM | 956 daylight | MHN-SA      | 2000 W     | Beam category A6<br>(A6) |
| 06898300   | MVF403 MHN-SA2000W/956<br>A2 SI AM  | 956 daylight | MHN-SA      | 2000 W     | Beam category A2<br>(A2) |
| 06899000   | MVF403 MHN-SA2000W/956<br>A3 SI AM  | 956 daylight | MHN-SA      | 2000 W     | Beam category A3<br>(A3) |
| 06900300   | MVF403 MHN-SA2000W/956<br>A4 SI AM  | 956 daylight | MHN-SA      | 2000 W     | Beam category A4<br>(A4) |
| 06901000   | MVF403 MHN-SA2000W/956<br>A5 SI AM  | 956 daylight | MHN-SA      | 2000 W     | Beam category A5<br>(A5) |
| 06902700   | MVF403 MHN-SA2000W/956<br>A6 SI AM  | 956 daylight | MHN-SA      | 2000 W     | Beam category A6<br>(A6) |
| 06903400   | MVF403 MHN-SA2000W/956<br>A7 SI AM  | 956 daylight | MHN-SA      | 2000 W     | Beam category A7<br>(A7) |
| 06906500   | MVF403 MHN-SA2000W/956<br>A2 HRE    | 956 daylight | MHN-SA      | 2000 W     | Beam category A2<br>(A2) |
| 06907200   | MVF403 MHN-SA2000W/956<br>A3 HRE    | 956 daylight | MHN-SA      | 2000 W     | Beam category A3<br>(A3) |
| 06908900   | MVF403 MHN-SA2000W/956<br>A4 HRE    | 956 daylight | MHN-SA      | 2000 W     | Beam category A4<br>(A4) |
| 06909600   | MVF403 MHN-SA2000W/956<br>A5 HRE    | 956 daylight | MHN-SA      | 2000 W     | Beam category A5<br>(A5) |
| 06910200   | MVF403 MHN-SA2000W/956<br>A6 HRE    | 956 daylight | MHN-SA      | 2000 W     | Beam category A6<br>(A6) |
| 06911900   | MVF403 MHN-SA2000W/956<br>A7 HRE    | 956 daylight | MHN-SA      | 2000 W     | Beam category A7<br>(A7) |
| 06913300   | MVF403 MHN-SA2000W/956<br>A1 SI     | 956 daylight | MHN-SA      | 2000 W     | Beam category A1<br>(A1) |
| 06914000   | MVF403 MHN-SA2000W/956<br>A2 SI     | 956 daylight | MHN-SA      | 2000 W     | Beam category A2<br>(A2) |
| 06915700   | MVF403 MHN-SA2000W/956<br>A3 SI     | 956 daylight | MHN-SA      | 2000 W     | Beam category A3<br>(A3) |
| 06916400   | MVF403 MHN-SA2000W/956<br>A4 SI     | 956 daylight | MHN-SA      | 2000 W     | Beam category A4<br>(A4) |
| 06917100   | MVF403 MHN-SA2000W/956<br>A5 SI     | 956 daylight | MHN-SA      | 2000 W     | Beam category A5<br>(A5) |
| 06918800   | MVF403 MHN-SA2000W/956<br>A6 SI     | 956 daylight | MHN-SA      | 2000 W     | Beam category A6<br>(A6) |
| 06919500   | MVF403 MHN-SA2000W/956<br>A7 SI     | 956 daylight | MHN-SA      | 2000 W     | Beam category A7<br>(A7) |

## Initial performance (IEC compliant)

| Order Code | Full Product Name            | Init. Corr. Colour | Init. Colour    | Order Code | Full Product Name            | Init. Corr. Colour | Init. Colour    |
|------------|------------------------------|--------------------|-----------------|------------|------------------------------|--------------------|-----------------|
|            |                              | Temperature        | rendering index |            |                              | Temperature        | rendering index |
| 50265700   | MVF403 MHN-LA1000W/956 A1 SI | 5600 K             | >90             | 50268800   | MVF403 MHN-LA1000W/956 A4 SI | 5600 K             | >90             |
| 50266400   | MVF403 MHN-LA1000W/956 A2 SI | 5600 K             | >90             | 50269500   | MVF403 MHN-LA1000W/956 A5 SI | 5600 K             | >90             |
| 50267100   | MVF403 MHN-LA1000W/956 A3 SI | 5600 K             | >90             | 50270100   | MVF403 MHN-LA1000W/956 A6 SI | 5600 K             | >90             |

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| Order Code | Full Product Name                | Init. Corr. Colour Temperature | Init. Colour rendering index |
|------------|----------------------------------|--------------------------------|------------------------------|
| 50271800   | MVF403 MHN-LA1000W/956 A7 SI     | 5600 K                         | >90                          |
| 39888200   | MVF403 MHN-LA1000W/956 A4 HRE    | 5600 K                         | >90                          |
| 39889900   | MVF403 MHN-LA1000W/956 A5 HRE    | 5600 K                         | >90                          |
| 39890500   | MVF403 MHN-LA1000W/956 A6 HRE    | 5600 K                         | >90                          |
| 06935500   | MVF403 MHN-SA2000W A7 SI AM      | -                              | -                            |
| 06945400   | MVF403 MHN-SA2000W A1 SI         | -                              | -                            |
| 06946100   | MVF403 MHN-SA2000W A2 SI         | -                              | -                            |
| 06947800   | MVF403 MHN-SA2000W A3 SI         | -                              | -                            |
| 06948500   | MVF403 MHN-SA2000W A4 SI         | -                              | -                            |
| 06949200   | MVF403 MHN-SA2000W A5 SI         | -                              | -                            |
| 06950800   | MVF403 MHN-SA2000W A6 SI         | -                              | -                            |
| 06951500   | MVF403 MHN-SA2000W A7 SI         | -                              | -                            |
| 06890700   | MVF403 MHN-SA2000W/956 A2 HRE AM | 5600 K                         | >90                          |
| 06894500   | MVF403 MHN-SA2000W/956 A6 HRE AM | 5600 K                         | >90                          |
| 06898300   | MVF403 MHN-SA2000W/956 A2 SI AM  | 5600 K                         | >90                          |
| 06899000   | MVF403 MHN-SA2000W/956 A3 SI AM  | 5600 K                         | >90                          |
| 06900300   | MVF403 MHN-SA2000W/956 A4 SI AM  | 5600 K                         | >90                          |

| Order Code | Full Product Name               | Init. Corr. Colour Temperature | Init. Colour rendering index |
|------------|---------------------------------|--------------------------------|------------------------------|
| 06901000   | MVF403 MHN-SA2000W/956 A5 SI AM | 5600 K                         | >90                          |
| 06902700   | MVF403 MHN-SA2000W/956 A6 SI AM | 5600 K                         | >90                          |
| 06903400   | MVF403 MHN-SA2000W/956 A7 SI AM | 5600 K                         | >90                          |
| 06906500   | MVF403 MHN-SA2000W/956 A2 HRE   | 5600 K                         | >90                          |
| 06907200   | MVF403 MHN-SA2000W/956 A3 HRE   | 5600 K                         | >90                          |
| 06908900   | MVF403 MHN-SA2000W/956 A4 HRE   | 5600 K                         | >90                          |
| 06909600   | MVF403 MHN-SA2000W/956 A5 HRE   | 5600 K                         | >90                          |
| 06910200   | MVF403 MHN-SA2000W/956 A6 HRE   | 5600 K                         | >90                          |
| 06911900   | MVF403 MHN-SA2000W/956 A7 HRE   | 5600 K                         | >90                          |
| 06913300   | MVF403 MHN-SA2000W/956 A1 SI    | 5600 K                         | >90                          |
| 06914000   | MVF403 MHN-SA2000W/956 A2 SI    | 5600 K                         | >90                          |
| 06915700   | MVF403 MHN-SA2000W/956 A3 SI    | 5600 K                         | >90                          |
| 06916400   | MVF403 MHN-SA2000W/956 A4 SI    | 5600 K                         | >90                          |
| 06917100   | MVF403 MHN-SA2000W/956 A5 SI    | 5600 K                         | >90                          |
| 06918800   | MVF403 MHN-SA2000W/956 A6 SI    | 5600 K                         | >90                          |
| 06919500   | MVF403 MHN-SA2000W/956 A7 SI    | 5600 K                         | >90                          |

