# VALO

LED INDUSTRIAL LUMINAIRES FOR

## CHALLENGING CONDITIONS

minexx

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In the design of I-Valo's industrial luminaires, special attention is paid to their suitability for hot, humid and dusty conditions with air-borne impurities. The luminaires are easy to install and maintain, and their need for maintenance is minimal. The best possible product quality is ensured by selecting materials and components carefully. In product design, special emphasis is placed on the principles of sustainable development. Most of our luminaires can be updated, thanks to their replaceable LED technology. These luminaires are indicated with the Fit for the Future logo in our catalogue.

I-Valo's luminaires retain their luminous efficacy well even in challenging conditions, enabling you to minimise the number of luminaires installed, which helps save energy and reduce installation and operating costs. Our lighting design team is more than happy to help you identify the best possible solution for your property. Our customers include forestry, metal, chemical and building material industries and waste processing and powerplant facilities.


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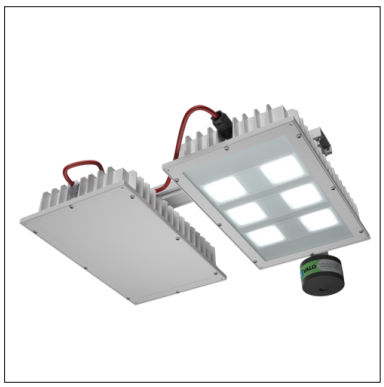
# XENRE®

The XENRE highbay luminaire is an ideal solution for high industrial spaces where extra robustness is required. Typical applications include workshops, paper and pulp mills, sawmills and forest product plants and warehouses. Equipped with a polycarbonate diffuser, this luminaire is also ideal for food and beverage industry applications. The 37,000-lumen XENRE model equipped with a floodlight fitting, is also ideal for area and façade lighting.

| | |
|---|---|
| **Ta class** | -40°C... +80°C (varies between models) |
| **Input power** | 85 W–577 W |
| **Luminous flux** | 12,200 lm–62,200 lm |
| **Luminous efficacy** | 147 lm/W |
| **Colour temperature** | 4,000 K |
| **MacAdam value** | 3 SDCM |
| **Enclosure rating** | IP66 (equipped with a GORE filter), IP65 (equipped with another I-Valo filter) |
| **Impact strength rating** | IK08 |
| **Light distribution** | Medium wide or wide |
| **Cover glass** | Tempered safety glass (clear or frosted), polycarbonate (PC) |
| **Body material** | Polyester-coated cast aluminium, anti-glare visor's frame of coated steel sheet |
| **Connection** | Standard connections 1.5 m cable with a plug or 4.0 m cable. We are more than happy to provide information on other options. |
| **Control** | DALI-2 or ON/OFF |
| **Frequency** | 0/50/60 Hz |
| **Voltage** | 220–240 V |
| **Weight** | approx. 8 kg |
| **Installation** | A wide range of XENRE mounting brackets is available for installation, see pages 8-11. |

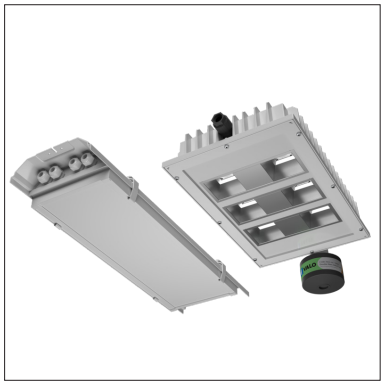
## XENRE

- Input power: 85 W–277 W
- Ta class: -40°C... +60°C (varies between models)
- Luminous flux: 12,200 lm–37,000 lm
- Mounting brackets must be ordered separately



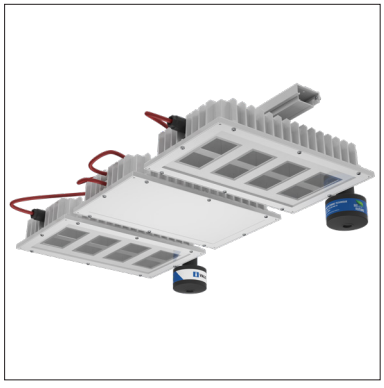
## XENRE60, XENRE70

- Input power: 174 W–289 W
- Ta class: -40 °C... +60 °C and +70 °C
- Luminous flux: 18,900 lm–31,100 lm
- Includes a mounting rail (X220)
- The luminaire modules are easy to loosen from the mounting rail for maintenance
- The luminaire module is equipped with the QPD panel feed-through connector



## XENRE80

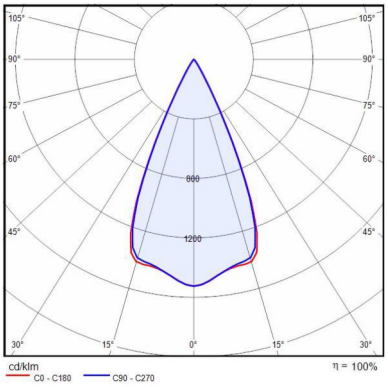
- Input power: 139 W–286 W
- Ta class, luminaire module: -40 °C... +80 °C
- Ta class, control module: -25 °C... +60 °C
- Luminous flux: 15,400 lm–16,400 lm
- The connecting cable for the luminaire modules is not included in the delivery (product no. **16693L1** (sold by metre), **16693L500** (sold as a 500 m reel))
- The mounting rail must be ordered separately
- The control module must be mounted in a cooler space, max. 25 metres from the luminaire module
- Mounting brackets must be ordered separately



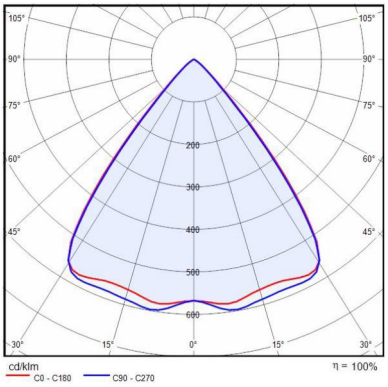
## XENRE XL

- Input power: 440 W–577 W
- Ta class: -40 °C... +60 °C and +65 °C
- Luminous flux: 47,800 lm–62,200 lm
- Includes a mounting rail (X330)
- The luminaire modules are easy to loosen from the mounting rail for maintenance
- The luminaire module is equipped with the QPD panel feed-through connector

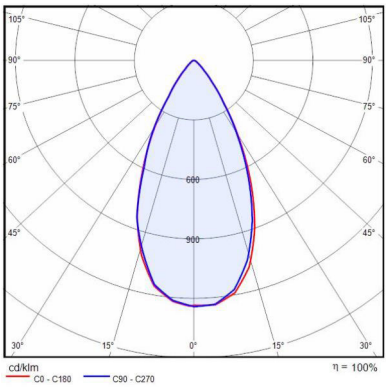
# Light distribution



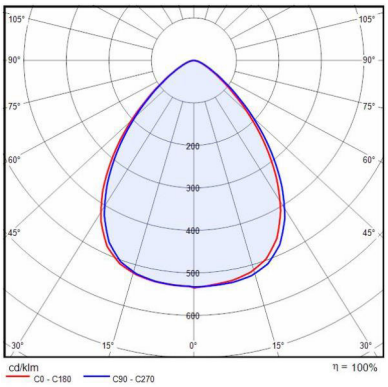

MEDIUM WIDE
(CLEAR SAFETY GLASS or PC)



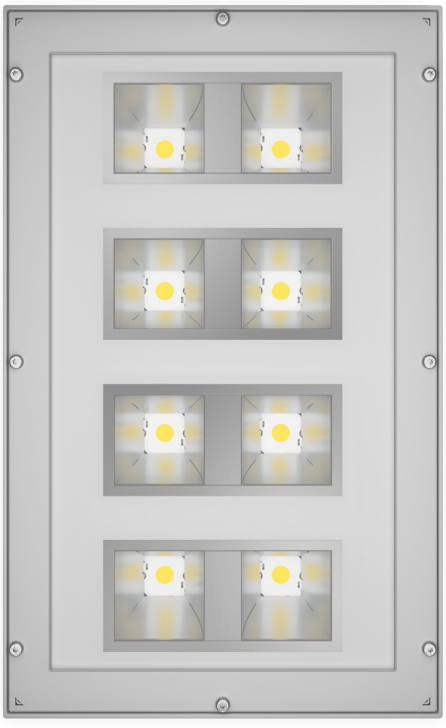

WIDE
(CLEAR SAFETY GLASS or PC)

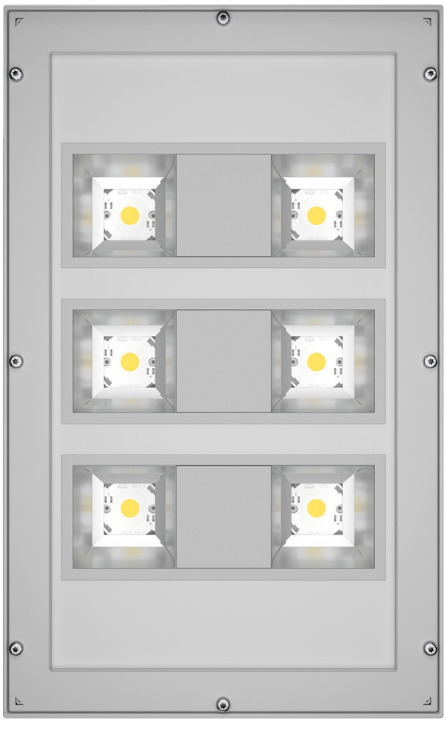



MEDIUM WIDE
(FROSTED GLASS)



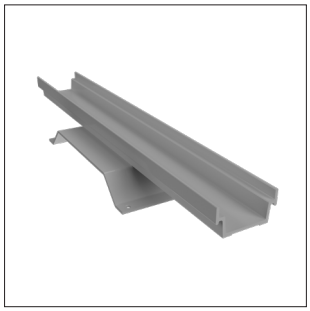
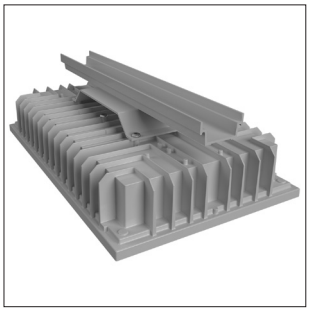

WIDE
(FROSTED GLASS)



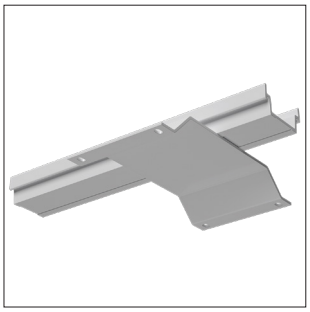


# XENRE mounting brackets

## X100
**MOUNTING RAIL**
- A mounting rail for one XENRE luminaire
- The top part of the rail is fixed to the installation surface and the luminaire is slid in place along the bottom part of the rail
- Polyester-coated aluminium

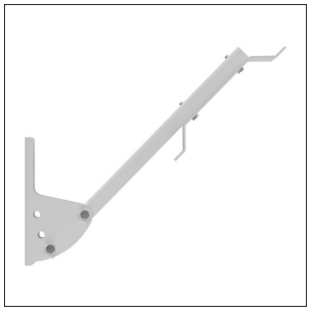
## X101
**MOUNTING RAIL BOTTOM SECTION**
- Suitable for use with I-Valo's old mounting rails for the REGULAR/SUPER highbay luminaires in renovation projects
- Polyester-coated aluminium

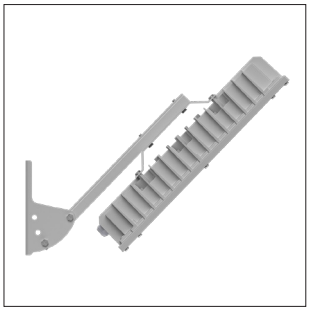


## X103
**MOUNTING RAIL ADAPTER**
- An adapter for installing two XENRE modules on the 6083 mounting rail of I-Valo's conventional highbay luminaires in renovation projects
- Polyester-coated aluminium

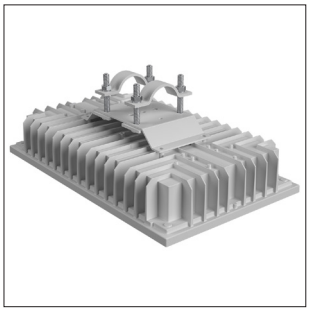
## X104
**MOUNTING RAIL ADAPTER**
- An adapter for installing one XENRE luminaire on the VEGA range's B100 mounting rail in renovation projects
- Polyester-coated aluminium

## X104-2
**MOUNTING RAIL ADAPTER**
- An adapter for installing two XENRE luminaires on the VEGA range's B100 mounting rail in renovation projects
- Polyester-coated aluminium

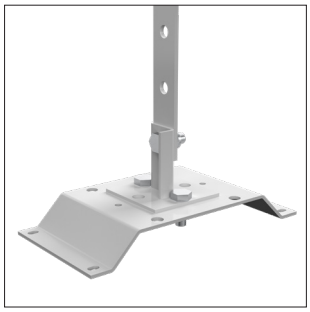


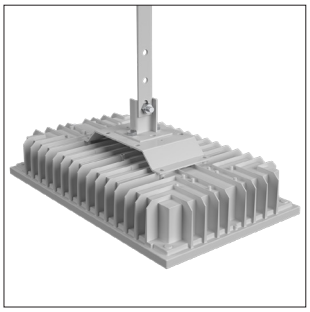


## X110
**WALL BRACKET**
- Mounting angles 0°, 25°, 45°
- Polyester-coated aluminium

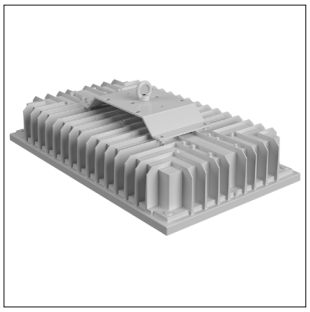


## X111
**PIPE BRACKET**
- Polyester-coated aluminium



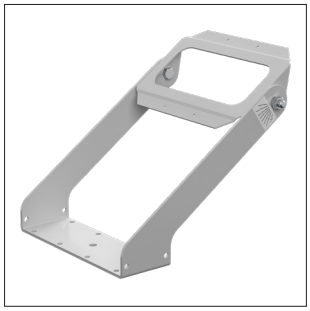


## X1121000, X1122000
**SUSPENSION ROD**
- Lengths 1,000 mm and 2,000 mm
- Other lengths by special order
- Polyester-coated aluminium



## X113
**SUSPENSION BRACKET**
- Single-point mounting
- Link and nut made of electro-galvanised steel
- Plate part made of polyester-coated aluminium
- Polyester-coated aluminium

## X114
**POLE BRACKET**
- Polyester-coated hot-dip galvanised steel, plate part made of polyester-coated aluminium
- Polyester-coated aluminium



## X120

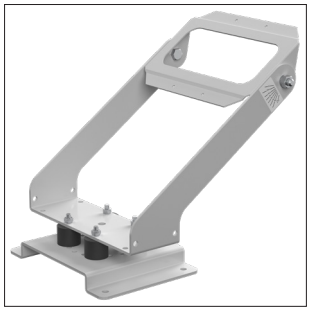
**FLOODLIGHT BRACKET WITHOUT A BASE**

- Mounted directly to the installation surface
- Continuous control of the luminaire angle
- Polyester-coated aluminium

## X121

**FLOODLIGHT BRACKET WITH A BASE**

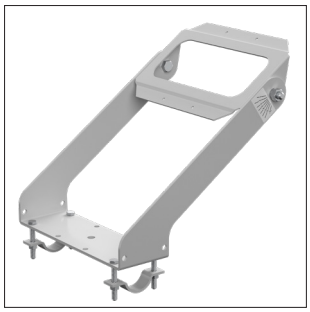
- Continuous control of the luminaire angle
- The floodlight bracket can be adjusted 360 degrees in relation to the base and it can be locked at 22.5-degree increments
- Polyester-coated aluminium

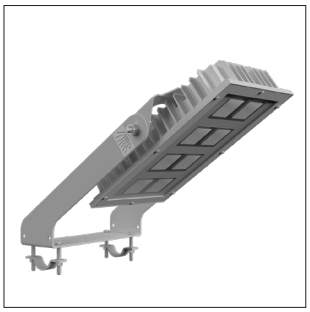


## X122

**FLOODLIGHT BRACKET WITH VIBRATION DAMPERS**

- Floodlight bracket with a base and vibration dampers
- Continuous control of the luminaire angle
- The floodlight bracket can be adjusted 360 degrees in relation to the base and it can be locked at 22.5-degree increments
- Polyester-coated aluminium





## X123

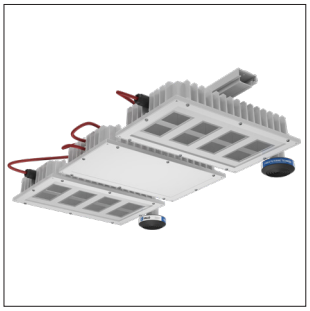
**FLOODLIGHT BRACKET WITH PIPE BRACKETS**

- floodlight bracket with pipe brackets
- continuous control of the luminaire angle
- polyester-coated aluminium

## X220

**MOUNTING RAIL FOR TWO XENRE MODULES**

- The bottom part of the rail consists of two components that can be removed for the maintenance of the luminaire
- Used for luminaires such as XENRE60 and XENRE70 (included in the delivery of these luminaires)
- Polyester-coated aluminium



## X330

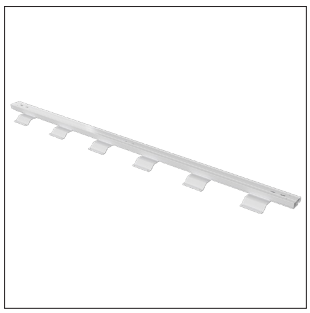
**MOUNTING RAIL FOR THREE XENRE MODULES**

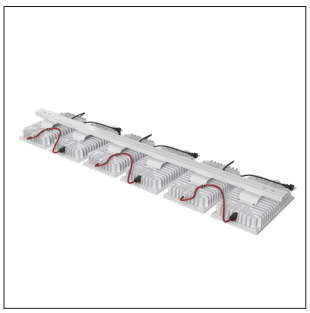
- The bottom part of the rail consists of three components that can be removed for the maintenance of the luminaire
- Used for luminaires such as XENRE XL (included in the delivery of these luminaires)
- Polyester-coated aluminium

## X440

**MOUNTING RAIL FOR FOUR XENRE MODULES**

- The bottom part of the rail consists of four separate components that can be removed for the maintenance of the luminaire
- Used, for example, in the installation of individual XENRE luminaires or XENRE60 and XENRE70 luminaire entities
- Polyester-coated aluminium

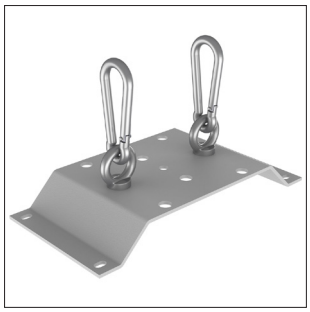


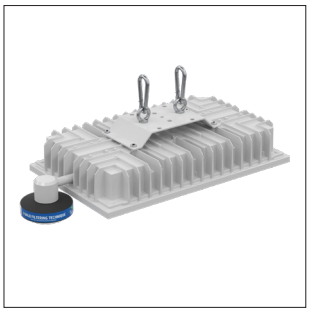


## X660

**MOUNTING RAIL FOR SIX XENRE MODULES**

- The bottom part of the rail consists of six separate components that can be removed for the maintenance of the luminaire
- Used, for example, in the installation of individual XENRE luminaires or XENRE60 and XENRE70 luminaire entities
- Polyester-coated aluminium





## X904

**SUSPENSION BRACKET**

- Two-point fastening with two carabiners
- Link and nut made of electro-galvanised steel
- Plate part made of polyester-coated aluminium

# DAVI®

DAVI is a top-quality LED luminaire with an update possibility, designed especially for the lighting needs of the industry. The technology of this luminaire is replaceable, which means that the whole luminaire does not need to be replaced when it reaches the end of its lifespan. The availability of spare parts is guaranteed by constantly using the latest LED technology, which will always fit into the same frame.

The very robust mechanical structure of the luminaire is familiar from I-Valo's traditional lowbay luminaires, which have been appreciated on the market for decades. Installation is easy thanks to I-Valo's comprehensive range of fasteners for lowbay luminaires.

| | |
|---|---|
| **Updating** | Replaceable LED module, see 26 |
| **Ta class** | -30°C... +60°C (varies between models) |
| **Input power** | 31 W–156 W |
| **Luminous flux** | 4,400 lm–27,500 lm |
| **Luminous efficacy** | 176 lm/W |
| **Colour temperature** | 4,000 K |
| **MacAdam value** | 3 SDCM |
| **Enclosure rating** | IP65 |
| **Impact strength rating** | IK08 |
| **Light distribution** | Medium wide or wide |
| **Cover glass material** | Tempered safety glass (clear glass, clear glass/PMMA + anti-glare film, or frosted glass) |
| **Body material** | Polyester-coated aluminium profile |
| **Connection** | Several connection options, see further information at www.i-valo.com |
| **Control** | DALI-2 or ON/OFF |
| **Frequency** | 0/50/60 Hz |
| **Voltage** | 220–240 V |
| **Weight** | 6.1 kg–10.6 kg |
| **Installation** | Can be mounted without separate brackets from the lugs at the ends of the luminaire. A wide range of mounting brackets is also available, when necessary; see pages 36–39. |

FIT FOR THE FUTURE

# DORA

I-VALO DORA is a high-quality luminaire range for general lighting applications in industry. The luminaires can be used to replace conventional lowbay discharge lamp luminaires and fluorescent lamps. The typical installation height is between 2 and 8 metres but, depending on the luminaire type, greater installation heights are also possible.
The DORA luminaire range incudes luminaires in two lengths and with several luminaire module numbers. Both lengths are available with wide and medium wide light distribution. The model with the wide light distribution is equipped with a cover glass made of PMMA, PC or safety glass and an anti-glare film, which is effective in preventing distracting glare. This luminaire with a high protection class (IP67) and a GORE filter is also suitable for outdoor use.

| | |
|---|---|
| **Ta class** | -30°C... +60°C (varies between luminaire types) |
| **Input power** | 28 W–146 W |
| **Luminous flux** | 3,900 lm–23,200 lm |
| **Luminous efficacy** | up to 169 lm/W |
| **Colour temperature** | 4,000 K |
| **MacAdam value** | 3 SDCM |
| **Enclosure rating** | IP67 |
| **Impact strength rating** | IK07 |
| **Light distribution** | Medium wide or wide |
| **Cover glass material** | Tempered safety glass, acrylic (PMMA) or polycarbonate. Can be equipped with an effective anti-glare film. |
| **Body material** | Polyester-coated aluminium profile |
| **Connection** | Several connection options, see further information at www.i-valo.com |
| **Control** | DALI-2 or ON/OFF |
| **Frequency** | 0/50/60 Hz |
| **Voltage** | 220–240 V |
| **Weight** | 4.6 kg–6.7 kg |
| **Installation** | Can be mounted without separate brackets from the lugs at the ends of the luminaire. A wide range of mounting brackets is also available, when necessary; see pages 36–39. |

# DANI®

DANI is a compact, aluminium-framed, general-purpose LED, which can be upgraded. The technology of the luminaire is replaceable, which means that the whole luminaire does not need to be replaced when it reaches the end of its lifespan.

The luminaire is ideal for general lighting applications in low spaces, such as storerooms, technical premises including rooms for air-conditioning machines, maintenance premises, industrial maintenance platforms, corridors and stairways. The Dani luminaire can be installed on I-Valo's pole with the bracket 6061. Equipped with a GORE filter.

FIT FOR THE FUTURE

| | |
|---|---|
| **Updating** | Replaceable LED module, see 28 |
| **Ta class** | -25 °C...+45 °C (12 W)<br>-25 °C...+40 °C (20 W) |
| **Input power** | 12 W and 20 W |
| **Luminous flux** | 1,500 lm and 2,500 lm |
| **Luminous efficacy** | 125 lm/W |
| **Colour temperature** | 4,000 K |
| **MacAdam value** | 3 SDCM |
| **Enclosure rating** | IP65 |
| **Impact strength rating** | IK07 |
| **Light distribution** | Wide |
| **Cover glass material** | Acrylic (PMMA) |
| **Body material** | Polyester-coated aluminium profile |
| **Connection** | 1.5 m or 4.0 m cable + plug, 1.5 m or 4.0 m cable with free ends, fixed connection with spring terminal 5 x 2.5 $mm^2$ |
| **Control** | ON/OFF |
| **Frequency** | 0/50/60 Hz |
| **Voltage** | 220-240 V |
| **Weight** | approx. 2.0 kg |
| **Installation** | Can be mounted without separate brackets from the lugs at the ends of the luminaire. A wide range of mounting brackets is also available, when necessary; see pages 36-39. |

# MARCO®

The MARCO luminaire has a low frame (40 mm), but is despite its size robust, mechanically stable and well suited to general lighting on the industry's secondary premises. Typical applications include industrial technical spaces, such as AC machine rooms, maintenance spaces, low maintenance platforms, corridors and staircases. A through-wired version of the luminaire is also available. Equipped with a GORE filter.

| | |
|---|---|
| **Ta class** | -35°C... +50°C |
| **Input power** | 26 W and 53 W |
| **Luminous flux** | 3,600 lm and 7,400 lm |
| **Luminous efficacy** | 138 lm/W |
| **Colour temperature** | 4,000 K |
| **MacAdam value** | 3 SDCM |
| **Enclosure rating** | IP66 |
| **Impact strength rating** | IK08 |
| **Light distribution** | Wide |
| **Cover glass material** | Tempered frosted glass or satin acrylic |
| **Body material** | Polyester-coated aluminium profile |
| **Connection** | Several connection options, see further information at www.i-valo.com |
| **Control** | ON/OFF |
| **Frequency** | 0/50/60 Hz |
| **Voltage** | 220-240 V |
| **Weight** | approx. 5.0 kg |
| **Installation** | Can be mounted without separate brackets from the lugs at the ends of the luminaire. A wide range of mounting brackets is also available, when necessary; see pages 36-39. |

# 6721LED & 6741LED

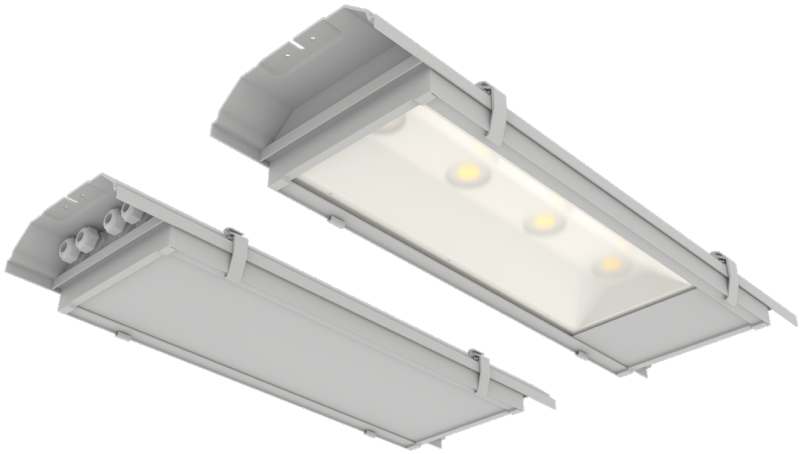
This luminaire equipped with LED technology was introduced as a replacement for I-Valo's profile luminaires with conventional light sources. Thanks to its robust design and replaceable LED unit, this luminaire is still in high demand. Another feature that makes it popular is its replaceable diffusor, which comes into its own in challenging conditions, such as mines. The luminaire offers a compact and durable solution for general lighting in low spaces. Typical applications include the lower floors of paper and pulp mills, power plants and furnaces, corridors, staircases, maintenance platforms and parking facilities. A dust filter protects the luminaire from impurities.

| | |
|---|---|
| **Updating** | Replaceable LED module, see 25 |
| **Ta class** | 6721LED: -25°C... +55°C \| 6741LED: -25°C... +50°C |
| **Input power** | 54 W and 71 W |
| **Luminous flux** | 6,900 lm - 9,000 lm |
| **Luminous efficacy** | 139 lm/W |
| **Colour temperature** | 4,000 K |
| **MacAdam value** | 3 SDCM |
| **Enclosure rating** | IP65 |
| **Impact strength rating** | IK07 |
| **Light distribution** | Wide |
| **Cover glass material** | Tempered frosted safety glass or satin coated acrylic plate (PMMA) |
| **Body material** | Polyester-coated aluminium profile |
| **Connection** | 1.5 m cable with a plug or fixed connection with a spring terminal -o- 5 x 2.5 $mm^2$ + 2 x 2.5 $mm^2$ |
| **Control** | DALI-2 or ON/OFF |
| **Frequency** | 0/50/60 Hz |
| **Voltage** | 220-240 V |
| **Weight** | approx. 6.0 kg |
| **Installation** | Can be mounted without separate brackets from the lugs at the ends of the luminaire. A wide range of mounting brackets is also available, when necessary; see pages 36-39. |

KAESER
DSD 202
SFC
KAESER
DSD 202

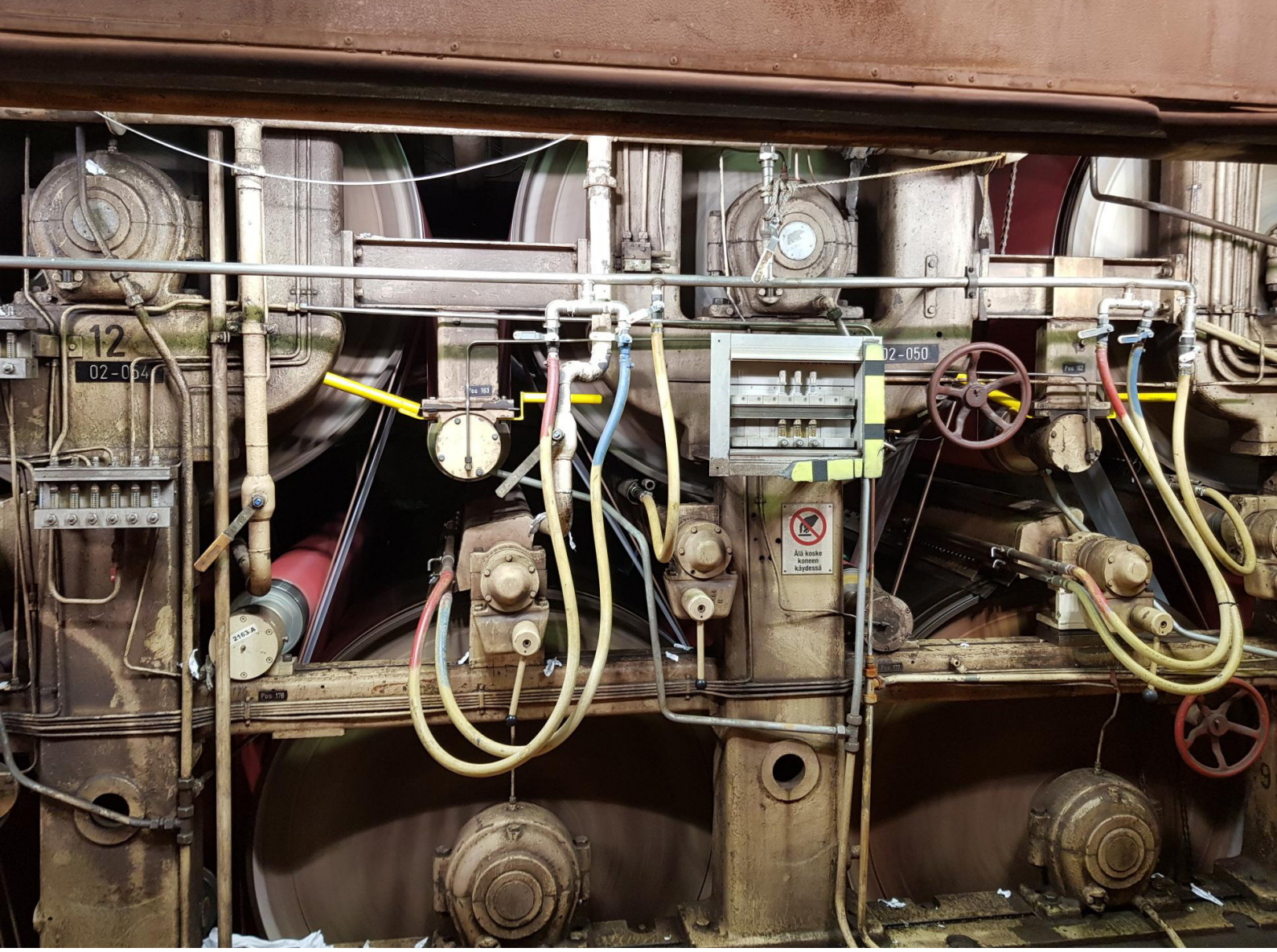
# HITE LED®

A LED luminaire, which withstands extremely high temperatures; the ambient temperature for the luminaire component is an outstanding **+110°C**. This special luminaire is specifically designed for hot and humid industrial process applications, such as paper machines' drier cylinders and cement plants' cyclone preheaters. The solution consists of separate luminaire and control modules. The control unit, which contains drivers for four luminaire units, must be placed in a cooler space. The luminaire is installed by using the separately sold bracket **6066.030.00E.** The technology of the luminaire is replaceable, which means that the whole luminaire does not need to be replaced when it reaches the end of its lifespan.



FIT FOR THE FUTURE

| | |
|---|---|
| **Updating** | Replaceable LED module and technology package for the control unit, see 28 |
| **Ta class** | Luminaire: Min. -40°C, max. +110°C<br>Control unit: Min. -25°C, max. +45°C |
| **Input power** | 198 W (the solution as a whole, incl. 4 luminaires + control module) |
| **Luminous flux** | 23,600 lm (5,900 lm per luminaire unit) |
| **Luminous efficacy** | 119 lm/W @110 °C |
| **Colour temperature** | 4,000 K |
| **MacAdam value** | 3 SDCM |
| **Enclosure rating** | IP65 |
| **Impact strength rating** | IK08 |
| **Light distribution** | Wide |
| **Cover material tempered** | Safety glass, frosted |
| **Body material** | Epoxy-coated aluminium |
| **Connection** | Luminaire unit: Spring terminal (3 × 2.5 mm²). Control unit: Spring terminal (5 × 2.5 mm²) or a 1.5 m cable with a plug. The connecting cable for the modules is not included in the product number. |
| **Control** | DALI-2 |
| **Frequency** | 0/50/60 Hz |
| **Voltage** | 220–240 V |
| **Weight** | Luminaire unit 7.2 kg, control module for four luminaires 4.9 kg |
| **Installation** | The luminaire is installed with a separately ordered steplessly adjustable alignment bar 6066.030.00E (see p. 38). |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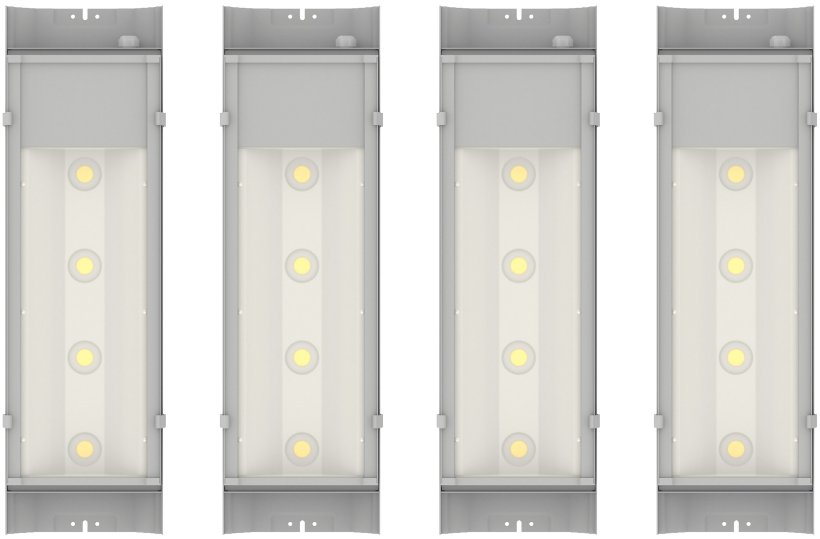


# LED EXIT 9701 - exit route light

A durable, low-maintenance signal and safety light for challenging conditions. Suitable for use as an exit route and safety light in process spaces. Typical applications include paper machine premises, pulp mills, workshops, steel mills, power plants, furnaces and warehouses. Typical installation height: 2–5 m.

FIT FOR THE FUTURE

**Basic version:**
- 200–240 V
- 0/50/60 Hz
- Input power 2.3 W

**Battery-operated versions:**
- 220–240 V
- 50/60 Hz
- Input power 3 W
- Battery charge 3 h
- Battery charging time 12 h
- Prevention of deep discharge
- Restricts power automatically to ensure that 3 h is achieved
- Switches automatically to battery power
- LED indicator for luminaire status

**Battery-operated version Basic:**
- Equipped with a test switch for testing the luminaire's functioning

**Battery-operated version Pro:**
- Can be controlled via a DALI connection
- If external control has not been connected, a functioning test is performed automatically once a week while a condition and charging test is carried out every 13 weeks

**Accessories:**
- Screen-printed acrylic sheets with an arrow pattern can be ordered with three different arrow directions
- For safety lights, an unprinted white opal acrylic sheet is also available (product number 14070)
- The product number for the luminaire with an unprinted opal acrylic sheet is 9701.000.00

| | |
|---|---|
| **Ta class** | +45°C |
| **Input power** | 2.3 W–3 W |
| **Enclosure rating** | IP65 |
| **Impact strength rating** | IK08 |
| **Light distribution** | Wide |
| **Cover glass material** | Tempered safety glass + printed opal acrylic sheet |
| **Body material** | Polyester-coated aluminium profile |
| **Connection** | Spring terminal (5 × 2.5 $mm^2$) |
| **Control** | DALI or ON/OFF |
| **Frequency** | 50/60 Hz |
| **Voltage** | Basic version: 200-240 V, Battery-operated versions: 220-240 V |
| **Weight** | approx. 3.5 kg |
| **Installation** | Can be mounted without separate brackets from the lugs at the ends of the luminaire. A wide range of mounting brackets is also available, when necessary; see pages 36–39. |

# ACQUEX LED made by Zalux

## II 3 G Ex nA IIC T6 Gc, II 3 D Ex t IIIC T85 °C Dc IP66

I-Valo offers Zalux's reliable, explosion-proof luminaire solutions, which utilise the latest LED technology. The products are designed for general lighting in spaces where explosive atmospheres occur temporarily. ACQUEX LED is suitable for use in spaces with an explosive atmosphere pursuant to the ATEX directive (2014/34/EU). The high-quality materials used for the LED luminaire guarantee a long service life.

### Recommended applications:

- Spaces with oils or gases
- Medical industry
- Chemical industry
- Food industry and agriculture
- Industrial plants

| | |
|---|---|
| **Ta class** | -20°C... +40°C |
| **Input power** | 18 W, 32 W and 40 W |
| **Luminous flux** | 2,200 lm, 4,800 lm and 5,800 lm |
| **Luminous efficacy** | 122 - 150 lm/W |
| **Colour temperature** | 4,000 K |
| **Enclosure rating** | IP66 |
| **Impact strength rating** | IK10 |
| **Light distribution** | Wide |
| **Cover glass material** | Polycarbonate (PC) |
| **Body material** | Glass fibre reinforced polyester |
| **Connection** | Fixed connection with a spring terminal (3 × 1.5 mm²) |
| **Control** | ON/OFF |
| **Frequency** | 0/50/60 Hz |
| **Voltage** | 220-240 V |
| **Weight** | 1.8 kg-3.6 kg |

# I-Valo's upgrade and maintenance packages

In its product development, I-Valo focuses on designing durable products with long service lives. This principle is evident in the company's wide range of RetroFit upgrade and maintenance packages. The LED upgrade packages are part of I-Valo's environmental philosophy and sustainable product development. The continuously developing technology of I-Valo's Fit for the Future products can be updated while keeping the durable frame and brackets. This way, customers who already use I-Valo's luminaires with conventional light sources can upgrade their solutions and benefit from the energy savings created by modern LED technology. With I-Valo's LED RetroFit upgrade packages you can easily convert your luminaires with a discharge or fluorescent lamp into a modern LED solution.

FIT FOR THE FUTURE

## 6721 LED & 6741 LED

### ST/MT-70W - 150W for lowbay luminaires

NEW PRODUCT UPDATE

- The RetroFit package for I-Valo's discharge lamp luminaires 6111, 6121, 6201, 6211, 6221 and 6301
- Includes an easy-to-install LED technology package and control units
- The 6721 LED package most closely corresponds to the ST/MT-70W and MT-100W luminaires in terms of efficacy, whereas the 6741 LED package can be used to upgrade luminaires with a ST-100W or MT-150W light source. I-Valo's sales team are more than happy to help you select the suitable package.

| PRODUCT NUMBER | INPUT POWER | TA CLASS |
|---|---|---|
| 6721.200.V3.LM11 | 54 W | -25°C...+55°C |
| 6741.200.V3.LM11 | 71 W | -25°C...+50°C |

Note: This RetroFit package also includes a new glass frame and filter!

## 6231 LED

### MT-250W for a lowbay luminaire

NEW PRODUCT UPDATE

- The RetroFit package for I-Valo's discharge lamp luminaire 6231 (MT-250 W)
- The technology package includes the LED module, control units, and a new glass frame with acid-etched glass and dust filter
- The new frame with a lower profile optimises the luminaire's light output while preventing distracting nuisance glare

| PRODUCT NUMBER | INPUT POWER | TA CLASS | LUMINOUS FLUX (LUMINAIRE) | COVER MATERIAL |
|---|---|---|---|---|
| 6231.200.V3.LM11 | 118 W | -25°C...+45°C | 15,000 lm | Safety glass, frosted |
| 6231.300.V3.LM11 | 118 W | -25°C...+45°C | 15,800 lm | Satin acrylic (PMMA) |

# DAVI®

## LED maintenance packages

- A technology package for the maintenance of DAVI luminaires
- Select a technology package that matches the first five characters in the luminaire's product number
- Includes the LED module plus control module

| PRODUCT NUMBER | INPUT POWER | TA CLASS | LUMINOUS FLUX<br>varies depending on the diffusor |
|---|---|---|---|
| **Short DAVI** | | | |
| DN10M | 31 W | -25°C...+60°C | 4,400-4,900 lm |
| DN10X | 31 W | -25°C...+60°C | 4,600-4,700 lm |
| DN20M | 59 W | -25°C...+45°C | 9,700-9,900 lm |
| DN20X | 59 W | -25°C...+45°C | 9,200-9,400 lm |
| DN21M | 78 W | -25°C...+40°C | 12,400-13,700 lm |
| DN21X | 78 W | -25°C...+40°C | 12,600-12,900 lm |
| **Long DAVI** | | | |
| DA20M | 59 W | -25°C...+50°C | 9,000-10,000 lm |
| DA20X | 59 W | -25°C...+50°C | 9,300-9,500 lm |
| DA40M | 119 W | -25°C...+45°C | 18,100-19,600 lm |
| DA40X | 119 W | -25°C...+45°C | 18,600-19,000 lm |
| DA41M | 156 W | -25°C...+40°C | 24,800-27,500 lm |
| DA41X | 156 W | -25°C...+40°C | 25,700-26,300 lm |

KEMIKAARI

# DANI®

## LED maintenance packages

- A technology package for the maintenance of DANI luminaires
- Includes the LED module plus control module

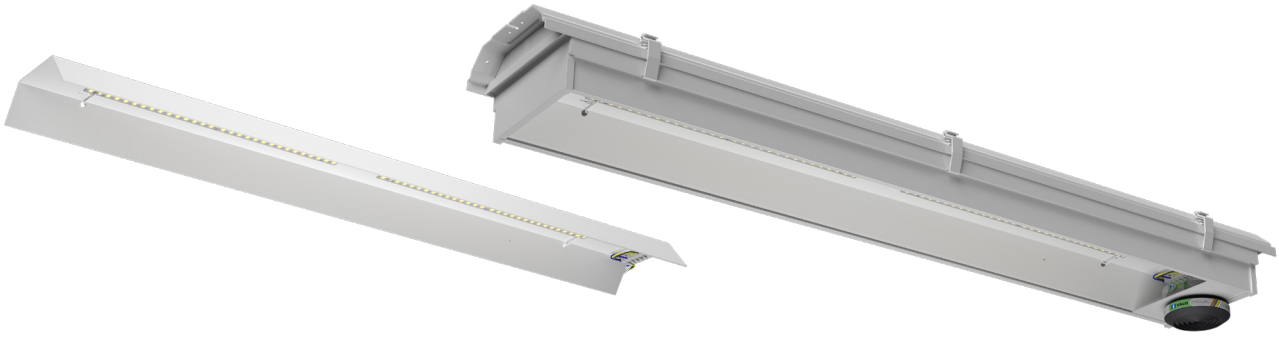
| PRODUCT NUMBER | INPUT POWER | TA CLASS | LUMINOUS FLUX |
|---|---|---|---|
| DV01X | 12 W | -25°C...+45°C | 1,500 lm |
| DV02X | 20 W | -25°C...+40°C | 2,500 lm |

# HITE LED® 6756 & C6756

## LED maintenance packages for luminaires and control units

- 6756 is a replaceable technology package designed for the maintenance of the HITE LED luminaire unit
- C675601 is a technology package for a single luminaire's control unit
- C675604 is a technology package for four luminaires' control unit
- C6756 technology packages are composed of a ready-assembled installation base, complete with a driver (incl. wires), fixing screws for mounting the base on the control module's frame, a type plate and a user manual.

| PRODUCT NUMBER | INPUT POWER | TA CLASS | LUMINOUS FLUX |
|---|---|---|---|
| 6756 | 49.5 W | -40 °C...+110 °C | 5,900 lm |
| C675601 | 49.5 W | -25 °C...+45 °C | incl. 1 control unit |
| C675604 | 198 W | -25 °C...+45 °C | incl. 4 control units |

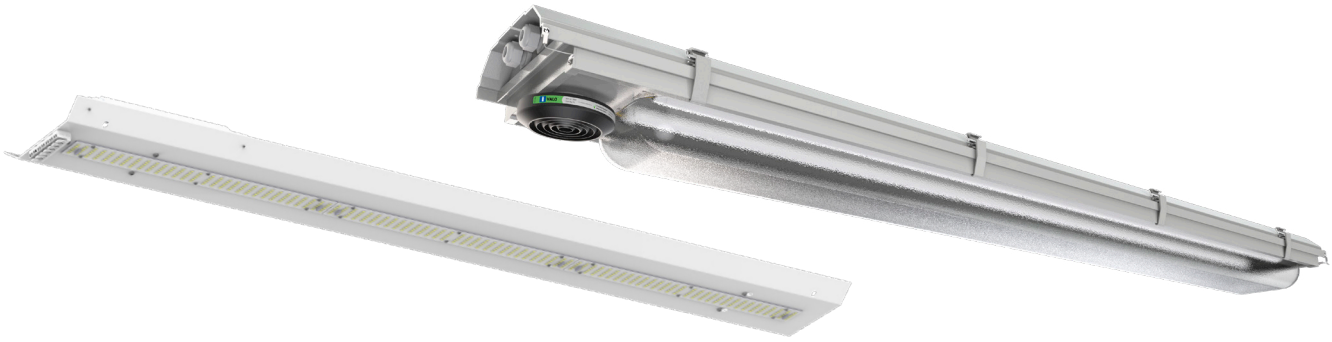


# 9441 LED & 9451 LED

## For I-VALO's T5 industrial fluorescent lamp luminaires

- The RetroFit package for I-Valo's T5 industrial fluorescent lamp luminaires 9441 (2 x FD-54W-G5) and 9451 (2 x FD-80W-G5)
- Includes an easy-to-install LED technology package and control units

| PRODUCT NUMBER | INPUT POWER | TA CLASS | LUMINOUS FLUX |
|---|---|---|---|
| 9441.200.V3.LM11 | 55 W | -20 °C...+45 °C | 8,500 lm |
| 9451.200.V3.LM11 | 75 W | -20 °C...+45 °C | 11,800 lm |



# 6431 LED & 6441 LED

## For I-VALO's T8 industrial fluorescent lamp luminaires

- The RetroFit package for I-Valo's T8 industrial fluorescent lamp luminaires 6431 (2 x FD-36W-G13) and 6441 (2 x FD-58W-G13)
- Includes an easy-to-install LED technology package and control units

| PRODUCT NUMBER | INPUT POWER | TA CLASS | LUMINOUS FLUX |
|---|---|---|---|
| 6431.200.V3.LM11 | 36 W | -25 °C...+55 °C | 7,000 lm |
| 6441.200.V3.LM11 | 53 W | -25 °C...+55 °C | 10,500 lm |

# e-Sense Move Highbay control technology

## Lighting control in industrial facilities - available for **XENRE®** and **DAVI®** luminaires

The e-Sense Move Highbay control technology is designed for industrial applications. The system is equipped with both microwave and PIR sensors in a single unit, enabling the user to switch between these presence detection methods or to use both simultaneously. When a sensor detects presence in the space, a set number of luminaires switches on at a pre-determined efficacy level. This allows the creation of a seamless and energy-efficient lighting solution for the entire space. e-Sense Move Highbay can be equipped with a lens designed for corridors or open spaces to enable application-specific detection. This technology is available for I-Valo's XENRE and DAVI luminaires.

## Two PIR lens options

To optimise the system, e-Sense Move Highbay is available with two different lenses. Lenses designed for corridors have a narrow, rectangular detection area while lenses intended for open spaces operate over a wide or medium wide area.

## This is how e-Sense Move Highbay works

e-Sense Move Highbay utilises two detection methods. Microwave sensors can detect motion through light-weight doors and other similar structures. PIR sensors react to heat generated by a living body.

## Quick to program with a remote control

A remote controller is used to determine the number of luminaires linked together, low and high lighting levels, duration of full/low/off states and the choice of detection technique. Once you have defined the settings for the first sensor luminaire, you can save the settings and use them for all the other sensors. This makes the solution quick to commission when a large number of luminaires is required to operate in a similar manner.

With the e-Sense Move Highbay lighting control system, the sensors communicate with one another wirelessly. The sensors are integrated into a master luminaire, which can be linked to up to 20 slave luminaires via a DALI bus. When presence is detected, the information is sent wirelessly to up to 15 other master luminaires, which switch on automatically at a pre-determined efficacy level

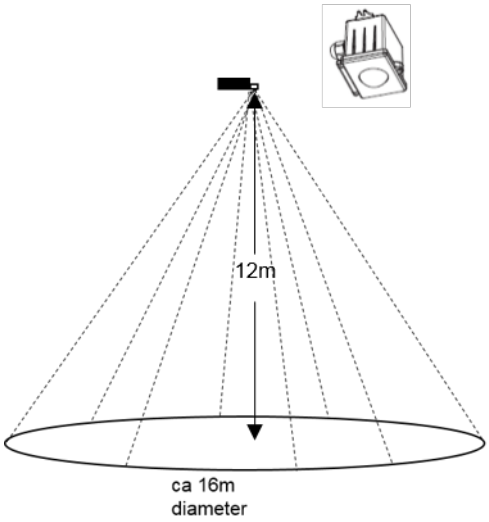
## Microwave sensor or PIR

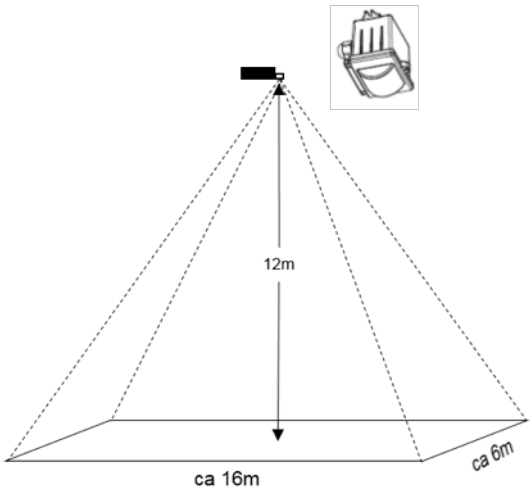
Thanks to dual sensors, users can switch to presence detection with microwave sensors, PIR sensors or both. The possibility to select the sensor type for a luminaire offers added flexibility if the property's floor plan or purpose is changed at a later date.

A microwave sensor can detect motion through doors or other similar structures and its sensitivity is easy to adjust. If luminaires are located close to an air-conditioning system or another similar system, vibration may activate microwave sensors. In such places, a PIR sensor may offer a better solution.

### PIR SENSOR

PIR sensors operate in various ways, depending on the lens. Lenses designed for corridors have a narrow, rectangular detection area while lenses intended for open spaces operate over a wide or medium wide area.



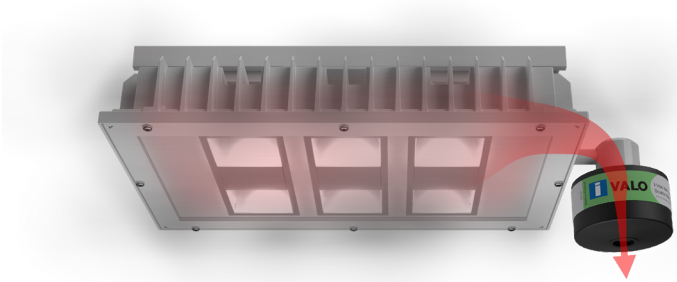

### MICROWAVE SENSORS

The microwave sensor operates differently, with a dome-shaped detection area. The detection area can be adjusted by changing the sensor's efficacy. The starting efficacy can be set at 100%, 75%, 50% or 10%.

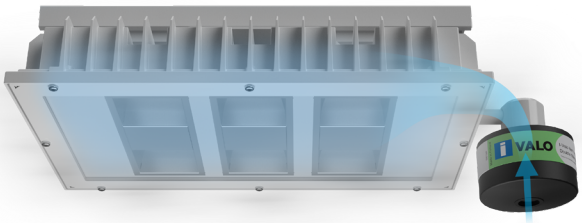
# I-Valo's filtering technology

## How does the filtering technique work?

The air current caused by the lighting fixture heating and cooling is passed through a filter, which captures dust and other dirt particles. Such impurities are removed from the air by either the filtering microfibre paper, the activated charcoal element or the GORE membrane. This ensures that no impurities get onto the surface of the specially treated reflectors in such a way that would decrease the luminous flux or damage the sensitive LED chips or electronics. Energy consumption and the need for maintenance decrease and lighting life cycle costs reduce considerably.




**THE LUMINAIRE IS ON**
- Air expands as it heats up and exits via the filter




**THE LUMINAIRE IS OFF**
- The luminaire cools down and takes in air
- The filter removes impurities from the incoming air

The larger I-Valo dual-effect filters include an activated charcoal element in addition to the microfibre paper. They also filter out different gases in addition to dirt particles. The choice of filter is made based on the ambient conditions in the installation environment.

**19961**

## DUST FILTER
with a plastic cover

### FILTERS

- solid and liquid particles of toxic agents
- radioactive substances and micro-organisms, e.g. bacteria and viruses
- dust particles and impurities larger than 0.01 µm

Typically used in luminaires that are used in standard industrial environments with dust in the air. These include power plants, boilers, pulp and paper mills, and the wood processing industry.

**19959**

## DUAL-EFFECT FILTER
with a metal cover

**19960**

## DUAL-EFFECT FILTER
with a plastic cover

### FILTERS

- organic, inorganic and acid gases and vapours
- ammonia and organic ammonia derivatives
- solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms

The dual-effect filter with a plastic casing offers added durability in environments where aggressive chemicals would corrode a filter with a metal casing. These include galvanising and pickling plants.

**19956**

**GORE FILTER LARGE**
with a plastic cover

**19957**

**GORE FILTER SMALL**
with a plastic cover

## FILTERS

- dirt, dust, salts, water and other harmful liquids
- particularly recommended for use with luminaires installed in outdoor areas

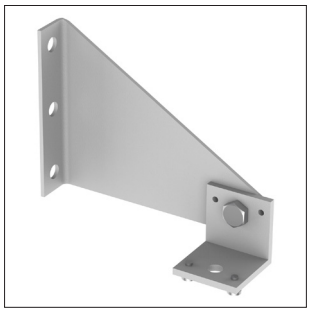
Also recommended for facilities used in the food and beverage industry, where there is a need for regular cleaning due to strict hygiene regulations. This means that high humidity levels are often present. The thermal resistance of GORE filters is excellent; therefore, they are just as suited for cold rooms as they are for the highest ambient temperatures of I-Valo luminaires. They are also resistant to changes in temperature. Washing facilities constitute one challenging application area where the ambient temperature can vary significantly.

# Mounting brackets

### 602100000
**WIRE SUSPENSION BRACKET**
- Wire suspension bracket without the wire
- Plate parts made of polyester-coated hot-dip galvanised steel
- Lifting loop nuts made of electro-galvanised steel

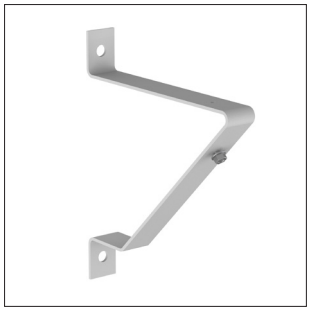
### 602140000
**WIRE SUSPENSION BRACKET**
- Plate parts made of polyester-coated hot-dip galvanised steel
- Lifting loop nuts made of electro-galvanised steel
- Wire rope locks made of nickel-plated stainless steel
- Stainless steel wire rope with loop
- The standard length of the wire rope is 4,000 mm, and it can be shortened by the customer to the desired length

### 602200000
**WIRE SUSPENSION BRACKET**
- Plate parts made of hot-dip galvanised steel
- Lifting loop nuts made of electro-galvanised steel
- Carabiners made of electro-galvanised steel
- Quick and easy to install on a horizontal wire, for example
- Suitable for all I-Valo's low- and highbay luminaires (except VIVO)



### 603500000
**WALL BRACKET**
- Stepless wall bracket
- Polyester-coated steel sheet/aluminium
- Continuous control of the angle
- Two 6035 brackets are required for installation
- Wall-mounting screws M10 (6 pcs) are not included in the delivery

### 603600000
**RAIL BRACKET**
- Polyester-coated steel sheet
- Continuous control of the angle
- Two 6036 brackets are required for installation



## 606000000

**WALL BRACKET**

- Mounting angles 0°, 45°
- Polyester-coated hot-dip galvanised steel
- The luminaire is installed with two brackets

## 606100000

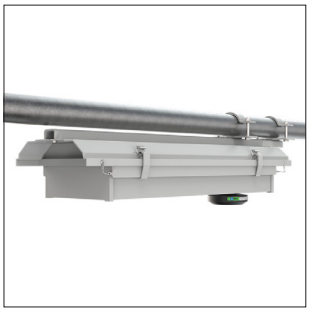
**WALL BRACKET**

- Mounting angles 0°, 25°, 45°
- Polyester-coated hot-dip galvanised steel
- The bracket version **606103000** is suited for use with the long DORA luminaire

## 606300000

**POLE BRACKET**

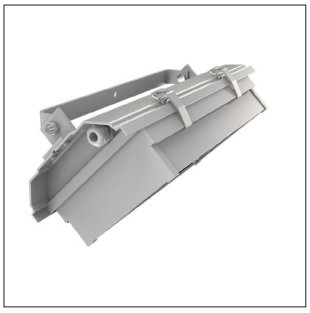
- Mounting angles 0°, 25°, 45°
- Polyester-coated hot-dip galvanised steel
- The bracket version **606303000** is suitable for use with the long DORA luminaire



## 606500000

**PIPE BRACKET**

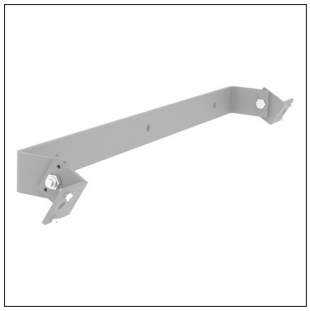
- Installation angle 0°
- Polyester-coated hot-dip galvanised steel
- The bracket version 606503000 is suitable for use with the long DORA luminaire

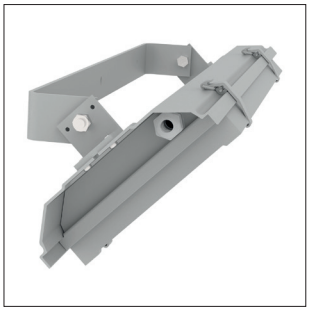


## 606600000

**ALIGNMENT BAR**

- Alignment bar for the HITE 6316 luminaire
- Polyester-coated aluminium
- Continuous control of the angle

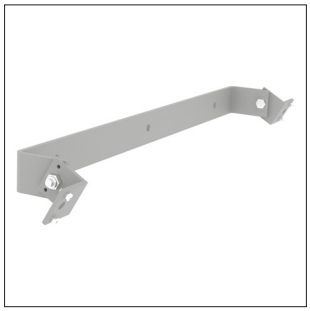


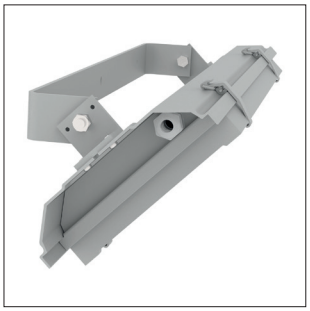


## 606603000

**ALIGNMENT BAR**

- An alignment bar for the installation of I-Valo's lowbay luminaires, such as HITE LED
- **The use of the alignment bar to mount the HITE LED luminaire enables the achievement of the luminaire's max. Ta class of 110°C**
- Continuous control of the angle
- **Polyester-coated aluminium (RAL 7047)**





## 606603000E

**ALIGNMENT BAR**

- An alignment bar for the installation of I-Valo's lowbay luminaires, such as HITE LED
- **The use of the alignment bar to mount the HITE LED luminaire enables the achievement of the luminaire's max. Ta class of 110°C**
- Continuous control of the angle
- **Epoxy-coated aluminium (RAL 7045)**

## 607900000

**WIRE BRACKET**

- Mounting angles 0°, 25°, 45°
- Polyester-coated hot-dip galvanised steel
- The bracket version 606303000 is suitable for use with the long DORA luminaire

## D100

**SUSPENSION BRACKET**

- Suitable for the chain suspension of the DORA+ luminaire
- Single-point mounting
- Polyester-coated aluminium

## D200

**SUSPENSION BRACKET**

- Adjustable double suspension bracket
- Easy to mount directly on the ceiling or to suspend on a chain or wire with hooks
- Luminaires can be tilted $10^0$

## PP30S00
**FIXED POLE 3.0 M**

- I-VALO POLE is designed for lighting installation in spaces such as staircases, maintenance platforms and conveyors.
- The luminaire can be mounted on any side of the pole.
- The luminaire must be mounted on the pole with the wall bracket 6061 (must be ordered separately).
- Pay attention to cable length in the choice of the pole.

## PP30T00
**FOLDING POLE 3.0 M**

- I-VALO POLE is designed for lighting installation in spaces such as staircases, maintenance platforms and conveyors.
- The luminaire can be mounted on any side of the pole.
- The folding poles fold sideways in both directions.
- The luminaire must be mounted on the pole with the wall bracket 6061 (must be ordered separately).
- Pay attention to cable length in the choice of the pole.

## PP35T00
**FOLDING POLE 3.5 M**

- I-VALO POLE is designed for lighting installation in spaces such as staircases, maintenance platforms and conveyors.
- The luminaire can be mounted on any side of the pole.
- The folding poles fold sideways in both directions.
- The luminaire must be mounted on the pole with the wall bracket 6061 (must be ordered separately).
- Pay attention to cable length in the choice of the pole.

## FOLDING POLES (PP30T00, PP35T00)

- Thanks to the pole that folds sideways, the light source can be lowered at the working height. Because of this, installation can be carried out by a single fitter and no extra pairs of hands are required for the work.

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VALO

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