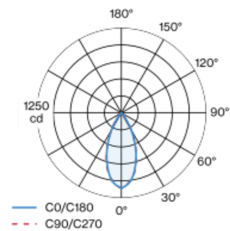


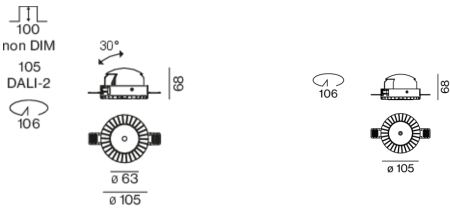


Round recessed spotlight in die-cast aluminium; surface white powder coated; installation without tools in mounting set with magnetic attachment; for trimless installation in plasterboard ceilings, specially designed trim with grooves for better adhesion of smoothing compound; suitable for ceiling thickness of 12.5/15/25 mm; paintable cover; shadow joint between cover and mounting set optionally fillable; 360° rotatable and 30° tiltable; passive cooling of the LEDs through improved heat sink geometry; light colour 2700 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 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 ø 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



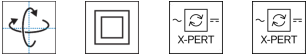
Product drawing



Project / Type

Notes

Count / Date



General

Ceiling , Recessed

tilt max 30°

rotation 360°

white , RAL 9016 <sup>1</sup>

Mounting set traffic white

IP20

668 lm

fixture 56 lm/W<sup>2</sup>

LED

2700 K

CRI ≥ 90

L85 / 50000 h

initial MacAdam ≤ 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 ≤ 1.0 <sup>3</sup>

SVM ≤ 0.4 <sup>3</sup>

Electrical

non DIM

220-240 V

system 14.0 W

fixture 11.9 W

12 Vf

1050 mA

PC2

Physical

trimless

diameter 105 mm

height 68 mm

0.45 kg

Cutout

diameter 106 mm

min. ceiling thickness 12.5 mm

max. ceiling thickness 25 mm

recessed depth 100 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



# SPIO 60 adjustable

trimless

048-1520417W 048-1598107 002-90787



Project / Type

Notes

Count / Date

## 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		RSMF <sup>a</sup>	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF <sup>a</sup>	Luminaire 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	17
B13	21
B16	27
B20	33
B25	42
C10	28
C13	36
C16	45
C20	56
C25	70

## Components

### MOUNTING SET trimless

TYPE	COLOUR	Ø (MM)	ARTICLE NUMBER(S)
for plasterboard ceilings 12.5/15/25 mm	traffic white	105	048-1598107



### POWER SUPPLY

TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
22 W	111-38-28	002-90787



## Optional electrical accessories

### DIN RAIL POWER SUPPLY

TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
160 W	72-90-63	005-6520210



### DIN RAIL LED DRIVER

TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
DALI-2   200-1050 mA   2 x 42W	36-88-59	005-6121030

