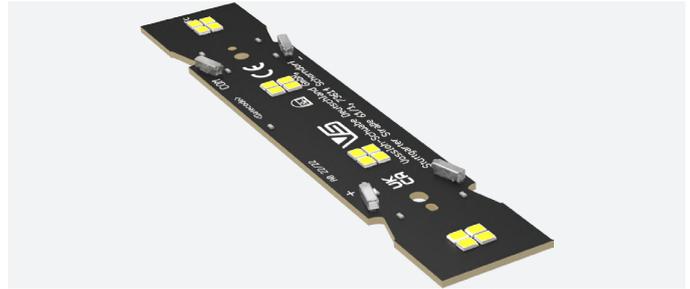


Vossloh rigid strips of 25mm

Features:

- For lighting up offices, comercial areas, corridors and shelves.
- Driving current: 150mA / 200mA / 350mA / 500mA / 700mA.
- Led built-in module for integration into luminaires
- Degree of protection: IP20.
- On-board push-in terminals.
- For correct heat dissipation we recommend the use of an aluminium profile and thermal tape.



Reference	Colour temp.	Current mA	Lumens/W at 350mA	Energy efficiency
36.073	4000K	150mA / 200mA / 350mA / 500mA / 700mA	164 lm/W	D

Technical characteristics

Technical data

Power	1,6W (150mA) 2,1W (200mA) 3,8W (350mA) 5,6W (500mA) 8,2W (700mA)
Forward voltage	10,5V (150mA) 10,7V (200mA) 10,9V (350mA) 11,3V (500mA) 11,7V (500mA)
Operating current (mA)	700mA (max)
Max. allowed repetitive peak current for frequencies $\geq 100\text{Hz}$ (mA)	1200
Risk group (IEC 62471)	RG1
Degree of protection	IP20

Led information

Type of led	SMD
Number of leds per module	4 groups of 4

Temperatures and operating conditions

Nominal temperature	50°C
Working temperature	-20°C / +80°C
Storage temperature	-20°C / +70°C

Photometric data

IRC	>90
Opening angle	120°
Luminous flux (lm)	275lm (150mA) 360lm (200mA) 625lm (350mA) 885lm (500mA) 1220lm (700mA)
Luminous efficacy (lm/W)	173lm/W (150mA) 170lm/W (200mA) 164lm/W (350mA) 157lm/W (500mA) 149lm/W (700mA)
PCB colour	Black
Colour consistency	MacAdam 3

Services

Dimmable	Yes *1
Apt for	Indoor

*1 Adjustable with appropriate controllers.

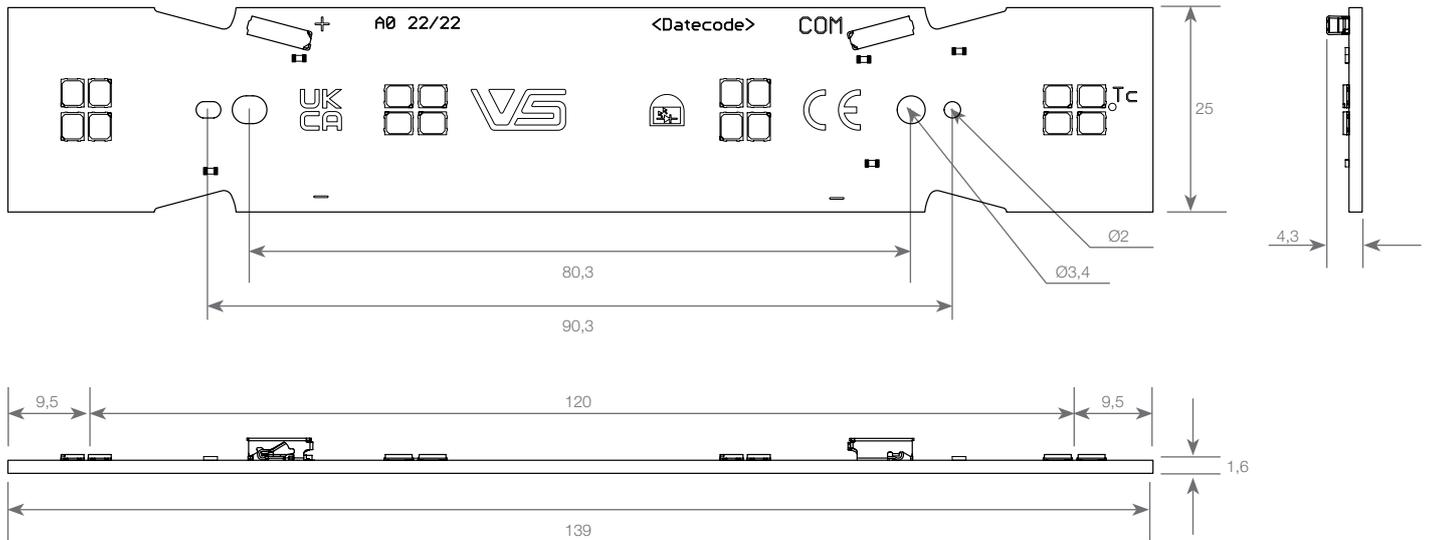
Useful lifespan

Estimated lifespan (350mA)	40°C (>72.000h) / 50°C (>72.000h) / 80°C (>57.000h) *2
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*2 Depending on the dissipation of the profile, the daily working hours and the external environmental working temperature.



Vossloh rigid strips of 25mm



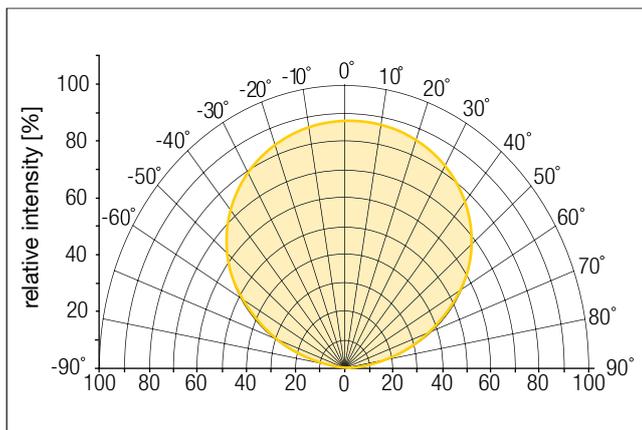
Dimensions

Length	139mm	Height	4,3mm
PCB width	25mm		

Connection

Maximum connection	12 modules
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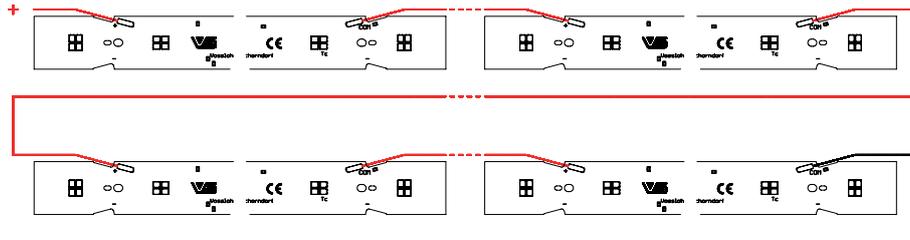
Photometric curves



Vossloh rigid strips of 25mm

Connection Example:

- The number of modules that can be connected in series depends on the available output voltage of the led driver.
- The clearance and creepage distances are designed for working voltages up to 500V DC (basic insulation) and 250V DC (reinforced insulation).
- In case of assembly of the led modules in profiles (e.g. aluminium) where the profile touches the top edge of the PCB the clearance and creepage distances are reduced to 150V DC (basic insulation).
- Only the marked holes are fixing holes for screws M3. Please do not use other holes for fixation!



Assembly and safety information:

Installation must be carried out under observation of the relevant regulations and standards. The led modules are designed for operation within a casing or luminaire. Installation must be carried out in a voltage-free state (i.e. disconnection from the mains). The following advice must be observed; non-observance can result in the destruction of the led assembly modules, fire and/or other hazards.

- Consider safety regulations acc. EN 60598 in the luminaire design, especially when the operating led driver is not galvanic isolated.
 - In mode of operation regard to sufficient isolation.
 - Live parts must not be touched in operation mode. Life in danger!!!
- ESD (electrostatic discharge) protection measures must be observed when handling and installing the led modules. See VS's application notes on ESD protection.
- Led assembly modules must not be subjected to any undue mechanical stress, e. g.:
 - Do not treat as bulk cargo.
 - Avoid shear and compressive forces during handling and installation.
 - Do not damage circuit paths.
 - Avoid any pressure on the light emitting surface.
- Please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- Safety regulations acc. to EN 60598 (or further standards) has to be observed if the maximum output voltage exceed the permitted touchable value.
- Measurement tolerances:
 - luminous flux: $\pm 7\%$
 - voltage: $\pm 3\%$
 - CRI: ± 1
- The following points must be observed when connecting led modules in parallel:
 - All led strings that are wired in parallel must contain the same number of leds (symmetrical loading).
 - Owing to differing forward biases, there can be a difference of up to 10% in brightness between modules connected in parallel.
- To ensure problem-free operation, the specified maximum temperature at the tp point (see "Operating Life") must be observed (and measured in accordance with EN 60598-1). To satisfy this point, it may be necessary to put measures in place to ensure any heat is dissipated from the PCB to the environment.
- In the event of outdoor applications or applications in damp locations, care must be taken to protect led assembly modules against humidity, splashes and jets of water. Any corrosion damage resulting from humidity or contact with condensation will not be recognised as a defect or manufacturing fault. Led assembly modules are not specially protected against foreign bodies or dust. Depending on the type of application, further protection must be ensured to prevent dust and foreign bodies from entering.
- Due to the manufacturing process, the PCBs of the led assembly modules can have sharp edges and corners. Care must therefore be taken during handling and installation to avoid injury.

Vossloh rigid strips of 25mm

- The photobiological safety of the led modules must be classified into risk groups in accordance with EN 62471: 2008. Rating in accordance with IEC / TR 62778: risk group 1.

CCT (K)	Max. operating current for risk group 1 (mA)	E threshold for higher operating currents to be risk group 1 (lx)
≤ 4000	700	1221

Applied standards:

- EN 62031
- EN 62471