

## LD238

### COMPACT SURFACE MOUNTED ADJUSTABLE INTERIOR/EXTERIOR LED SPOTLIGHT



The LD238 is a discreet surface mounted spotlight that is very compact in size but offers a powerful output and large range of features. There are 2 LED engines available. The E3 engine provides the ability to achieve a high output of up to 597lm, whilst the F1 offers a super warm colour temperature of 2200K. Featuring a single optic for superior beam quality, there are a range of beam angles available and a half or full cowl for low glare. With a choice of fixing options, including a ground spike, tree strap and surface mounted base, the versatile LD238 can be used in a range of exterior applications.



## KEY FEATURES

- > Compact exterior spotlight with 105° lockable head tilt adjustment
- > High-power E3 engine featuring NICHIA LED delivering up to 597lm at 700mA
- > F1 LED engine featuring CREE COB with 2200K colour temperature option
- > Machined aluminium fitting, paint finishes include: White (RAL 9016), Silver, Anthracite Grey (RAL 7016), Black (RAL 9005), Antique Bronze, Satin Antique Brass, Satin Brass or any RAL finish
- > Range of beam angles including 12°, 18°, 31°, 55°, 14° x 48°
- > Single light source and optic produces a consistent beam removing multiple shadows
- > Deep recessed LED lens assembly with option of no cowl, full, or half anti-glare cowl and honeycomb louvre
- > Wide range of fixing options including surface mounted base, ground spike and tree strap
- > Switched, 0-10V, Casambi, DMX, DALI, or Mains dimmable drivers available

## DIMENSIONS

*Dimensions in mm*

For fixing dimensions please go to page 4.



## WHITE LED ENGINE SPECIFICATION

Engine	E3			F1		
Beam angles	12°, 18°, 31°, 55°, 14° x 48°			21°, 35°, 52°, 17° x 48°		
LED manufacturer	NICHIA			CREE		
Colour temperature*	2700K, 3000K, 4000K, 5000K			2200K, 2700K, 3000K, 4000K, 5000K		
Current	350mA	500mA	700mA	350mA	500mA	700mA
LED power (Max)**	4.2 (5W**)	6.0 (7W**)	8.0 (10W**)	3.2 (3.5W**)	4.5 (5W**)	6.3 (7W**)
Delivered lumens (L <sub>100</sub> )	359	465	597	254	335	442
Lumens per circuit watt	72	66	60	73	67	63
CRI (Typ)	85			90		
Forward voltage (V <sub>100</sub> )	14V			9V		
Colour consistency	2SCDM			3SCDM		
Peak intensity	6010 cd			2198 cd		
LED Lumens	840			623		
LOR	0.71			0.71		
TM30	RF87	RG99		RF93	RG99	
LED lifetime	L90B5 at 90,000hrs			L90B5 at 90,000hrs		
Applications						

This data is based on LD238-E3-700-NB and LD238-F1-700/MSB/LW30

\*Lumen output data applies to all E3 colour temperatures, for F1, please see lumen variance table to the right

\*\*Indicates the nominal power for the LED run at that particular current and includes losses associated with using an 85% efficient driver

Lumen variance by CCT	
2700K	+/- 0%
4000K	+7%
5000K	+16%

## MECHANICAL

Ambient temperature	E3	- 20° to 35° (700mA) or -20° to 45° (350mA/500mA)
	F1	- 20° to 35° (700mA) or -20° to 45° (350mA/500mA)
Glass	2mm thick toughened glass with black ceramic screen print	
Materials	Anodised aluminium body	
Weight of product	0.35kg (with /SMB fixing)	
IP rating	IP67	
Wiring	In-series constant current wiring (pre-wired with 2-core exterior cable)	

## ENVIRONMENTAL

TM65	Available on request
TM66	2.7

## AVAILABLE FINISHES

Please refer to our finishes guide for full details

The LD238 body is machined from aluminium and painted in-house at LightGraphix. Paint finishes are suitable for interior and exterior use on surface mounted products. Our standard colours are below but we can accommodate any RAL request. Please view our full finishes guide online for more information.

### WET SPRAY



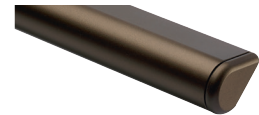
**BLACK**  
(RAL 9005)



**WHITE**  
(RAL 9016)



**SILVER ANODISED**



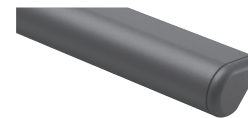
**ANTIQUE BRONZE**



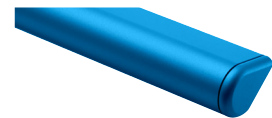
**SATIN ANTIQUE BRASS**



**SATIN BRASS**



**ANTHRACITE GREY**  
(RAL 7016)

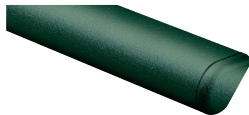


**RAL COLOURS**

### POWDER COAT



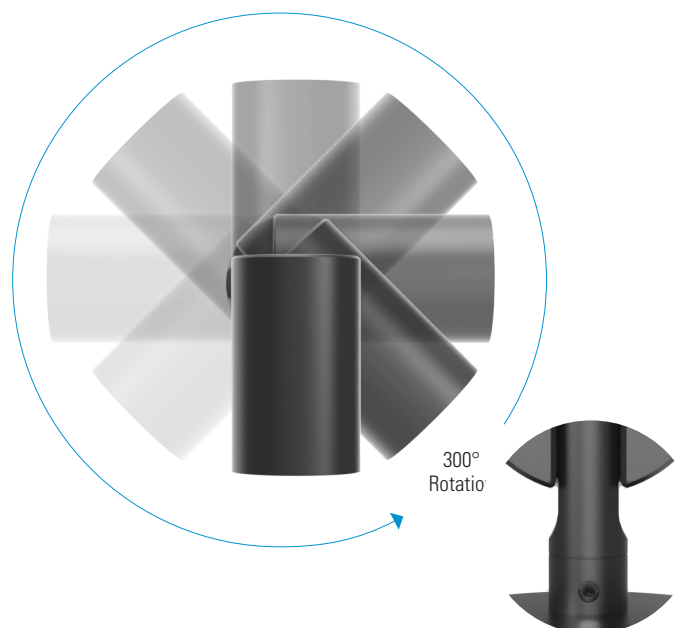
**TEXTURED MARS BRONZE**



**TEXTURED FIR GREEN**  
(RAL 6009)

## ADJUSTABILITY

The LD238 has a lockable upwards tilt of 105° on any fixing option and using the /SMB mounting method can be rotated 300° in any horizontal direction.



**DIMENSIONS & FIXING OPTIONS**

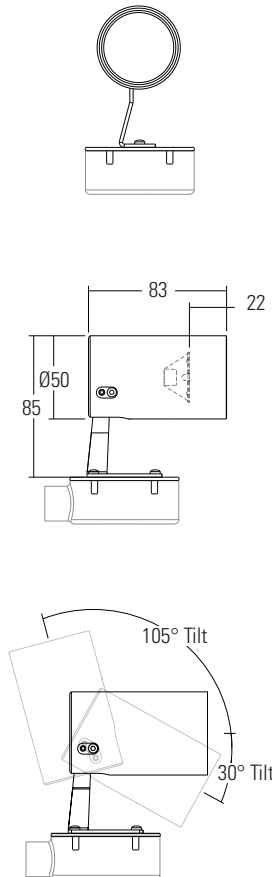
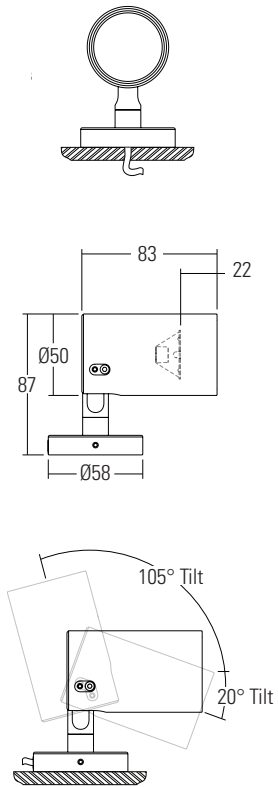
*Dimensions in mm*

**/SMB Surface mount base**

Surface mount base offers hidden wiring and a machined pivot arm with lockable tilt and rotation of the fitting. Cable length: 1200mm Weight: 0.68kg

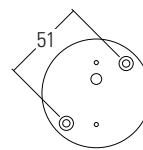
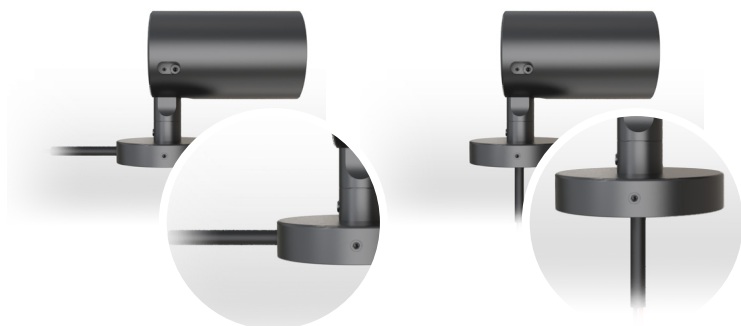
**/BB Besa box mount**

Supplied with a plate for mounting to the front of a besa conduit box to allow mounting to pre-existing conduit installations or for projects with a more industrial aesthetic. Cable length: 1200mm Weight: 0.27kg



**/SMB cable mounting options**

There are two cable exit hole options when specifying a surface mount base. This includes the cable remaining hidden within the base of the fixing and entering through the mounting surface below, or using the horizontal exit hole on the side of the base, if the cable is not able to pass directly through its mounting surface.

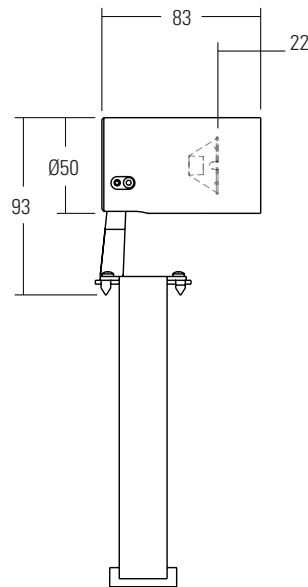
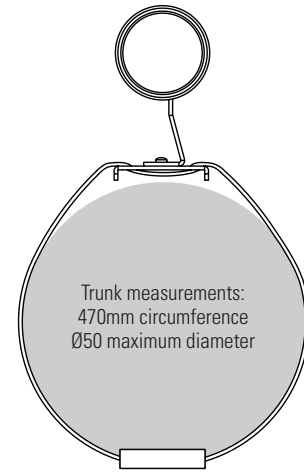
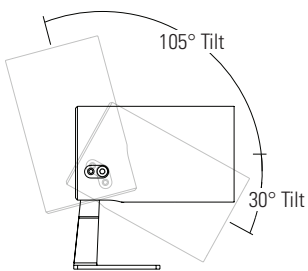
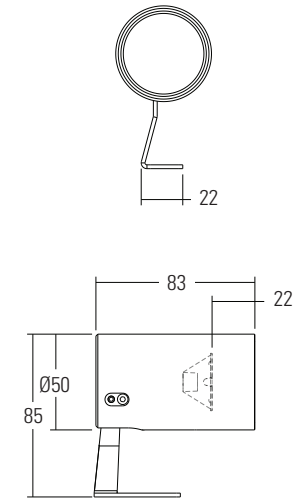


**/SAM** Surface adjustable mount

Surface adjustable mounting is screwed to the surface via a strong mounting stand which allows for minor rotational adjustment. The fitting tilt adjustment is lockable via the socket head screw located on the side. Cable length: 1200mm Weight: 0.26kg

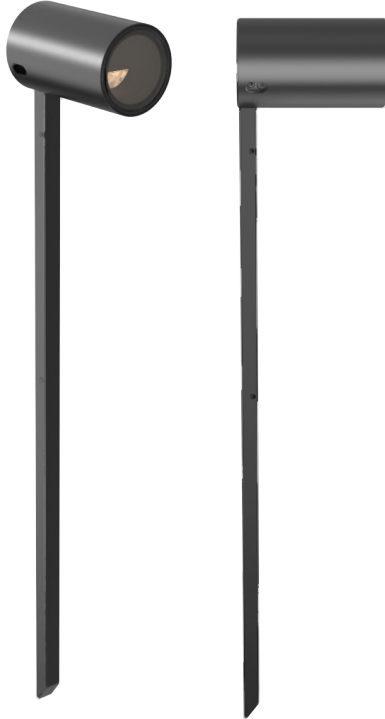
**/TS** Tree strap

Tree strap with lockable fitting tilt adjustment, has a customisable arm length. It can be specified between 130mm and 600mm to the centre of the fitting. Suitable for vertical and horizontal mounting. Cable length: 1200mm Weight: 1.31kg



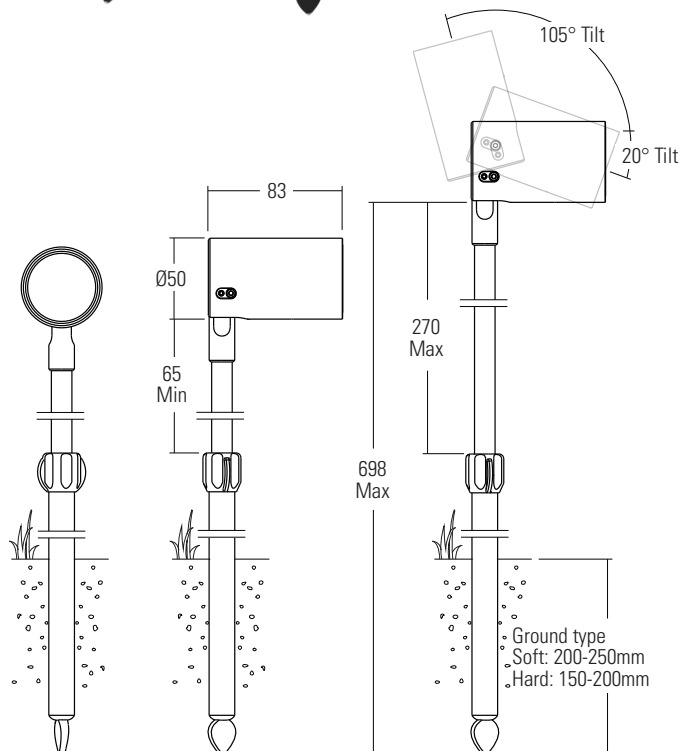
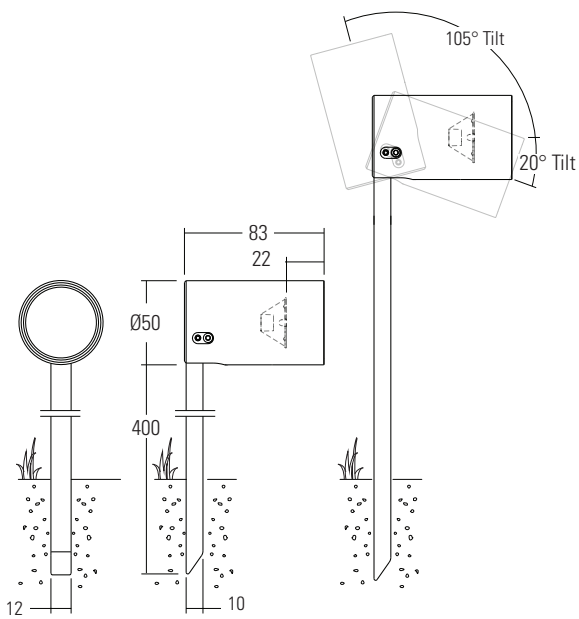
**/GSF** Ground spike fixed

Surface adjustable mounting is screwed to the surface via a strong mounting stand which allows for minor rotational adjustment. The fitting tilt adjustment is lockable via the socket head screw located on the side. Cable length: 1200mm Weight: 1.39kg



**/GSA** Adjustable ground spike

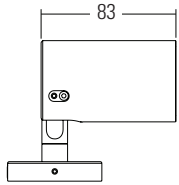
Adjustable ground spike with a lockable fitting tilt adjustment, for in-ground applications. Height adjustment of 490mm to 695mm to the centre of the fitting. Cable length: 2200mm Weight: 1.47kg



## GLARE CONTROL OPTIONS

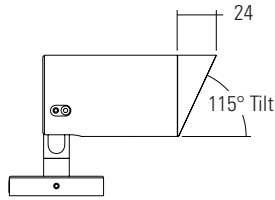
### /NC No Cowl

The LD238 has been designed with optics recessed 22mm into the body for low glare and is suitable for use without a cowl.



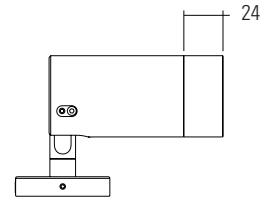
### /HC Anti-glare half cowl

The half cowl can be rotated in any direction to further reduce glare.



### /FC Anti-glare full cowl

A full cowl will reduce glare from all angles.



### /GS238 Glare shield

Standard glare shield, which provides an excellent balance between glare control and light output. This accessory works well in most applications. Not recommended for use with an anti-glare cowl.



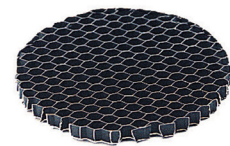
### /GSHM Half moon glare shield

Half-moon glare shield for applications that require very low glare. Lumen output is typically reduced by 60% with no light lost on the lit surface. Not recommended for use with an anti-glare cowl.



### /HL Honeycomb louvre

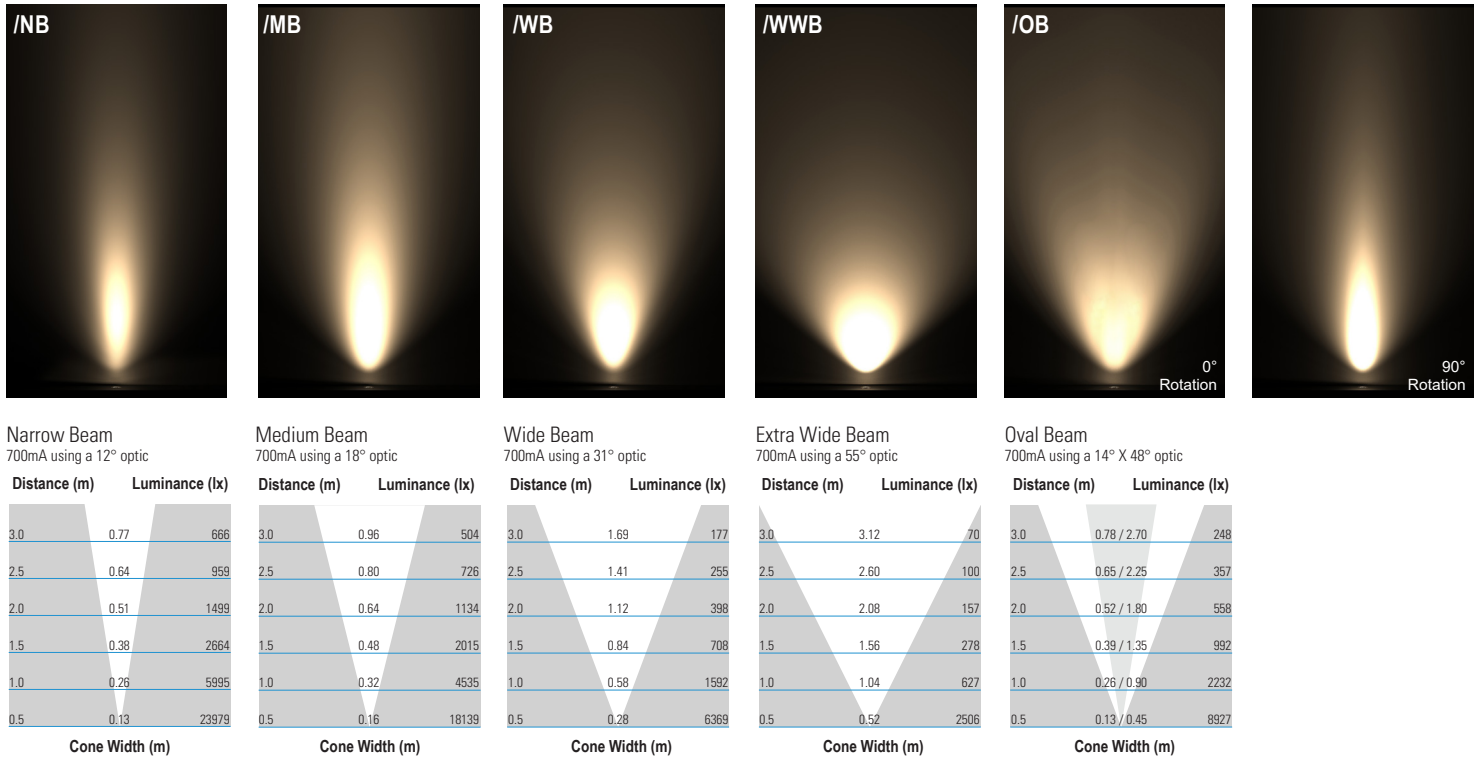
The honeycomb louvre can be used alone or with the /GSHM for further reducing glare from all angles. Please note this is not suitable for use with the 14° x 48° oval beam. Suitable for use with an anti-glare cowl.



CONE DIAGRAMS

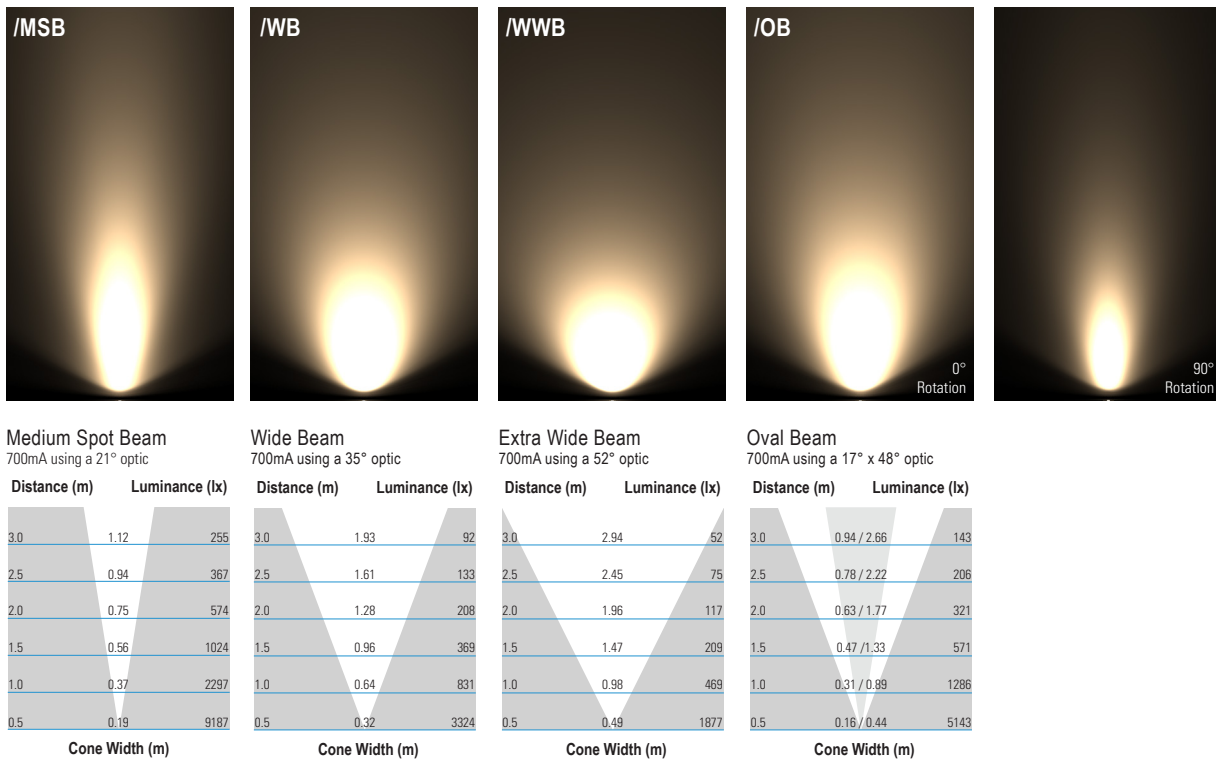
E3 LED Engine

Cone diagrams below are based on a 3000K E3 LED engine run at maximum output 700mA, 10W. Images below represent beam outputs when wall washing a 3m wall, spaced 125mm away from the lit surface. Photometric files (LDT) are included in the design pack which can be downloaded from the LD238 product page on the website.



F1 LED Engine

Cone diagrams below are based on a 3000K F1 LED engine run at maximum output 700mA, 7W. Images below represent beam outputs when wall washing a 3m wall, spaced 125mm away from the lit surface. Photometric files (LDT) are included in the design pack which can be downloaded from the LD238 product page on the website.





ORDER CODES & OPTIONS

Example: LD238-E3-700 / LW30 / OB / HL / WS Black / BB

Light engine & drive current / LED colour / Beam angle / Accessory / Finish / Fixing

**E3**

5W LED at 350mA	LD238-E3-350
7W LED at 500mA	LD238-E3-500
10W LED at 700mA	LD238-E3-700

Extra Warm White (2700K)	/LW27
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K)	/LW50

12° Narrow spot	/NB
18° Medium	/MB
31° Wide	/WB
55° Extra Wide	/WWB
14° x 48° Oval	/OB

	/NC
	/HC
	/FC
	/NGS
	/GS238
	/GSHM
	/HL

	WET SPRAY Black (RAL 9005)
	WET SPRAY White (RAL 9016)
	WET SPRAY Silver Anodised
	WET SPRAY Antique Bronze
	WET SPRAY Satin Antique Brass
	WET SPRAY Satin Brass
	WET SPRAY Anthracite Grey (RAL 7016)
	WET SPRAY RAL Colours
	POWDER COAT Textured Mars Bronze
	POWDER COAT Textured Fir Green (RAL 6009)

	/SMB
	/BB
	/SAM
	/TS
	/GSF
	/GSA

**F1**

3.5W LED at 350mA	LD238-F1-350
5W LED at 500mA	LD238-F1-500
7W LED at 700mA	LD238-F1-700

Super Warm White (2200K)	/LW22
Extra Warm White (2700K)	/LW27
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K)	/LW50

21° Medium spot	/MSB
35° Wide	/WB
52° Extra Wide	/WWB
17° x 48° Oval	/OB