

VARO 110 S

180-6531117F



Project / Type _____

Notes _____

Count / Date _____



General

Ceiling , Track _____

tilt max 90° _____

rotation 355° _____

white , RAL9016 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

non DIM _____

system 36 W _____

PC2 220-240V _____

system 126 lm/W² _____

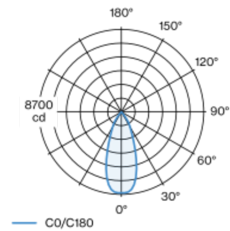
Physical

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 220-240V; incl. converter, non dimmable; 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;

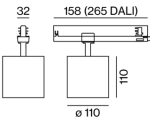
Light distribution



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 incl. optical losses and the efficiency of the operating device (converter)

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

