



Project / Type \_\_\_\_\_

Notes \_\_\_\_\_

Count / Date \_\_\_\_\_



**General**

Showcase , Recessed \_\_\_\_\_

tilt max 90° \_\_\_\_\_

rotation 360° \_\_\_\_\_

black , RAL9021<sup>1</sup> \_\_\_\_\_

IP20 \_\_\_\_\_

Interior \_\_\_\_\_

358 lm \_\_\_\_\_

**LED**

4000 K \_\_\_\_\_

CRI ≥ 95 \_\_\_\_\_

L85 / 50000 h \_\_\_\_\_

photobio. safety RG 1 - low Risk \_\_\_\_\_

initial MacAdam ≤ 3 SDCM \_\_\_\_\_

R<sub>g</sub>: 100 , R<sub>f</sub>: 94 , R<sub>{1-15}</sub>: 96 \_\_\_\_\_

MR 0.87 \_\_\_\_\_

MDER 0.78 \_\_\_\_\_

**Optical**

medium \_\_\_\_\_

beam angle 30° \_\_\_\_\_

Miniature linear light inset made of aluminium; tubular design; surface lacquered in black; optionally for recessed or surface mounting (available as an accessory); plug and play electrical connector system for toolless mounting; different connectors for mechanical and electrical connection available - for flexible system design (available as an accessory); equipped with miniature spotlight heads; spotlight heads 360° rotatable and 90° tiltable; light colour 4000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 95; min. 85% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; incl. high quality lens system; precise radiation characteristic with 30° beam; light inset rotatable; degree of protection IP20; PC3 24V; photobiological safety according to IEC 62471 risk group RG 1 - low Risk; accessories are listed separately; light source replaceable by an authorized professional;

**Electrical**

excl. driver \_\_\_\_\_

24 V \_\_\_\_\_

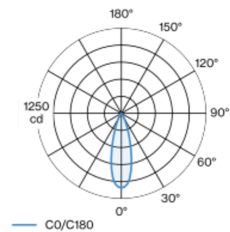
system 5.0 W \_\_\_\_\_

PC3 24V \_\_\_\_\_

inset 107 lm/W<sup>2</sup> \_\_\_\_\_

24 V \_\_\_\_\_

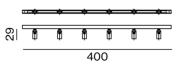
Light distribution



medium 30°

h (m)	E0° (lx)	ø (m)
1	1090	0.54
2	270	1.07
3	120	1.61
4	70	2.15
5	40	2.68

Product drawing



**Physical**

length 400 mm \_\_\_\_\_

width 11 mm \_\_\_\_\_

height 29 mm \_\_\_\_\_

<sup>1</sup> RAL code <sup>2</sup> incl. optical losses

Installation instructions





## Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.983	0.957	0.931	0.906	0.881
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 Faktor

<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.

## Mounting accessories

### MOUNTING CHANNEL 90

TYPE	COLOUR	L-W-H (MM)	ARTICLE NUMBER(S)
230 mm	white aluminium	230-17-11	011-9100206
230 mm	black	230-17-11	011-9100208
430 mm	white aluminium	430-17-11	011-9100306
430 mm	black	430-17-11	011-9100308
630 mm	white aluminium	630-17-11	011-9100406
630 mm	black	630-17-11	011-9100408
830 mm	white aluminium	830-17-11	011-9100506
830 mm	black	830-17-11	011-9100508
1030 mm	white aluminium	1030-17-11	011-9100606
1030 mm	black	1030-17-11	011-9100608
1230 mm	white aluminium	1230-17-11	011-9100706
1230 mm	black	1230-17-11	011-9100708



### MOUNTING CHANNEL 90 ANTI-GLARE

TYPE	COLOUR	L-W-H (MM)	ARTICLE NUMBER(S)
230 mm	white aluminium	230-17-15	011-9101206
230 mm	black	230-17-15	011-9101208
430 mm	white aluminium	430-17-15	011-9101306
430 mm	black	430-17-15	011-9101308
630 mm	white aluminium	630-17-15	011-9101406
630 mm	black	630-17-15	011-9101408
830 mm	white aluminium	830-17-15	011-9101506
830 mm	black	830-17-15	011-9101508
1030 mm	white aluminium	1030-17-15	011-9101606
1030 mm	black	1030-17-15	011-9101608
1230 mm	white aluminium	1230-17-15	011-9101706
1230 mm	black	1230-17-15	011-9101708





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Mounting accessories

MOUNTING CHANNEL 60

TYPE	COLOUR	L-W-H (MM)	ARTICLE NUMBER(S)
230 mm	white aluminium	230-40-11	011-9102206
230 mm	black	230-40-11	011-9102208
430 mm	white aluminium	430-40-11	011-9102306
430 mm	black	430-40-11	011-9102308
630 mm	white aluminium	630-40-11	011-9102406
630 mm	black	630-40-11	011-9102408
830 mm	white aluminium	830-40-11	011-9102506
830 mm	black	830-40-11	011-9102508
1030 mm	white aluminium	1030-40-11	011-9102606
1030 mm	black	1030-40-11	011-9102608
1230 mm	white aluminium	1230-40-11	011-9102706
1230 mm	black	1230-40-11	011-9102708



Mounting accessories

MOUNTING CHANNEL 45

TYPE	COLOUR	L-W-H (MM)	ARTICLE NUMBER(S)
230 mm	white aluminium	230-17-11	011-9103206
230 mm	black	230-17-11	011-9103208
430 mm	white aluminium	430-17-11	011-9103306
430 mm	black	430-17-11	011-9103308
630 mm	white aluminium	630-17-11	011-9103406
630 mm	black	630-17-11	011-9103408
830 mm	white aluminium	830-17-11	011-9103506
830 mm	black	830-17-11	011-9103508
1030 mm	white aluminium	1030-17-11	011-9103606
1030 mm	black	1030-17-11	011-9103608
1230 mm	white aluminium	1230-17-11	011-9103706
1230 mm	black	1230-17-11	011-9103708



MOUNTING CHANNEL 45 JUT-OUT

TYPE	COLOUR	L-W-H (MM)	ARTICLE NUMBER(S)
230 mm	white aluminium	230-17-18	011-9104206
230 mm	black	230-17-18	011-9104208
430 mm	white aluminium	430-17-18	011-9104306
430 mm	black	430-17-18	011-9104308
630 mm	white aluminium	630-17-18	011-9104406
630 mm	black	630-17-18	011-9104408
830 mm	white aluminium	830-17-18	011-9104506
830 mm	black	830-17-18	011-9104508
1030 mm	white aluminium	1030-17-18	011-9104606
1030 mm	black	1030-17-18	011-9104608
1230 mm	white aluminium	1230-17-18	011-9104706
1230 mm	black	1230-17-18	011-9104708





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Mounting accessories

MOUNTING CLIP 90

TYPE	COLOUR	ARTICLE NUMBER(S)
surface	white aluminium	011-9100006
surface	black	011-9100008



MOUNTING CLIP 60

TYPE	COLOUR	ARTICLE NUMBER(S)
surface	white aluminium	011-9102006
surface	black	011-9102008



MOUNTING CLIP 45

TYPE	COLOUR	ARTICLE NUMBER(S)
surface	white aluminium	011-9103006
surface	black	011-9103008



Mounting accessories

MOUNTING TOOL

ARTICLE NUMBER(S)
011-9190000

Mounting accessories

BLIND INSET

TYPE	COLOUR	Ø (MM)	ARTICLE NUMBER(S)
200 mm	white aluminium	9	011-9109206
200 mm	black	9	011-9109208
400 mm	white aluminium	9	011-9109306
400 mm	black	9	011-9109308
600 mm	white aluminium	9	011-9109406
600 mm	black	9	011-9109408
800 mm	white aluminium	9	011-9109506
800 mm	black	9	011-9109508
1000 mm	white aluminium	9	011-9109606
1000 mm	black	9	011-9109608
1200 mm	white aluminium	9	011-9109706
1200 mm	black	9	011-9109708





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Electrical accessories

POWER SUPPLY 24V EU

TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
18 W   non dim	130-43-30	011-9212110
35 W   non dim	195-43-30	011-9212210
60 W   non dim	220-43-30	011-9212310
18 W   DALI-2	130-43-30	011-9212130
35 W   DALI-2	195-43-30	011-9212230
60 W   DALI-2	220-43-30	011-9212330



POWER SUPPLY 24V UL

TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
20 W   non dim	153-41-32	011-9282110
40 W   non dim	210-40-30	011-9282210
60 W   non dim	250-40-30	011-9282310
60 W   1-10 V	176-45-32	011-9282320
60 W   DALI-2	176-45-32	011-9282330



Electrical accessories

FLEX CONNECTOR

TYPE	ARTICLE NUMBER(S)
electrical	011-9225100
electrical   90°	011-9225200



LINEAR CONNECTOR

TYPE	ARTICLE NUMBER(S)
electrical	011-9225300



Electrical accessories

EXTENSION CABLE

TYPE	ARTICLE NUMBER(S)
1 × socket / 1 × plug	011-9222120
1 × socket / 1 × plug	011-9222140
1 × socket / 1 × plug	011-9222180
1 × socket / 1 × plug 90°	011-9222220
1 × socket / 1 × plug 90°	011-9222240
1 × socket / 1 × plug 90°	011-9222280