

VARO 110 S

180-6530118S



Project / Type _____

Notes _____

Count / Date _____



General

Ceiling , Track _____

tilt max 90° _____

rotation 355° _____

black , RAL9005 ¹ _____

IP20 _____

3220 lm _____

LED

4000 K _____

CRI ≥ 90 _____

L85 / 50000 h _____

initial MacAdam ≤ 3 SDCM _____

R_g: 100 , R_f: 92 , R_{f(-15)}: 91 _____

MR 0.78 _____

MDER 0.71 _____

Optical

spot _____

beam angle 14° _____

Electrical

non DIM _____

system 23.4 W _____

PC2 220-240V _____

system 138 lm/W² _____

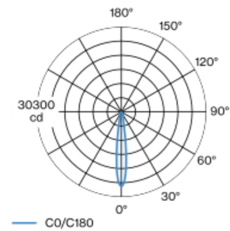
Physical

diameter 110 mm _____

height 110 mm _____

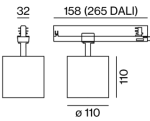
Track light made of die-cast aluminium; surface black powder coated; 355° rotatable and 90° tiltable; integrated converter in the plastic adapter; passive cooling of the LEDs through improved heat sink geometry; with COB (Chip on Board) technology for maximum efficiency; no appearance of multiple shadows; 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 14° 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



spot 14°		
h (m)	E0° (lx)	ø (m)
1	26500	0.25
2	6600	0.50
3	2900	0.75
4	1700	1.00
5	1100	1.25

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	0.975	0.944	0.913	0.883	0.854
LSF	1	1	1	1	1

MF

MF

LMF^a

LMF × RSMF × LLMF × LSF

Maintenance Factor

Luminaire Maintenance Factor

RSMF^a

LLMF

LSF

Room Surface Maintenance Factor

Lamp Lumens Maintenance Factor

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

