LED LIGHTING

BRIGHT
STYLISH
EFFICIENT

2018 - EDITION 5

CONTENTS

LED LIGHTING EXPLAINED

LIGHT COLOUR
Expressed in Degrees Kelvin (K), light colours are the key to determining the mood of a room.

WARM WHITE	DEGREES	2700-3000K
	DESCRIPTION	**SOFTER, WARMER LIGHT** Comparable to traditional incandescent lighting. Preferred in cooler climates
	ROOM	Bedroom, living room, bathroom, kitchen

COOL WHITE	DEGREES	4000K
	DESCRIPTION	**NEUTRAL LIGHT** Used for task lighting and preferred in warmer, tropical climates
	ROOM	Laundry, garage, study, bathroom, kitchen

AVERAGE LAMP LIFE

LED 30,000 HOURS	COMPACT FLUORESCENT 10,000 HOURS	INCANDESCENT 1,000 HOURS

DURABILITY: LEDs are very long-lasting compared to other lighting technologies, with an average 30,000 hours life expectancy. We use quality components which make our lamps even more durable, being laboratory tested and assessed at 30,000 hours life expectancy. That represents approximately 20 years based on 3 to 4 hours usage per day.

DIMMING COMPATIBILITY
Critical to a successful installation is an understanding of LED compatibility with dimmers.

HPM is one of the only major brands on the market to deliver a full solution from dimmers to drivers and LED fixtures. Choose the winning combination of HPM LED fixtures and HPM or Legrand dimmers to ensure superior performance – including smooth dimming with no flickering, reliability and long life.

HPM LED fixtures + HPM & Legrand dimmers p.69-70 = **SUPERIOR DIMMING**

LIGHT PERFORMANCE

LIGHT OUTPUT	INCANDESCENT	HALOGEN	CFL	LED
220 lm	25W	18W	5-7W	3W
420 lm	40W	28W	7-8W	4-5W
720 lm	60W	42W	11-12W	6-8W
930 lm	75W	52W	13-18W	9-13W
1300 lm	100W	70W	18-23W	16-20W

LUMINOUS EFFICACY (lm/W)
Picking a lamp fixture based only on wattage or physical size could result in the wrong choice: Wattage (measured in W) represents the power consumed by the luminaire. The actual output of a lamp is measured in lumens (lm): the more lumens, the more light emitted by the luminaire. A smart criteria for determining the efficiency of a light fixture is its lumens/Watt ratio, which represents how much light the fixture delivers versus what it consumes to perform. This value is called luminous efficacy, and proves LED lights are more efficient than other light technologies.

COLOUR RENDERING INDEX (CRI)
CRI measures how well a lamp makes colours appear. CRI scores light sources from 1 – 100: a high CRI means that the eye can pick up slight variations in colour, making details in an interior appear sharper and more vibrant. For outstanding colour rendering, opt for our Dalia series which boasts a very high 92 index.

Our downlights range from 80 to 92, to enhance skin tones, hues and textures in rooms.

BEAM ANGLE
The light effect from a luminaire is determined by its beam angle, That is the shape and direction of light generated by the lamp. Most conventional fixtures deliver a focused light distribution at 35-60° beam angle, but LED technology can go well above those values, while still maintaining a fair pool of light.

Our lights deliver beam angles ranging from 80 to 120° to ensure a beautiful light is spread throughout a room.

OUR QUALITY PROMISE

DIMMING COMPATIBILITY
Many of our lights are capable of being dimmed effectively. For optimum dimming performance and to reduce flickering, use HPM or Legrand dimmers. See pages 102-103 for more details.

INSULATION RATING
All recessed luminaires included in this brochure have an insulation rating of IC, IC-F, IC-4, CA80 and CA90. This means insulation may abut or cover the LED luminaire.

NATA ACCREDITED LABORATORY
To ensure the highest possible quality assurance standards all HPM lighting fixtures and lamps are tested in our NATA accredited laboratory in Sydney.

IP RATING
All our products are assured against insects and moisture, with IP ratings ranging from IP42 to IP65. See IP chart on page 105 for more information.

LED LIGHTING FIXTURES

FINA SLIM FLOODLIGHT (9W TO 15W)

NEW

The Fina floodlight combine both a contemporay design and high performance. The slim profile and sleek tempered glass diffuser bring a touch of modern design. The stunning IP rating allows the Fina to be installed fully exposed to the elements.
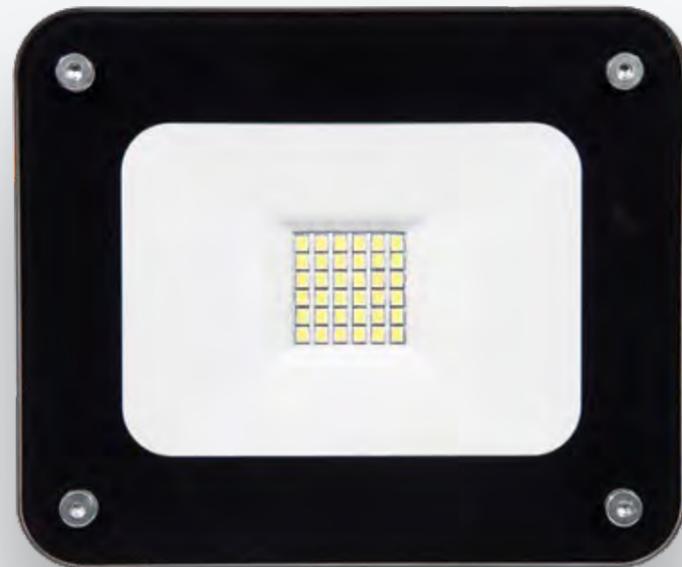
TIP
Super slim profile blends perfectly into all exteriors
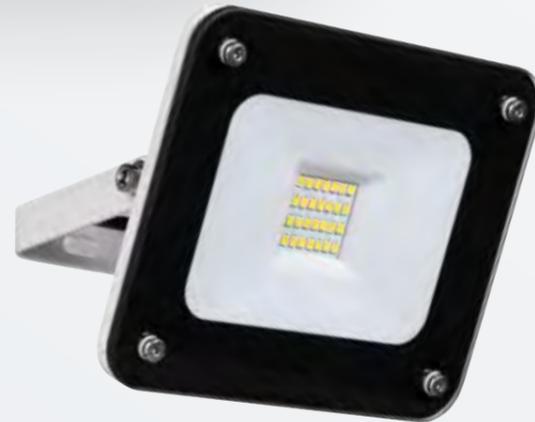
Power		9W	15W
Lumen output	Cool White	800 lm	1490 lm
Efficacy	Cool White	75 lm/W	75 lm/W
Colour temperature	Cool White		4,000K
CRI	80+		
Lifespan	15,000 h		
Constructions	Tempered glass		
Package contents	LED floodlight with mounting bracket, wall plugs, screws and power cable		
Product codes	9W		**LFL0409WBL**
	15W		**LFL0415WBL**
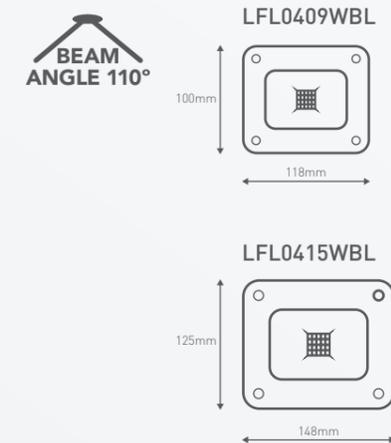
UP TO **1490** LUMENS

ADJUSTABLE HEAD 180°

IP65 WEATHERPROOF

3 YEAR WARRANTY

BEAM ANGLE 110°

LFL0409WBL
100mm
118mm

LFL0415WBL
125mm
148mm

LFL0409WBL

LFL0415WBL

LEANA SLIM FLOODLIGHT (8W-20W)

NEW

Think 'fabulous al fresco fun' with Leana. With its sleek, contemporary design, IP65 weatherproof rating and long-lasting LED globe, Leana is the perfect floodlight for adding sparkle to your outdoor area. The light is also equipped with multiple levels of luminosity to suit all your ambiance needs. Sleek to the eye, low on the power bill and brilliant for creating moods, you can't go wrong with Leana.

UP TO ~3000~ LUMENS

SENSOR OPTIONS AVAILABLE

IP65 WEATHERPROOF

5 YEAR WARRANTY

TIP
Super slim profile blends perfectly into all exteriors

		8W	15W	20W	30W
Power		8W	15W	20W	30W
Lumen output	Cool White	650 lm	1200 lm	1200 lm	3000 lm
Efficacy	Cool White	80 lm/W	80 lm/W	100 lm/W	100 lm/W
Colour temperature	Cool White 4,000K				
CRI	70+				
Lifespan	25,000 h				
Construction	Die-cast aluminium				
Tilt angle	130° vertical				
Sensor detection range/angle	6m (max) 360° scan				
Time delay	5 min				
Sensor type	Passive Infrared (PIR)				
Switching function	Auto				
Package contents	LED floodlight with mounting bracket & 300mm lead, wall plugs, screws and power cable				

Product code		
	8W	**LFL0510BL**
	15W	**LFL0520BL**
	20W	**LFL0530BL**
	30W	**LFL0540BL**
	15W with PIR sensor	**LFS0520BL**
	20W with PIR sensor	**LFS0530BL**

30W
145mm
189mm
52mm

20W
120mm
150mm
48mm

15W
98mm
121mm
44mm

8W
77mm
96mm
42mm

20W WITH PIR SENSOR
120mm
150mm
48mm

15W WITH PIR SENSOR
98mm
121mm
44mm

**BEAM ANGLE 110°**

LEANA SLIM FLOODLIGHT WITHOUT SENSOR

**LEANA SLIM FLOODLIGHT WITH SENSOR**
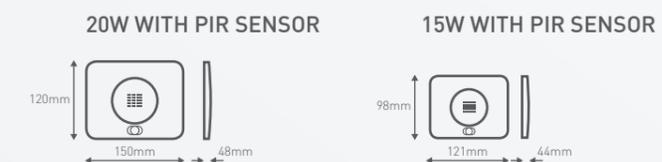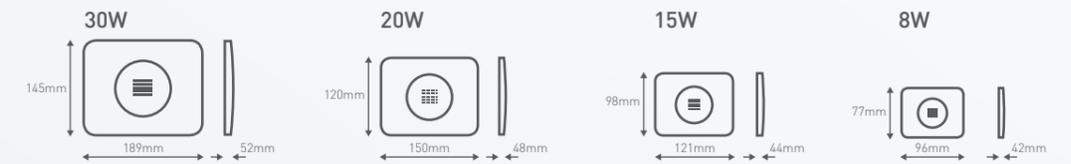
TWIN FLOODLIGHT WITH SENSOR (29W)

This versatile floodlight features dual lights that can be independently positioned allowing different areas to be illuminated. Ideal for secluded walkways and driveways the PIR sensor automatically activates lights when motion is detected within the detection range.

Power	29W	
Lumen output	Warm White	2,200 lm
Efficacy	Warm White	75 lm/W
Colour temperature	Warm White	3,000K
CRI	80+	
Lifespan	30,000 h	
Head swivel angle	120°	
Sensor detection range/angle	12m / 180°	
Sensor time-delay adjustment	10 (±5) seconds to 4 (±1) minutes	
Sensor type	Passive Infrared (PIR)	
Construction	UV resistant polycarbonate	
Package contents	29W Twin LED floodlight with PIR sensor, wall plugs and screws, 2x14W PAR38 LED lamps	
Product code	Black Finish Warm White Light	**LFS013KBL**

2200 LUMENS

ADJUSTABLE TIME-DELAY & LUX LEVEL

IP44 WEATHERPROOF

3 YEAR WARRANTY

BEAM ANGLE 120°

140mm

215mm
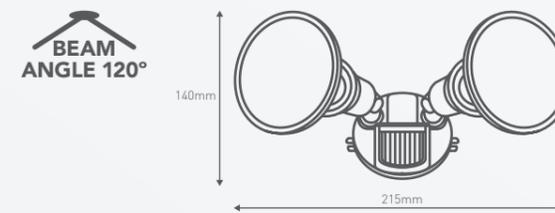
PAR38 replacement LED lamp (LPAR38024KES)

TIP

Passive infrared sensors are sensitive to a person's skin temperature through emitted body radiation, in contrast to background objects at room temperature. No energy is emitted from the sensor, thus the name "Passive Infrared" (PIR)

SIKA FLOODLIGHTS (12W TO 25W)

A great choice for lighting walkways and outdoor areas, this floodlight is a bright energy saver. Its simple design blends seamlessly with any décor making it a versatile choice. The Sika with motion sensor switches on automatically when movement is detected.

Power		12W	25W
Lumen output	Cool White	1,070 lm	2,200 lm
Efficacy	Cool White	88 lm/W	89 lm/W
Colour temperature	Cool White		4,000K
CRI	80+		
Lifespan	15,000 h		
Head swivel angle	130° vertical / 180° horizontal		
Sensor detection range/angle	12m / 180°		
Sensor time-delay adjustment	10 (±5) seconds to 4 (±1) minutes		
Sensor type	Passive Infrared (PIR)		
Sensor manual overide	Yes		
Construction	Die-cast aluminium body		
Package contents	12W to 25W LED floodlight, wall plugs and screws		

Product code

Single spot	12W	**LSP0112WBL**
Double spot	25W	**LSP0125WBL**
Single spot	12W with PIR sensor	**LSS0112WBL**
Double spot	25W with PIR sensor	**LSS0125WBL**

UP TO
2200 LUMENS

ADJUSTABLE TIME-DELAY & LUX LEVEL

IP44 WEATHERPROOF

3 YEAR WARRANTY

TIP
Ideal for driveways, including walkways, front and back porches

BEAM ANGLE 120°

LSP0112WBL
170mm
120mm

LSP0125WBL
170mm
240mm
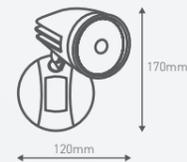
LSS0112WBL
240mm
120mm
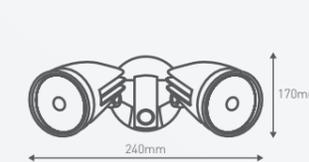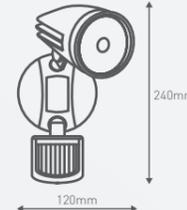
LSS0125WBL
240mm
120mm
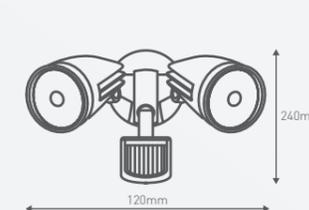
FORTA FLOODLIGHTS (10W TO 40W)

Sporting a slick black, die-cast aluminium body, Forta floodlights look fantastic as well as throw a powerful light. The optional PIR sensor automatically turns on the light when it detects movement, which is both a great energy saving and security feature.

Main applications
Ideal for driveways, secluded walkways, front and back porches

UP TO
3000
LUMENS

SENSOR OPTIONS AVAILABLE

IP44 WEATHERPROOF

3 YEAR WARRANTY

Power		10W	20W	30W	40W
Lumen output	Cool White	730 lm	1,615 lm	2,250 lm	3,000 lm
Efficacy	Cool White	73 lm/W	80 lm/W	75 lm/W	75 lm/W
Colour temperature	Cool White				4,000K
CRI	80+				
Lifespan	15,000 h				
Construction	Die-cast aluminium				
Head swivel angle	180° vertical				
Sensor detection range/angle	12m / 180°				
Sensor time-delay adjustment	10 (±5) seconds to 4 (±1) minutes				
Sensor type	Passive Infrared (PIR)				
Sensor manual override	Yes				
Package contents	LED floodlight with mounting bracket, wall plugs, screws and power cable				
Product code	10W				**LFL0110WBL**
	20W				**LFL0120WBL**
	30W				**LFL0130WBL**
	40W				**LFL0140WBL**
	10W with PIR sensor				**LFS0110WBL**
	30W with PIR sensor				**LFS0130WBL**

LFL0110WBL

87mm
115mm

LFL0120WBL

140mm
180mm

LFL0130WBL

188mm
228mm

LFL0140WBL

188mm
228mm

LFS0110WBL

200mm
130mm

LFS0130WBL

270mm
228mm
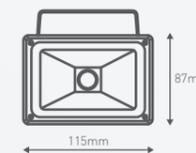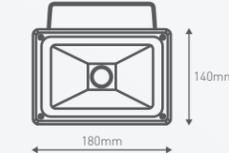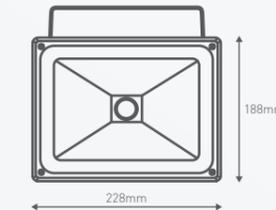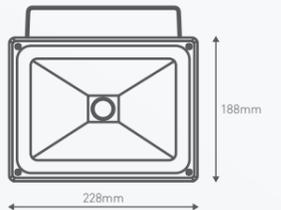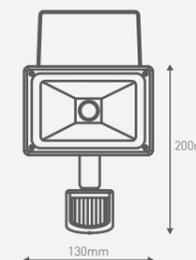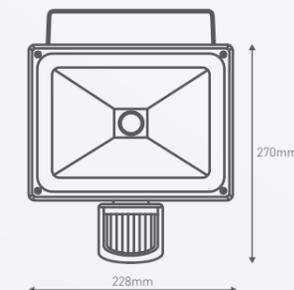
TORAN FLOODLIGHT WITH SENSOR (16W)

HPM

Ideal for mounting under eaves or for illuminating driveways, the Toran keeps you safe with style. Equipped with a motion sensor for energy saving and an adjustable head which enables 180° flexibility.
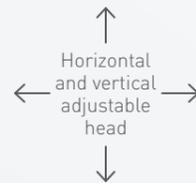
Power	16W	
Lumen output	Cool White	1,700 lm
Efficacy	Cool White	106 lm/W
Colour temperature	Cool White	4,000K
CRI	80+	
Lifespan	30,000 h	
Head swivel angle	90° vertical / 120° horizontal	
Sensor detection range/angle	12m / 180°	
Sensor time-delay adjustment	10 (±5) seconds to 4 (±1) minutes	
Sensor type	Passive Infrared (PIR)	
Sensor manual override	Yes	
Construction	UV resistant polycarbonate with aluminium heat sink	
Package contents	16W LED floodlight with sensor, wall plugs and screws	
Product code	Black Finish Cool White Light	**LFS0316WBL**
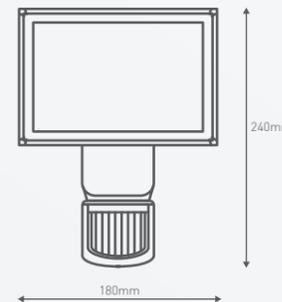
1700 LUMENS

PIR SENSOR WITH MANUAL OVERRIDE

IP44 WEATHERPROOF

3 YEAR WARRANTY

Horizontal and vertical adjustable head

Main applications
Ideal for driveways, secluded walkways, front and back porches

BEAM ANGLE 100°

240mm

180mm
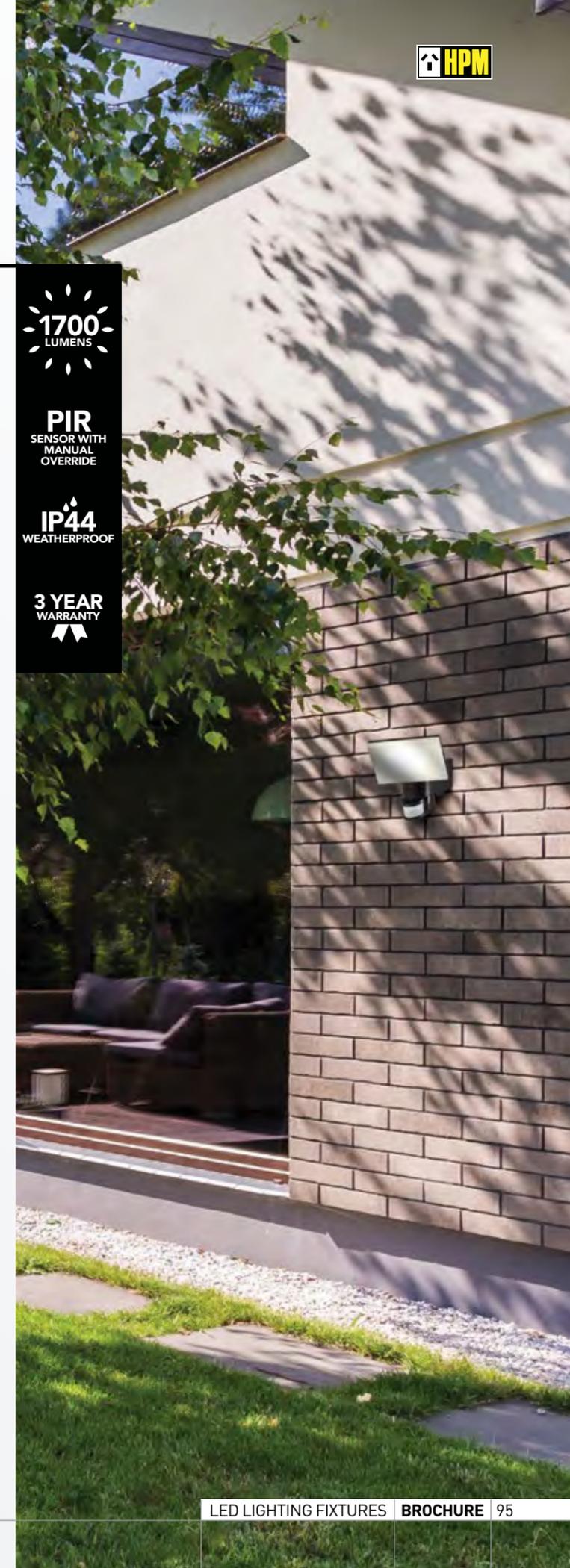
MAXIS FLOODLIGHT (9W)

The Maxis provides added security to outdoor areas with an integrated PIR motion sensor that lights up automatically when movement is detected.

Horizontal and vertical adjustable head up to 90°

Main applications

Ideal for driveways, secluded walkways, front and back porches

Power	9W
Lumen output	Cool White 900 lm
Efficacy	Cool White 100 lm/W
Colour temperature	Cool White 4,000K
CRI	80+
Lifespan	25,000 h
Head swivel angle	90° vertical and horizontal
Sensor detection range/angle	8m / 130°
Sensor time-delay adjustment	10 (±5) seconds to 4 (±1) minutes
Sensor type	Passive Infrared (PIR)
Construction	UV resistant polycarbonate
Package contents	9W LED floodlight with sensor, wall plugs and screws
Product code	Black Finish Cool White Light **LSS0209WBL**

BEAM ANGLE 120°

170mm

160mm
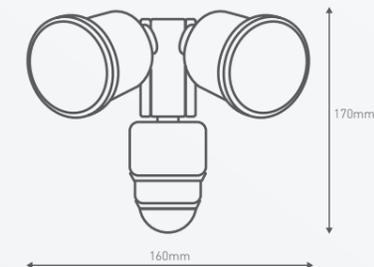
900 LUMENS

ADJUSTABLE TIME-DELAY & LUX LEVEL

IP44 WEATHERPROOF

3 YEAR WARRANTY

HPM

BAKRA FLOODLIGHT (11W)

HPM

Illuminate your outdoor space with the Bakra. The functional design casts a wide spread of light making outdoor spaces brighter and safer.

Main applications
Ideal for driveways, secluded walkways, front and back porches

Power	11W
Lumen output	Cool White 1,100 lm
Efficacy	Cool White 100 lm/W
Colour temperature	Cool White 4,000K
CRI	80+
Head swivel angle	180° vertical (No sensor) 90° vertical (Sensor)
Lifespan	15,000 h (No sensor) 30,000 h (Sensor)
Construction	UV Resistant ABS Plastic aluminium heat sink
Sensor detection range/angle	8m / 130°
Sensor time-delay adjustment	10 (±5) seconds to 4 (±1) minutes
Sensor type	Passive Infrared (PIR)
Sensor manual override	No
Package contents	LED floodlight with mounting brackets, wall plugs and screws
Product code	Black Finish 11W **LFL0213WBL** 11W with PIR sensor **LFS0214WBL**

1100 LUMENS

ADJUSTABLE HEAD 180°

IP44 WEATHERPROOF

3 YEAR WARRANTY

BEAM ANGLE 105°

LFS0214WBL

165mm
230mm

LFL0213WBL

261mm
210mm
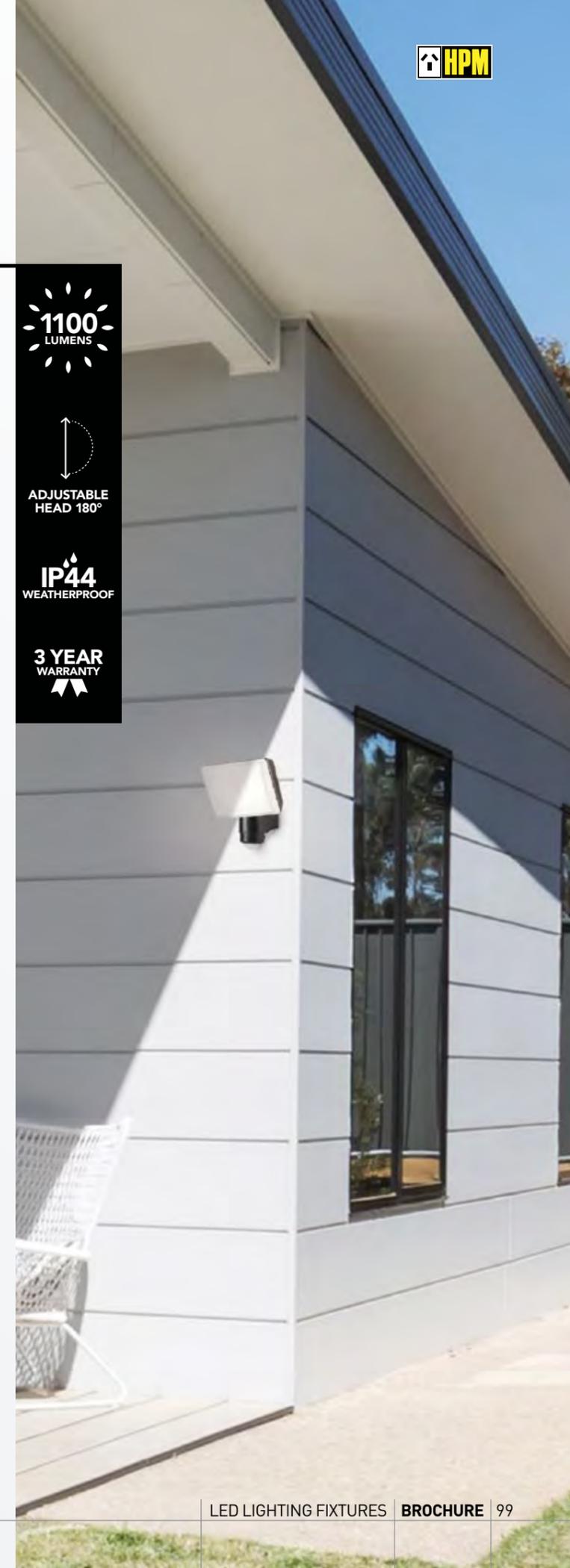
DIMMER COMPATIBILITY

LED FIXTURE RANGE	DIMMER TYPE	DIMMERS COMPATIBILITY	MAXIMUM LIGHTS PER DIMMER	DIMMING RANGE
DLI70 Downlights	Trailing edge only	400A3P	16	100%-1%
		400A2P	16	89%-7%
		250T	11	100%-7%
		400T	16	94%-8%
		700T	28	100%-15%
		1000T	40	100%-18%
AZA+ Downlights DLI90, DLI110, DLI125 & DLI150 Downlights	Trailing edge only	400A3P	12	100%-1%
		400A2P	12	97%-9%
		250T	8	100%-7%
		400T	12	100%-7%
		700T	21	100%-13%
		1000T	30	100%-16%
Dalia Downlights Azalea Downlights Freesia Downlights Luna Panel Lights Calla Step Lights Zinnia Starlights	Trailing edge & leading edge	400A3P	8	100%-5%
		400A2P	8	100%-10%
		250T / 250L	5	100%-10%
		400T / 400L	8	100%-10%
		700T / 700L	14	100%-25%
		1000T / 1000L	20	100%-25%
DLS Downlights	Trailing edge only	400A3P	8	100%-10%
		400A2P	8	100%-10%
		250T	5	100%-10%
		400T	8	100%-10%
		700T	14	100%-25%
		1000T	20	100%-25%

**Note:** Not all LED lights are dimmable, refer to product details to confirm suitability for dimming.

LEGRAND EXCEL LIFE™

EM400A3P (3 wire) EM400A2P (2 wire)
Excel Life 400VA all load 2 & 3 wire electronic push-button dimmer mechanism
White: EM400A3PWE EM400A2PWE
Urban Grey: EM400A3PUG EM400A2PUG

EM250T*
Excel Life 250VA 2 wire trailing edge rotary dimmer mechanism
White: EM250TRWE
Urban Grey: EM250TRUG

EM400T*
Excel Life 400VA 2 wire trailing edge rotary dimmer mechanism
White: EM400TRWE
Urban Grey: EM400TRUG

LEGRAND ARTEOR™

AR400A3P (3 wire) AR400A2P (2 wire)
Arteor 400VA all load 2 & 3 wire push-button dimmer mechanism
White: AR400A3PMWE AR400A2PMWE
Magnesium: AR400A3PMMGN AR400A2PMMGN

AR400T / AR400L*
Arteor 400VA 2 wire rotary dimmer mechanism
White: AR400TMWE AR400LMWE
Magnesium: AR400TMMGN AR400LMMGN

*T = Trailing Edge, L = Leading Edge

HPM LINEA™ AND EXCEL

400A2P (2 wire)
Excel or Linea and 400VA (2 wire) electronic push-button dimmer mechanism
White: 400A2PWE

250T / 250L*
Excel or Linea 250VA 2 wire rotary dimmer mechanism
White: 250LMWE 250TMWE
Also available in black & cream

400T / 400L*
Excel or Linea 400VA 2 wire rotary dimmer mechanism
White: 400TMWE 400LMWE
Also available in black & cream

700T / 700L*
Excel or Linea 700VA 2 wire rotary dimmer mechanism
White: 700TMWE 700LMWE

1000T / 1000L*
Excel or Linea 1000VA 2 wire rotary dimmer mechanism
White: 1000TMWE 1000LMWE

VIVO™

EVM400A3* (3 wire) EVM400A2* (2 wire)
VIVO 400VA all load 2 & 3 wire electronic push button dimmer mechanism
White: EVM400A3WE, EVM400A2WE
Grey: EVM400A3GR, EVM400A2GR

ACCESSORIES

DOWNLIGHT EXTENSION PLATES

Cat No.	Image	Description
LEP120WE		Suitable for hole cut-outs up to Ø120mm
LEP150WE		Suitable for hole cut-outs up to Ø150mm

Suitable for: DLI90, AZA+, Dalia, Azalea, and DLS series

LIGHTING SENSORS

Passive infrared (PIR) sensor

Sensitive to a person's skin temperature through emitted body radiation, in contrast to background objects at room temperature. HPM range of sensors is suitable for both indoor and outdoor for various locations throughout the house including corridors, wardrobes, secluded walkways and garages.

Whether used for extra safety around the house or for convenience indoors, these deliver great energy savings all year round.

Cat No.	Image	Description	Finish	Manual override	IP Rating	Application	Mounting type	Detection range	Detection angle	Time delay
630S01BL		180° PIR Sensor	Black	No	IP44	Indoor/Outdoor	Wall Surface Mounted	12m	180°	8s to 7min
630S01WE		180° PIR Sensor	White	No	IP44	Indoor/Outdoor	Wall Surface Mounted	12m	180°	8s to 7min
630SM01BL		180° PIR Sensor	Black	Yes	IP44	Indoor/Outdoor	Wall Surface Mounted	12m	180°	8s to 7min
630SM01WE		180° PIR Sensor	White	Yes	IP44	Indoor/Outdoor	Wall Surface Mounted	12m	180°	8s to 7min
630S02WE		360° PIR Sensor	White	No	IP20	Indoor	Ceiling Surface mouted	8m	360°	10s to 10min
630R02WE		360° PIR Sensor	White	No	IP41	Indoor	Ceiling Surface mounted	8m	360°	10s to 10min
630R01WE		360° PIR Sensor	White	No	IP20	Indoor	Ceiling surface mounted	6m	360°	10s to 15min
488TRI3W		Triscan 3-Wire Pir Sensor	White	Yes	IP66	Outdoor	Wall Surface Mounted	8m	120°	8s to 15min

INDEX OF PROTECTION

1. Protection against solid bodies and liquids: IP index of protection

Degrees of protection for enclosures of electrical equipment according to standards:
IEC 60529, BS EN 60529 and NF EN 60529

First digit:
Protection against solid bodies
(See AS 1939, Clause 5)

IP	Tests		IP
0		No protection	
1	Ø 50 mm	Protected against solid bodies larger than 50 mm (e.g. accidental contact with the hand)	A
2	Ø 12.5 mm	Protected against solid bodies larger than 12.5 mm (e.g. finger)	B
3	Ø 2.5 mm	Protected against solid bodies larger than 2.5 mm (e.g. tools, wires)	C
4	Ø 1 mm	Protected against solid bodies larger than 1 mm (e.g. fine tools and small wires)	
5		Protected against dust (no harmful deposit)	D
6		Completely protected against dust	

Second digit:
Protection of equipment against ingress of harmful liquids
(See AS 1939, Clause 6)

IP	Tests	
0		No protection
1		Protected against vertically-falling drops of water (condensation)
2		Protected against drops of water falling at up to 15° from the vertical
3		Protected against drops of rain water at up to 60° from the vertical
4		Protected against projections of water from all directions
5		Protected against jets of water (from all directions)
6		Protected against jets of water of similar force to heavy seas
7		Protected against the effects of immersion
8		Protected against prolonged effects of immersion

2. Protection IK, against mechanical impact.

According to standards: IEC 62262, BS EN 62262 and NF EN 62262

IK	Tests	Impact energy (in Joules)
IK 00		0
IK 01	0.2 kg 75 mm	0.15
IK 02	0.2 kg 100 mm	0.2
IK 03	0.2 kg 175 mm	0.35
IK 04	0.2 kg 250 mm	0.5
IK 05	0.2 kg 350 mm	0.7

IK	Tests	Impact energy (in Joules)
IK 06	0.5 kg 200 mm	1
IK 07	0.5 kg 400 mm	2
IK 08	1.7 kg 295 mm	5
IK 09	5 kg 200 mm	10
IK 10	5 kg 400 mm	20

• This table can be used to ascertain the resistance of a product to an impact given in Joules from the IK code (graduated from 00 to 10)

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