

Outdoor lighting

About us www.vulkan.eu

Vulkan – the traditional brand

Vulkan stands for products that are of premium quality, in terms of engineering, as well as highly efficient and have been for more than a century.

Vulkan's roots go all the way back to the year 1898. This makes Vulkan one of the oldest brands in the lighting industry. Particularly within the Germanspeaking area, the company enjoys a very good reputation.

Vulkan offers cities, municipalities and energy suppliers, technically highly advanced products for a standard-compliant illumination of streets, central traffic intersections, car parks, pedestrian zones and public facilities.

Vulkan – well-engineered and efficient

Technically advanced outdoor luminaries ensure high reliability and a long service life. Vulkan also stands for extremely attractive conditions. The combination of very high levels of energy-efficiency and long maintenance intervals result in very lucrative payback periods for Vulkan customers.

Energy efficiency meets high functionality

Vulkan luminaires are designed for a high level of technical functionality and maximum energy efficiency. Both are achieved through the use of state-of-the-art LED technology - paired with a high level of expertise in the field of mechanical design.

In addition, we align ourselves very closely with our customer requirements when developing new products. Depending on the corresponding application area, we develop lighting technology that is optimally matched to the requirements.

VULKAN – Quality from the Black Forest.

Hess - enhancing urban spaces

Thanks to its extremely varied range of luminaires, premium supplier Hess is able to fulfil every lighting design requirement for public and private outdoor spaces and exterior illumination of objects and properties. Together with the Hess brand Vulkan, the company covers almost the entire spectrum of outdoor lighting – from technically efficient to multifunctional, smart luminaires.

Perfectly matched, high-quality site furnishings round out the product portfolio. The perfect combination of luminaires and site furnishings allows the realisation of holistic concepts for urban and open space design – and, as a special hallmark of Hess, also the most unique special solutions.

As the world's first manufacturer of LED streetlights, Hess played a pioneering role in innovative LED outdoor lighting already in 2003.

Hess offers a portfolio of innovative LED lights, which feature a unique design, modular LED technology and intelligent lighting management systems

In addition to luminaires, Hess also produces high-quality site furnishings comprising among others benches, planters, barrier systems, waste receptacles, tree grates and bicycle racks. The products are conceived for the most demanding conditions while taking into account the highest design requirements.

Hess supports cities and municipalities on their way to becoming "Smart Cities" – with a comprehensive, innovative and design-oriented portfolio of products and solutions.

Hess: Enhancing urban spaces – we enhance smart cities.









Content www.vulkan.eu



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Request Loa Street Lighting			



References















Optics asymmetrical www.vulkan.eu

Optics asymmetrical

Application examples* Main thoroughfares Thoroughfares Low-order thoroughfares Cycle paths / walkways illumin the Luminaires Optic O1 Optic O2 Optic O3 Optic O4 Optic O4 V3050 ✓ ✓ ✓ ✓ V3051 ✓ ✓ ✓ V3052 ✓ ✓ ✓ V3080 ✓ ✓ ✓ V3081 ✓ ✓ ✓ V3082 ✓ ✓ ✓ V3125 ✓ ✓ ✓ V3210 ✓ ✓ ✓ V3213 ✓ ✓ ✓ V3220 ✓ ✓ ✓	an crossings, nation to e right Cic O6R
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V3081 ✓ ✓ V3082 ✓ ✓ V3083 ✓ ✓ V3125 ✓ ✓ V3210 ✓ ✓ V3211 ✓ ✓ V3212 ✓ ✓ V3213 ✓ ✓	✓
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V3083 ✓ ✓ V3125 ✓ ✓ V3210 ✓ ✓ V3211 ✓ ✓ V3212 ✓ ✓ V3213 ✓ ✓	✓
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V3210 ✓ V3211 ✓ V3212 ✓ V3213 ✓ V3220 ✓	✓
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V3220 ✓ ✓	
	✓
V3221 ✓ ✓	✓
V3222 ✓ ✓	✓
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V3224 ✓ ✓	✓
V3454 ✓ ✓	
V3456 ✓ ✓	
V3457 ✓ ✓	
V3458 ✓ ✓	
V3606 ✓ ✓ ✓	✓
V3610 ✓ ✓ ✓ ✓	✓
V3630 ✓ ✓ ✓	✓
V5480 ✓ ✓	
V7410 ✓ ✓	
V7420 ✓ ✓	
V8446 ✓ ✓ ✓	
V8447 ✓ ✓ ✓	
V8448 ✓ ✓ ✓	
V8450 ✓ ✓ ✓	
V8466 ✓ ✓ ✓	
V8481 ✓ ✓	
V8482 ✓ ✓ ✓	
V9701 ✓ ✓	✓
V9702 ✓ ✓	✓
V9703 ✓ ✓	✓
V9801	
V9802	
V9803	

				I	I
Application examples*	Side streets / paths	Sport facilities, Parking areas	Large areas	Large areas	Car parks
Luminaires	Optic 07	Optic O14	Optic O20	Optic O23	Optic O24
V3050	✓	✓			
V3051	✓	✓			
V3052	✓	✓			
V3053	✓	✓			
V3080	✓	✓			
V3081	✓	✓			
V3082	✓	✓			
V3083	✓	✓			
V3125					
V3210	✓	✓			
V3211	✓				
V3212	✓				
V3213					
V3220	✓	✓			
V3221	✓	√			
V3222	✓	√			
V3223					
V3224	✓	✓			
V3454	✓	-			
V3456	✓				
V3457	√				
V3458	✓				
V3606	√	√			
V3610	<i>✓</i>	√			
V3630	· ✓	<u> </u>			
V5480	✓	<u> </u>			
V7410	✓				
V7410	✓				
V8446	√				
V8446 V8447	∨				
V8447 V8448	∀				
V8448 V8450	∨				
V8450 V8466	√				
V8466 V8481	∨				
V8481 V8482	√				
	∀	√			√
V9701	∀	<u> </u>			∀
V9702	✓				-
V9703	٧	√	/		√
V9801		√	√	√	√
V9802		√	√	√	√
V9803		✓	✓	✓	√

^{*}The shown graphics give examples of the light distribution of the individual optics. These can vary depending on their mounting height, location and luminaire. LDT/IES data can be found for each luminaire model at www.vulkan.de. All optics (cluster of 4) can be combined with each other and changed on site in 90°- steps.

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Optics symmetrical & axially symmetric

Application examples*	Pedestrian path / symmetric	Main thoroughfares or pedestrian zones	Main thoroughfares	Spotlighting	Large areas
Luminaires	Optic O8	Optic O9	Optic O10	Optic O15	Optic O16
V3050					
V3051					
V3052					
V3053					
V3080					
V3081					
V3082					
V3083					
V3125		✓	✓		
V3210					
V3211	✓				
V3212	✓				
V3213	✓	✓	✓		
V3220					
V3221	✓	√			
V3222	✓				
V3223	√	√	✓		
V3224	✓	✓			
V3454	√	√			
V3456	✓	√			
V3457	√	√			
V3458	✓	√			
V3606	✓	√			
V3610					
V3630	√	√			
V5480	√	√			
V7410	√	√			
V7420	√	√			
V8446	√	√			
V8447	√	√			
V8448	√	√			
V8450	√	√			
V8466	✓ ✓	✓			
V8481	✓	✓			
V8482 V9701	V	V		√	
V9701 V9702				<u> </u>	
V9702 V9703				<u> </u>	
V9703 V9801			√	<u> </u>	✓
V9801 V9802			∨	<u> </u>	∨ ✓
V9802 V9803			√	<u> </u>	V ✓
V 7003		<u> </u>	Y	<u> </u>	<u> </u>

Recommended mounting heights

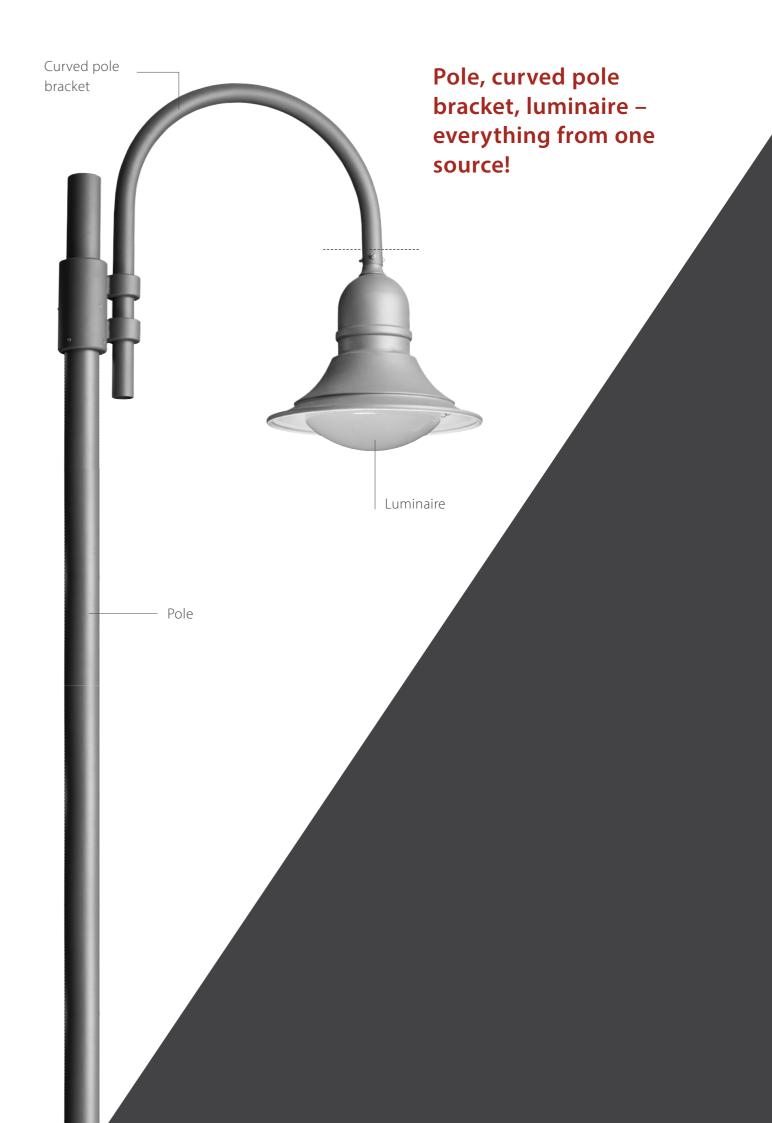
Luminaires	4-6 m	6-8 m	8-10 m	10-16 m	> 16 m
V3050	✓	✓			
V3051		✓	✓		
V3052			✓	✓	
V3053				✓	
V3080	✓	✓			
V3081		\checkmark	✓		
V3082			✓	✓	
V3083				✓	
V3125		✓	✓		
V3210	✓	✓			
V3211	✓				
V3212	✓	✓			
V3213	✓	✓	✓		
V3220	✓	✓	✓		
V3221	✓	✓			
V3222	✓	✓	✓		
V3223		✓	✓	✓	
V3224	✓	✓			
V3454	✓				
V3456	✓				
V3457	✓				
V3458	✓				
V3606		✓	✓	✓	
V3610	✓	√			
V3630		✓	√		
V5480	√				
V7410	✓				
V7420	✓				
V8446	√	✓			
V8447		<u>√</u>	√		
V8448	✓	√			
V8450	<i>✓</i>	<i>✓</i>			
V8466	√	✓			
V8481	√				
V8482	✓	✓			
V9701	•	√	✓		
V9702		✓	✓	√	
V9702 V9703		•	√	√	✓
V9703 V9801			√	✓	√
V9801 V9802				√	√
V9802 V9803				✓	√

Mounting heights

^{*}The shown graphics give examples of the light distribution of the individual optics. These can vary depending on their mounting height, location and luminaire. LDT/IES data can be found for each luminaire model at www.vulkan.de. All optics (cluster of 4) can be combined with each other and changed on site in 90°- steps.



Products



V321X













V3213

Decorative luminaire family in 2 sizes for holistic lighting concepts

- ✓ Small version with four mounting possibilities for a uniform appearance across all application situations
- ✓ Luminaire family with decorative design language
- ✓ Compact design of the housing for easy installation
- ✓ Easy maintenance via separately removable electronic ballast carrier





*in preparation



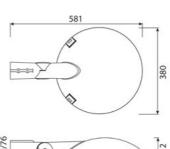






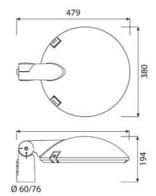


Dimensional drawing in mm

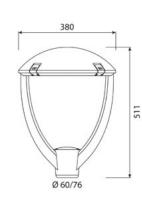




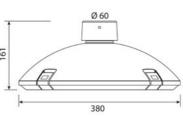
V3210



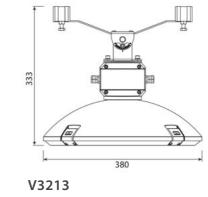
V3210



V3211



V3212



General specifications

Flat single-pane tempered safety glass, partially printed on the inside in grey
1.701 lm - 8.427 lm, L90/B10 at 100.000 h
4.000 K, 3.000 K; others on request
12 W - 40 W
l or II
0,052 m² - 0,074 m²
approx. 7 kg - 10 kg
DB 703; others on request
Pages 24 - 26

Additional specifications

Housing	Powder-coated, die-cast aluminium
Attachment	Spigot Ø 60 / 76 mm for Pole top- and side mounted luminaire
Light regulation	Constant Lumen Management (CLM)
	Autonomous performance reduction for operation in networks without a control line (Light Regulation Autarkic – LRA)
	Digital communication with DALI
	Optional: Radio-controlled Light Management System (LMS)



Technical-decorate









V3222 V3223



Decorative luminaire family in 2 sizes for holistic lighting concepts

- ✓ Small version with five mounting possibilities for a uniform appearance across all application situations
- ✓ Luminaire family with decorative design language
- ✓ Compact design of the housing for easy installation
- ✓ Easy maintenance via separately removable electronic ballast carrier



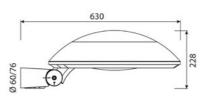


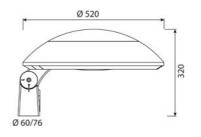






Dimensional drawing in mm



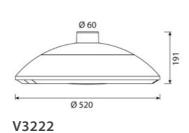


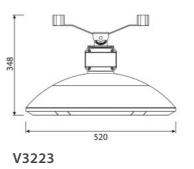


V3220

V3220

V3221







General specifications

Enclosure	Flat single-pane tempered safety glass, partially printed on the inside in grey
Rated luminous flux	1.593 lm - 9.370 lm, L90/B10 at 100.000 h
Light colour	4.000 K, 3.000 K; others on request
Rated input power	11 W - 53 W
Protection rating	Torll
Surface vulnerable to wind	0,098 m² - 0,126 m²
Weight	approx. 12 kg - 15 kg
Finish	DB 703; others on request
Optics	Pages 24 - 26

Additional specifications

Housing	Powder-coated, die-cast aluminium
Attachment	Spigot Ø 60 / 76 mm for Pole top- and side mounted luminaire
Light regulation	Constant Lumen Management (CLM)
	Autonomous performance reduction for operation in networks without a control line (Light Regulation Autarkic – LRA)
	Digital communication with DALI
	Optional: Radio-controlled Light Management System (LMS)



V3(15)





Technical and efficient luminaire family in a simple, pleasing design

- ✓ Luminaire family with four sizes for a uniform appearance across all application situations
- ✓ Easy maintenance via tool-free quick-release fasteners, detentable housing with partition plug and separately removable electronic ballast carrier
- ✓ Easy one-man installation
- ✓ Spigot for universal top and side mounting





*in preparation



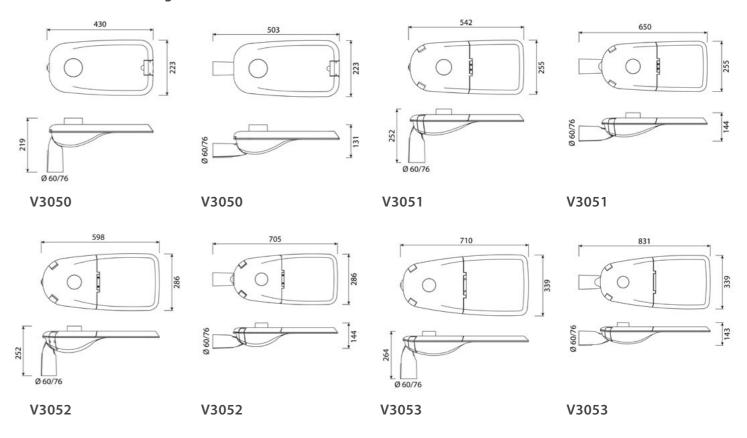








Dimensional drawing in mm



www.vulkan.eu

General specifications

Enclosure	Flat single-pane tempered safety glass, partially printed on the inside in grey
Rated luminous flux	2.219 lm - 25.850 lm, L90/B10 at 100.000 h
Light colour	4.000 K, 3.000 K; others on request
Rated input power	16 W - 209 W
Protection rating	l or II
Surface vulnerable to wind	0,05 m ² - 0,11 m ²
Weight	approx. 5,8 kg - 14,6 kg
Finish	Vulcano grey bright, structured; others on request
Optics	Pages 24 - 26

Additional specifications

Housing	Powder-coated, die-cast aluminium
Attachment	Spigot Ø 48 / 60 / 76 mm for Pole top- and side mounted luminaire
Inclination	Inclination of the luminaire adjustable from +15° to -15° in 5° steps
Light regulation	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)
	Digital communication with DALI
	Radio-controlled Light Management System (LMS) with monitoring, error messages, motion control and other features



Find more technical details https://www.vulkan.eu/en/street-lighting/v305x/

V308X

V3081

V3083

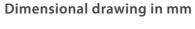
V3080

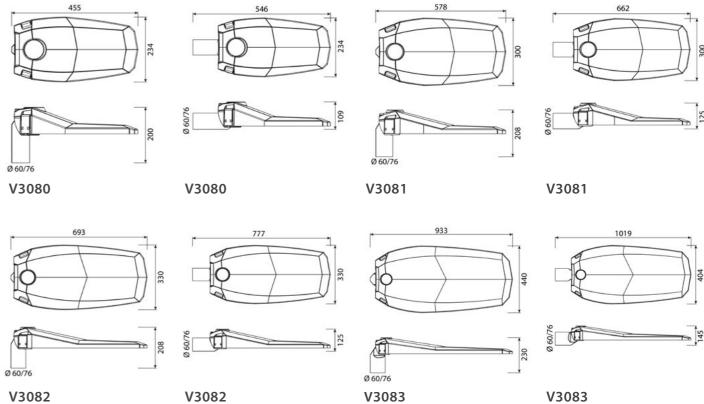
V3082





- ✓ Luminaire family with four sizes for a uniform appearance across all application situations
- ✓ Easy one-man installation
- ✓ Easy maintenance via tool-free quick-release fasteners, detentable housing with partition plug and separately removable electronic support carrier
- ✓ Tool-free separation of base support on pole and swing-down luminaire with LED and electrical block for simplified installation or replacement if necessary.
- ✓ Spigot for universal top and side mounting



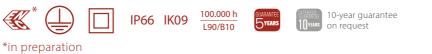


General specifications

Enclosure	Flat single-pane tempered safety glass, partially printed on the inside in grey
Rated luminous flux	1.518 lm - 37.520 lm, L90/B10 at 100.000 h
Light colour	4.000 K, 3.000 K; others on request
Rated input power	11 W - 278 W
Protection rating	Torll
Surface vulnerable to wind	0,07 m ² - 0,19 m ²
Weight	approx. 5,8 kg - 14,6 kg
Finish	DB 703; others on request
Optics	Pages 24 - 26

Additional specifications

Housing	Powder-coated, die-cast aluminium
Attachment	Spigot Ø 48 / 60 / 76 mm for Pole top- and side mounted luminaire
Inclination	Inclination of the luminaire adjustable from +15° to -15° in 5° steps
Light regulation	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)
	Digital communication with DALI
	Radio-controlled Light Management System (LMS) with monitoring, error messages, motion control and other features





Find more technical details https://www.vulkan.eu/en/street-lighting/v308x/

Technical luminaires



Modern interpretation of the classic linear luminaire

- ✓ Luminaire in slender, classic linear luminaire design
- ✓ Optimal for pole heights from 6 m to 12 m
- ✓ High quality aluminium housing
- ✓ Can be used as a side mounted and pole top mounted luminaire
- ✓ Components can be supplied and exchanged as spare parts







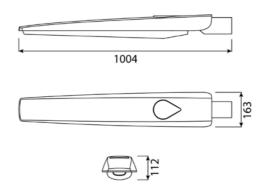








Dimensional drawing in mm



General specifications

Enclosure	Convex cover made of impact-resistant and UV-stable polycarbonate; optimised for far-reaching lateral illumination with large pole distances; visibility of luminaire even from a distance to support the appearance of classic linear luminaires
Rated luminous flux	3.033 lm - 9.374 lm, L90/B10 at 100.000 h
Light colour	4.000 K, 3.000 K, others on request
Rated power	21 W - 70 W; power-dependent equipping with 24 or 36 high-power LEDs
Protection rating	l or II
Surface vulnerable to wind	max. 0,1 m ²
Weight	approx. 6 kg
Finish	DB 703, others on request
Accessories	From page 80
Optics	Pages 24 - 26

Additional specifications

Housing	Die-cast housing made of corrosion-resistant aluminium alloy
Installation	Two versions for Ø 60 mm as well as Ø 42-48 mm pole spigot, both for side mounting and pole top mounting, setting angle + or - 15° in 5° increments
Light regulation	Constant Lumen Management (CLM); autonomous power reduction for operation in networks without a control line (LRA); power reduction by switching off a control line (LRT); optionally available as "Zhaga Ready" with top/bottom Zhaga Book 18 socket and SR driver; 3-stage lumen power switch on request
	Digital communication with DALI
	Radio-controlled Light Management System (LMS) with monitoring, error messages, motion control and other features



Find more technical details

https://www.vulkan.eu/en/street-lighting/v3606/

V3610⁻¹





Maximum flexibility for individual applications

- ✓ Universal and simple installation
- ✓ Optimal for pole heights of 4 m to 8 m
- ✓ Easy opening through quick-release lock
- ✓ Components exchangeable and available as spare parts















Six inclination levels from -5° to +20°



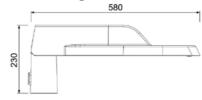


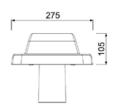


↑ For brackets without inclination, ↑ Brackets with inclination of up to 5° inclination is possible

20° can be inclined down to 0°

Dimensional drawing in mm





General specifications

Enclosure	Flat single-pane tempered safety glass, partially printed on the inside in black; easy to open thanks to quick-release lock with 90° rotation, enclosure glass can be hinged towards the pole
Rated luminous flux	742 lm - 6.874 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	6 W - 52 W
Protection rating	l or II
Surface vulnerable to wind	0,05 m ²
Weight	approx. 5,8 - 6,7 kg
Finish	DB 703 or RAL 7035, others on request
Accessories	See from page 80
Optics	Pages 24 - 26

Additional specifications

Housing	Powder-coated, die-cast aluminium	
Installation	Pole top Ø 60 - 76 mm Side mounted luminaire Ø 42 - 60 mm (for Ø 42 mm adapter requested)	
Light regulation	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), Optional as "Control Ready", deliverable with Zhaga Book 18 socket and SR drive located above or under; 3 levelled lumen circuit-breaker upon request	
	Digital communication with DALI	
	Radio-controlled Light Management System (LMS) with monitoring, error messages, motion control and other features	



Find more technical details

https://www.vulkan.eu/en/street-lighting/v3610/

V3630











One design for all applications within a city

- ✓ Flexibility in mounting on pole top and as side mounted luminaire, integrated pole flap
- ✓ Optimal for pole heights of 5 m to 12 m
- ✓ Easy opening through quick-release lock
- ✓ Components exchangeable and available as spare parts















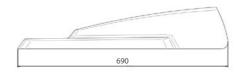


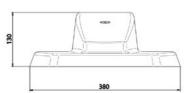
Inclination levels from 0° to + 15°





Dimensional drawing in mm





General specifications

Enclosure	Flat single-pane, tampered safety glass, partially printed on the inside in black; easy to open; quick release look with 90° rotation, enclosure glass can be hinged towards the pole
Rated luminous flux	1.325 lm - 16.362 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 139 W
Protection rating	l or II
Surface vulnerable to wind	0,06 m ²
Weight	approx. 9,2 to 10,5 kg
Finish	DB 703 or RAL 7035, others on request
Accessories	See from page 80
Optics	Pages 24 - 26

Additional specifications

Housing	Powder-coated die-cast aluminium	
Installation	Pole top Ø 60 - 76 mm Side mounted luminaire Ø 42 - 60 mm 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); optional as "Control Ready", deliverable with Zhaga Book 18 socket and SR drive located above or under; 3 levelled lumen circuit-breaker upon request	
Light regulation		
	Digital communication with DALI	
	Radio-controlled Light Management System (LMS) with monitoring, error messages, motion control and other features	



Find more technical details

https://www.vulkan.eu/en/street-lighting/v3630/

V3125





Aerodynamic shape for challenging lighting conditions



- ✓ Flat, aerodynamic shape with low wind load
- ✓ No light pollution from directed light
- ✓ Components exchangeable and available as spare parts

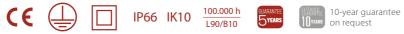




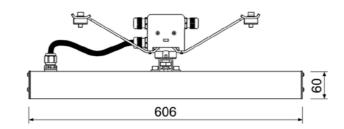


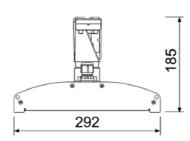






Dimensional drawing in mm





General specifications

Enclosure	Enclosure made from flat single-pane tempered safety glass, partially printed on the inside in black; maintenance-free concept; weather resistant EPDM gasket
Rated luminous flux	2.651 lm - 16.362 lm, L90/B10 for100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	21 W - 139 W
Protection rating	l or II
Surface vulnerable to wind	0,05 m ²
Weight	approx. 9 kg
Finish	DB 703, others on request
Accessories	See from page 80
Optics	Pages 24 - 26

Additional specifications

Housing	Extruded aluminium section, powder-coated, DB 703
Installation	Suspension, screws and fastening components made from stainless steel; attachment mechanism for suspension cable 8 - 12 mm
Light regulation	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); optional as "Control Ready", deliverable with Zhaga Book 18 socket and SR drive located above or under; 3 levelled lumen circuit-breaker upon request



Find more technical details

https://www.vulkan.eu/en/street-lighting/v3125/

V3454^e



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

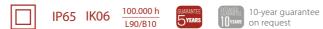




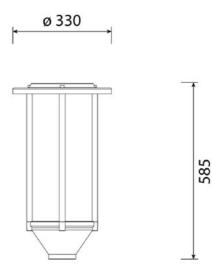








Dimensional drawing in mm



General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear, satin-finished at top
Rated luminous flux	1.449 lm - 4.476 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	Torll
Surface vulnerable to wind	0,1 m ²
Weight	approx. 10 kg
Finish	DB 703, others on request
Accessories	See from page 80
Optics	Pages 24 - 26

Additional specifications

	Housing	Dimensionally-stable and corrosion-resistant aluminium
_	Installation	Structurally secure three-point pole attachment in pole top for pole spigot diameter of 76 mm; reducing piece 60 mm to be ordered separately
	Light regulation	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)



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v3454/

V3456^e



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





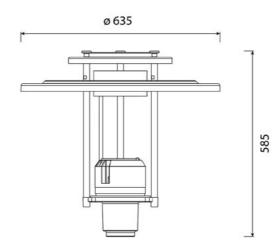








Dimensional drawing in mm



General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear, satin-finished at top
Rated luminous flux	1.449 lm - 4.476 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	Torll
Surface vulnerable to wind	0,1 m ²
Weight	approx. 11 kg
Finish	DB 703, others on request
Accessories	See from page 80
Optics	Pages 24 - 26

Additional specifications

Housing	Dimensionally-stable and corrosion-resistant aluminium
Installation	Structurally secure three-point pole attachment in pole top for pole spigot diameter of 76 mm; reducing piece 60 mm to be ordered separately
Light regulation	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); optional as "Control Ready", deliverable with Zhaga Book 18 socket and SR drive located above or under; 3 levelled lumen circuit-breaker upon request



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v3456/

Cylindrical luminaires 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









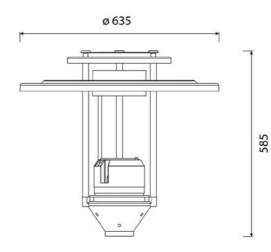








Dimensional drawing in mm



General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear, satin-finished at top
Rated luminous flux	1.520 lm - 4.689 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 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	See from page 80
Optics	Pages 24 - 26

Additional specifications

Housing	Dimensionally-stable and corrosion-resistant aluminium
Installation	Structurally secure three-point pole attachment in pole top for pole spigot diameter of 76 mm; reducing piece 60 mm to be ordered separately
Light regulation	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); optional as "Control Ready", deliverable with Zhaga Book 18 socket and SR drive located above or under; 3 levelled lumen circuit-breaker upon request



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v3457/

www.vulkan.eu

ZAS Cylindrical luminaires



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







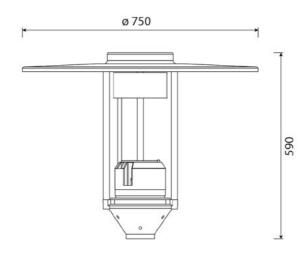








Dimensional drawing in mm



General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear, satin-finished at top
Rated luminous flux	1.449 lm - 4.476 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	l or II
Surface vulnerable to wind	0,1m ²
Weight	approx. 11 kg
Finish	DB 703, others on request
Accessories	See from page 80
Optics	Pages 24 - 26

Additional specifications

Housing	Dimensionally-stable and corrosion-resistant aluminium
Installation	Structurally secure three-point pole attachment in pole top for pole spigot diameter of 76 mm; reducing piece 60 mm to be ordered separately
Light regulation	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); optional as "Control Ready", deliverable with Zhaga Book 18 socket and SR drive located above or under; 3 levelled lumen circuit-breaker upon request



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v3458/

5480 Chalice luminaire



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







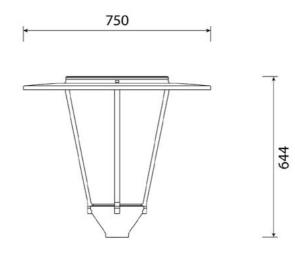








Dimensional drawing in mm



General specifications

Enclosure	Acrylic (PMMA) cylinder glass, clear or opal version
Rated luminous flux	1.507 lm - 6.976 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 52 W
Protection rating	П
Surface vulnerable to wind	0,12m ²
Weight	approx. 9 kg
Finish	DB 703, others on request
Accessories	See from page 80
Optics	Pages 24 - 26

Additional specifications

Housing	Dimensionally-stable and corrosion-resistant aluminium
Installation	Structurally secure three-point pole attachment in pole top for pole spigot diameter of 76 mm; reducing piece 60 mm to be ordered separately
Light regulation	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); optional as "Control Ready", deliverable with Zhaga Book 18 socket and SR drive located above or under; 3 levelled lumen circuit-breaker upon request



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v5480/



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





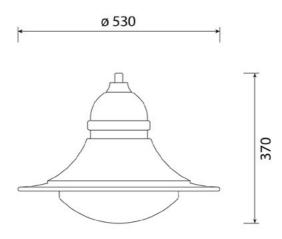








Dimensional drawing in mm



General specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	1.643 lm - 5.077 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	Torll
Surface vulnerable to wind	0,09 m ²
Weight	approx. 6,0 kg
Finish	DB 703, others on request
Accessories	See from page 80, curved pole brackets pages 86 - 87
Optics	Pages 24 - 26

Additional specifications

Housing	Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium
Installation	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
Light regulation	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); deliverable with Zhaga Book 18 socket



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v8446/



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







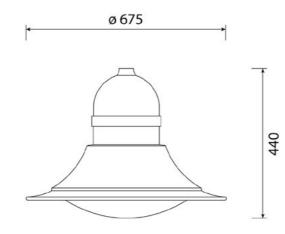








Dimensional drawing in mm



General specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	1.550 lm - 14.360 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 104 W
Protection rating	l or II
Surface vulnerable to wind	0,14 m ²
Weight	approx. 9 kg
Finish	RAL-colors and DB 703, others on request
Accessories	See from page 80, curved pole brackets pages 86 - 87
Optics	Pages 24 - 26

Additional specifications

Housing	Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium
Installation	Pole attachment with VPS quick mounting system (shown on page 87), with adapter also for 1/2" external threads; rosetten nut available for differing diameters of pole bracket mounted luminaires
Light regulation	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); auf deliverable with Zhaga Book 18 socket



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v8447/



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





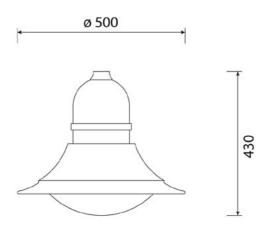








Dimensional drawing in mm



General specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	1.639 lm - 5.059 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	l or II
Surface vulnerable to wind	0,09 m ²
Weight	approx. 6 kg
Finish	RAL-colors and DB 703, others on request
Accessories	See from page 80, curved pole brackets pages 86 - 87
Optics	Pages 24 - 26

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Additional specifications

Housing	Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium
Installation	Pole attachment with VPS quick mounting system (shown on page 87), with adapter also for 1/2" external threads; rosetten nut available for differing diameters of pole bracket mounted luminaires
Light regulation	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); deliverable with Zhaga Book 18 socket



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v8448/

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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







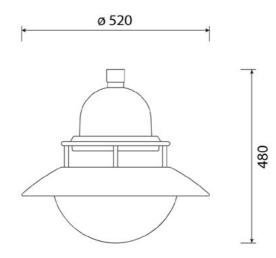








Dimensional drawing in mm



General specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	1.639 lm - 5.059 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	Torll
Surface vulnerable to wind	0,14 m ²
Weight	approx. 9 kg
Finish	RAL-colors and DB 703, others on request
Accessories	See from page 80, curved pole brackets pages 86 - 87
Optics	Pages 24 - 26

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Additional specifications

	Housing	Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium
	Installation	Pole attachment with VPS quick mounting system (shown on page 87), with adapter also for 1/2" external threads; rosetten nut available for differing diameters of pole bracket mounted luminaires
	Light regulation	Optional with integrated Constant Lumen Management (CLM); autonomous performance reduction (midnight point, can be programmed to several levels) (Light Regulation Autarkic – LRA), reduction in output via control line (Light Regulation Twin – LRT) or using DALI interface; on request with integrated Zhaga Book 18 Socket



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v8450/



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







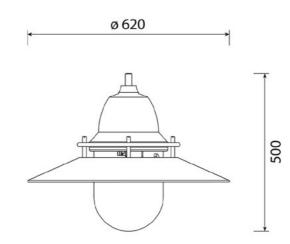








Dimensional drawing in mm



General specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	1.639 lm - 5.059 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	l or II
Surface vulnerable to wind	0,14 m ²
Weight	approx. 11 kg
Finish	RAL-colors and DB 703, others on request
Accessories	See from page 80, curved pole brackets pages 86 - 87
Optics	Pages 24 - 26

Additional specifications

	Housing	Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium
	Installation	Pole attachment with VPS quick mounting system (shown on page 87), with adapter also for 1/2" external threads; rosetten nut available for differing diameters of pole bracket mounted luminaires
	Light regulation	Optional with integrated Constant Lumen Management (CLM); autonomous performance reduction (midnight point, can be programmed to several levels) (Light Regulation Autarkic – LRA), reduction in output via control line (Light Regulation Twin – LRT) or using DALI interface; on request with integrated Zhaga Book 18 Socket



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v8466/

V8481



Decorative bell-shaped luminaires with sleek design

- ✓ Enclosure opens without tools
- ✓ Versatile mounting on bends and booms
- ✓ Low glare thanks to large optics surface
- ✓ Various covers upon request





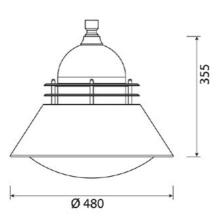








Dimensional drawing in mm



General specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	1.639 lm - 5.059 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	Torll
Surface vulnerable to wind	0,11 m ²
Weight	approx. 7,8 kg
Finish	RAL-colors and DB 703, others on request
Accessories	See from page 80, curved pole brackets pages 86 - 87
Optics	Pages 24 - 26

Additional specifications

Housing	Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium
Installation	Pole attachment with VPS quick mounting system (shown on page 87), with adapter also for 3/4" external threads; rosetten nut available for differing diameters of pole bracket mounted luminaires
Light regulation	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); deliverable with Zhaga Book 18 socket



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v8481/



Representative bell-shaped luminaires for individual urban design

- ✓ Enclosure opens without tools
- ✓ Versatile mounting on bends and booms
- ✓ Low glare thanks to large optics surface
- ✓ Various covers upon request







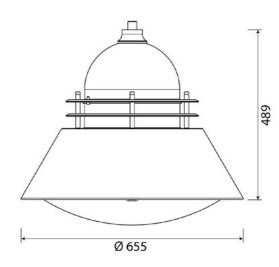








Dimensional drawing in mm



General specifications

Enclosure	Acrylic outer casing (PMMA), clear or structured version
Rated luminous flux	2.721 lm - 12.597 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	21 W - 104 W
Protection rating	Torll
Surface vulnerable to wind	0,21 m ²
Weight	approx. 16 kg
Finish	RAL-colors and DB 703, others on request
Accessories	See from page 80, curved pole brackets pages 86 - 87
Optics	Pages 24 - 26

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Additional specifications

Housing	Single-part luminaire housing constructed from dimensionally-stable and corrosion-resistant aluminium
Installation	Pole attachment with VPS quick mounting system (shown on page 87), with adapter also for 3/4" external threads; rosetten nut available for differing diameters of pole bracket mounted luminaires
Light regulation	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); deliverable with Zhaga Book 18 socket



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v8482/



Heritage luminaires luminaire design classics

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







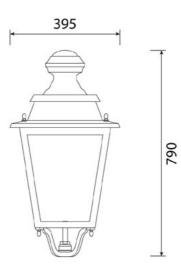








Dimensional drawing in mm



General specifications

Enclosure	Enclosure glass made from acrylic (PMMA), clear or structured
Rated luminous flux	1.400 lm - 4.323 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	Torll
Surface vulnerable to wind	0,1 m ²
Weight	approx. 13 kg
Finish	DB 703, others on request
Accessories	See from page 80, heritage poles pages 88 - 89
Optics	Pages 24 - 26

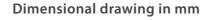
Additional specifications

Housing	Luminaire housing and pole top constructed from high-quality cast aluminium
Installation	Pole attachment with pole top with a G3/4" external thread for attachment to heritage poles or optionally with adapter for cylindrical stepped poles with a pole spigot diameter of 76 mm
Light regulation	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); deliverable with Zhaga Book 18 socket



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v7410/







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



















General specifications

Enclosure	Enclosure glass made from acrylic (PMMA), clear or structured
Rated luminous flux	1.432 lm - 4.418 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 36 W
Protection rating	Torll
Surface vulnerable to wind	0,1 m ²
Weight	approx. 13 kg
Finish	DB 703, others on request
Accessories	See from page 80, heritage poles pages 88 - 89
Optics	Pages 24 - 26

Additional specifications

Housing	Luminaire housing and pole top constructed from high-quality cast aluminium
Installation	Pole attachment with pole top with a G3/4" external thread for attachment to heritage poles or optionally with adapter for cylindrical stepped poles with a pole spigot diameter of 76 mm
Light regulation	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); deliverable with Zhaga Book 18 socket



Find more technical details

https://www.vulkan.eu/en/decorative-lighting/v7420/

V970X





Versatile and simple spotlight with bracket for wall or traverse mounting

- ✓ Functional headlight family with three sizes for a uniform appearance across all application situations
- ✓ Compact design for easy installation
- ✓ Easy maintenance via separately removable electronic ballast carrier
- ✓ Mounting bracket for wall or traverse mounting, Quick adjustment for simplified angle adjustment
- ✓ Separate ballast optionally possible (e.g. installation in lower pole section for easy maintenance)





*in preparation

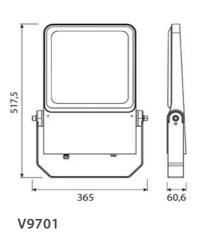


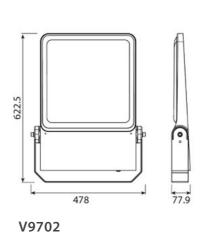


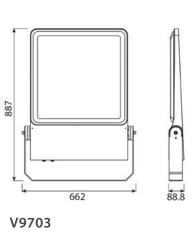




Dimensional drawing in mm







General specifications

Enclosure	Flat single-pane tempered safety glass, partially printed on the inside in grey
Rated luminous flux	3.876 lm - 76.566 lm, L90/B10 bei 100.000 h
Light colour	4.000 K; others on request
Rated input power	26 W - 550 W
Protection rating	I
Surface vulnerable to wind	0,036 m² - 0,08 m²
Weight	approx. 6 kg - 23 kg
Finish	Vulcano grey bright, structured; others on request
Optics	Pages 24 - 26

Additional specifications

Housing	Powder-coated, die-cast aluminium
Attachment	Mounting bracket for wall or traverse mounting, Quick adjustment for simplified angle adjustment
Light regulation	Constant Lumen Management (CLM)
	Autonomous performance reduction for operation in networks without a control line (Light Regulation Autarkic – LRA)
	Digital communication with DALI
	Optional: Radio-controlled Light Management System (LMS)



Find more technical details

https://www.vulkan.eu/en/flood-and-sports-light/v970x/

V980X





Versatile spotlight with bracket for wall or traverse mounting

- ✓ Functional headlight family with three sizes for a uniform appearance across all application situations
- ✓ Compact design for easy installation
- ✓ Mounting bracket for wall or traverse mounting, Quick adjustment for simplified angle adjustment
- ✓ ECG located in a separate LED driver box, which is detached from the housing by default, e.g. for installation on the truss or in the pole base for easy maintenance





*in preparation



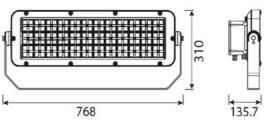


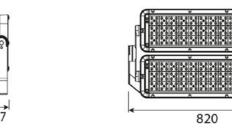




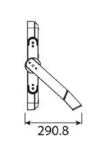


Dimensional drawing in mm

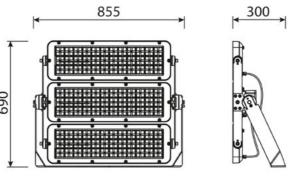


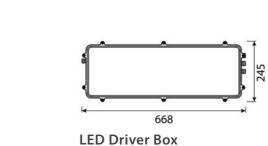


V9802



V9801







V9803

General specifications

Flat single-pane tempered safety glass, partially printed on the inside in black
29.354 lm - 162.957 lm, L90/B10 bei 100.000 h
4.000 K; others on request
200 W - 1200 W
l or II
0,2 m² - 0,562 m²
approx. 22 kg - 40 kg
Vulcano grey bright, structured; others on request
Pages 24 - 26

Additional specifications

	Housing	Powder-coated, die-cast aluminium
Attachment		Mounting bracket for wall or traverse mounting, quick adjustment for simplified angle adjustment
	Light regulation	Constant Lumen Management (CLM)
		Autonomous performance reduction for operation in networks without a control line (Light Regulation Autarkic – LRA)
Digital communication with DALI		Digital communication with DALI
		Optional: Radio-controlled Light Management System (LMS)



Find more technical details

https://www.vulkan.eu/en/flood-and-sports-light/v980x/

MODUL Replacement Kit



Multifunctional installation kit

- ✓ Conversion kit for outdoor luminaire types such as Cylinder lights, bell lights and umbrella lights, heritage lights and technical street lights
- ✓ The cover crown required for fastening is adapted to the specific design of the type
- ✓ Conversion kit also possible for third-party lights
- ✓ Best for pole heights from 4m up to 8m













General specifications

Enclosure	Cover made of flat toughened safety glass, flush-mounted and screwed into the housing; weather-resistant
Rated luminous flux	1.485 lm - 5.153 lm, L90/B10 for 100.000 h
Light colour	4.000 K, 3.000 K, 2.700 K, 1.800 K, others on request
Rated input power	11 W - 37W
Protection rating	l or II
Surface vulnerable to wind	Depending on luminaire installation type
Weight	approx. 2 kg resp. 2,7 kg
Finish	Housing aluminum untreated, cover round standard white, further colors upon request
Optics	Pages 24 - 26

Additional specifications

Housing	Aluminium die cast
Installation	Cover round is adapted to housing type; diameter variable
Light regulation (optional with dimming function)	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); deliverable with Zhaga Book 18 socket

IP rating depending on luminaire application.







Find more technical details

https://www.vulkan.eu/en/decorative-lighting/module-3000/



Accessories

Poles

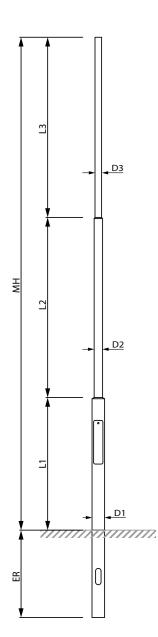
Cylindrical or conical – the choice is yours

Our poles are high quality products that are expertly crafted. The conical poles or poles with several steps are made of steel pipes, in accordance with DIN EN 40 and are hot-dip galvanised, in accordance with DIN EN ISO 1461. This ensures a long-lasting quality for your lighting systems. All poles can be powder-coated to ensure the perfect colour match.

Custom poles

We are happy to provide further models to suit your requirements. For example, we could provide a different length, an aluminium pole, 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.

Individual poles – for your individual project! We will be happy to help you.



Cylindrically stepped steel poles, spigot Ø 60

MH	D1	D2	D3	L1	L2	L3	ER	FL 🗆
3,500	108	60	-	1,000	2,500	-	700	280 x 280
4,000	108	60	-	1,200	2,800	-	800	280 x 280
4,500	108	60	-	1,200	3,300	-	800	280 x 280
5,000	108	60	-	1,200	3,800	-	800	280 x 280
6,000	114	89	60	1,400	1,600	3,000	1,000	300 x 300

All dimensions in mm

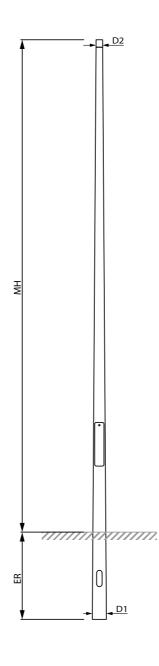
Cylindrically stepped steel poles, spigot Ø 76

MH	D1	D2	D3	L1	L2	L3	ER	FL 🗆
3,500	114	76	-	1,000	2,500	-	700	280 x 280
4,000	114	76	-	1,200	2,800	-	800	300 x 300
4,500	114	76	-	1,200	3,300	-	800	300 x 300
5,000	114	76	-	1,200	3,800	-	800	300 x 300
6,000	114	89	76	1,400	1,600	3,000	1,000	300 x 300
8,000	133	102	76	1,800	3,000	3,200	1,200	400 x 400

All dimensions in mm

Standard equipment:

- Standard dimensions of pole door: 400 × 85 mm
- Door latch, in accordance with DIN 49778, with M10 triangular screw
- Plain earthing link with two M6 sliding nuts
- \bullet Embedded base with 150 \times 50 mm cable entry
- Without cable junction box and accessories please order separately



Conical steel pole, spigot Ø 60

MH	D1	D2	ER	FL 🗆	Door
3,500	119	60	700	280 x 280	400 x 85
4,000	127	60	800	300 x 300	400 x 85
4,500	134	60	800	300 x 300	400 x 85
5,000	141	60	800	300 x 300	400 x 85
6,000	144	60	1,000	300 x 300	400 x 85
8,000	152	60	1,200	400 x 400	400 x 85

All dimensions in mm

Conical steel pole, spigot Ø 76

MH	D1	D2	ER	FL 🗆	Door
3,500	126	76	700	280 x 280	400 x 85
4,000	124	76	800	300 x 300	400 x 85
4,500	129	76	800	300 x 300	400 x 85
5,000	134	76	800	300 x 300	400 x 85
6,000	146	76	1,000	300 x 300	400 x 85
8,000	168	76	1,200	400 x 400	400 x 100
10,000	191	76	1,500	400 x 400	400 x 100
12,000	211	76	1,500	400 x 400	400 x 100

All dimensions in mm

Standard equipment:

- Standard dimensions of pole door: 400 x 85 mm or 100 x 400 m
- Door latch, in accordance with DIN 49778, with M10 triangular screw
- Plain earthing link with two M6 sliding nuts
- Embedded base with 150×50 mm cable entry
- Without cable junction box and other accessories please order separately

* Square flange plate

Pole top mountings & brackets

Pole top mounted brackets for side mounted luminaires

Made of steel, welded and hot-dip galvanised.

	Spi	igot		
Pole top mounting	Ø pole	Ø luminaire	Projection	Angle
	76	60	400	15°
sinale	76	60	1000	15°
single Fig. 1	89	60	400	15°
	89	60	1000	15°
	76	60	2 x 400	15°
double	76	60	2 x 1000	15°
Fig. 2	89	60	2 x 400	15°
	89	60	2 x 1000	15°
triple	76	60	3 x 400	15°
triple Fig. 3	89	60	3 x 400	15°
quadruple Fig. 4	76	60	4 x 400	15°
Fig. 4	89	60	4 x 400	15°

All dimensions in mm







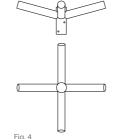




Eig 2







Traverses

Pole top traverses for floodlights and spotlights

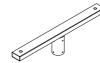
Made of steel, welded and hot-dip galvanised.

Pole top mounting	Spigot Ø pole	Number of spotlights	Projection
	60	1	-
	76	1	-
single Fig. 6	76	1	-
	89	1	-
	108	1	-
	76	2	2 x 425
double Fig. 7	89	2	2 x 600
	108	2	2 x 600
	76	3	3 x 500
triple Fig. 8	89	3	3 x 500
	108	3	3 x 580
	76	4	4 x 500
quadruple Fig. 9	89	4	4 x 500
	108	4	4 x 650

All dimensions in mi













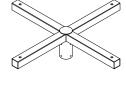


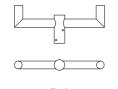
Fig. 9

Pole top mounted brackets for side mounted luminaires

Made of steel, welded and hot-dip galvanised.

	Spigot		
Pole top mounting	Ø pole	Ø luminaire	Projection
double	76	60	2 x 250
Fig. 5	76	60	2 x 500

All dimensions in mm



Other brackets and traverses with other pole spigots, projections, setting angles as well as special shapes or colours are available on request.

Curved pole brackets

www.vulkan.eu

Curved pole brackets

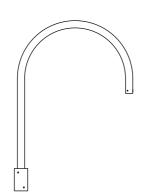
You have the choice: Single or double - simple or elegant

Our curved pole brackets as single and double brackets and in a simple as well as an elegant version. The unadorned version with a simple arch made of round tube mounts on top of the pole. While the more elegant version also mounts on top of the pole, it has a much more filigree appearance due

to its attached arch and lowered fastening bracket, which further enhance the appeal of the luminaire.

Further variants of our curved pole brackets are available on request.



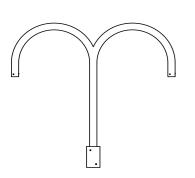


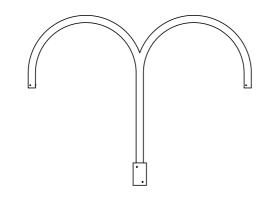
Simple curved pole bracket, single bracket

Made of steel, welded, hot-dip galvanised and finished to match the luminaire colour or according to customer requirements.

Pole spigot	Projection	Curved bracket radius	Overall height
Ø 76	520	260	1035
Ø 76	720	360	1135

II dimensions in mn





Simple curved pole bracket, double bracket

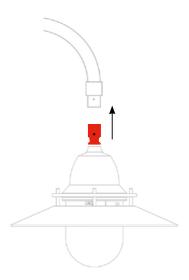
Made of steel, welded, hot-dip galvanised and finished to match the luminaire colour or according to customer requirements.

Pole spigot	Projection	Curved bracket radius	Overall height
Ø 76	2 x 520	260	1035
Ø 76	2 x 720	360	1135

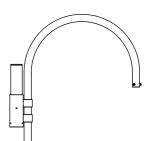
All dimensions in mm

With patented Vulkan Patent System (VPS)

Quick mounting system for easy installation of the shade luminaires. A connection to the bracket is made through the cone attachment. This connection is fixed with three screws to hold the shade luminaire. The VPS attachment is completely hidden in the bracket. Thus, a flush transition is created. The luminaire head can be mounted, as desired, in a 360 degree range. With patented Vulkan Patent System (VPS).





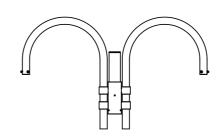


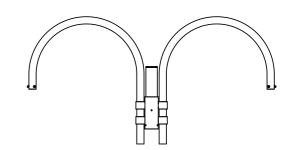
Elegant curved pole bracket, single bracket

Made of steel, welded, hot-dip galvanised and finished to match the luminaire colour or according to customer requirements.

F	Pole spigot	Projection	Curved bracket radius	Overall height
Q	Ø 76	595	260	735
Q	Ø 76	795	360	835

All dimensions in mm





Elegant curved pole bracket, double bracket

Made of steel, welded, hot-dip galvanised and finished to match the luminaire colour or according to customer requirements.

Pole spigot	Projection	Curved bracket radius	Overall height
Ø 76	2 x 595	260	750
Ø 76	2 x 795	360	850

All dimensions in mm

Heritage poles

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 with a 3/4 thread. Brackets suitable for wall mounting are available.

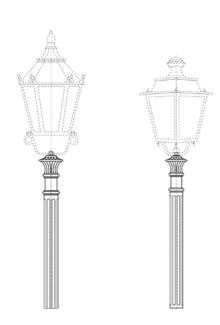


Fig. of heritage pole group 15101 for mounting one luminaire

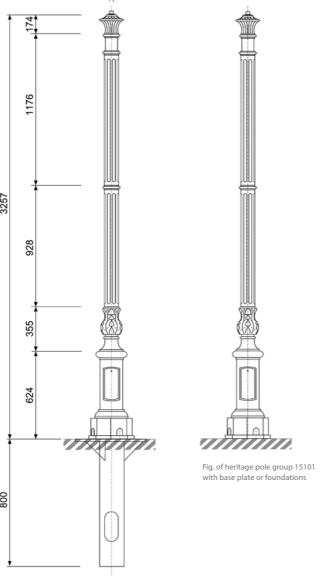


Fig. of heritage pole group 15101 with embedded base



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.

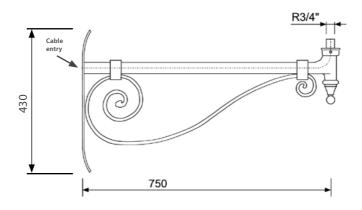


Fig. of W4000 wall bracket

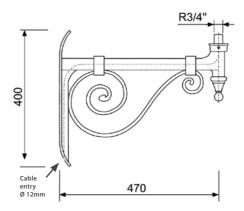


Fig. of W5000 wall bracket



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

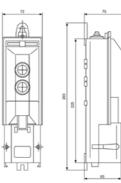
For light pole with compact design starting from 3m, manufactured in accordance with DIN VDE 0660-505 and DIN 43628. Type: LAK 75

- 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



Edge protection for cable in-feed in ground area

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



Fig. of corrosion protection sleeve

Fig. of edge protection for cable in-feed

Base plates for conical and cylindrical poles

Available in the following dimensions:

300 x 300 mm

400 x 400 mm

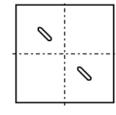


Fig. of base plate

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°



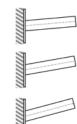


Fig. of 5° setting

Fig. of 10° settin

F:- -f 150 ----

rig. of 15 setting

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 corner mounting, view from above

Fig. of wall mounting,

an

Intelligent lighting www.vulkan.eu

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.

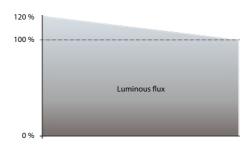
With constant luminous flux

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.

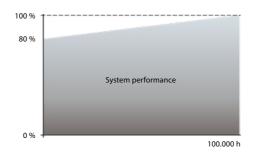
These days, modern LED systems work in such a stable manner that they only lose a few percent of luminous flux over the course of their lives. The influence of constant luminous flux is therefore low.

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.

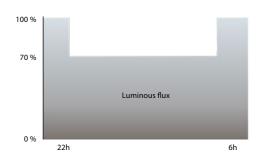
LRA - Light Regulation Autarkic (self-sufficient)

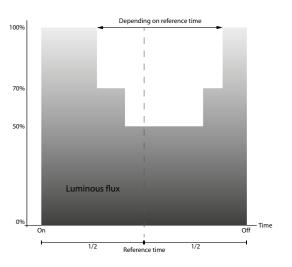
As the name suggests, Light Regulation Autarkic is not dependent on an external control line. This controller can therefore also be easily integrated in existing lighting systems. It can be freely programmed in 5 levels with the data stored directly in the electronic operating unit, meaning that no additional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

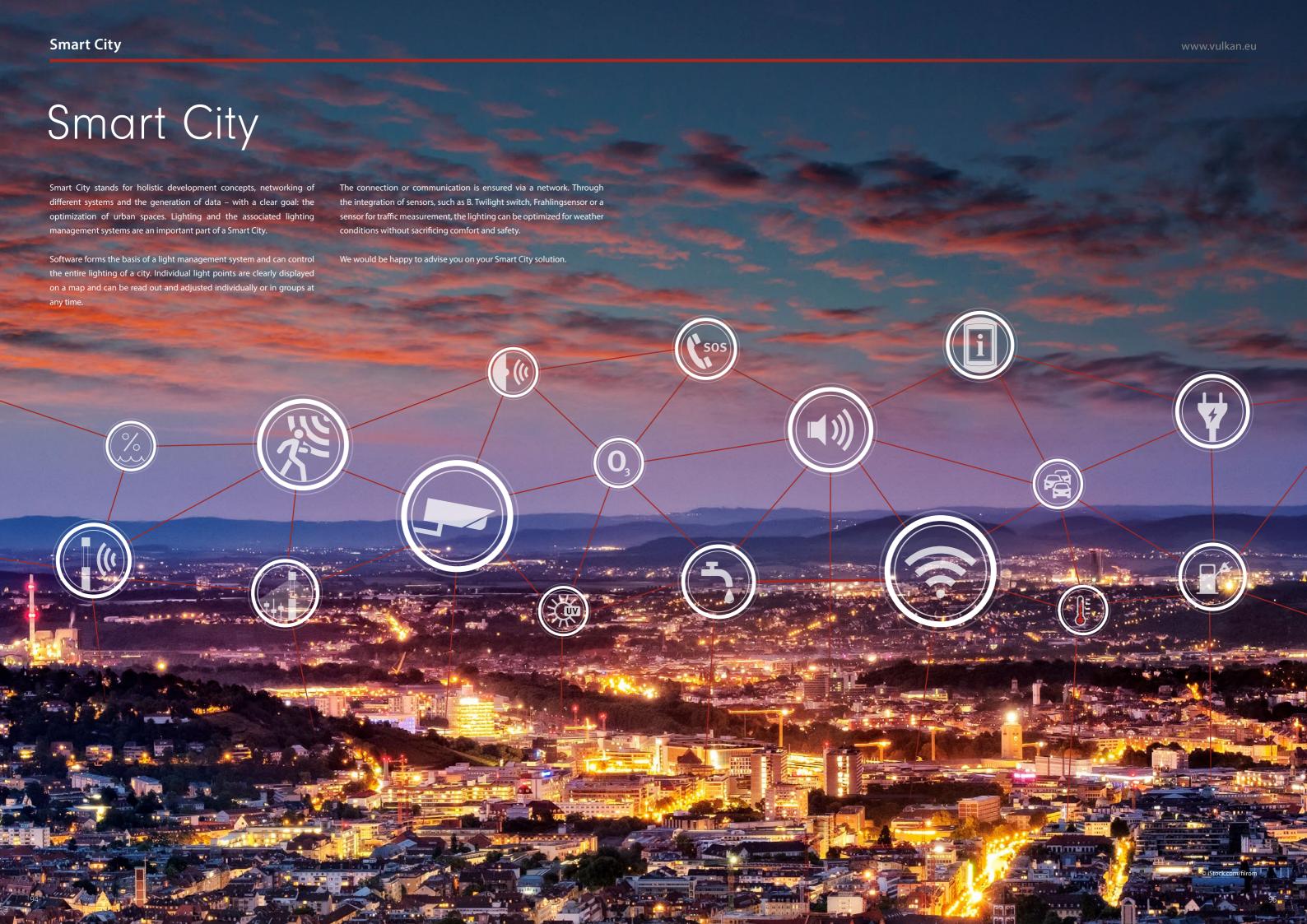
The programmed times at which the luminous flux is reduced are automatically taken from the switch-on and switch-off times. The midway point between switching on and off is the reference time for the reduction. If this changes, the reduction times are adapted accordingly, as happens e.g. when switching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







List of abbreviations and symbols www.vulkan.eu

List of abbreviations

Luminaires

2x 2 LED modules 30W System output per LED module 730 Ra> 70; 3.000 K 740 Ra> 70; 3.000 K 750 Ra> 70; 5000 K I Protection rating I II Protection rating II III Protection rating III CLM Constant Lumen Management LRT Light Regulation Twin - reduction to around 50 % (default) LRTO Light Regulation Autarkic, scene 1 LRA1 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) 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 without space) SP = salt protection or seawater protection	1x	1 LED module
730 Ra> 70; 3.000 K 740 Ra> 70; 4.000 K 750 Ra> 70; 4.000 K I Protection rating I II Protection rating II III 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) 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 without space)	2x	2 LED modules
740 Ra> 70; 4.000 K 750 Ra> 70; 5000 K I Protection rating I II Protection rating II III Protection rating III CLM Constant Lumen Management LRT Light Regulation Twin - reduction to around 50 % (default) LRT70 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) 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 without space)	30W	System output per LED module
750 Ra> 70; 5000 K I Protection rating I II Protection rating II III Protection rating II III Protection rating III CLM Constant Lumen Management LRT Light Regulation Twin - reduction to around 50 % (default) 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) 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 without space)	730	Ra> 70; 3.000 K
Protection rating	740	Ra> 70; 4.000 K
III Protection rating II III Protection rating III CLM Constant Lumen Management LRT Light Regulation Twin - reduction to around 50 % (default) LRT70 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) 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 without space)	750	Ra> 70; 5000 K
III 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) 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 without space)	1	Protection rating I
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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) 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 without space)	III	Protection rating III
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) 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 without space)	CLM	Constant Lumen Management
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LRA3 Light Regulation Autarkic, scene 3 LRAC Light Regulation Autarkic, customised (option) LMS Light Management System DALI DALI for external controllers (default = DALI logarithmic) 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 without space)	LRA1	Light Regulation Autarkic, scene 1
LRAC Light Regulation Autarkic, customised (option) LMS Light Management System DALI DALI for external controllers (default = DALI logarithmic) 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 without space)	LRA2	Light Regulation Autarkic, scene 2
LMS Light Management System DALI DALI for external controllers (default = DALI logarithmic) 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 without space)	LRA3	Light Regulation Autarkic, scene 3
DALI DALI for external controllers (default = DALI logarithmic) 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 without space)	LRAC	Light Regulation Autarkic, customised (option)
logarithmic) 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 without space)	LMS	Light Management System
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 without space)	DALI	DALI for external controllers (default = DALI
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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 without space)	O1L	Catenary luminaires: If the luminaire is arranged along
7035 RAL 7035 - light grey 703 DB 703 - iron mica, dark grey DB colour DB 703 + seawater protective finish (add to colour code without space)		the street, the optics designation has an "L" tagged on
703 DB 703 - iron mica, dark grey DB colour DB 703 + seawater protective finish (add to colour code without space)		the end, e.g. O1L, O3L, O7L,
DB 703 + seawater protective finish (add to colour code without space)	7035	RAL 7035 - light grey
703SP without space)	703	DB 703 - iron mica, dark grey DB colour
		DB 703 + seawater protective finish (add to colour code
SP = salt protection or seawater protection	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

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/or 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.



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.



Protection rating I



Protection rating II



Protection rating III



Five-year guarantee



10-year guarantee on request

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, especially in agriculture

Customer (name, a	dress)				Your notes:	
Project (descriptio	n e.g. street, neighbourhood, to	own/village,)				
Lighting Specificat	tions DIN 13201-1					
Lighting situation		Lighting Class				
No. of light point		No. in problem areas .				
Alternative specifi	cations for 1-1-replacement of e	existing luminaires (lum	inaires to be replaced)			
Manufacturer		Туре				
Type of luminaires		Power consumption .				
Pole (specification	s or existing luminaires)					
Pole height		Pole distance				
Bracket length		Bracket angle .				
Pole arrangement						
Road profile struct Dimensioning (m) of th	c ure e cross-section from the start to the en	d of the lighting, positioning o	of the lamp			
Description		Width in m	Example			
			Cycle path/Pavement Pole position	2m X		
			Road Parking strip	7m 2.5m		
			Grass verge	1m		
Details of the new	luminaire / remarks					
Luminaire type		Connection cable				
Protection rating		Night-time dimming				
Housing colour		Light colour				



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