

# VARO 80 S

track  
180-6422018S



Project / Type \_\_\_\_\_

Notes \_\_\_\_\_

Count / Date \_\_\_\_\_



**General**

Ceiling , Track

tilt max 90°

rotation 355°

black , RAL 9005 <sup>1</sup>

IP20

2750 lm

**LED**

3000 K

CRI ≥ 90

L80 / 50000 h

initial MacAdam ≤ 2 SDCM

R<sub>g</sub>: 98 , R<sub>f</sub>: 91 , R<sub>(1-15)</sub>: 93

MR 0.54

MDER 0.49

**Optical**

spot

beam angle 20°

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

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 3000 K; binning initial MacAdam ≤ 2 SDCM; CRI ≥ 90; min. 80% 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 20° 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;

**Electrical**

non DIM

220-240 V

system 21.1 W

system 130 lm/W<sup>3</sup>

PC2

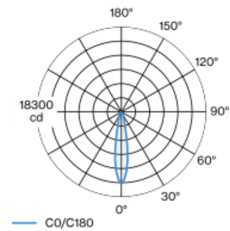
**Physical**

diameter 87 mm

height 80 mm

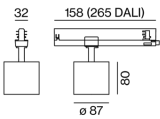
0.47 kg

## Light distribution



| spot 20° |          |       |  |
|----------|----------|-------|--|
| h (m)    | E0° (lx) | ø (m) |  |
| 1        | 15300    | 0.34  |  |
| 2        | 3800     | 0.69  |  |
| 3        | 1700     | 1.03  |  |
| 4        | 1000     | 1.38  |  |
| 5        | 600      | 1.72  |  |

## Product drawing



<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> 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



# VARO 80 S

track  
180-6422018S



Project / Type

Notes

Count / Date

## Maintenance Factors

| Operating Time [h] | 10 000                       | 20 000 | 30 000            | 40 000                          | 50 000 |
|--------------------|------------------------------|--------|-------------------|---------------------------------|--------|
| LLMF               | 0.977                        | 0.94   | 0.905             | 0.871                           | 0.838  |
| 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 Faktor            |        |

<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.

## Circuit Breaker Types

| Automatic Circuit Breaker Type | Number of Fixtures |
|--------------------------------|--------------------|
| B10                            | 17                 |
| B13                            | 21                 |
| B16                            | 27                 |
| B20                            | 33                 |
| C10                            | 28                 |
| C13                            | 36                 |
| C16                            | 44                 |
| C20                            | 55                 |

## Optical accessories

### HONEYCOMB LOUVER

|        |                   |
|--------|-------------------|
| Ø (MM) | ARTICLE NUMBER(S) |
| 75     | 080-6401118       |



## Optical accessories

### LINEAR PRISMATIC LENS

|        |                   |
|--------|-------------------|
| Ø (MM) | ARTICLE NUMBER(S) |
| 75     | 080-6402110P      |



## Optical accessories

### SNOOT

| TYPE   | Ø (MM) | ARTICLE NUMBER(S) |
|--------|--------|-------------------|
| short  | 66     | 080-6403118       |
| medium | 66     | 080-6403218       |
| angle  | 66     | 080-6403318       |

