VLO 12V LED Large Accent

One light, three lumen levels.

Our VLO Accent fixture is equipped with the Lumen Effects System, which allows you to easily switch between three lumen outputs: 400, 600, or 835, with the use of the Magnetic Key. Its field configurable design allows for customization based on the needs of the application.

Variable Lumen Output (VLO) Adjustment		Lumens
Level 1*	Flashes one time	400 lm
Level 2	Flashes two times	600 lm
Level 3	Flashes three times	835 lm

Factory setting

VLO 12V LED Accent with Lumen Effects System makes designing and modifying landscape lighting easier.

Lumen Effects System eliminates the need to mechanically adjust or open the fixture, supporting product longevity.

Flexible Lumen Levels allows you to set and adjust the lumen levels as the landscape needs change.

Sealed and fully encapsulated to safeguard from water ingression and the outdoor elements – helping to extend the life of the product.

Versatile IP66 rated design provides a dust and water tight housing that can protect against strong jets of water that can occur in coastal areas with strong storms or applications close to sprinklers.
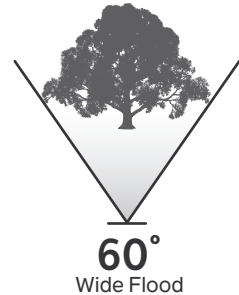
2,000-volt fixture surge protection protects against power surges and irregularities.

KICHLER®

PRODUCT ORDERING GUIDE

Ordering Guide (product number breakdown)

Example: 16018 CBR 30

1 Item Number for Fixture & Beam Angle:

16018 = 15° Narrow Spot
16019 = 35° Flood
16020 = 60° Wide Flood

1 6 0 1 8

2 Product Finish:

AZT = Textured Architectural Bronze
BKT = Black
CBR = Centennial Brass

C B R

3 Color Temperature:

27 = 2700K, Warm White
30 = 3000K, Pure White

3 0

BEAM SPREAD

15°
Narrow Spot

35°
Flood

60°
Wide Flood

PHOTOMETRICS

16018AZT27 16018BKT27 16018CBR27 15° Narrow Spot 2700K – Warm White	16018AZT30 16018BKT30 16018CBR30 15° Narrow Spot 3000K – Pure White	16019AZT27 16019BKT27 16019CBR27 35° Flood 2700K – Warm White	16019AZT30 16019BKT30 16019CBR30 35° Flood 3000K – Pure White	16020AZT27 16020BKT27 16020CBR27 60° Wide Flood 2700K – Warm White	16020AZT30 16020BKT30 16020CBR30 60° Wide Flood 3000K – Pure White

LEVEL 1 LUMENS

Item	16018 (Low - 400 lm)		Item	16019 (Low - 400 lm)		Item	16020 (Low - 400 lm)	
Beam	15° Narrow Spot		Beam	35° Flood		Beam	60° Wide Flood	
Candela	Max Candela: 3521		Candela	Max Candela: 948		Candela	Max Candela: 396	
Distance	Foot-candles	Beam Width	Distance	Foot-candles	Beam Width	Distance	Foot-candles	Beam Width
60'	0.7	15.8'	40'	0.4	24.5'	40'	0.2	49'
48'	1.1	12.6'	32'	0.6	19.6'	32'	0.3	39.2'
36'	2	9.5'	24'	1	14.7'	24'	0.5	29.4'
24'	4.5	6.3'	16'	2.3	9.8'	16'	1.1	19.6'
12'	17.9	3.2'	8'	9.3	4.9'	8'	4.3	9.8'
8'	40.2	2.1'	4'	37.3	2.5'	4'	17.1	4.9'

LEVEL 2 LUMENS

Item	16018 (Mid - 600 lm)		Item	16019 (Mid - 600 lm)		Item	16020 (Mid - 600 lm)	
Beam	15° Narrow Spot		Beam	35° Flood		Beam	60° Wide Flood	
Candela	Max Candela: 4925		Candela	Max Candela: 1315		Candela	Max Candela: 560	
Distance	Foot-candles	Beam Width	Distance	Foot-candles	Beam Width	Distance	Foot-candles	Beam Width
60'	1.3	15.8'	40'	.7	24.5'	40'	0.3	49'
48'	2.1	12.6'	32'	1	19.6'	32'	0.5	39.2'
36'	3.7	9.5'	24'	1.8	14.7'	24'	0.8	29.4'
24'	8.3	6.3'	16'	4.1	9.8'	16'	1.8	19.6'
12'	33.2	3.2'	8'	16.4	4.9'	8'	7.3	9.8'
8'	74.7	2.1'	4'	65.6	2.5'	4'	29.1	4.9'

LEVEL 3 LUMENS

Item	16018 (High - 835 lm)		Item	16019 (High - 835 lm)		Item	16020 (High - 835 lm)	
Beam	15° Narrow Spot		Beam	35° Flood		Beam	60° Wide Flood	
Candela	Max Candela: 6576		Candela	Max Candela: 1816		Candela	Max Candela: 750	
Distance	Foot-candles	Beam Width	Distance	Foot-candles	Beam Width	Distance	Foot-candles	Beam Width
60'	1.8	15.8'	40'	0.9	24.5'	40'	40.8	49'
48'	2.8	12.6'	32'	1.3	19.6'	32'	10.2	39.2'
36'	5	9.5'	24'	2.4	14.7'	24'	2.6	29.4'
24'	11.2	6.3'	16'	5.4	9.8'	16'	1.1	19.6'
12'	44.8	3.2'	8'	21.5	4.9'	8'	0.6	9.8'
8'	100.8	2.1'	4'	86	2.5'	4'	0.4	4.9'

WIDTH
2.75in

LENGTH
6in

HEIGHT
4.5in

FINISH OPTIONS

AZT - Textured Architectural Bronze

BKT - Textured Black

CBR - Centennial Brass

PERFORMANCE

Output Position	Level 1	Level 2	Level 3
Lumen Output	400 lm	600 lm	835 lm
Input Voltage	9V-15V	9V-15V	9V-15V
Power (VA) @ 15V AC	8.5VA	12.5VA	17VA
Power (W) @ 15V DC	5.25W	8.5W	12W
Efficacy (lm/W @ DC)	76 lm/W	70 lm/W	69 lm/W
Halogen Equivalents	40W	60W	83.5W

SPECIFICATIONS

Fixture

Light Source	Integrated LED
Number of LEDs	1 High Output COB
Color Temperature	2700K, 3000K
Color Rendering Index	80+
Beam Angles	15º, 35º, 60º
Binning	3 Step

Fixture can be used in up or down position.

Input

Input Voltage Range	9 – 15V AC or DC with no loss in light output
Input Frequency	47 - 63Hz
Input Current	2.55A Max @ 9VAC
Inrush Current	9A Max
Efficiency	> 70L/W @ 12VDC
Power Factor	> 0.7 @ 15V

Environmental

Environmental Protection Rating	Wet, IP66
Operation Ambient Temperature	-25°C - +40°C
Lumen Maintenance (L70)	50K Hours

Mechanical & Housing Specification

Diameter/Height	2.75" W x 6" L x 4.5" H
Housing Material	Cast Aluminum, Cast Brass
Housing Color & Surface	AZT, BKT or CBR
Weight	24 oz (Aluminum), 48 oz (Brass)

Lens Material

Tempered, shock resistance glass with high tolerance for thermal expansion and stress.

Wire

18 AWG, 105ºC, 300V 48" of usable #18-2 SPT-1W leads.

Optics

Custom reflector provide uniform center-to-edge light distribution. Available in a 15, 35 and 60 degree beam angles.

FIXTURE ATTRIBUTES

Included Accessories

8" Slotted In-ground Stake, 2 Gel-Filled Wire Nuts, Locknut, and Magnetic Key.

Optional Accessories

3" Riser Stem	15509CBR
6" Riser Stem	15645AZT, BKT, 15510CBR
12" Riser Stem	15656AZT, BKT, 15511CBR
18" Riser Stem	15657AZT, BKT, 15512CBR
24" Riser Stem	15658AZT, BKT, 15513CBR
Adjustable Riser Stem	15570AZT, BKT
Stem Coupler	15649AZT, BKT
Mounting Base	15493CBR
Two Fixture "T"	15515CBR
Surface Flange	15601AZT, BKT
Bracket	15607AZT, BKT, 15516CBR
Tree Mount	15609AZT, BKT, CBR
Elbow	15647AZT, 15514CBR
Gutter Mount	15489CBR
Long Cowl	16068CBR
Amber Lens	16072AMB
Green Lens	16072GRN
Hexcell Louver	16075BK
Beam Expander	16091FRO
8" Stake	15575BK
14" Stake	15576BK
Power Post	15276BK

LOAD CHART

Power (VA)	Wire Gauge / Length (ft/m) Load Chart			
	10 AWG	12 AWG	14 AWG	16 AWG
0-20 VA	1860'/567 m	1150'/351 m	730'/223 m	450'/137 m
40 VA	930'/283 m	580'/177 m	370'/113 m	230'/70 m
60 VA	620'/189 m	390'/119 m	240'/73 m	150'/46 m
80 VA	470'/143 m	290'/88 m	180'/55 m	110'/34 m
100 VA	370'/113 m	230'/70 m	140'/43 m	90'/27 m
>100 VA	**Consult Technical Support**			

TROUBLE SHOOTING

Fixture does not illuminate	Verify power connections. Review installation guide for installation problem. Ensure manual reset breaker has not been tripped.
Fixture flashes	Verify load calculations for the installation. Check voltage at affected fixture. Verify you are on 15V output tap.
Fixture turns off	Verify power connections. Review installation guide for installation problems. Ensure manual reset breaker has not been tripped. Check voltage drop at fixture.
Fixture trips breaker	Check installation for a possible short or overload state. Isolate the identified short and replace affected fixture or remove fixture(s) installed in overload.
Fixture returns to original lumen output	The fixture has to be powered on for 2 minutes after final adjust to exit programming mode.

LISTING

UL 1838 Listed. Low Voltage Landscape Lighting Systems.

CSA C22.2#250.7 Listed.

FCC Part 15, subpart B, Class B

LIMITED 15 YEAR WARRANTY

WARRANTY

Backed by our 15 year limited warranty. Visit **Kichler.com/Warranty** for details.

DISCLOSURE

1. Chip binning ranges: (2700K 80+ CRI: 3 step), (3000K 80+ CRI: 3 step). LED chip data measured in accordance to IES LM-80.
2. Fixture has a 90% confidence luminous flux range to stated 3000K CCT target. Photometric (flux and color) data has been measured in accordance to IES LM- 79.
3. Actual efficacy value can be calculated as follows: Lumen value divided by average power consumption.
4. Do not extend beyond the recommended maximum run length.
5. Recommend product be installed with 10 or 12 gauge wire.
6. Recommend 80% load/20% overhead rule for fixture load planning in reference to the power source. Calculating fixture loading this way provides additional resource for fixture adjustment and loss due to voltage drop due to wire run lengths.
7. We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.
8. Damage caused by misuse (including use for an unintended application) or improper or incorrect installation, maintenance or repair, including failure to follow the applicable care and cleaning instructions, is not covered by our warranty.

ADVANCED PRODUCT SOLUTIONS (APS) & LAYOUT TEAM

Have installation issues or a product and location inquiry? We have you covered. Our APS team can provide you with technical guidance and professionally designed landscape lighting layouts free of charge.

Visit **Kichler.com/APS**, reach out to us at **layouts@kichler.com**, or by phone Monday - Friday, 8:00 am to 6:30 pm EST, at **844-KICHLER (844-542-4537)** to get started.

See the entire VLO product line at **Kichler.com/VLO**

KICHLER®