

VARO 110 S

track
180-6531137F



Project / Type

Notes

Count / Date



General

Ceiling , Track

tilt max 90°

rotation 355°

white , RAL 9016 ¹

IP20

4550 lm

LED

4000 K

CRI ≥ 90

L85 / 50000 h

initial MacAdam ≤ 3 SDCM

R_g: 100 , R_f: 92 , R_{f(1-5)}: 91

MR 0.78

MDER 0.71

Optical

flood

beam angle 40°

Electrical

DALI-2

220-240 V

system 36 W

system 126 lm/W²

PC2

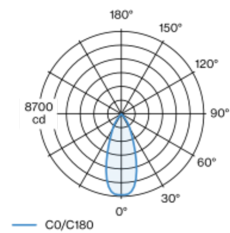
Physical

diameter 110 mm

height 110 mm

Track light made of die-cast aluminium; surface white powder coated; 355° rotatable and 90° tiltable; integrated converter in the plastic adapter; passive cooling of the LEDs through improved heat sink geometry; with COB (Chip on Board) technology for maximum efficiency; no appearance of multiple shadows; light colour 4000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 90; min. 85% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; including high quality aluminium reflector with spherical reflector; high gloss anodised; neutral colour reflection through absolute freedom from interference colour; for brilliant object staging; precise radiation characteristic with 40° beam; installed and exchanged without tools; optical attachments available as accessories; optical attachments can be combined; accessories are listed separately; degree of protection IP20; PC2; 220-240 V; incl. DALI-2 converter; adapter for toolless insertion or movement on a variety of 3-phase power tracks; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

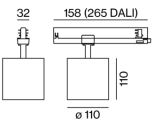
Light distribution



flood 40°

h (m)	E0° (lx)	ø (m)
1	8540	0.73
2	2130	1.46
3	950	2.18
4	530	2.91
5	340	3.64

Product drawing



¹ RAL code
² FIXTURE: incl. consideration of optical losses & internal control unit losses SYSTEM: incl. consideration of optical losses, internal control unit losses & operating device efficiency.

Installation instructions



Lighting calculator



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Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.977	0.95	0.923	0.897	0.872
LSF	1	1	1	1	1

MF

LMF × RSMF × LLMF × LSF

MF

Maintenance Factor

LMF^a

Luminaire Maintenance Factor

RSMF^a

Room Surface Maintenance Factor

LLMF

Lamp Lumens Maintenance Factor

LSF

Lamp Survival Faktor

^a 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.

Optical accessories

HONEYCOMB LOUVER

Ø (MM)	ARTICLE NUMBER(S)
106	080-6501118



WIDE FLOOD LENS

Ø (MM)	ARTICLE NUMBER(S)
106	080-6502110W



OVAL LENS

Ø (MM)	ARTICLE NUMBER(S)
106	080-6502210



SNOOT

TYPE	Ø (MM)	ARTICLE NUMBER(S)
short	97	080-6503118
medium	97	080-6503218
angle	97	080-6503318

