



Hazardous
Lighting Solutions LTD



HAZ-FLOOD 1



High-performance LED floodlight delivering reliable, efficient, durable hazardous-area illumination



PETROLEUM
REFINERIES



ONSHORE



OFFSHORE



PETROLEUM
PONTOON LOADING



CHEMICAL

MECHANICAL FEATURES

Body: Low copper aluminium alloy with integrated cooling fins

Glass face: Tempered, shock and temperature resistant glass

Bracket: Galvanised steel

Gaskets: Acid, hydrocarbon and high temperature resistant silicone

Fasteners: Stainless steel

Cable entries: 2 × ISO M20 / M25 entries (variant dependent, supplied with plug & gland)

Coating: Polyester powder coating, RAL 7035 (light grey)

ELECTRICAL FEATURES

Input voltage: 100–277 Vac $\pm 10\%$ (variant dependent)

Frequency: 50–60 Hz $\pm 5\%$

Power factor: 0.95

THD: <10%

Connection: Terminal block L, N, PE (4 mm²), loop-in / loop-out

Rated current: 559–820 mA (depending on variant)

Power consumption: 122 W – 186 W

WORK PARAMETERS

Ambient temperature: -20°C to +60°C (IIB + H₂)
-40°C to +60°C (IIB)

Lifetime (L90): 72,600 h – 109,000 h

Protection rating: IP66

PHOTOMETRICAL PARAMETERS

Photometric reference: Measured at Ta = +25°C

Colour temperature: 5000K – 5700K (Cool White)

CRI: 70

HAZFLOOD 1-250180



HAXFLOOD 1-400300



HAZFLOOD 1-600400 ...600500

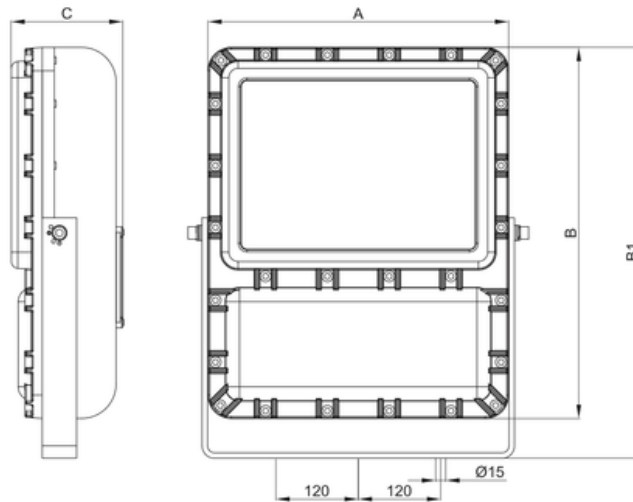


AMBIENT TEMPERAURES/ TEMPERATURE CLASS

CODE	(IIB + H ₂) -20°C to +40°C	(IIB + H ₂) -20°C to +60°C	(Only IIB) -40°C to +40°C	(Only IIB) -40°C to +60°C
HAZFLOOD 1-250120	T6 / 85°C	T5 / 100°C	T6 / 85°C	T5 / 100°C
HAZFLOOD 1-250180	T5 / 98°C	–	T5 / 99°C	–
HAZFLOOD 1-400200	T6 / 85°C	T5 / 100°C	T6 / 85°C	T5 / 100°C
HAZFLOOD 1-400300	T5 / 90°C	T5 / 100°C (+50°C amb)	T5 / 90°C	T5 / 100°C (+50°C amb)
HAZFLOOD 1-600300	T6 / 85°C	T5 / 100°C	T6 / 85°C	T5 / 100°C
HAZFLOOD 1-600400	T5 / 93°C	T4 / 103°C (+50°C amb)	T5 / 93°C	T4 / 103°C (+50°C amb)
HAZFLOOD 1-600500	T6 / 85°C	T5 / 100°C (+55°C amb)	T6 / 85°C	T5 / 100°C (+55°C amb)

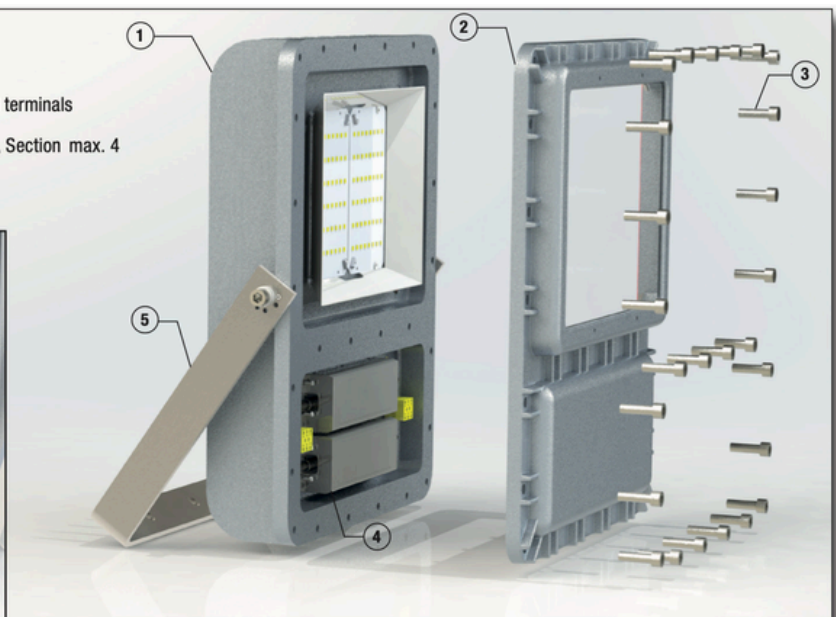
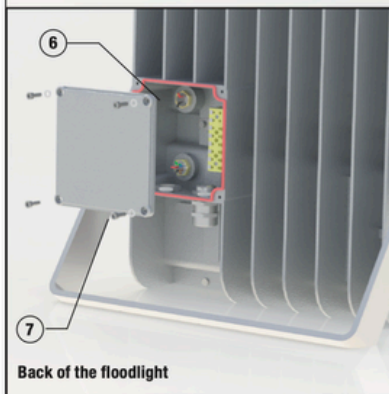
TYPE COMPARISONS

Code	A	B	B1	C	Watt	TA=+40°C	TA=+50°C	TA=+55°C	TA=+60°C	Weight (kg)	Dimensions (mm)
HAZFLOOD 1-250120	310	360	460	135	122W	T6/85°C	—	—	T5/100°C	13.5	470×345×150
HAZFLOOD 1-250180	310	360	460	135	180W	T5/98°C	—	—	—	13.5	470×345×150
HAZFLOOD 1-400200	360	444	520	145	186W	T6/85°C	—	—	T5/100°C	20.3	540×410×180
HAZFLOOD 1-400300	360	444	520	145	290W	T5/90°C	T5/100°C	—	—	20.3	540×410×180
HAZFLOOD 1-600300	440	540	600	165	290W	T6/85°C	—	—	T5/100°C	32.4	600×465×180
HAZFLOOD 1-600400	440	540	600	165	400W	T5/93°C	T4/103°C	—	—	32.4	600×465×180
HAZFLOOD 1-600500	440	540	600	165	500W	T6/85°C	T5/95°C	T5/100°C	—	32.4	600×465×180



Descriptions:

1. Body including optics and LED board
2. Cover with tempered glass
3. UNI5931 stainless steel screws
4. 'Ex e' housing complete with power supply and terminals
5. Mounting bracket
6. 'Ex e' housing complete with terminals L, N, PE, Section max. 4 mm², suitable for loop-in, loop-out
7. Cover equipped with captive screws



ELECTRICAL FEATURES

PARAMETER	HAZFLOOD 1- 250120	HAZFLOOD 1-250180	HAZFLOOD 1-400200
Power supply	100–277 Vac ±10%	110–277 Vac ±10%	110–277 Vac ±10%
Rated frequency	50–60 Hz ±5%	50–60 Hz ±5%	50–60 Hz ±5%
Power consumption	122 W	171 W	186 W
Connection	Direct to terminal L, N, PE (4 mm ²), loop-in/loop-out		
Power factor	>0.95	>0.95	>0.95
Rated current	559 mA	760 mA	820 mA
EMC	EN 55015, EN 61547, IEC 61000-3-2, IEC 61000-3-3, IEC 61000-4 series		
THD	<10%	<10%	<10%
Over-voltage protection	2 kV	6–10 kV	4 kV
Driver protections	Over-voltage, Over-current, Short-circuit protection		
Dimming (on request)	0–10 V / PWM	0–10 V / PWM	0–10 V

PHOTOMETRIC FEATURES

PARAMETER	HAZFLOOD 1-250120	HAZFLOOD 1-250180	HAZFLOOD 1-400200
LED	Cree	Cree	Cree
Viewing angle	60°	120°	120°
Type	Cool White	Cool White	Cool White
Colour temperature	~5700 K	~5000 K	~5000 K
CRI	>70	>70	>70
Instant restrike	YES	YES	YES
L90	>72,600 h	109,000 h	109,000 h
Lumen output	12,387 lm	19,340 lm	22,181 lm
Max light intensity	5,206 cd	9,128 cd	9,705 cd
Overall efficiency	101 lm/W	113 lm/W	119 lm/W

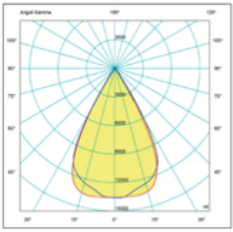
ELECTRICAL FEATURES

Parameter	HAZFLOOD 1-400300	HAZFLOOD 1-600300	HAZFLOOD 1-600400	HAZFLOOD 1-600500
Power supply	100–277 Vac ±10%	120–277 Vac ±10%	110–277 Vac ±10%	110–277 Vac ±10%
Rated frequency	50–60 Hz ±5%	50–60 Hz ±5%	50–60 Hz ±5%	50–60 Hz ±5%
Power consumption	290 W	290 W	400 W	500 W
Connection	Direct to terminal L, N, PE (4 mm ²), loop-in/loop-out			
Power factor	>0.95	>0.97	>0.95	>0.95
Rated current	1290 mA	1303 mA	1760 mA	2150 mA
EMC	EN 55015, EN 61547, IEC 61000-3-2, IEC 61000-3-3, IEC 61000-4 series			
THD	<10%	<10%	<10%	<10%
Over-voltage protection	6 kV	4 kV	4–6 kV	4–6 kV
Driver protections	Over-voltage, Over-current, Short-circuit protection			
Dimming (on request)	0–10 V / PWM	0–10 V	0–10 V / PWM	0–10 V / PWM

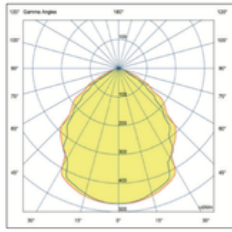
PHOTOMETRIC FEATURES

Parameter	HAZFLOOD 1-400300	HAZFLOOD 1-600300	HAZFLOOD 1-600400	HAZFLOOD 1-600500
LED	Cree	Cree	Cree	Cree
Viewing angle	120°	60°	120°	120°
Type	Cool White	Cool White	Cool White	Cool White
Colour temperature	~5000 K	~5700 K	~5000 K	~5000 K
CRI	>70	>70	>70	>70
Instant restrike	YES	YES	YES	YES
L90	109,000 h	>72,600 h	109,000 h	109,000 h
Lumen output	36,418 lm	30,799 lm	52,368 lm	60,658 lm
Max light intensity	15,912 cd	33,976 cd	20,577 cd	23,922 cd
Overall efficiency	125 lm/W	106 lm/W	131 lm/W	123 lm/W

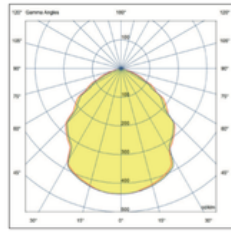
PHOTOMETRY



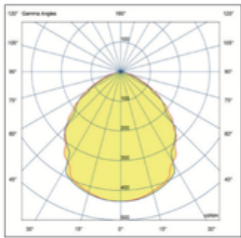
HAZFLOOD 1-250120
Luminous flux: 12387 lm



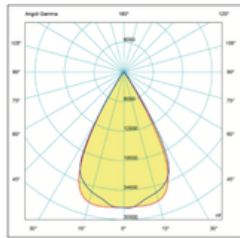
HAZFLOOD 1-250180
Luminous flux: 19340 lm



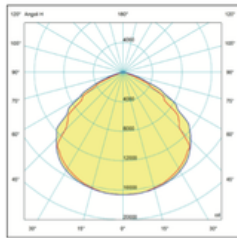
HAZFLOOD 1-400200
Luminous flux: 22181 lm



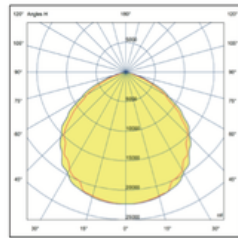
HAZFLOOD 1-400300
Luminous flux: 36418 lm



HAZFLOOD 1-600300
Luminous flux: 30799 lm



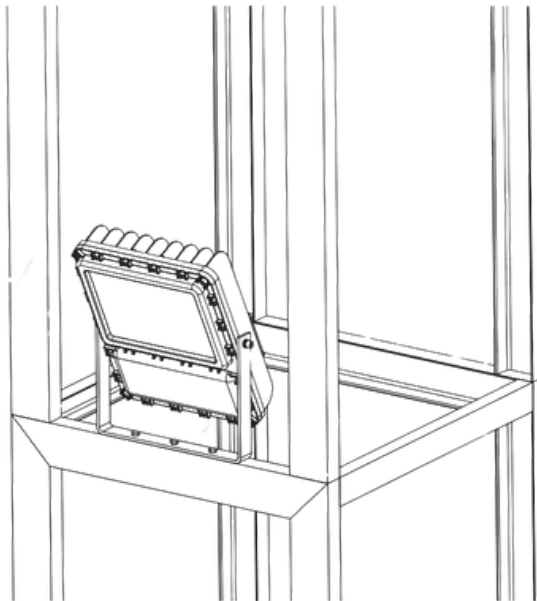
HAZFLOOD 1-600400
Luminous flux: 52368 lm



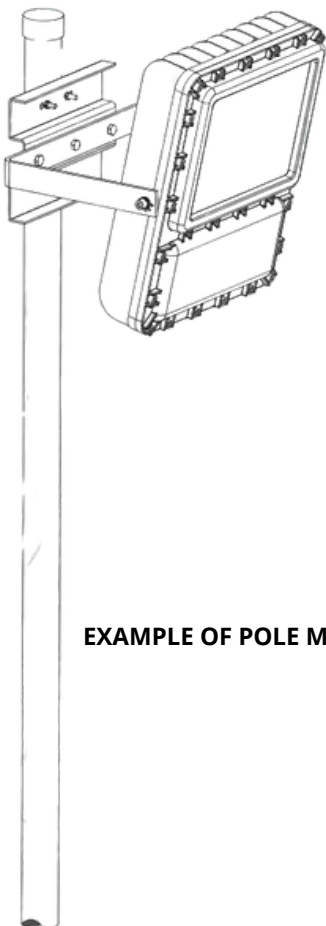
HAZFLOOD 1-600500
Luminous flux: 60658 lm

MOUNTING

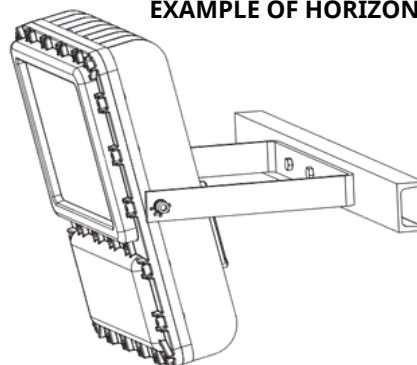
EXAMPLE OF VERTICAL MOUNTING ON STRUCTURE



EXAMPLE OF POLE MOUNTING



EXAMPLE OF HORIZONTAL MOUNTING ON STRUCTURE



ACCESSORIES & SPARE PARTS

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE
	Reinforced supporting bracket for mounting on movement facilities	HAZFLOOD 1-600...	Material: galvanised steel	G-558/1
	Frame for pole mounting	For all models	Material: galvanised steel	G-0534
	Swivel base for 360° adjustment	HAZFLOOD 1-400... / HAZFLOOD 1-600...	Material: aluminium RAL 7035 painted	G-326 + G-327
	Cable gland for nonarmored cables	HAZFLOOD 1-250...	std. range cable 6.3 ÷ 11.6	NAV20SIB
		HAZFLOOD 1-400... / SLED-ME-600...	std. range cable 11 ÷ 20	NAV25IB
	Front ring with glass	HAZFLOOD 1-250...	Low copper content aluminium alloy with tempered glass	G250-0622
		HAZFLOOD 1-400...		G400-0622
		HAZFLOOD 1-600...		G-0622
	Supporting bracket	HAZFLOOD 1-250...	Material: galvanised steel	G-901
		HAZFLOOD 1-400...		G-896
		HAZFLOOD 1-600...		G-558
	Electronic driver	HAZFLOOD 1-250120	100-277 Vac	LEDDEVL100
		HAZFLOOD 1-400200	110-277 Vac	LEDDEVL100/1/1
		HAZFLOOD 1-600300	120-277 Vac	LEDDSLED600
		HAZFLOOD 1-250180	110-277 Vac	LEDDEVL100/1/9
		HAZFLOOD 1-400300	100-277 Vac	LEDDSLED60i/1-990MA
		HAZFLOOD 1-600400	110-277 Vac	LEDDEVL100/1/12 (X2)
		HAZFLOOD 1-600500	110-277 Vac	LEDDEVL100/1/2 (X2)