

27W-120W series power range
- 4no. optic variants - Post top
or slip fit mounting options Stainless steel exposed fixtures
& marine-grade painted finish
- Tool-less entry & auto-switch
disconnect for simplified
installation & maintenance

CE, RoHS, & ENEC, international product marks

Arbuthnot Series

Multi-Purpose Amenity Street Lights



CDN:SPEC113REV





Technical Specifications Summary







Performance Summary:						
Code (Series-Wattage/Size)	ARB-27	ARB-37	ARB-56	ARB-70	ARB-90	ARB-120
Nominal Power	27W	37W	56W	70W	90W	120W
Luminaire Efficacy ¹ @ CRI>70, 5000K CCT	115lm/W	115lm/W	115lm/W	115lm/W	115lm/W	115lm/W
Lumen Output @ CRI>70, 5000K CCT	3,105lm	4,255lm	6,440lm	8,050lm	10,350lm	13,200lm
Lumen Maintenance (TM21 Reported)	L70B50≥90,000 hours @ Ta 25°C					
Lumen Maintenance (TM21 Calculated)	L70B50 ≥181,000 hours @ Ta 25°C L70B50 ≥142,000 hours @ Ta 25°C					
Certification	CE, RoHS, ENEC					
Product Warranty			5 Y	ears		
Light Source and Photometric P	arameters:					
Chip Brand, Model, & Size			Philips Lur	nileds 3030		
Chip Efficacy @ CRI>70, 5000K CCT			188lm/V	/ @ 65mA		
Light Emmission			Di	rect		
ССТ			5000K, (3000K, 400	0K, 5700K optional)		
CRI	≥70					
SDCM	<5					
Diffusers	Clear					
Symmetric Light Distribution	120°					
Asymmetric Light Distribution	IESNA Type 1M, 2M, 3M					
Electrical Parameters ² :						
System Operating Power	27W	37W	56W	70W	90W	120W
Driver Brand			Mear	ean Well		
Driver Model	HLG-40H		HLG-60H HLG-80H		HLG-120H	
System Power Factor	>0.9					
Typical Driver Lifetime	62,000 hours					
Input Voltage	100-240VAC					
Input Frequency	50-60Hz					
Qty of Drivers per Light	1					
Inrush Current Per Driver @ 230VAC measured at 50% Ipeak (Peak/Duration)	50A/210μs		55A/265μs	70A/485µs	60A/3	75μs
Power Factor	>0.9					
THD	<20% (100-240VAC)					
Surge Protection/Fusing	10kA					
Environmental Parameters:						
IP Rating	IP66					
IK Rating	IK08					
Ambient Usage Tolerance	-40°C to 50°C					
Ambient Storage Tolerance	-40°C to 50°C					

Ambient Humidity Tolerance

10% to 90% RH



Technical Specifications Summary

Code (Series-Wattage/Size)	ARB-27	ARB-37	ARB-56	ARB-70	ARB-90	ARB-120	
Physical/Mechanical Parameters:							
Product Dimensions: LxWxH (mm)	480 x 480 x 521	480 x 480 x 521	480 x 480 x 521	480 x 480 x 521	480 x 480 x 521	480 x 480 x 521	
Windage	0.217m²						
Qty of LED Chips	72	96	120	144	168	168	
Electrical Connection	Terminal Block						
Fixture Weight ³	8.7kg	kg 8.9kg 9.0kg 9.1kg 9.2kg			≀kg		
Fixture Primary Material(s)	Aluminium Alloy						
Fixture Finish	Powder Coated						
Lens(es) Materials ⁴	UV Stabilised Polycarbonate and Tempered Glass						
Dimming/Controls Parameters:							
Dimming Options	1-10V, DALI						
Built-in Controls	Photocell						
Compatible intelligent lighting systems	Wireless Controls and Monitoring						
Options/Accessories:							
Mounting Styles	Post Top, Side Entry						
Available Product Colours	Grey						

 $^{^{1}}$ Stated value is for Type 1M, 2M, 3M. Type V -120° output \approx 13% higher

All stated values should be considered indicative only. Technical data is provided from sample luminaires and construction components as assessed by OEM(s) under industry-standard, laboratory conditions. In practice, stated values can vary. Kellwood Lighting operates a policy of continual product improvement. Our luminaires' capabilities are regularly enhanced to outperform in-class market alternatives. Please contact our technical team directly for clarifications prior to purchase. All images depicted should be considered indicative only. Stated product warranty periods do not include associated labour costs. Stated product warranty periods are for UK projects only. For international projects, please contact our offices directly. Optional upgrades can often affect or supersede unit technical parameters, capabilities, and warranties. It is the responsibility of the purchasing authority to ensure selected hardware is suitable for application. For further documentation, including Returns Policy and Conditions of Unit Failure, please contact our offices. Hazardous area documentation (eg. ATEX) are issued to OEM codes. WEEE compliance reference code: WEE/MP3838PR/SCH. Please do not look directly at LED lighting products during operation.

This datasheet & corresponding certification should be reviewed by a competent person to ensure project suitability. ©2020 Kellwood Engineering Ltd. All rights reserved.



² Electrical Parameter data is for D1 drivers, unless otherwise stated

³ Excludes bracketry. Refer to the Packaging Weights & Dimensions data sheet for bracketry and accessory weights

⁴PC for Type 1M, 2M, 3M, Tempered Glass for Type 5 - 120°

Features Summary



Mounting Options

Post Top, Side Entry - both options to accomodate a 60mm outer diameter spigot



Special Features

Tool-less entry & auto-switch disconnect



Environmental Protection

Barometric protection - Breather valve maintains pressure equilibrium to preserve ingress protection system



Impact Protection

IK09 body, IK08 tempered glass front-face



Distribution

4no. optic variants are available for general & task-specific applications



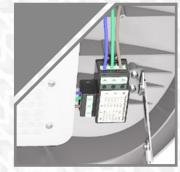
Driver Protocols

Non-dimming, 0-10V, 1-10V, DALI



Sensor(s)

Optional socket can be supplied with photocell for dusk-dawn operation



Electrical Protection

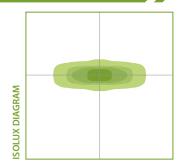
10kA integrated surge protection device

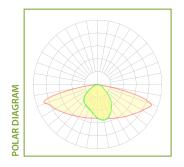


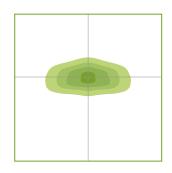
Please note - images shown are intended to be illustrative only. For exact data, please refer to specific product photometry, available for download from our website.

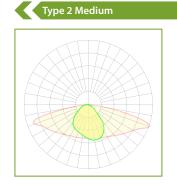
Indicative Product Photometry

Type 1 Medium

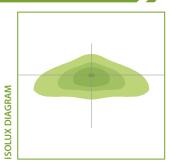


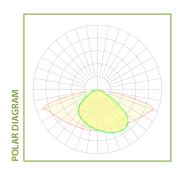


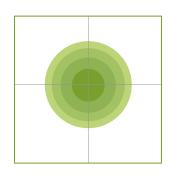


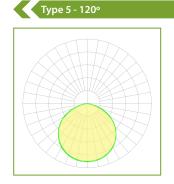


Type 3 Medium

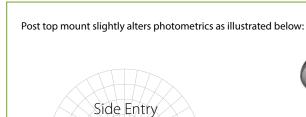








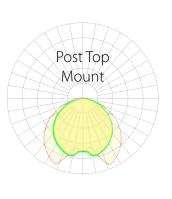
Top Mount Bracket



Mount









Standard product code fields are presented as: Further customisation may be available - please contact us if required





PRODUCT -	- POWER -	- CRI & CCT -	OPTIC	DRIVER -	- MOUNTING -	- COLOUR -	MODIFICATIONS
ARB	27 27W	730 CRI >70, 3000K	120 120° CIRCULAR	D1 NON-DIM	PT POST TOP	GR GREY	PH1 PHOTOCELL
	37 37W	740 CRI >70, 4000K	1M IESNA TYPE I MEDIUM	D2 1-10V	SE SIDE ENTRY		
	56 56W	750 CRI >70, 5000K	2M IESNA TYPE II MEDIUM	D3 DALI			
	70 70W	757 CRI >70, 5700K	3M IESNA TYPE III MEDIUM	ALTERNATIVES TO STANDARD AVAILABLE			
	90 90W						
	120 120W						

Product Ordering Code Examples: ARB-27-750-1M-D1-SE-GR ARB-120-757-120-D3-PT-GR-PH1

DRIVER MANUFACTURER						
POWER	D1	D3				
27 27W	Mean Well	Mean Well	Inventronics			
37 37W	Mean Well	Mean Well	Inventronics			
56 56W	Mean Well	Mean Well	Inventronics			
70 70W	Mean Well	Mean Well	Inventronics			
90 90W	Mean Well	Mean Well	Inventronics			
120 120W	Mean Well	Mean Well	Inventronics			

GENERAL NOTES:

- 1. IF MORE THAN ONE MODIFICATION IS REQUIRED, SEPARATE EACH MODIFICATION WITH A HYPHEN AT THE END OF THE PRODUCT CODE
- 2. PLEASE ENSURE SELECTION OF COMPATIBLE DRIVER FOR OCCUPANCY SENSORS WITH DIMMING FUNCTIONALITY
- 3. PLEASE NOTE THAT MODIFICATIONS WHICH AFFECT LIGHT OUTPUT HAVE SEPARATE PHOTOMETRIC FILES IDENTIFIED WITH ..."+(MODIFICATION)"
- 4. ALTERNATIVE DRIVERS MAY BE AVAILABLE PLEASE CONTACT OUR OFFICE FOR FURTHER DETAILS
- 5. IF PRODUCT IS CUSTOMISED, CODES WILL BE ALTERED AS NECESSARY

CONTACT OUR OFFICE FOR FURTHER INFORMATION ON DRIVER PARAMETERS