

# VELA 450 direct / indirect soft

surface  
073-1147618K



Project / Type

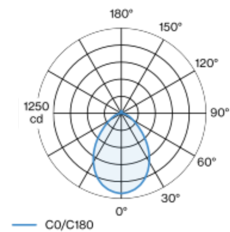
Notes

Count / Date

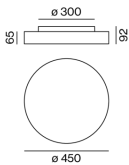


Round luminaire housing in aluminium, rolled profile, seamlessly welded; surface black powder coated; highly reflective coating for improved efficiency; suitable for wall or ceiling mounting; convenient quick mounting system without tools; microprismatic PMMA cover; completely homogeneous illumination;  $UGR \leq 19$ ; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above  $65^\circ \leq 3000 \text{ cd/m}^2$ ; direct / indirect radiation characteristic for additional accentuation of the ceiling; light colour 4000 K; binning initial MacAdam  $\leq 3 \text{ SDCM}$ ; CRI  $\geq 80$ ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; luminaire with 2 cable openings and plug-in terminal for through wiring; degree of protection IP40; PC1; 220-240 V; internal wiring in light halogen free; incl. converter, non dimmable; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Light distribution



## Product drawing



### General

Ceiling / Wall | Surface

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

IP40

indirect 87 lm | direct 2150 lm

total 2240 lm

### LED

4000 K

CRI  $\geq 80$

L90 / 50000 h

initial MacAdam  $\leq 3 \text{ SDCM}$

MR 0.72 | MDER 0.66

### Optical

Microprismatic | microprismatic

$UGR \leq 19$  |  $\geq 65^\circ < 3000 \text{ cd/m}^2$

$PstLM \leq 1.0$  <sup>2</sup> |  $SVM \leq 0.4$  <sup>2</sup>

### Electrical

non DIM

PC1 | 220-240 V

system 16.7 W

system 134 lm/W <sup>3</sup>

### Physical

diameter 450 mm | height 92 mm

3.8 kg

<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> incl. consideration of optical losses, internal control unit losses & operating device efficiency

## Installation instructions



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## Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.98	0.96	0.94	0.91	0.9
LSF	1	1	1	1	1

MF

MF

LMF<sup>a</sup>

LMF × RSMF × LLMF × LSF

Maintenance Factor

Luminaire Maintenance Factor

RSMF<sup>a</sup>

LLMF

LSF

Room Surface Maintenance Factor

Lamp Lumens Maintenance Factor

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.

## Circuit Breaker Types

Automatic Circuit Breaker Type	Number of Fixtures
B10	31
B13	40
B16	50
B20	62
B25	78
C10	52
C13	67
C16	85
C20	104
C25	130

