

# VARO 110 S

track  
180-6531117F



Project / Type

Notes

Count / Date



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. 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;



## General

Ceiling | Track

tilt max 90°

rotation 355°

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

IP20

4550 lm

## LED

4000 K

CRI ≥ 90

L85 / 50000 h

initial MacAdam ≤ 3 SDCM

R<sub>g</sub>: 100 | R<sub>f</sub>: 92 | R<sub>f(1-15)</sub>: 92

MR 0.78 | MDER 0.71

## Optical

flood | beam angle 40°

## Electrical

non DIM

PC2 | 220-240 V

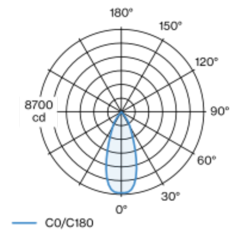
system 36 W

system 126 lm/W <sup>2</sup>

## Physical

diameter 110 mm | height 110 mm

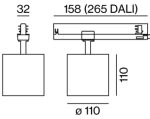
## Light distribution



flood 40°

h (m)	EO° (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



## Installation instructions



## Lighting calculator



[“180-6531117F”] The technical data represent rated values for an ambient temperature of 25°C. The data values for the luminous flux are initially subject to a tolerance of +/- 10%, those for the electrical connected load are initially subject to a tolerance of +/- 10%, and those for the colour temperature are initially subject to a tolerance of +/- 150 K. No liability is assumed for typographical or printing errors. The general terms and conditions of XAL GmbH apply.  
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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		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.

## Optical accessories

### HONEYCOMB LOUVER

Ø (MM)  
106

ARTICLE NUMBER(S)  
080-6501118



### WIDE FLOOD LENS

Ø (MM)  
106

ARTICLE NUMBER(S)  
080-6502110W



### OVAL LENS

Ø (MM)  
106

ARTICLE NUMBER(S)  
080-6502210



### SNOOT short

Ø (MM)  
97

ARTICLE NUMBER(S)  
080-6503118



### SNOOT medium

Ø (MM)  
97

ARTICLE NUMBER(S)  
080-6503218



### SNOOT angle

Ø (MM)  
97

ARTICLE NUMBER(S)  
080-6503318

