

# PRODUCT DATASHEET

## FL FLEX P 450W ML 830 R20 WAL

FLOODLIGHT FLEX RADIAL SYMMETRIC 20 | High lumen floodlights with radial symmetric light distribution for high mast area lighting



### Areas of application

- Coastal areas, like ports
- General outdoor area lighting
- Parking
- Suitable for indoor and outdoor sports facilities
- Architectural lighting
- Industry
- Direct replacement for luminaires using HID lamps

### Product benefits

- Corrosion resistance C5: tested in environments with high salinity
- Serviceable luminaire: LED driver can be replaced
- Flexible application due to a range of different lumen packages and beam angles
- 3 cable entries for flexible use and easy connection between luminaires
- Integrated breather for preventing condensation inside the luminaire
- Energy savings of up to 91 % compared to halogen lamp floodlights
- Energy savings of up to 51 % compared to luminaires that use conventional discharge lamps
- No upper light output ratio (ULOR 0%) when mounted at 0° tilt
- Intelligent design of the water drain to prevent standing water
- Simple angle adjustment by locking every 2.5°
- Clear angular degree indication
- Key hole to ensure ease of installation

### Product features



- Corrosion resistance C5 based on 1,500 hours salt mist spray test
- High luminous efficacy: up to 151 lm/W
- Multi Lumen function: 4 power steps selectable
- Daisy chaining possible
- High surge protection: up to 10 kV (L/N-PE), 6 kV (L-N)
- High lifetime (L70/B50): up to 120,000 h (at 25 °C)
- Lumen packages up to 70000 lm

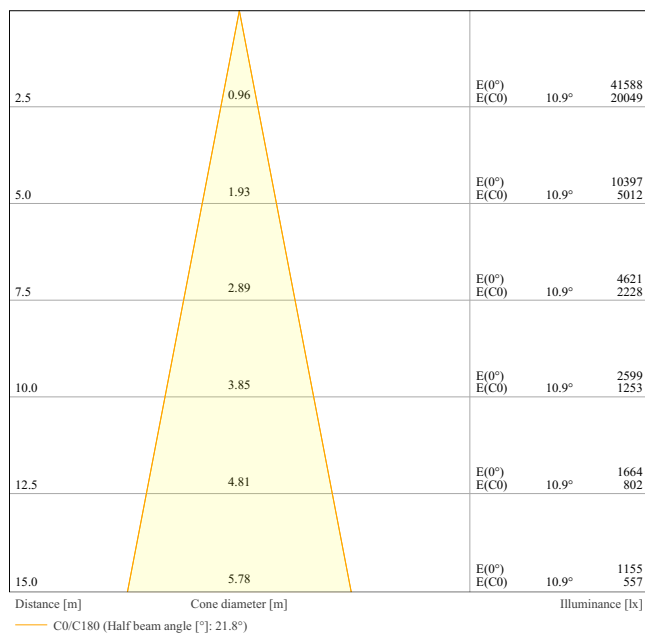
## TECHNICAL DATA

### Electrical data

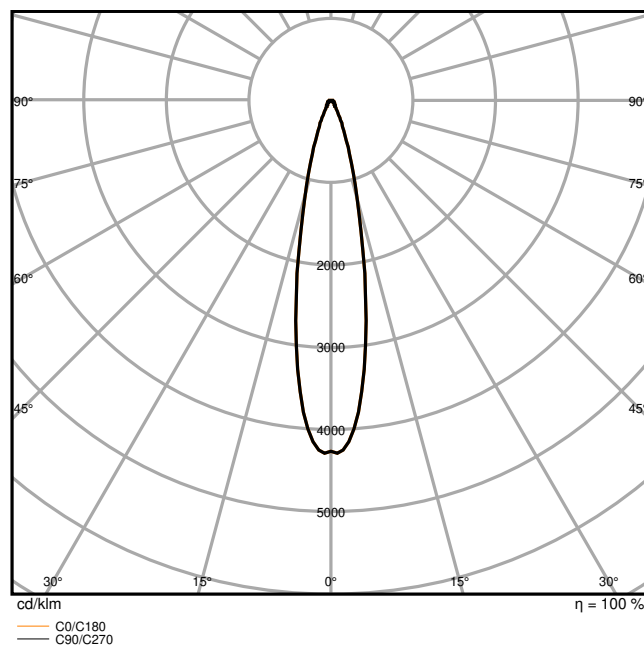
|                                                             |                                   |
|-------------------------------------------------------------|-----------------------------------|
| Nominal wattage                                             | 450 W / 382.5 W / 315 W / 247.5 W |
| Nominal voltage                                             | 220...240 V                       |
| Mains frequency                                             | 50...60 Hz                        |
| Nominal current                                             | 2000.000 mA                       |
| Inrush current                                              | 200 A                             |
| Inrush current time $T_{h50}$                               | 208 $\mu$ s                       |
| Max. number of luminaires per miniature circuit breaker B16 | 3                                 |
| Max. number of luminaires per miniature circuit breaker C10 | 3                                 |
| Max. number of luminaires per miniature circuit breaker C16 | 5                                 |
| Power factor $\lambda$                                      | > 0.96                            |
| Total harmonic distortion                                   | < 20 %                            |
| Protection class                                            | I                                 |
| Surge capability (L-N)                                      | 6 kV                              |
| Surge capability (L/N-Ground)                               | 10 kV                             |
| Operating mode                                              | Integrated LED driver             |

### Photometrical data

|                                              |                                           |
|----------------------------------------------|-------------------------------------------|
| Luminous flux                                | 61000 lm / 51900 lm / 43300 lm / 34800 lm |
| Luminous efficacy                            | 136 lm/W / 137 lm/W / 141 lm/W            |
| Color temperature                            | 3000 K                                    |
| Light color (designation)                    | Warm White                                |
| Color rendering index Ra                     | > 80                                      |
| Standard deviation of color matching         | 5 sdc <sub>m</sub>                        |
| Luminous intensity                           | 297808 cd                                 |
| Low flicker                                  | Yes                                       |
| Flickering metric (Pst LM)                   | <1                                        |
| Stroboscope effect metric (SVM)              | <.0.4                                     |
| Photobiological safety group acc. to EN62778 | RG1                                       |
| Beam angle                                   | 20 °                                      |

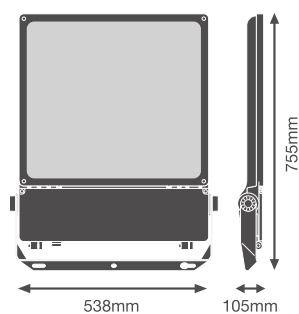


FL FLEX DA/P 450W ML 830 R20 WAL



FL FLEX P 450W ML 830 R20 WAL LEDV

|                |            |
|----------------|------------|
| Length         | 755.00 mm  |
| Width          | 538.00 mm  |
| Height         | 105.00 mm  |
| Product weight | 15500.00 g |



FL FLEX P WAL

## Materials & Colors

|                                            |                |
|--------------------------------------------|----------------|
| Product color                              | White aluminum |
| Housing color                              | White aluminum |
| Body material                              | Aluminum       |
| Cover material                             | Glass          |
| Light emitting surface material            | Glass          |
| Glow Wire Test according to IEC 60695-2-12 | 850 °C         |
| Mercury content                            | 0.0 mg         |

### Application & Mounting

|                                             |                               |
|---------------------------------------------|-------------------------------|
| Ambient temperature range                   | -30...+50 °C                  |
| Temperature range at storage                | -30...+80 °C                  |
| Type of connection                          | Screwless terminal            |
| Type of protection                          | IP66                          |
| Protection class IK (shock resistance)      | IK08                          |
| Corrosion resistance class acc. to EN 12944 | C5                            |
| Dimmable                                    | No                            |
| Mounting type                               | Surface                       |
| Mounting location                           | Wall / Pole / Floor / Ceiling |
| Application environment                     | Outdoor                       |
| Adjustable                                  | Yes                           |
| With light source                           | Yes                           |

### Lifespan

|                            |                        |
|----------------------------|------------------------|
| Lifespan L70/B50 at 25 °C  | 120000 h <sup>1)</sup> |
| Lifespan L80/B10 at 25 °C  | 100000 h <sup>1)</sup> |
| Lifespan L80/B50 at 25 °C  | 100000 h               |
| Lifespan L90/B10 at 25 °C  | 50000 h                |
| Number of switching cycles | 100000                 |

<sup>1)</sup> t[h]: L70 / B50 @ 25 °C (Ta), t[h]: L80 / B10 @ 25 °C (Ta), t[h]: L90 / B10 @ 25 °C (Ta)

### Control gear

|                             |         |
|-----------------------------|---------|
| Output current              | 6250 mA |
| ECG - Output ripple current | < 10 %  |

### Certificates & Standards

|           |                       |
|-----------|-----------------------|
| Standards | CE / CB / ENEC / UKCA |
|-----------|-----------------------|

|                                                      |                 |
|------------------------------------------------------|-----------------|
| Luminaire with limited surface temperature, "D sign" | Yes             |
| Replaceable light source (EPREL)                     | Not replaceable |

### Additional product data

|                |              |
|----------------|--------------|
| Added function | MULTI SELECT |
|----------------|--------------|

### EQUIPMENT / ACCESSORIES

- Delivery without cables
- Second cable gland included
- 2 rubber inserts for 6,5 - 7,5 mm cables included

### DOWNLOAD DATA

| Documents and certificates                                                         |                                        | Document name                      |
|------------------------------------------------------------------------------------|----------------------------------------|------------------------------------|
|    | User instruction / safety instructions | FL FLEX P ON-OFF                   |
|    | Legal information                      | Informationstext 18 Abs 4 ElektroG |
|  | Legal information                      | Safety Insert G11205497            |
|  | Legal information                      | LSI FL FLEX                        |
|  | Legal information                      | Legal insert G11231557             |
|  | Declarations of conformity             | CE FL FLEX P                       |
|  | Declarations of conformity UKCA        | UKCA FL FLEX P                     |
|  | Certificates                           | ENEC FL FLEX P                     |
| Photometric and lighting design files                                              |                                        | Document name                      |
|  | IES file (IES)                         | FL FLEX P 450W ML 830 R20 WAL LEDV |
|  | LDT file (Eulumdat)                    | FL FLEX P 450W ML 830 R20 WAL LEDV |
|  | ULD file (DIALux)                      | FL FLEX P 450W ML 830 R20 WAL      |

| Photometric and lighting design files                                             |                                     | Document name                                              |
|-----------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------|
|  | ROLF file (RELUX)                   | FL FLEX P 450W ML 830 R20 WAL                              |
|  | Light distribution curve type cone  | FL FLEX DA/P 450W ML 830 R20 WAL                           |
|  | Light distribution curve type polar | FL FLEX P 450W ML 830 R20 WAL LEDV                         |
| CAD/BIM files                                                                     |                                     | Document name                                              |
|  | BIM Revit 3D                        | Floodlight Flex                                            |
|  | BIM Step 3D                         | FL FLEX 450W                                               |
| Tender texts                                                                      |                                     | Document name                                              |
|  | Tender documents                    | FLOODLIGHT FLEX RADIAL SYMMETRIC 20 450W ML 830 R20 WAL-en |

LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume    |
|---------------|------------------------------|--------------------------------------|--------------|-----------|
| 4099854373961 | Shipping box<br>1            | 837 mm x 577 mm x 154 mm             | 18095.00 g   | 74.37 dm³ |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

ADDITIONAL CATALOG INFORMATION



References / Links

– For Guarantee see [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)

DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.