

# SPIO 20 downlight

trim

048-1610418W 002-90783



Project / Type

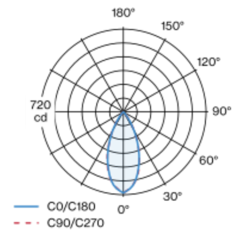
Notes

Count / Date

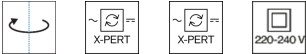
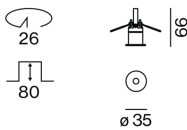


Round recessed spotlight in aluminium; surface jet black powder coated; with trim; suitable for ceiling thickness of 2-25 mm; installation without tools using snap spring closure; passive cooling of the LEDs through improved heat sink geometry; light colour 2700 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 90$ ; min. 85% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; incl. high quality lens system; precise radiation characteristic with 44° beam; no multiple shadows; uncluttered ceiling look through recessed lighting level; reduced light-emitting surface (only  $\varnothing 10$  mm); degree of protection IP20; PC2; 220-240 V; incl. converter, non dimmable; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Light distribution



## Product drawing



## General

Ceiling | Recessed

rotation 360°

jet black | RAL 9005 <sup>1</sup>

IP20

424 lm

fixture 65 lm/W <sup>2</sup>

## LED

2700 K

CRI  $\geq 90$

L85 / 50000 h

initial MacAdam  $\leq 3$  SDCM

R<sub>g</sub>: 104 | R<sub>f</sub>: 88 | R<sub>f(1-15)</sub>: 89

MR 0.5 | MDER 0.46

## Optical

wide flood | beam angle 44°

PstLM  $\leq 1.0$  <sup>3</sup> | SVM  $\leq 0.4$  <sup>3</sup>

## Electrical

non DIM

PC2 | 220-240 V

system 8.7 W | fixture 6.5 W

12 Vf | 600 mA

## Physical

trim

diameter 35 mm | height 66 mm

0.17 kg

## Cutout

diameter 26 mm

min. ceiling thickness 2 mm | max. ceiling thickness 25 mm

recessed depth 80 mm

<sup>1</sup> RAL code  
<sup>2</sup> incl. consideration of optical losses & internal control unit losses  
<sup>3</sup> Value of containing product at full load (undimmed)

## Installation instructions



## Lighting calculator



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## Maintenance Factors

| Operating Time [h] | 10 000 | 20 000 | 30 000 | 40 000 | 50 000 |
|--------------------|--------|--------|--------|--------|--------|
| LLMF               | 1      | 1      | 0.99   | 0.97   | 0.96   |
| LSF                | 1      | 1      | 1      | 1      | 1      |

MF

LMF × RSMF × LLMF × LSF

MF

Maintenance Factor

LMF<sup>a</sup>

Luminaire Maintenance Factor

RSMF<sup>a</sup>

Room Surface Maintenance Factor

LLMF

Lamp Lumens Maintenance Factor

LSF

Lamp Survival Factor

<sup>a</sup> According to "CIE 97, Maintenance of indoor electric lighting systems", 2005, ISBN 3-900-734-34-8. The values must be determined by the planner.

## Circuit Breaker Types

| Automatic Circuit Breaker Type | Number of Fixtures |
|--------------------------------|--------------------|
| B10                            | 31                 |
| B13                            | 40                 |
| B16                            | 50                 |
| B20                            | 62                 |
| C10                            | 52                 |
| C13                            | 67                 |
| C16                            | 85                 |
| C20                            | 104                |

## Components

### POWER SUPPLY

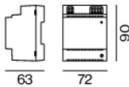
|            |                   |
|------------|-------------------|
| L·W·H (MM) | ARTICLE NUMBER(S) |
| 147-44-22  | 002-90783         |



## Optional electrical accessories

### DIN RAIL POWER SUPPLY

|            |                   |
|------------|-------------------|
| L·W·H (MM) | ARTICLE NUMBER(S) |
| 72-90-63   | 005-6520210       |



### DIN RAIL LED DRIVER

|                                |            |                   |
|--------------------------------|------------|-------------------|
| TYPE                           | L·W·H (MM) | ARTICLE NUMBER(S) |
| 2 × 42W   48V DC   UOUT 10–40V | 36-88-59   | 005-6121030       |

