

VARO 110 S

track
180-6531037M



Project / Type _____

Notes _____

Count / Date _____



General

Ceiling , Track _____

tilt max 90° _____

rotation 355° _____

white , RAL 9016 ¹ _____

IP20 _____

4410 lm _____

LED

3000 K _____

CRI ≥ 90 _____

L85 / 50000 h _____

initial MacAdam ≤ 3 SDCM _____

R_g: 99 , R_f: 92 , R₍₁₋₁₅₎: 93 _____

MR 0.61 _____

MDER 0.55 _____

Optical

medium _____

beam angle 25° _____

Electrical

DALI-2 _____

220-240 V _____

system 36 W _____

system 123 lm/W² _____

PC2 _____

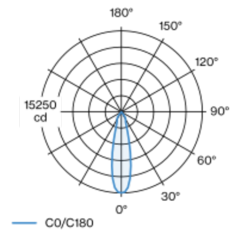
Physical

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 3000 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 25° 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



medium 25°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1 | 15200 | 0.45 |
| 2 | 3800 | 0.90 |
| 3 | 1700 | 1.35 |
| 4 | 1000 | 1.81 |
| 5 | 600 | 2.26 |

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 |

