

VU Since 1898 KON A brand of Hess

Outdoor lighting

Vulkan the traditional brand

Vulkan stands for high-quality and extremely efficient products "Made in Germany" – and that for well over a century.

The roots of Vulkan date back to 1898. This makes Vulkan one of the oldest brands in the lighting industry with an excellent reputation, especially in German-speaking countries.

Vulkan offers cities, municipalities and energy suppliers technically sophisticated products that ensure the standard-compliant illumination of roads, traffic junctions, dangerous (traffic) areas, pedestrian zones and public facilities.



Vulkan – technical and efficient

High quality technical products. Products "made in Germany". Vulkan also stands for very attractive terms. In combination with a very high energy efficiency and long service intervals it leads to more than lucrative payback periods for Vulkan customers.







4



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References

Optics overview

Products

Technical luminaires Catenary luminaires Cylindrical luminaires Chalice luminaires Bell-shaped luminaires Heritage luminaires Surface-mounted luminaires Replacement Kit

Accessories

- Poles & brackets
- Accessories & wall brackets
- Pole top mountings & brackets

Curved pole brackets

Heritage poles

Intelligent lighting

Smart City

List of abbreviations and symbols

Experience Brands

Request Log Street Lighting

88 90 92

- 80 82 **84**
- 76 78 80
- **72** 74
- 60 64 70
- 38 48 50
- **24** 26
- 22

32

86

06



References



Providing lighting when and where it is needed.

Routes such as service roads and side roads are lit at night even if this isn't necessary. Our goal is to illuminate areas only when light is actually needed there. Integrating sensors helps to optimize the light output without impacting on convenience or safety.

The integrated motion detector can reduce the light intensity to a minimum. As soon as a sensor detects traffic, the light intensity increases to a specified value. At the same time, this command is sent to two previously defined adjoining luminaires to ensure consistent lighting for the entire stretch.

Product: V3630 Project: Nordeon production site Springe, Germany www.vulkan.eu

"Integrated motion detectors guarantee intelligent energy saving without neglecting safety!"

Sascha Schönfelder, Head of Manufacturing Engineering, Development, Laboratory and Quality (Nordeon)



Heritage luminaires preserve and mair bridges and city districts.

"Take a stroll on the famous Pöppelmann Bridge and get lost in your dreams thanks to the traditional heritage lighting from Vulkan, which blends perfectly into the historical townscape of Grimma."

Product: V7420 Project: Pöppelmann Bridge Grimma, Germany 

Product: V3630 Customer: City of Bühl, Germany Sustainability and energy-saving lighting with a special charm.

"With its reserved form, the V3630 can be used in almost any environment."

Michael Schindler, Technical Manager



Product: V3630 Project: Effia car park, Bellegarde, France Customer: City of Bellegarde, France Car parks need to be well-lit to give users a sense of security at night.

"Powerful and reliable lighting make this car park a place where drivers and pedestrians feel really safe again. The V3630 is a great example of efficient and homogenous lighting."

1000

Resident of Bellegarde, France

303 34034



4

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Product: V3630 Double Bracket Project: Railway station Wunstorf



Product: V9510, V3630 Project: Quarry Oldendorf, Germany

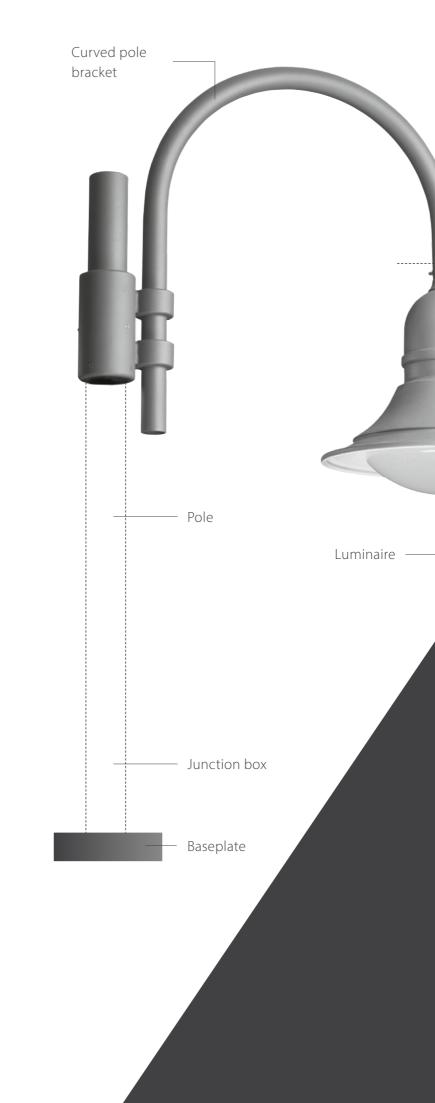
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Optics overview

					Ģ
Luminaires	Optics O1 Major road	Optics O2 High-traffic road	Optics O3 Low-traffic road	Optics O4V Cycle path / Pavement	Optics O5 Area lighting
V7410					
V7420					
V6220					
V6230					
V8446	~	✓	✓		
V8447	✓	~	~		
V8448	✓	✓	✓		
V8450	✓	✓	✓		
V8466	✓	✓	✓		
V3450					
V3454					
V3456					
V3457					
V3458					
V5480				✓	
V9010	✓	~	~		✓
V9510	✓	✓	✓		✓
V9550			~		\checkmark
V3125	✓		✓		
V3140	✓		✓		
V3130	✓		✓		
V3605	~		✓	✓	✓
V3610	✓	✓	✓	✓	✓
V3630	~	✓	✓		✓
V5050	✓	✓	✓		\checkmark

				•	
Luminaires	Optics O6 Pedestrian crossing	Optics O7 Major road / High-traffic road	Optics O8 Pedestrian path / symmetric	Optics O9 Pedestrian path / asymmetrical	Optics O10V Sport facilities / Parking areas
V7410		✓	✓	✓	
V7420		~	~	×	
V6220		✓	✓	✓	
V6230		 ✓ 	✓	×	
V8446		✓			
V8447		✓			
V8448		✓			
V8450		✓			
V8466		✓			
V3450		✓	✓	✓	
V3454		✓	✓	✓	
V3456		✓	✓	✓	
V3457		✓	✓	✓	
V3458		✓	✓	✓	
V5480		✓	✓	✓	
V9010		✓			✓
V9510		✓			✓
V9550		✓			✓
V3125		✓			
V3140		✓			
V3130		✓			
V3605		✓			✓
V3610	✓	✓			✓
V3630	~	✓	✓	✓	✓
V5050		✓			\checkmark



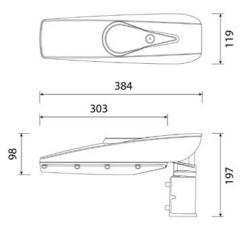


Products

Everything to meet your lighting needs

Technical luminaires

Dimensional drawing in mm



General specifications

Enclosure	Domed cover made of PMMA for optimal light er
Rated luminous flux	696 lm-2250 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	6 W-19 W
Protection rating	l or ll
Surface vulnerable to wind	0,01 m ²
Weight	appr. 2,8 kg
Finish	RAL 7016 (only one colour available)
Accessories	From page 72 onwards
Optics	Page 22

Additional specification

Housing	High-quality die-cast aluminium housing, which management. Powder coated, RAL7016 (only one
Installation	2 versions for 76/60 mm, as well as 48/42 mm spi H07 RN-F connection cable in 3/4/5/6 m, pre-inst
Light regulation	Constant Lumen Management (CLM)
	Autonomous performance reduction for operation
	Performance reduction by switching off a control
	DALI interface
	Optional as "Control Ready", deliverable with Zhaga
	Electronic operating device with very long service



Find more technical details https://www.vulkan.eu





Individual solution for lower mounting heights

- ✓ Highly-efficient and cost-effective pole-top-mounted & laterally mounted luminaires
- ✓ All components are designed for a very long lifetime of 100.000 hours
- ✓ Modern housing design, optimal for pole heights of 3 up to 6 m



emission

serves as a heat sink and ensures optimum and efficient thermal ne colour available)

pigot diameters stalled

tion in networks without a control signal (Light Regulation Autarkic – LRA)

ol line (Light Regulation Twin – LRT)

ga Book 18 socket and SR drive located above

ice life of 100,000 h max. 10% failure, replaceable

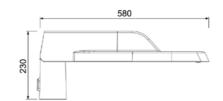
V3610[±]

Six inclination levels from -5° to + 20°



 \uparrow Pole top mounting with six inclination levels from -5° to + 20°

Dimensional drawing in mm



General specifications

Enclosure	Flat single-pane tempered safety glass, partially p with 90° rotation, enclosure glass can be hinged
Rated luminous flux	665 lm-6230 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	6 W–54 W
Protection rating	l or ll
Surface vulnerable to wind	0,05 m ²
Weight	appr. 5,8 - 6,7 kg
Finish	DB 703 or RAL 7035, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Powder-coated, die-cast aluminium
Installation	Pole top diam. 60–76mm Side mounted luminaire diam. 42–60mm
Light regulation	Constant Lumen Management (CLM); autonomo (Light Regulation Autarkic - LRA); performance re
	Digital communication with DALI
	Radio-controlled Light Management System (LMS)



Find more technical details https://www.vulkan.eu



Maximum flexibility for individual applications

- ✓ All components are designed for a very long lifetime of 100.000 hours
- ✓ Smooth and flat aluminium housing acts as a heat sink without cooling fins which are prone to soiling
- ✓ Universal and rapid mounting
- ✓ No light pollution from directed light
- ✓ 6 inclination levels, adjustable in 5° increments

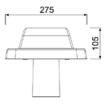






5° inclination is possible

↑ For brackets without inclination, ↑ For brackets with inclination of up to 20° can be inclined down to 0° $\,$



printed on the inside in black; easy to open thanks to quick-release lock d towards the pole

nous performance reduction for operation in networks without a control line reduction by switching off a control line (Light Regulation Twin - LRT)

S) with monitoring, error messages, motion control and other features

Inclination levels from 0° to + 15°



↑ Pole top: diam. 60-76 mm

Dimensional drawing in mm



General specifications

Enclosure	Flat single-pane, tampered safety glass, partially rotation, enclosure glass can be hinged towards
Rated luminous flux	1229 lm-15400 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	11 W–135 W
Protection rating	l or ll
Surface vulnerable to wind	0,06 m ²
Weight	approx. 9.2 bis 10.5 kg
Finish	DB 703 or RAL 7035, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specification

Housing	Powder-coated die-cast aluminium
Installation	Pole top diam. 60–76mm Side mounted luminaire diam. 42–60mm
Light regulation	Constant Lumen Management (CLM); autonomo (Light Regulation Autarkic - LRA); performance re
	Digital communication with DALI
	Radio-controlled Light Management System (LMS)



Find more technical details https://www.vulkan.eu







One design for all applications within a city

- ✓ System efficiency of up to 124 lm/W
- ✓ Universal and rapid assembly with just one screw
- Flexibility in mounting on pole top and as side mounted luminaire, integrated pole flap
- ✓ Heat sink integrated in housing, for optimum and efficient thermal management









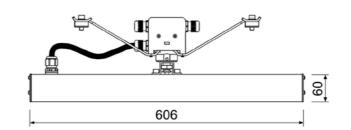
/ printed on the inside in black; easy to open; quick release look with 90° s the pole

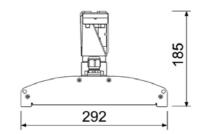
nous performance reduction for operation in networks without a control line reduction by switching off a control line (Light Regulation Twin - LRT)

S) with monitoring, error messages, motion control and other features

V3125^a

Dimensional drawing in mm





General specifications

Enclosure	Enclosure made from flat single-pane tempered s concept; weather resistant EPDM gasket
Rated luminous flux	3800 lm-11400 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	32 W-95 W
Protection rating	l or ll
Surface vulnerable to wind	0,05 m ²
Weight	appr. 9 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Extruded aluminium section, powder-coated, DB
Installation	Suspension, screws and fastening components m 8–12mm
Light regulation	Constant Lumen Management (CLM); autonomou (Light Regulation Autarkic - LRA); performance red



Find more technical details https://www.vulkan.eu







Aerodynamic shape for challenging lighting conditions

- ✓ All components are designed for a very long lifetime of 100.000 hours
- ✓ Smooth aluminium housing without cooling fins which are prone to soiling
- \checkmark Flat, aerodynamic shape with low wind load
- $\checkmark\,$ No light pollution from directed light



safety glass, partially printed on the inside in black; maintenance-free

3 703

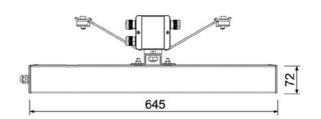
nade from stainless steel; Attachment mechanism for suspension cable

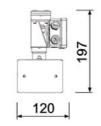
ous performance reduction for operation in networks without a control line eduction by switching off a control line (Light Regulation Twin - LRT)

V3130^{ca}

Mite Carton

Dimensional drawing in mm





General specifications

Enclosure	Enclosures made from flat single-pane tempered single-pane tempered safety glass inserted flush;
Rated luminous flux	3800 lm-8370 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	32 W–71 W
Protection rating	l or ll
Surface vulnerable to wind	0.06 m ²
Weight	approx. 6.3 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Extruded aluminium section serves as heat sink; e
Installation	Suspension, screws and fastening components m 8–12mm
Light regulation	Constant Lumen Management (CLM); autonomo (Light Regulation Autarkic - LRA); performance red



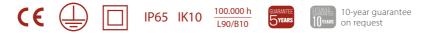
Find more technical details https://www.vulkan.eu



Discreet catenary luminaire for any townscape

CHARGENER

- ✓ All components are designed for a very long lifetime of 100.000 hours
- ✓ Smooth aluminium housing, without cooling fins which are prone to soiling
- ✓ Narrow design for reduced visibility
- \checkmark No light pollution from directed light
- ✓ Pane inserted flush for easy cleaning



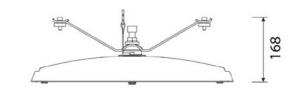
ed safety glass, inserted into housing flush from the inside; easy cleaning of h; weather-resistant EPDM gasket

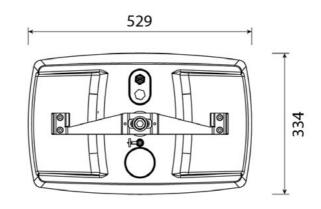
efficient thermal management, powder-coated DB703

made from stainless steel; Attachment mechanism for suspension cable

nous performance reduction for operation in networks without a control line reduction by switching off a control line (Light Regulation Twin - LRT)

Dimensional drawing in mm





General specifications

Enclosure	Enclosures made from flat single-pane tempered single-pane tempered safety glass inserted flush;
Rated luminous flux	8064 lm-12600 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	32 W-100 W
Protection rating	l or ll
Surface vulnerable to wind	0.05 m ²
Weight	approx. 9 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Extruded aluminium section serves as heat sink; e
Installation	Suspension, screws and fastening components m 8–12mm
Light regulation	Constant Lumen Management (CLM); autonomo (Light Regulation Autarkic - LRA); performance re



Find more technical details https://www.vulkan.eu





Versatile design rope luminaire

- ✓ All components are designed for a very long lifetime of 100.000 hours
- ✓ Attractive housing made of die-cast aluminum
- \checkmark No light pollution from directed light
- ✓ Flat, aerodynamic shape with low wind load



I safety glass, inserted into housing flush from the inside; easy cleaning of ; weather-resistant EPDM gasket

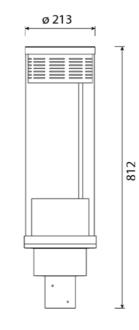
; efficient thermal management, powder-coated DB703

made from stainless steel; Attachment mechanism for suspension cable

nous performance reduction for operation in networks without a control line reduction by switching off a control line (Light Regulation Twin - LRT)

Cylindrical luminaires

Dimensional drawing in mm

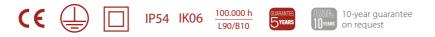


General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear, satin-finished at top
Rated luminous flux	1368 lm-3750 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-37 W
Protection rating	l or ll
Surface vulnerable to wind	0.09 m ²
Weight	approx. 10 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Decorative top-mounted luminaire with timeless, elegant design

- ✓ Dimensionally-stable and corrosion-resistant aluminium
- ✓ Efficient thermal management thanks to built-in heat sink
- ✓ Interchangeable LED module with highly efficient high-power LEDs



Additional specifications

Housing	Dimensionally-stable and corrosion-resistant alun
Installation	Structurally secure three-point pole attachment in
Light regulation	Constant Lumen Management (CLM); autonomo (Light Regulation Autarkic - LRA); performance rec

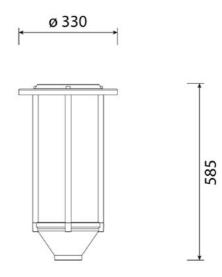


minium

in pole top for pole spigot diameter of 76mm

ous performance reduction for operation in networks without a control line eduction by switching off a control line (Light Regulation Twin - LRT)

Dimensional drawing in mm



General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear, satin-finished at top
Rated luminous flux	1368 lm-3750 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-37 W
Protection rating	l or ll
Surface vulnerable to wind	0.1 m ²
Weight	approx. 10 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Dimensionally-stable and corrosion-resistant alum
Installation	Structurally secure three-point pole attachment in
Light regulation	Constant Lumen Management (CLM); autonomou (Light Regulation Autarkic - LRA); performance rec

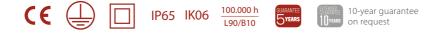


Find more technical details https://www.vulkan.eu



Decorative top-mounted luminaire with timeless, elegant design

- ✓ Dimensionally-stable and corrosion-resistant aluminium
- ✓ Stable roof fixation with three massive external aluminium rods
- ✓ Efficient thermal management thanks to built-in heat sink
- ✓ Interchangeable LED module with highly efficient high-power LEDs



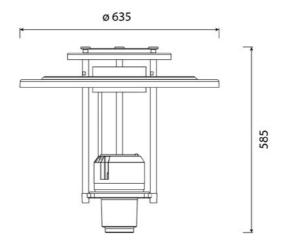
minium

in pole top for pole spigot diameter of 76mm

ous performance reduction for operation in networks without a control line eduction by switching off a control line (Light Regulation Twin - LRT)

V3456°

Dimensional drawing in mm



General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear, satin-finished at top
Rated luminous flux	1368 lm-3750 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-37 W
Protection rating	l or ll
Surface vulnerable to wind	0.1 m ²
Weight	approx. 11 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Dimensionally-stable and corrosion-resistant alum
Installation	Structurally secure three-point pole attachment in
Light regulation	Constant Lumen Management (CLM); autonomou (Light Regulation Autarkic - LRA); performance rec



Find more technical details https://www.vulkan.eu



Decorative top-mounted luminaire with timeless, elegant design

- ✓ Dimensionally-stable and corrosion-resistant aluminium
- ✓ Stable roof fixation with three massive external aluminium rods
- ✓ Efficient thermal management thanks to built-in heat sink
- ✓ Interchangeable LED module with highly efficient high-power LEDs



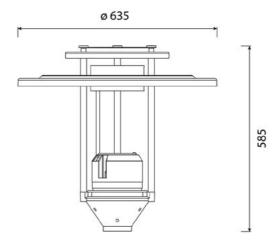
minium

in pole top for pole spigot diameter of 76mm

ous performance reduction for operation in networks without a control line eduction by switching off a control line (Light Regulation Twin - LRT)

Cylindrical luminaires

Dimensional drawing in mm



General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear, satin-finished at top
Rated luminous flux	1368 lm-3750 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-37 W
Protection rating	l or II
Surface vulnerable to wind	0.1 m ²
Weight	approx. 11 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Dimensionally-stable and corrosion-resistant alum
Installation	Structurally secure three-point pole attachment in
Light regulation	Constant Lumen Management (CLM); autonomou (Light Regulation Autarkic - LRA); performance rec



Find more technical details https://www.vulkan.eu



V3457

Decorative top-mounted luminaire with timeless, elegant design

- ✓ Dimensionally-stable and corrosion-resistant aluminium
- ✓ Stable roof fixation with three massive external aluminium rods
- ✓ Efficient thermal management thanks to built-in heat sink
- ✓ Interchangeable LED module with highly efficient high-power LEDs



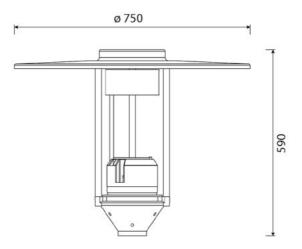
minium

in pole top for pole spigot diameter of 76mm

ous performance reduction for operation in networks without a control line eduction by switching off a control line (Light Regulation Twin - LRT)

Cylindrical luminaires

Dimensional drawing in mm



General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear, satin-finished at top
Rated luminous flux	1368 lm-3750 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-37 W
Protection rating	l or ll
Surface vulnerable to wind	0.1 m ²
Weight	approx. 11 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Decorative top-mounted luminaire with timeless, elegant design

- ✓ Dimensionally-stable and corrosion-resistant aluminium
- ✓ Stable roof fixation with three massive external aluminium rods
- ✓ Efficient thermal management thanks to built-in heat sink
- ✓ Interchangeable LED module with highly efficient high-power LEDs





Housing	Dimensionally-stable and corrosion-resistant alun
Installation	Structurally secure three-point pole attachment in
Light regulation	Constant Lumen Management (CLM); autonomo (Light Regulation Autarkic - LRA); performance rec

Find more technical details https://www.vulkan.eu

minium

in pole top for pole spigot diameter of 76mm

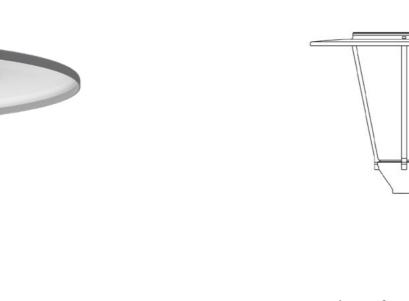
ous performance reduction for operation in networks without a control line eduction by switching off a control line (Light Regulation Twin - LRT)

5480 Chalice luminaires

同意同意

Dimensional drawing in mm

750

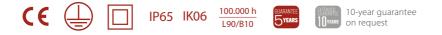


General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear or opal versic
Rated luminous flux	1525 lm-6912 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-54 W
Protection rating	Ш
Surface vulnerable to wind	0.12 m ²
Weight	9 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Decorative top-mounted luminaire with timeless, elegant design

- ✓ Dimensionally-stable and corrosion-resistant aluminium
- ✓ Efficient thermal management thanks to built-in heat sink
- ✓ Interchangeable LED module with highly efficient high-power LEDs



Additional specifications

Housing	Dimensionally-stable and corrosion-resistant alun
Installation	Structurally secure three-point pole attachment in
Light regulation	Constant Lumen Management (CLM); autonomo (Light Regulation Autarkic - LRA); performance re



Find more technical details https://www.vulkan.eu

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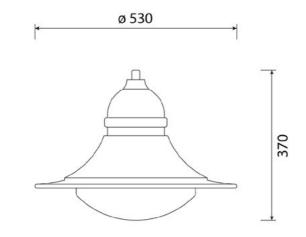
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Iminium

t in pole top for pole spigot diameter of 76mm

nous performance reduction for operation in networks without a control line reduction by switching off a control line (Light Regulation Twin - LRT)

Dimensional drawing in mm



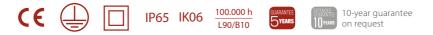
General specifications

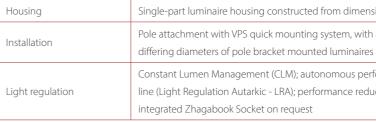
Additional specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured v
Rated luminous flux	1450 lm-4500 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-37 W
Protection rating	l or ll
Surface vulnerable to wind	0.09 m ²
Weight	approx. 6,0 kg
Finish	Standard finish in DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Decorative bell-shaped luminaires with traditional design

- ✓ Enclosure opens without tools
- ✓ Rapid mounting using Vulkan Patent System (VPS)
- ✓ Low glare thanks to large optics surface
- ✓ Efficient thermal management thanks to in-built heat sink







Find more technical details https://www.vulkan.eu

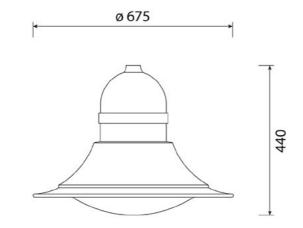
version

Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium

Pole attachment with VPS quick mounting system, with adapter also for 1/2" external threads; rosetten nut available for

Constant Lumen Management (CLM); autonomous performance reduction for operation in networks without a control line (Light Regulation Autarkic - LRA); performance reduction by switching off a control line (Light Regulation Twin - LRT),

Dimensional drawing in mm



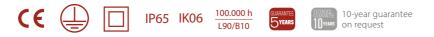
General specifications

Additional specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	1445 lm-8065 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-72 W
Protection rating	l or ll
Surface vulnerable to wind	0.14 m ²
Weight	approx. 9 kg
Finish	Standard finish in RAL-Farben und DB 703, others on req
Accessories	From page 72 onwards
Optics	Page 22

Decorative bell-shaped luminaires with traditional design

- ✓ Enclosure opens without tools
- ✓ Rapid mounting using Vulkan Patent System (VPS)
- ✓ Low glare thanks to large optics surface
- ✓ Efficient thermal management thanks to built-in heat sink





Light regulation

Housing

Installation

Find more technical details https://www.vulkan.eu

integrated Zhagabook Socket on request

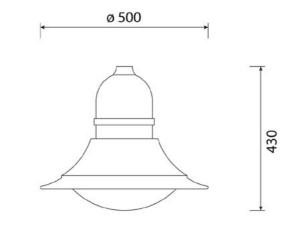
Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium

s on request

Pole attachment with VPS quick mounting system, with adapter also for 1/2" external threads; rosetten nut available for differing diameters of pole bracket mounted luminaires

Constant Lumen Management (CLM); autonomous performance reduction for operation in networks without a control line (Light Regulation Autarkic - LRA); performance reduction by switching off a control line (Light Regulation Twin - LRT),

Dimensional drawing in mm

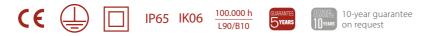


General specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	1530 lm-4580 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-37 W
Protection rating	l or ll
Surface vulnerable to wind	0.09 m ²
Weight	approx. 6 kg
Finish	Standard finish in RAL colours and DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Decorative bell-shaped luminaires with traditional design

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- ✓ Rapid mounting using Vulkan Patent System (VPS)
- ✓ Low glare thanks to large optics surface
- ✓ Efficient thermal management thanks to built-in heat sink



Additional specifications

Housing	Single-part luminaire housing constructed from c
Installation	Pole attachment with VPS quick mounting system differing diameters of pole bracket mounted lum
Light regulation	Constant Lumen Management (CLM); autonomou line (Light Regulation Autarkic - LRA); performanc integrated Zhagabook Socket on request

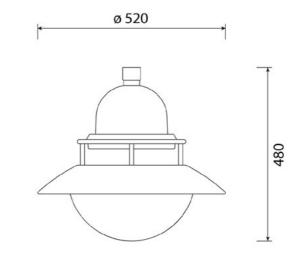


Find more technical details https://www.vulkan.eu dimensionally-stable and corrosion-resistant aluminium

em, with adapter also for 1/2" external threads; rosetten nut available for ninaires

ous performance reduction for operation in networks without a control nce reduction by switching off a control line (Light Regulation Twin - LRT),

Dimensional drawing in mm



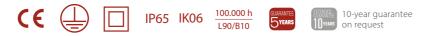
General specifications

Additional specifications

st

Decorative bell-shaped luminaires with traditional design

- ✓ Enclosure opens without tools
- ✓ Rapid mounting using Vulkan Patent System (VPS)
- ✓ Low glare thanks to large optics surface
- ✓ Efficient thermal management thanks to built-in heat sink





Housing

Installation

Light regulation

Find more technical details https://www.vulkan.eu

Integrated Zhaga Socket on request

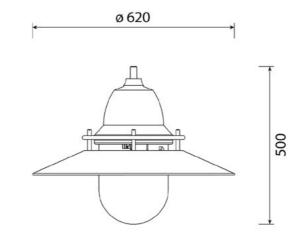
Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium

Pole attachment with VPS quick mounting system, with adapter also for 1/2" external threads; rosetten nut available for differing diameters of pole bracket mounted luminaires

Constant Lumen Management (CLM) autonomous performance reduction for operation in networks without a control line (Light Regulation Autarkic - LRA) performance reduction by switching off a control line (Light regulation Twin - LRT),

$V8466^{-1}$

Dimensional drawing in mm



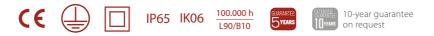
General specifications

Additional specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	1450 lm-4500 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-37 W
Protection rating	l or ll
Surface vulnerable to wind	0.14 m ²
Weight	approx. 11 kg
Finish	Standard finish in RAL colours and DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22
Rated input power Protection rating Surface vulnerable to wind Weight Finish Accessories	12 W–37 W I or II 0.14 m ² approx. 11 kg Standard finish in RAL colours and DB 703, others on request From page 72 onwards

Decorative bell-shaped luminaires with traditional design

- ✓ Enclosure opens without tools
- ✓ Rapid mounting using Vulkan Patent System (VPS)
- ✓ Low glare thanks to large optics surface
- ✓ Efficient thermal management thanks to built-in heat sink







Find more technical details https://www.vulkan.eu

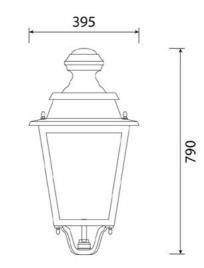
Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium

Pole attachment with VPS quick mounting system, with adapter also for 1/2" external threads; rosetten nut available for

Constant Lumen Management (CLM) autonomous performance reduction for operation in networks without a control line (Light Regulation Autarkic - LRA) performance reduction by switching off a control line (Light regulation Twin - LRT),

Heritage luminaires

Dimensional drawing in mm



General specifications

Enclosure	Enclosure glass made from acrylic (PMMA), clear of
Rated luminous flux	1404 lm-4250 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	12 W-37 W
Protection rating	l or ll
Surface vulnerable to wind	0.1 m ²
Weight	13 kg
Finish	Standard finish in DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Luminaire housing and pole top constructed from
Installation	Pole attachment with pole top with a G3/4" externation cylindrical stepped poles with a pole spigot diam
Light regulation	Constant Lumen Management (CLM); autonomo line (Light Regulation Autarkic - LRA); performand integrated Zhagabook Socket on request

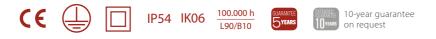


Find more technical details https://www.vulkan.eu



Heritage luminaires – luminaire design classics

- ✓ Luminaire housing and pole top constructed from high-quality cast aluminium
- ✓ Nostalgic design for old city areas



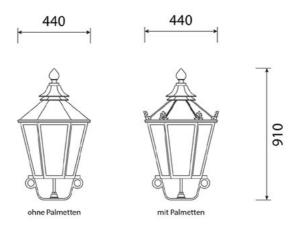
om high-quality cast aluminium

ernal thread for attachment to heritage poles or optionally with adapter for meter of 76mm

nous performance reduction for operation in networks without a control nce reduction by switching off a control line (Light Regulation Twin - LRT),

Heritage luminaires

Dimensional drawing in mm



General specifications

Enclosure	Enclosure glass made from acrylic (PMMA), clear o
Rated luminous flux	1404 lm-4250 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K, 2200 K
Rated input power	12 W-37 W
Protection rating	l or ll
Surface vulnerable to wind	0.1 m ²
Weight	13 kg
Finish	Standard finish in DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Luminaire housing and pole top constructed fror
Installation	Pole attachment with pole top with a G3/4" exten cylindrical stepped poles with a pole spigot diam
Light regulation	Constant Lumen Management (CLM); autonomo line (Light Regulation Autarkic - LRA); performand integrated Zhagabook Socket on request

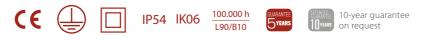


Find more technical details https://www.vulkan.eu



Heritage luminaires – luminaire design classics

- ✓ Luminaire housing and pole top constructed from highquality cast aluminium
- ✓ Nostalgic design for old city areas

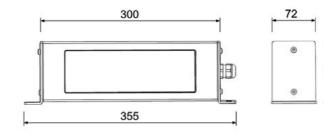


om high-quality cast aluminium

ernal thread for attachment to heritage poles or optionally with adapter for meter of 76mm

nous performance reduction for operation in networks without a control nce reduction by switching off a control line (Light Regulation Twin - LRT),

Dimensional drawing in mm





General specifications

Enclosure	Enclosure made from flat single-pane tempered s weather-resistant EPDM gasket
Rated luminous flux	2050 lm-3858 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	18 W–35 W
Protection rating	l or ll
Surface vulnerable to wind	0.05 m ²
Weight	approx. 1.6 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	High-quality extruded aluminium section, which s managment. Powder coated, DB 703
Installation	Wall attachment using slots for screws with a dian
Light regulation	Constant Lumen Management (CLM); autonomou (Light Regulation Autarkic - LRA); performance rec communication using DALI interface for integration



Find more technical details https://www.vulkan.eu



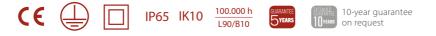
Façade and wall luminaires with minimalist design

✓ Directed light for high efficiency



✓ All components are designed for a very long lifetime of 100.000 hours

- ✓ Discreet, slimline and minimalist design
- ✓ Spring attachment for optics and LED that doesn't damage the material



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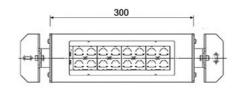
safety glass, inserted flush in the housing and glued from the inside;

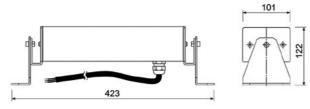
serves as heat sink and ensures optimum and efficient thermal

ameter of 8mm

ous performance reduction for operation in networks without a control line eduction by switching off a control line (Light Regulation Twin - LRT); digital tion in external DALI controllers

Dimensional drawing in mm







Enclosure made from flat single-pane tempered s weather-resistant EPDM gasket
2050 lm-3858 lm, L90/B10 for 100.000h
4000 K, 3000 K
18 W–35 W
l or ll
0.05 m ²
approx. 1.6 kg
DB 703, others on request
From page 72 onwards
Page 22

Additional specifications

Housing	High-quality extruded aluminium section, which management. powder-coated, DB 703
Installation	Ground, wall or ceiling attachment using swivel-r 2m connecting lead, pre-installed in the factory
Light regulation	Available with various dimming functions as opti- DALI interface for integration in external DALI cor



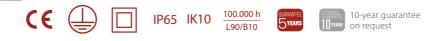
Find more technical details https://www.vulkan.eu





Robust 3-in-1 floodlight for flexible lighting

- ✓ Spotlight for use on the ground, wall or ceiling
- ✓ Small LED spotlight for lighting signs, logos or for similar applications
- ✓ Directed light for high efficiency
- ✓ All components are designed for a very long lifetime of 100.000 hours
- ✓ Discreet, slimline and minimalist design



safety glass, inserted flush in the housing and glued from the inside;

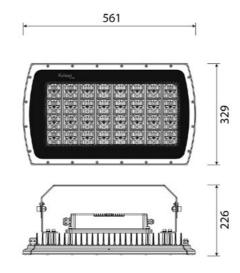
serves as heat sink and ensures optimum and efficient thermal

I-mounted brackets with slots for 6mm screws; with H07 RN-F,

tions: "Constant Lumen Management" (CLM); digital communication using ontrollers

Vulkan

Dimensional drawing in mm



General specifications

Enclosure	Enclosure made from flat single-pane tempered
Rated luminous flux	26000 lm-37000 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	200 W-280 W
Protection rating	l or ll
Surface vulnerable to wind	0.18 m ²
Weight	approx. 13 kg
Finish	DB 703, others on request
Accessories	From page 72 onwards
Optics	Page 22



Industry luminaire with high lumen output

 Highly efficient surface illuminating devices for industrial areas, parking lots and floodlights

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- ✓ All components are designed for a very long lifetime of 100.000 hours
- ✓ Flat housing design with external driver housing for optimum temperature management
- ✓ Spotlight for use on the ground, wall or ceiling





Find more technical details https://www.vulkan.eu

Additional specifications

Housing	High-quality die-cast aluminium housing for opt
Installation	Ground, wall or ceiling attachment using swivel- 2m connection cable pre-installed in the factory
Light regulation	Available with various dimming functions as optic
	Autonomous performance reduction for operation
	Performance reduction by switching off a contro
	DALI interface
	Electronic operating device with very long servic

I safety glass, inserted flush in the housing; resistant silicone gasket

otimum and efficient heat management. Powder coated, DB 703

I-mounted brackets with snap-in holes for 6 mm screws; with H07 RN-F,

ions: Constant Lumen Management (CLM)

tion in networks without a control signal (Light Regulation Autarkic - LRA)

rol line (Light Regulation Twin - LRT)

ice life of 100,000 h with max. 10% failure, replaceable

MODUL **Control Control Control**

General specifications

Enclosure	Enclosure made from flat single-pane tempered s
Rated luminous flux	1240 lm-5856 lm, L90/B10 for 100.000h
Light colour	4000 K, 3000 K
Rated input power	11 W-52 W
Protection rating	l or ll
Surface vulnerable to wind	Dependent on the luminaire housing
Weight	approx. 2 kg resp. 2.7 kg
Finish	Aluminium RAW
Accessories	From page 72 onwards
Optics	Page 22

Additional specifications

Housing	Die-cast aluminium
Installation	Cover (circular blank) is adapted to the housing ty
Light regulation (Optionally with dimmer function)	Constant Lumen Mangement
	Autonomous performance reduction
	Performance reduction by switching off a control
	DALI Interface

IP rating depending on luminaire application.



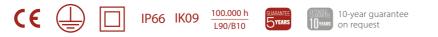
Multifunctional replacement kit

H: 120 mm, W: 200 mm, L: 200 mm

- ✓ Replacement kit for various luminaires
- ✓ Discreet, slim and reduced design

8

- ✓ Flat, flush singel-pane tempered safety glass
- ✓ 2 Types, 2 LED-elements, 3 LED-elements







safety glass, flush-mounted, weatherproof

type

ol line





Accessories



Poles & brackets

Cylindrical

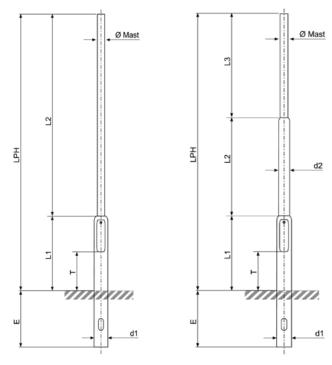
The cylindrical stepped poles are high-quality products from experts. They are manufactured in a flexible production process and can therefore be adapted to your needs. Manufactured from steel pipe according to EN 10220 / DIN 1626, hot-dip galvanised in accordance with DIN EN ISO 1461

and manufactured in accordance with DIN EN 40, you are guaranteed lasting quality for your lighting systems. Poles up to a length of 14m can be coated using an environmentally-friendly method to provide appropriate colours. We keep selected standard poles in stock for a rapid delivery service.

Conical

The conical poles are also high-quality products from experts. They are manufactured in a flexible production process and can be precisely adapted to your needs. Manufactured from steel pipe according to DIN EN 10025, hot-dip galvanised in accordance with DIN EN ISO 1461 and manufactured

Conical pole (STK) diameter 76 mm, wall thickness 3 mm



- Standard dimensions of pole door: 85 × 400 mm
- Triangular door look made from V2A, 10 mm
- Plain earthing link with two M6 sliding nuts and M8 earth connection
- Embedded base with a 150 × 50 mm cable in-feed
- Without cable junction box and other accessories please order separately

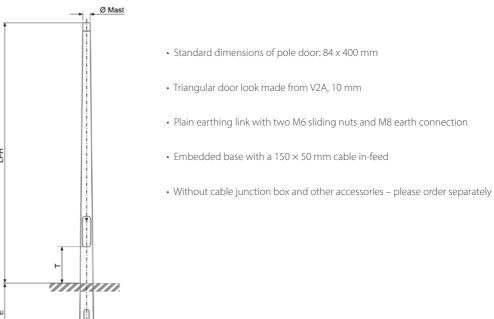


Fig. of conical pole

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LPH	E	d1 (E+L1)	Т	Pole door
3000	700	128	600	85 x 400
3500	700	135	600	85 x 400
4000	800	129	600	85 x 400
4500	800	134	600	85 x 400
5000	800	140	600	85 x 400
5500	900	146	600	85 x 400
6000	1000	153	600	85 x 400
6500	1000	159	600	85 x 400
7000	1000	164	600	100 x 400
8000	1200	177	600	100 x 400

All dimensions in mm

Cylindrical stepped pole (STZ) diameter 76 mm, wall thickness 2.9 mm

Fig. 2 – Pole with several steps

LPH	E	L1	L2	L3	d1 (E+L1)	d2	Т	Fig.
3000	700	1000	2000	-	114 × 3,2	-	500	1
3500	700	1000	2500	-	114 × 3,2	-	500	1
4000	700	1000	3000	-	114 × 3,2	-	500	1
4500	800	1200	3300	-	114 × 3,2	-	600	1
5000	800	1500	3500	-	114 × 3,2	-	600	1
5500	800	1500	4000	-	114 × 3,2	-	600	1
6000	1000	2000	4000	-	114 × 3,6	-	600	1
6500	1000	1500	2000	3000	114 × 3,6	89 x 3,2	600	2
7000	1000	1500	3000	2500	114 × 3,6	89 x 3,2	600	2
8000	1200	1800	3000	3200	133 × 3,6	89 x 3,2	600	2

All dimensions in mm

Fig. 1 – Pole with one step

in accordance with DIN EN 40. You are guaranteed lasting quality for your lighting systems. Poles up to a length of 14m can be coated using an environmentally-friendly method to provide appropriate colours. We keep selected standard poles in stock for a rapid delivery service.

We are happy to provide further models to suit your requirements. For example, we could provide a different length, an aluminium pole, a pole with a spigot diameter of 60 mm, a version with a base plate, powder coating in RAL or DB colours or wet coating, epoxy resin coating / bitumen in the ground section or shrink-fitting of a PE sleeve.

Accessories & wall brackets

Cable connection and junction box with surge protection

Cable connection and junction box for light pole with surge protection module. Satisfies all mechanical and electrical requirements and is manufactured in accordance with DIN 43628.

- Optimum mounting thanks to large connection space
- Design in accordance with DIN 43628
- Clamp connection for 2 cables 2.5-16 mm²
- Ingress protection IP 54 / protection rating II
- Sturdy housing made from impact-resistant polyamide, solid-coloured, RAL 7035, light grey
- Enclosure made from polycarbonate (PC), grey
- Equipped with two fuse elements 2 x D01, 6A
- · With integrated sliding and spring clamping technology
- Permanently attached, transparent protection against contact
- Suitable for pole installation starting from an inner diameter of 90 mm
- Can be used with door sizes starting from 80 x 300 mm
- Dimensions: L=277 mm, W=80 mm, D=66 mm
- Integrated surge voltage module in accordance with EN 61643-11 / IEC 61643-11 type 2 Protection rating II.

Technical data:

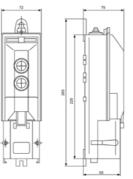
- Maximum continuous voltage AC [L-N] (UC) 275 V (50 / 60 Hz)
- Maximum continuous voltage AC [N-PE] (UC) 255 V (50 / 60 Hz)
- Nominal discharge current (8/20 μs) (In) 5 kA
- Max. discharge current (8/20 µs) (Imax) 10 kA
- Total discharge current (8/20 µs) [L+N-PE] (Itotal) 20 kA

Other versions with other specifications and modules available on request.

Cable connection and junction box

For light pole with compact design starting from 3m, manufactured in accordance with DIN VDE 0660-505 and DIN 43628. Type: LAK 75

- Protection against contact in accordance with VBG 4
- Reliable clamp connection for 3 cables 5 x 16 mm²
- Ingress protection IP 44 / protection rating II
- Base body made from PA plastic, cover made from PC plastic
- Cable in-feed for 2 or 3 cables with knock-out seal rings
- Equipped with two fuse elements D 01 / E 14
- Flexible internal pre-wiring
- Separate earthing cable guide without terminal box limitation
- Contact module for PE and N output terminal in luminaire output area
- 2 luminaire outputs with plastic sleeves which can be cut



Shrink-fit corrosion protection sleeves

Suitable for cylindrical and conical poles

Nominal range	Shrink-fit range	Length
100	90 - 110	400
115	110 - 130	400
125	125 - 150	400
160	145 - 170	400
170	155 - 180	400

All dimensions in mm

Edge protection for cable in-feed in ground area

Suitable for cylindrical and conical poles Dimensions: 150 x 50 mm

Base plates for conical and cylindrical poles

Available in the following dimensions: 300 x 300 mm 400 x 400 mm

Wall bracket with flange plate

Made out steel, welded and hot-dip galvanised.

Support: diam. 60 x 100 mm Length: 150 mm, 250 mm or 400 mm Setting angle: 0°, 5°, 10° or 15°

Universal bracket for wall and corner mounting

Made out steel, welded and hot-dip galvanised.

Support: diam. 60 x 100 mm Length: 300 mm or 500 mm Setting angle: 15°







Fig. of corrosion protection sleeve



Fig. of edge protection for cable in-feed

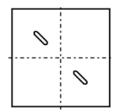


Fig. of base plate

Fig. of 5° setting

Fig. of 10° setting

Fig. of 15° setting

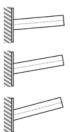






Fig. of corner mounting, view from abov

Fig. of wall mounting. view from above





Pole top mountings & brackets

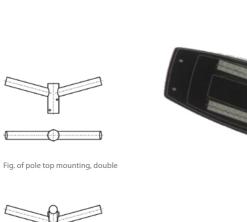
Individual and multiple pole top mountings

Made of steel, welded and hot-dip galvanised.

Pole top mounting	Pole spigot	Support	Projection	Angle
single	Ø 76	Ø 60x100	250	15°
single	Ø 76	Ø 60x100	500	15°
double	Ø 76	Ø 60x100	250	15°
double	Ø 76	Ø 60x100	500	15°
triple	Ø 76	Ø 60x100	250	15°
triple	Ø 76	Ø 60x100	500	15°
quadruple	Ø 76	Ø 60x100	250	15°
quadruple	Ø 89	Ø 60x100	250	15°
quadruple	Ø 76	Ø 60x100	500	15°
quadruple	Ø 89	Ø 60x100	500	15°

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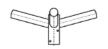
All dimensions in mm





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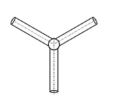


Fig. of pole top mounting, triple

Fig. of pole top mounting, quadruple



Pole top mountings with vertical support

Made of steel, welded and hot-dip galvanised.

Pole top mounting	Pole spigot	Support	Projection	Angle
double	Ø 76	Ø 60x100	200	0°
double	Ø 76	Ø 60x100	250	0°
double	Ø 76	Ø 60x100	400	0°

All dimensions in mm

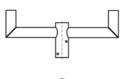


Fig. of pole top mounting, double

Curved pole brackets

Westerburg-MN curved pole top mounting bracket

Made of steel, welded, hot-dip galvanised and finished as requested by the customer to match the luminaire colour.

Connection to Iuminaire	Curved bracket radius	Pole spigot
VPS	R260	Ø 76
VPS	R360	Ø 76
I-1/2	R260	Ø 76
E-3/4	R260	Ø 76

Westerburg-MF curved pole top mounting bracket

Made of steel, welded, hot-dip galvanised and finished as requested by the customer to match the luminaire colour.

Connection to luminaire	Curved bracket radius	Pole spigot
VPS	R260	Ø 76
VPS	R360	Ø 76
I-1/2	R260	Ø 76
E-3/4	R260	Ø 76

Höhn curved pole top mounting bracket

Made of steel, welded, hot-dip galvanised and finished as requested by the customer to match the luminaire colour.

Connection to luminaire	Curved bracket radius	Pole spigot
VPS	R260	Ø 76
VPS	R320	Ø 76
I-1/2	R260	Ø 76
E-3/4	R260	Ø 76

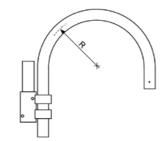


Fig. of Westerburg-MN curved pole bracket

V1 Curved pole top mounting bracket

Made of steel, welded, hot-dip galvanised and finished as requested by the customer to match the luminaire colour.

Connection to luminaire	Curved bracket radius	Pole spigot
VPS	R260	Ø 76
VPS	R360	Ø 76
I-1/2	R260	Ø 76
E-3/4	R260	Ø 76

V3 curved pole top mounting brackets

Made of steel, welded, hot-dip galvanised and finished as requested by the customer to match the luminaire colour.

Connection to Iuminaire	Curved bracket radius	Pole spigot
VPS	R260	Ø 76
VPS	R360	Ø 76
I-1/2	R260	Ø 76
E-3/4	R260	Ø 76

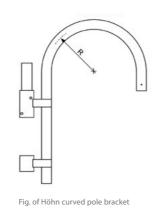


Fig. of Westerburg- MF curved pole bracket

VPS = Vulkan Patent System

I-1/2 = 1/2 inch internal thread E-3/4 = 3/4 inch external thread

Other curved top mounting brackets with other pole spigots, curved bracket radii and special shapes or colours are available on request.

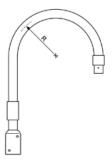


Fig. of V1 curved pole bracket

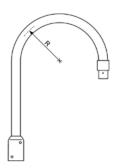


Fig. of V3 curved pole bracket

Heritage poles

Projects aiming to retain the historic ambience of an old city should include suitable heritage poles, that fit with the historic townscape. The heritage poles from Vulkan are made from cast aluminium and powder coated in DB 703. A coating colour in other DB or RAL shades can also be selected. Mounting is very simple and uses an inner core pole made from galvanised steel pipe, which perfectly links together all the decorative elements. Customers can choose between a foot plate or embedded base for the installation. The luminaires are mounted in groups of one, two or three with a 3/4 thread. Brackets suitable for wall mounting are available.



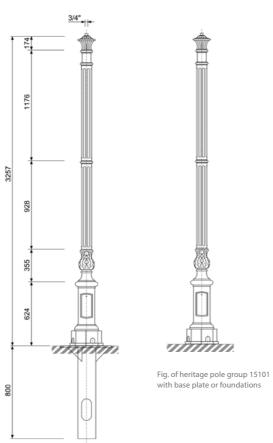


Fig. of heritage pole group 15101 with embedded base

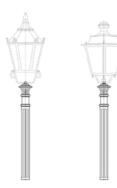


Fig. of heritage pole group 15101 for mounting one luminaire



Fig. of heritage pole group 15102 for mounting two luminaires



Fig. of heritage pole group 15103 for mounting three luminaires

Wall brackets for heritage luminaires

Decorative heritage bracket W3000

Made from cast aluminium, with integrated cable guide for hidden cable routing, finished as requested to match the luminaire colour.

Heritage brackets W4000 and W5000

Made of steel, welded, hot-dip galvanised and with integrated cable guide for hidden cable routing. Finished as requested to match the luminaire colour.

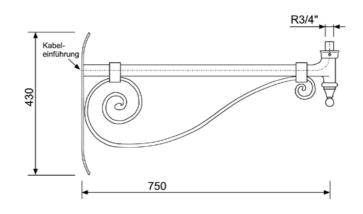


Fig. of W4000 wall bracket



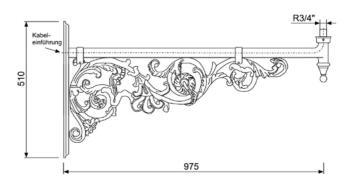


Fig. of W3000 wall bracket

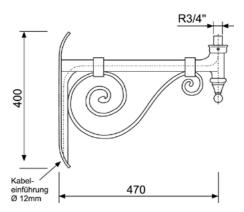


Fig. of W5000 wall bracket

Intelligent lighting

Light controllers

Modern and energy-efficient LED lighting offers huge potential savings over conventional street lighting. Through the use of electronic components, it also opens up the option of very easily integrating a light controller to save additional energy.

The right controller for your application depends on your requirements and also the prevailing conditions. Intelligent light controllers in our luminaires make our lighting systems even more efficient. They minimise annual energy consumption and therefore associated costs too. We are happy to explain the options in more detail.

Without constant luminous flux

Over the course of a light source's life, its luminous flux falls by approximately 20% (L80B10), but the system output remains unchanged. The drop in luminous flux must be taken into account when planning the use of the lamp luminous flux maintenance factor (LLWF). This means that from the outset the lighting system has to be provided with more energy to take the drop in luminous flux into account and still provide the amount of light needed at the end of its life.

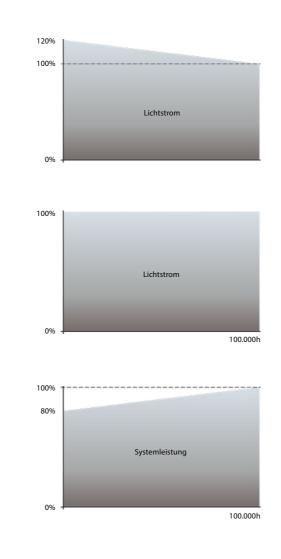
With constant luminous flux

The integrated electronics increase the flux over the illuminant's life and thereby keep the luminous flux constant. This does increase the system output over the illuminant's life, but you save energy right from the start because you don't have to oversize your lighting system.

These days, modern LED systems work in such a stable manner that they only lose a few percent of luminous flux over the course of their lives. The influence of constant luminous flux is therefore low.

CLM – Constant Lumen Management

The luminous flux of all light sources, including LEDs, reduces as they age. The amount by which it reduces depends on various parameters. However, these days an electronic controller can counteract this reduction to provide constant luminous flux over the light sources entire life and save even more energy for good measure.



LRT – Light Regulation Twin (2 phases)

With this controller, the lighting is reduced using a second phase (control phase). Switching off the control phase, reduces the luminous flux to a predefined value. There are two versions available: With «LRT70», the luminous flux is reduced to around 70% (equating to a reduction of roughly one lighting class).

With the classic «LRT», it is reduced to 50% (the familiar half-night setup). The duration and times can be freely determined by the user and adapted to suit user needs. This controller can be easily integrated into networks with an existing control phase and in new systems too.

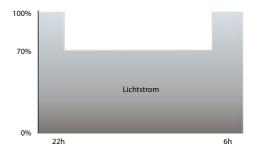
LRA – Light Regulation Autarkic (self-sufficient)

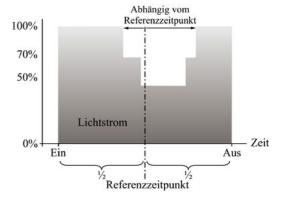
As the name suggests, Light Regulation Autarkic is not dependent on an external control line. This controller can therefore also be easily integrated in existing lighting systems. It can be freely programmed in 5 levels with the data stored directly in the electronic operating unit, meaning that no additional components are needed.

The programmed times at which the luminous flux is reduced are automatically taken from the switch-on and switch-off times. The midway point between switching on and off is the reference time for the reduction. If this changes, the reduction times are adapted accordingly, as happens e.g. when switching between CET summer / winter time.

DALI

For integration in external controllers, Vulkan's luminaires can also be supplied with a DALI connection. In addition to the control function, the other benefit of DALI is that it is a two-way protocol and e.g. errors and lighting hours can also be read out. The reduction in performance is then of course dependent on the controller used and the options it offers. One of the disadvantages of these systems is the limited cable lengths which is why the signal converter (controller) is usually located in the pole or luminaire.





Smart City

Smart City stands for holistic development concepts, networking of different systems and the generation of data – with a clear goal: the optimization of urban spaces. Lighting and the associated lighting management systems are an important part of a Smart City.

The connection or communication is ensured via a network. Through the integration of sensors, such as B. Twilight switch, Frahlingsensor or a sensor for traffic measurement, the lighting can be optimized for weather conditions without sacrificing comfort and safety.

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Software forms the basis of a light management system and can control the entire lighting of a city. Individual light points are clearly displayed on a map and can be read out and adjusted individually or in groups at any time.

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We would be happy to advise you on your Smart City solution.



List of abbreviations

Luminaires

1x	1 LED module
2x	2 LED modules
30W	System output per LED module
730	Ra> 70; 3000K
740	Ra> 70; 4000K
750	Ra> 70; 5000K
	Protection rating I
	Protection rating II
	Protection rating III
CLM	Constant Lumen Management
LRT	Light Regulation Twin – reduction to around 50% (default)
LRT70	Light Regulation Twin – reduction to around 70%
LRA1	Light Regulation Autarkic, scene 1
LRA2	Light Regulation Autarkic, scene 2
LRA3	Light Regulation Autarkic, scene 3
LRAC	Light Regulation Autarkic, customised (option)
LMS	Light Management System
DALI	DALI for external controllers (default = DALI
	logarithmic)
Optics O1	Major road
Optics O2	High-traffic road
Optics O3	Low-traffic road requirement
Optics O4V	Bike / Pedestrian path
Optics O5	Area lighting
Optics O6	Pedestrian crossing
Optics O7	Major road / High-traffic road
Optics O8	Pedestrian path / symmetric
Optics O9	Pedestrian path / asymmetric
Optics O10V	Sport facilities / Parking areas
HS	House-side shield
O1X	Catenary luminaires: If the luminaire is arranged across
	the street, the optics designation has an "X" tagged on
	the end, e.g. O1X, O3X, O7X,
O1L	Catenary luminaires: If the luminaire is arranged along
	the street, the optics designation has an "L" tagged on
	the end, e.g. O1L, O3L, O7L,
7035	RAL 7035 - light grey
703	DB 703 - iron mica, dark grey DB colour
	DB 703 + seawater protective finish (add to colour code
703SP	without space)
	SP = salt protection or seawater protection

Poles and brackets

ALK	Aluminium pole, conical
STK	Steel pole, conical
ALZ	Aluminium pole, cylindrical
STZ	Steel pole, cylindrical
STZ 2F	Steel pole, cylindrical, double bracket
STK-P	Steel pole, conical, whip shape (whip pole)
3000	Pole height above the ground 3 m
60	Pole diameter 60 mm
76	Pole diameter 76 mm
E-3/4	Outer diameter 3/4"
3.0	Wall thickness 3 mm
E700	Length of buried base in ground 0.7 m
MB-T1	Straight bracket, pole top, single
MB-T2	Straight bracket, pole top, double
MB-S1	Straight bracket, side entry, single
MB-S2	Straight bracket, side entry, double
MB-S3	Straight bracket, side entry, triple
MB-S4	Straight bracket, side entry, quadruple
MB-B1	Curved bracket, single
MB-B2	Curved bracket, double
MB-O	Round/circular bracket, single
WB-S1	Wall bracket, single
60x100	Support diameter x support length in mm
I-1/2-BE	Internal thread, diameter, curved bracket end
E-1/2-BE	External thread, diameter, curved bracket end
VPS	Vulkan Patent System
VPS-IB	Vulkan Patent System, in curved bracket
L1000	Length of bracket
L1000-5°	Length of bracket, 5° inclination
R260	Radius of curved bracket
HÖ	Höhn
WB-MF	Westerburg, far-off pole
WB-MN	Westerburg, nearby pole
V1	Curved bracket, version 1
V2	Curved bracket, version 2
V3	Curved bracket, version 3

List of symbols

The CE symbol is used by the manufacturer and confirms that he is responsible for the products' conformity with the relevant EC and/o EU laws. Our products have to comply with the Low Voltage Directive and the EMC Directive 2004/108/EC (interference resistance, emitted interference) in order to use the CE symbol.



CE

The ENEC symbol is the European symbol proving that luminaires comply with European safety standards. The test method is described in the European 60598-1 standard. The ENEC symbol is used along with the identification number of a European test centre (VDE = 10). It documents the fact that the luminaires have been constructed and tested "in compliance with applicable standards", see Low Voltage Directive 2006/95/EC.

IP (Ingress Protection)

The IP is identified using 2 parameters:

Parameter 1: Level of protection against contact and foreign bodies

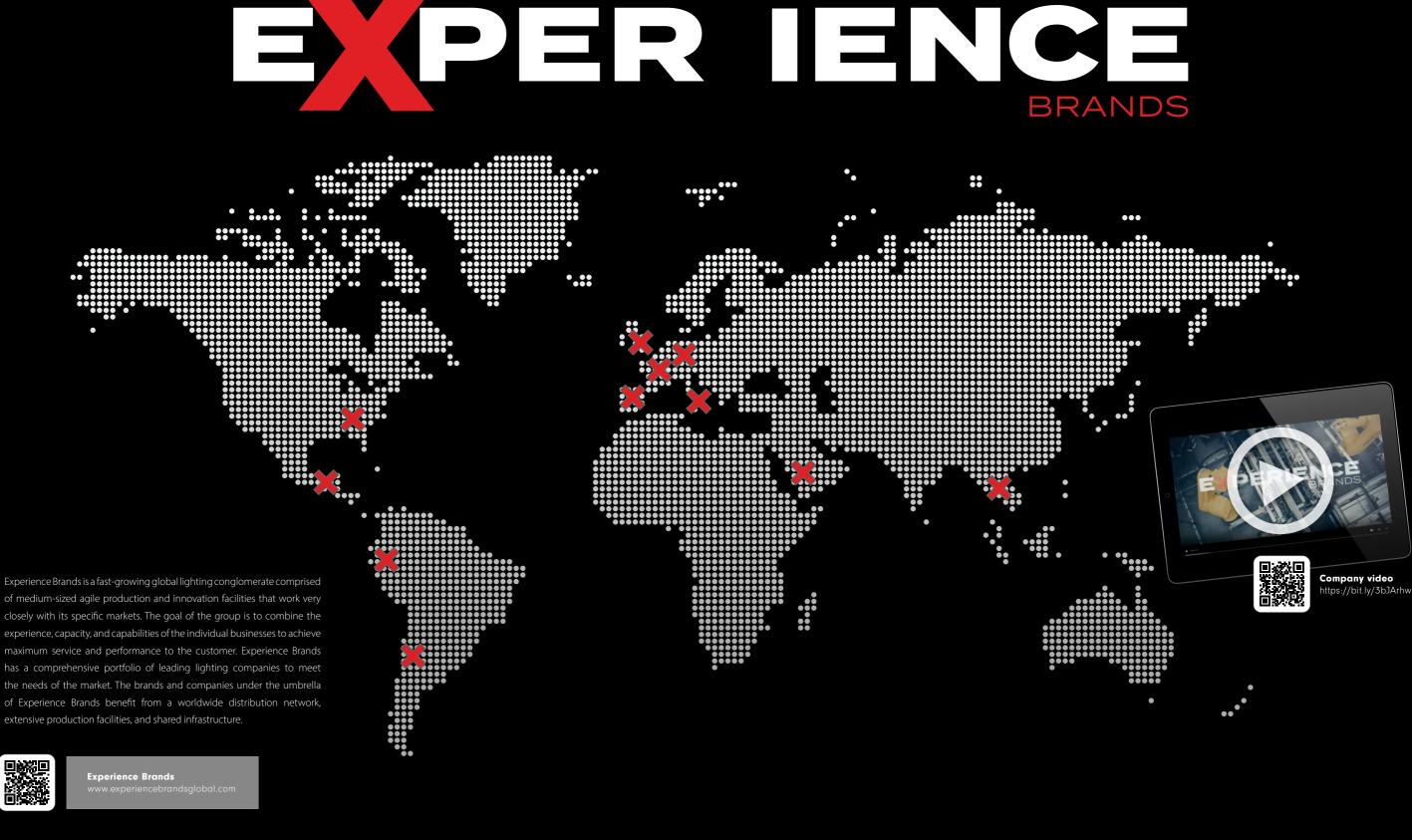
First parameter	Protection against foreign bodies	Protection against contact	
0	No protection	No protection	
1	Protected against solid foreign bodies with a diameter of 50 mm or more	Protected against access with the back of the hand	
2	Protected against solid foreign bodies with a diameter of 12.5 mm or more	Protected against access with a finger	
3	Protected against solid foreign bodies with a diameter of 2.5 mm or more	Protected against access with a tool	
4	Protected against solid foreign bodies with a diameter of 1.0 mm or more	Protected against access with a wire	
5	Dust-protected	Complete protection against contact	
6	Dust-tight	Complete protection against contact	

Parameter 2: Levels of protection for water protection

Second parameter	Protection against water
0	No protection
1	Protection against drips
2	Protection against falling drips if the housing is tilted up to 15°
3	Protection against falling spray up to 60° from the vertical
4	Protection against splashes from all sides
5	Protection against jets of water (nozzle) from any angle
6	Protection against powerful jets of water
7	Protection against brief immersion
8	Protection against permanent immersion
9	Protection against water during high-pressure/steam jet cleaning, es

is	\bigcirc	Protection rating I
or ve ed		Protection rating II
		-
es ed	GUARANTEE	Protection rating III
ng D). nd	EXTENDED	Five-year guarantee
je		10-year guarantee on request

especially in agriculture















www.hess.eu

www.vulkan.eu

www.griven.com

www.lamp.es

www.nordeon.com

SCHMITZ | WILA



www.wila.com

Customer (name,	adress)		Your notes:		
Project (descripti	on e.g. street, neighbourhood, t	own/village,)			
Lighting Specifica	ations DIN 13201-1				
Lighting situation		Lighting Class			
No. of light point		No. in problem areas			
Alternative specif	fications for 1-1-replacement of	existing luminaires (lum	inaires to be replaced)		
Manufacturer		Туре			
Type of luminaires		Power consumption			
Pole (specificatio	ns or existing luminaires)				
Pole height		Pole distance			
Bracket length		Bracket angle			
Pole arrangement					
Road profile strue Dimensioning (m) of t	:ture the cross-section from the start to the er	nd of the lighting, positioning o	of the lamp		
Description		Width in m	Example		
			Cycle path/Pavement	2m	
			Pole position Road Parking strip	X 7m 2.5m	
			Grass verge	1m	
Details of the nev	v luminaire / remarks				
Luminaire type		Connection cable			
Protection rating		Night-time dimming			
Housing colour		Light colour			

Request Log Street Lighting

Customer (name, adress)





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June 2021