



# HARSH & HEAVY INDUSTRIAL

*A Dedicated Range of Products for Industrial Applications*







Follow us

With over 160 shared years of experience, Chalmit, Hawke and GAI-Tronics have a reputation for designing the highest quality products for use in some of the world's harshest environments.



Using our experience supplying Luminaires, Cable Glands, Telephones and Enclosures to Marine, Oil & Gas and Petrochemical industries, we've developed a dedicated range of products designed to meet the exacting requirements of Harsh and Heavy Industrial applications.

Combining robust design with easy installation, low maintenance and extensive lifetimes; our industrial ranges provide the same performance and peace of mind that you expect from any Hubbell offering. Plus, with our One Hubbell package you can get all the products you need from our brands in one place.

Our experts are on hand to help you discover more about the range of products we can supply.

To find out more email us at [getintouchuk@hubbell.com](mailto:getintouchuk@hubbell.com)



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# Industrial Products

## Lighting

Our dedicated range of rugged and water tight LED luminaires are ideal for both hazardous and industrial applications. Consisting of emergency or non-emergency floodlights, bulkhead and linear luminaires, the range can be used to illuminate every aspect of a site including exterior and interior spaces.

## Cable Glands

Hawke's heavy duty industrial cable glands provide superior cable retention compared to standard unarmoured cable glands which is essential for tough industrial applications.. Not only do these glands come with IP68 protection as standard, to protect cabling even after continuous immersion in water, they have also undergone Shell's rigorous DTS-01 deluge test to assure the highest amount of protection.

## Enclosures

Hawke supplies quality, market leading enclosures for industrial applications. At the forefront of innovation for over 30 years, our ranges of enclosures have built a reputation for reliability, strength and value.

## Industrial Telephones

GAI-Tronics has been a pioneer in the development of industrial communication systems since 1946. Manufacturers of high-performance public address, intercom/paging and emergency notification systems for challenging environments to ensure reliable and efficient communication.





## Chalmit Luminaires





# PROTECTA III

LED Linear

The Industrial **Protecta III** is a high quality LED linear delivering unparalleled performance and all the recognised benefits of the existing Protecta range; a proven robust enclosure, excellent IP and low maintenance features which are key to heavy industrial and harsh marine environments.

Expected useful life to 70% of the initial lumens (L70) is a market leading 154,000 hours at 55°C and, combined with a lightweight geartray design utilising fully replaceable LED strips and driver, we can deliver a unique product with effective long term maintenance capabilities.



## Mounting Options

Ceiling. Wall. Suspended. Pole/Stanchion.

## Standard Specification

Protecta III LED Linear

Enclosure	GRP body with polycarbonate cover
Geartray	White coated zintec
Entry	4 x M20 cable entries - 2 at each end
Termination	3 core 4mm <sup>2</sup> max conductor with looping and 16A rating through wiring [4 core on Emergency]
Installation	2 x M8 moulded-in stainless steel bushes located on the rear of the body
Control Gear	Electronic Driver
Colour Temperature (CCT)	4000K (Neutral White)
Colour Rendering Index (Ra)	>80
Maintenance	Quick release diffuser clamp and hinged cover
LED Lifetime @ 55°C Ambient	L70 > 154,000hrs
System Life	120,000hrs @ 25°C [excluding battery]
Battery	Internal Ni-Cd (6V) [Emergency version only]
Emergency Duration	3 Hours (O2L version = 33% output, O4L version = 23% output, O7L version = 12% output)
Impact Protection	IK10
Ingress Protection	IP66/67 to EN 60529
Surge Protection	O2L = 1kV; O4L/O7L = 4kV (line to line)
Electrical Supply	120-277V AC, 50/60Hz 127-300V DC [O4L/O7L]; 127-250V DC [O2L] 220-240V AC, 50/60Hz [Emergency version only]

*This product is also available certified for UL markets if required. Please ask for details.*

## Features

- Highly Energy Efficient
- Screwless mains terminals
- DTS-01 deluge tested
- Battery monitoring and automatic self test
- 120,000 maintenance free hours at 25°C
- Simple rugged construction



Std. Cat No.	Delivered Output	Power Consumption	Ambient °C	Weight
PR3I/02L/LE	2296 lm	16W	-40 to +55	4.8kg
PR3I/04L/LE	3526 lm	24W	-40 to +55	4.9kg
PR3I/07L/LE	6690 lm	44W	-40 to +55	8.2kg
PR3I/02L/LE/EM	2296 lm	20W	-25 to +50	5.8kg
PR3I/04L/LE/EM	3526 lm	26W	-25 to +50	5.9kg
PR3I/07L/LE/EM	6690 lm	49W	-25 to +50	9.2kg

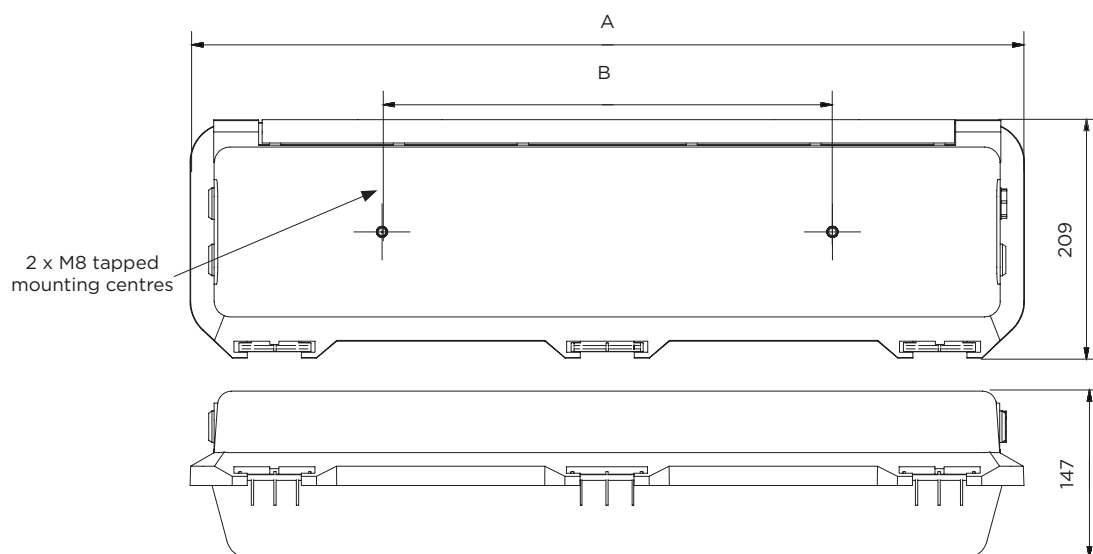
### Options - Suffix to Catalogue No.

/M25	M25 cable entries	/5K	5000K (Cool White) LED Strips
/LBE	Looping both sides	/3K	3000K (Warm White) LED Strips
/BP	Nickel plated brass plugs (x3)	/DM	DALI Dimmable driver (04L and 07L only)
/EL	Extra live termination facility (to match emergency circuit)	/NST	Non self test inverter (EM only)
/OD	Internal Opal diffusers (approx. 20% reduction in output)	/SC	Screwed connection terminal block (up to 6mm <sup>2</sup> conductors)
/JSVS	Inotec CBS type J-SV Modul/S	/JSVT	Inotec CBS type J-SV Modul T/S

Note: When /JSVT or /JSVS are selected the temperature rating is adjusted to  $-15^{\circ}\text{C} < T_a < +50^{\circ}\text{C}$

### Accessories *Accessories should be ordered separately*

	Order Code
Pole mounting bracket assembly (38-42mm diameter poles)	SPOL4-100001
Pole mounting bracket assembly (48-52mm diameter poles)	SPOL4-100002
Pole mounting bracket assembly (58-62mm diameter poles)	SPOL4-100003
Hook type ceiling bracket assembly	SPRO4-0005
Flush mounted wall bracket assembly	SPRO4-0006
Ceiling bracket assembly	SPRO4-0002
Standard 2ft wall mounting outreach bracket (use with SPOL4-100001)	NPRO4-0008
Standard 4ft wall mounting outreach bracket (use with SPOL4-100001)	NPRO4-0012
Eyebolt mounting assembly	SPRO5-0005
Internal Opal Diffuser Strips (02L & 04L)	S3004-100005
Internal Opal Diffuser Strips (07L)	S3004-100006



DIM	02L/04L	07L
DIM A	742	1352
DIM B	400	700





# STERLING III

LED Linear

The **Sterling III** LED is a high quality, cost effective linear which realises further power savings over the Sterling II family, without impacting on the luminaire performance.

Featuring a lightweight, single geartray design allows for ease of installation and maintenance, and is available with or without internal opal diffusers to suit any industrial application.



### Mounting Options

Ceiling. Wall. Suspended. Pole. Handrail

## Standard Specification

Sterling III LED Linear

Enclosure	GRP with prismatic polycarbonate diffuser and stainless steel retaining clips
Geartray	White coated zintec
Entry	2 x 20mm diameter clearance holes
Termination	4 core 4mm <sup>2</sup> max conductor with through wiring 16A rating
Installation	Two clearance holes for M8 fasteners located on rear of body, sealing washers provided
Control Gear	Electronic Driver
Colour Temperature (CCT)	4000K (Neutral White)
Colour Rendering Index (Ra)	>80
Maintenance	Access via diffuser secured by quick release stainless steel clips
Battery	Internal Ni-Cd (6V) [Emergency version only]
Emergency Duration	3 Hours (O3L = 26%; O6L = 14%; O9L = 10%)
Ingress Protection	IP65 to EN 60529
Surge Protection	4kV line to line, 6kV line to earth
Electrical Supply	120-277V AC, 50/60Hz 127-300V DC 220-240V AC, 50/60Hz [Emergency version only]

## Features

- Highly Energy Efficient
- Battery management and automatic self test
- Multiple beam distributions available
- 155,000 maintenance free hours at 45°C (L70)

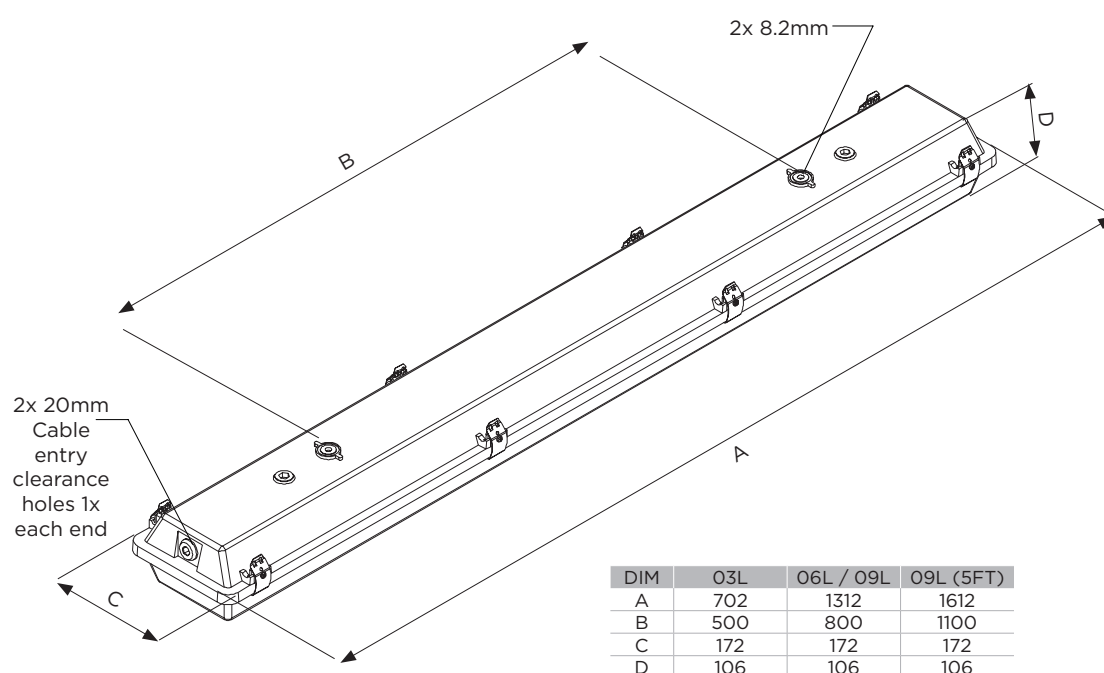
Std. Cat No.	Delivered Output	Power Consumption	Ambient °C	Weight
ST3I/O3L/LE	3592 lm	23W	-20 to +55	2.8kg
ST3I/O6L/LE	6241 lm	42W	-20 to +55	4.4kg
ST3I/O9L/LE	8798 lm	63W	-20 to +45	5.0kg
ST3I/O3L/LE/EM	3592 lm	26W	-20 to +50	3.8kg
ST3I/O6L/LE/EM	6241 lm	49W	-20 to +50	5.2kg
ST3I/O9L/LE/EM	8798 lm	65W	-20 to +45	5.8kg

### Options - Suffix to Catalogue No.

/OD	Internal Opal diffusers (approx. 20% reduction in output)	/NST	Non self test inverter (EM only)
/DM	DALI Dimmable driver	/5K	5000K (Cool White) LED Strips
/5FT	5ft body (O9L model only)	/3K	3000K (Warm White) LED Strips

### Accessories *Accessories should be ordered separately*

	Order Code
Pole mounting bracket assembly (38-42mm diameter poles)	SPOL4-100004
Pole mounting bracket assembly (48-52mm diameter poles)	SPOL4-100005
Pole mounting bracket assembly (58-62mm diameter poles)	SPOL4-100006
Hook type ceiling bracket assembly	S3004-100003
Ceiling bracket assembly	S3004-100001
Flush wall mounting bracket assembly (30° luminaire rotation)	S3004-100004
O3L wall mounting outreach bracket (use with SPOL4-100004)	NPRO4-0008
O6L/O9L wall mounting outreach bracket (use with SPOL4-100004)	NPRO4-0012
Internal Opal Diffuser Strips (O3L)	S3004-100005
Internal Opal Diffuser Strips (O6L & O9L)	S3004-100006







# HBN 106N

LED Floodlight

The **HBN106N** is an outstanding luminaire, with a variety of beam options to suit any industrial application.

Up to four modules can be interlinked to increase the output without impacting on the product performance, and provide an effective replacement for conventional HID floodlights, up to 250W.



### Mounting Options

Floodlight. Pendant. Bulkhead. High Bay. Pole/Column. Road Lighting.

## Standard Specification

HBN106N LED Floodlight

Ambient °C	-20 to +55
Enclosure	LM6 Aluminium with epoxy powder finish (RAL 7035) and Polycarbonate diffuser
Entry	2 x M20 cable entries
Termination	3 core 4mm <sup>2</sup> max. conductor with looping
Installation	Stirrup mounting bracket
Control Gear	Electronic Driver
Colour Temperature (CCT)	Refer to Ordering Matrix
Colour Rendering Index (Ra)	>70
Maintenance	M8 Hex Head and M6 SKT Head
Ingress Protection	IP66/67 to EN 60529
Surge Protection	4kV line to line, 6kV line to earth
Electrical Supply	Refer to Ordering Matrix

## Features

- Highly Energy Efficient
- Instant on crisp white light output
- Modular design allowing up to four interlinked luminaires, each providing a delivered output > 5500lm
- Lower power consumption than HID lamps
- Lightweight (6kg per module) lighting solution
- >150,000 maintenance free hours at 25°C (L70)

## HDN106N

Version <sup>1</sup>	Voltage	Beam Pattern <sup>2</sup>	Mount	Light (CCT)	Cable Entries	Material & Paint	Options
<b>0</b> - 24 LEDs [26W] <b>1</b> - 48 LEDs [43W] <b>2</b> - 96 LEDs [87W] <b>3</b> - 144 LEDs [129W] <b>4</b> - 192 LEDs [174W]	<b>H</b> - 100-254V AC <b>L</b> - 18-54V AC/DC	<b>N</b> - Narrow (6565lm) <b>M</b> - Medium (5882lm) <b>W</b> - Wide (5624lm) <b>X</b> - Extra Wide (5547lm)	<b>H</b> - Horizontal Mount [single unit] <b>V</b> - Vertical Mount [multiple units] <b>C</b> - Ceiling Mount	<b>W</b> - Cool White (5000K)	<b>0</b> - M20 <b>5</b> - M25 <b>OBP</b> - M20 Brass Nickel Plated Plugs <b>5BP</b> - M25 Brass Nickel Plated Plugs	<b>04</b> - RAL 7035 (Grey)	<b>FG</b> - Glass front cover <sup>3</sup> <b>RCG</b> - Rapid Connection Gland for single entry <sup>4</sup> <b>RCGL</b> - Rapid Connection Glands for looping <sup>4</sup>

<sup>1</sup> Power consumption provided in square brackets

<sup>2</sup> Delivered outputs based on single module 48LED version

<sup>3</sup> Standard Cover Front Clear Polycarbonate (No Abbreviation required)

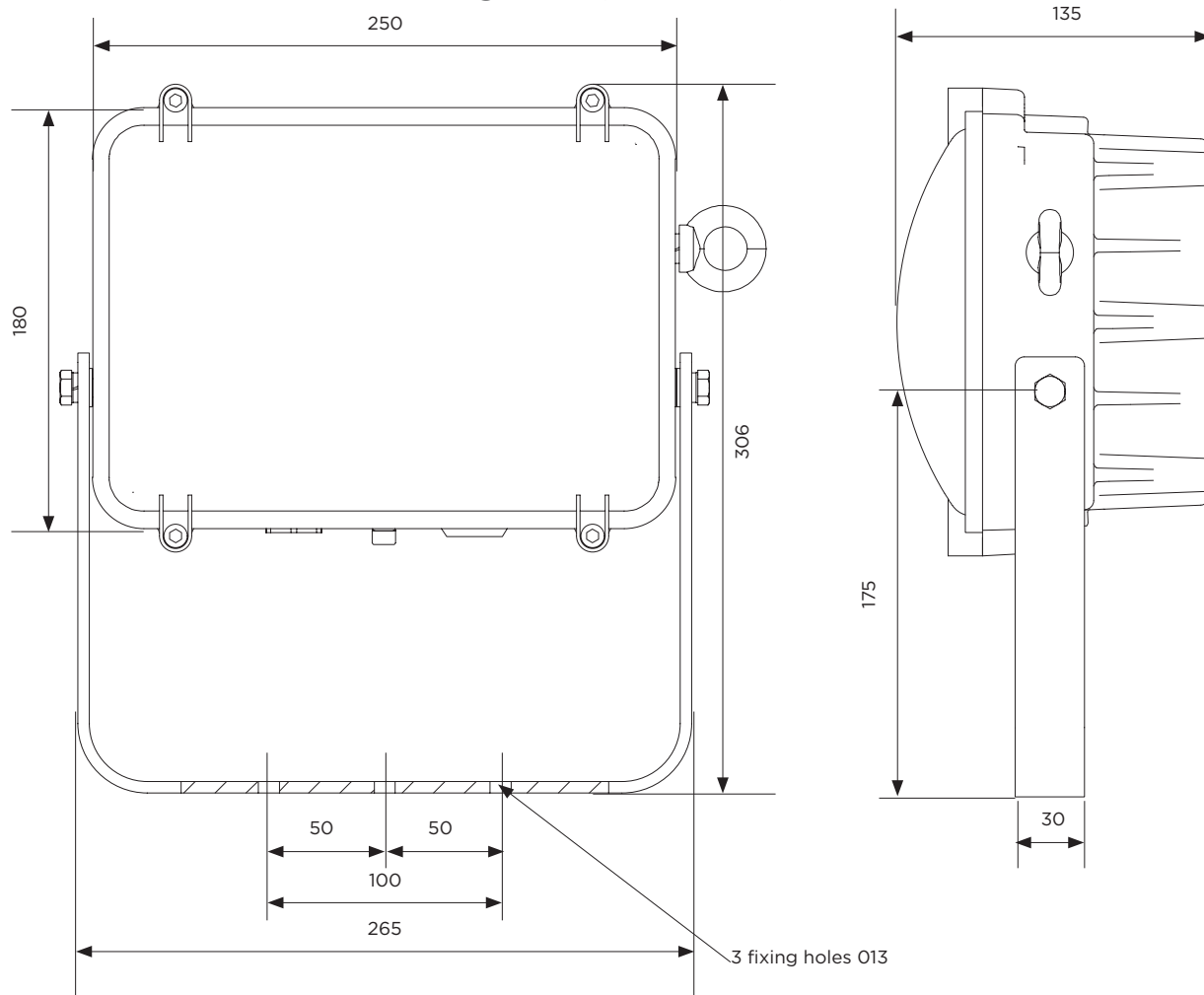
<sup>4</sup> Factory fitted with 4pin Rapid Connection Gland entry only. Purchaser to supply appropriately sized RCG body as determined by site specific cable requirement.

Typical ordering reference: **HDN106N1HWHW004FG**

## Accessories *Should be ordered separately*

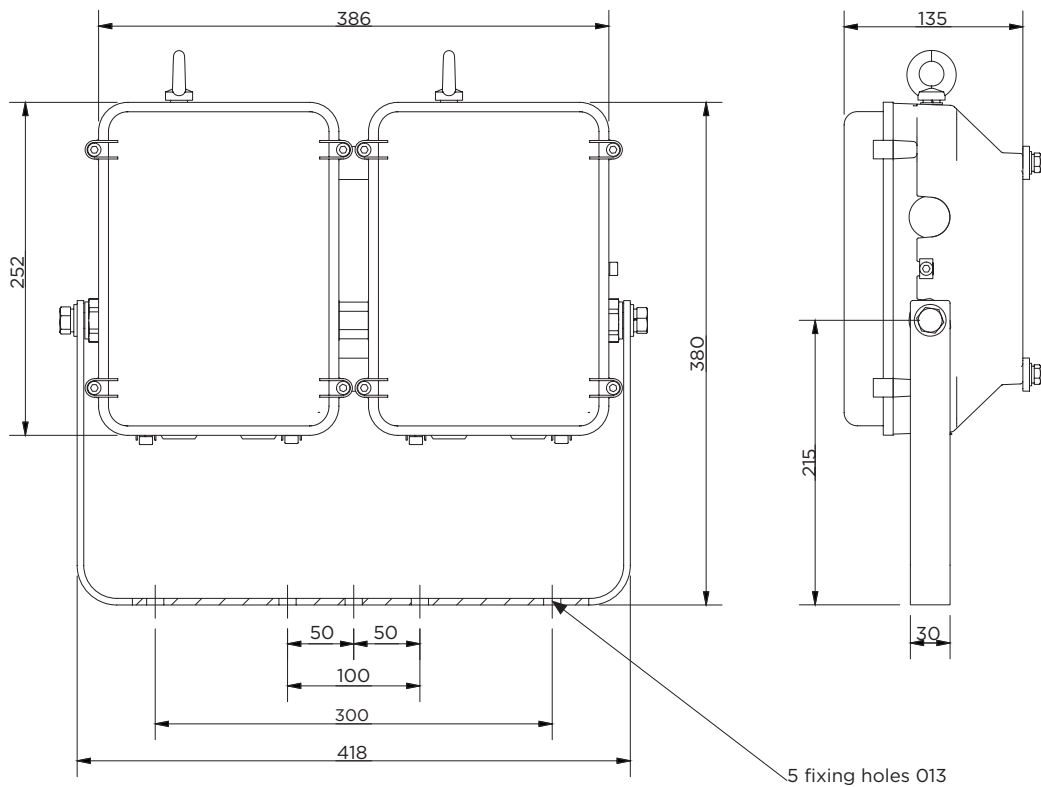
	Order Code
Crane Damper Bracket (96 LEDs Twin Module)	<b>SHDL1-000002</b>
Crane Damper Bracket (144 LEDs Triple Module)	<b>SHDL1-000003</b>

### Single unit (24/48 LEDs)

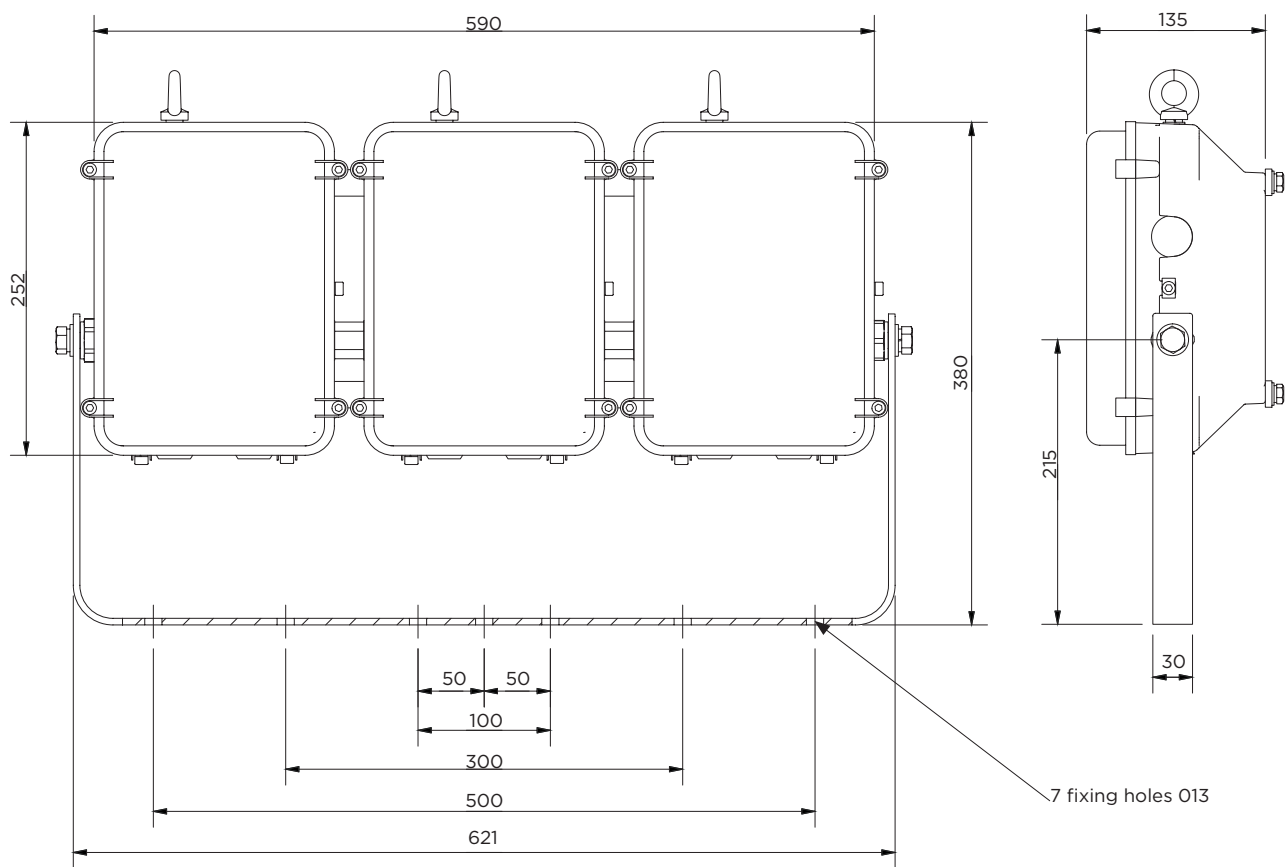




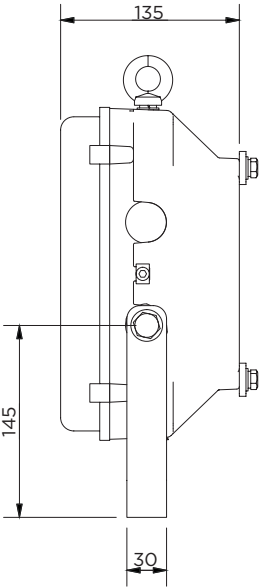
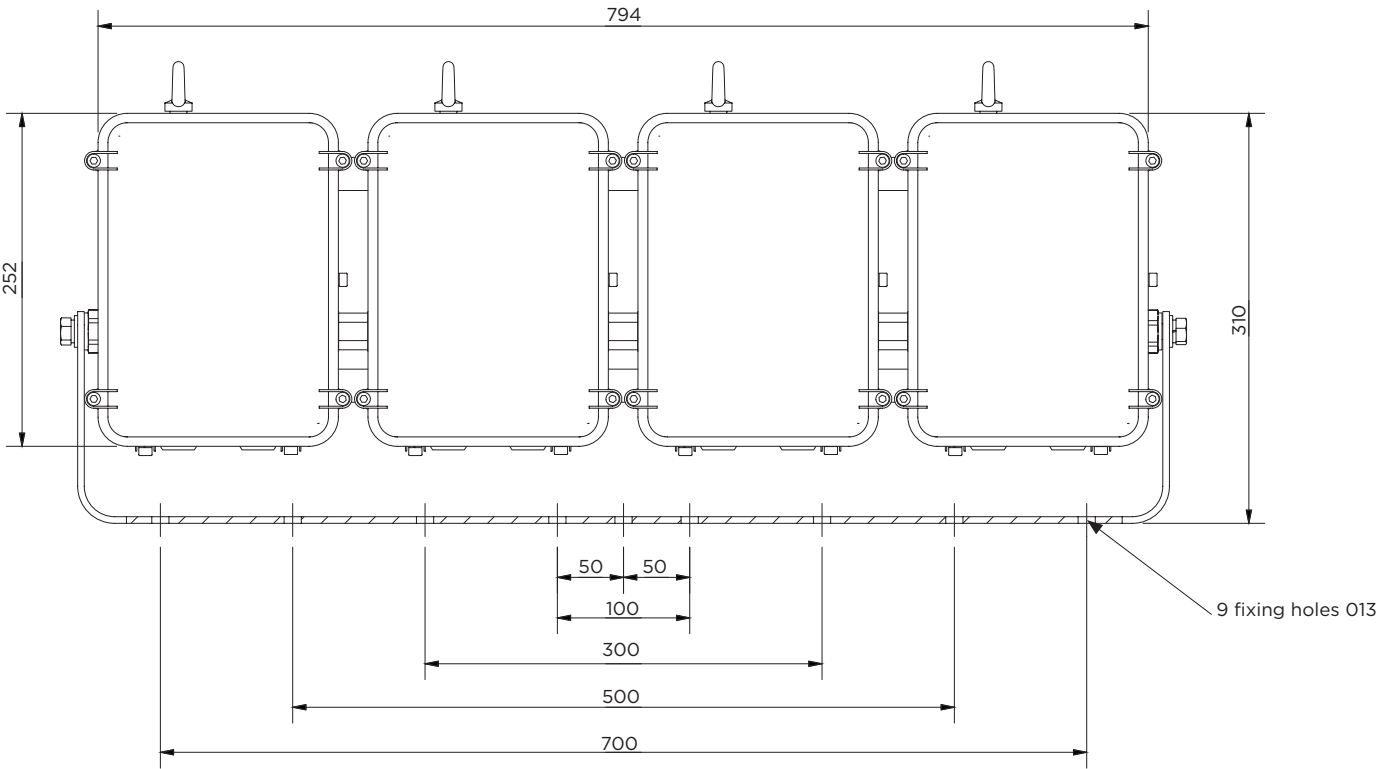
Double unit (96 LEDs)



Triple unit (144 LEDs)



Quadruple unit (192 LEDs)







# HBN 106NE

LED Floodlight

The **HBN106NE** is a distinctive Emergency LED luminaire allowing up to three modules interlinked, providing an effective and efficient replacement to traditional battery-backed luminaires.

With a wide ambient range and multiple beam options available, this is a truly global industrial solution for any application where Emergency lighting is required for a period of 90mins or 3hrs.



### Mounting Options

Floodlight. Pendant. Bulkhead. High Bay. Pole/Column. Road Lighting.

## Standard Specification

HBN106NE LED Floodlight

Ambient °C	-20 to +55
Enclosure	LM6 Aluminium with epoxy powder finish (RAL 7035) and Polycarbonate diffuser
Entry	2 x M20 cable entries
Termination	4 core 4mm <sup>2</sup> max. conductor with looping
Installation	Stirrup mounting bracket
Control Gear	Electronic Driver
Colour Temperature (CCT)	Refer to Ordering Matrix
Colour Rendering Index (Ra)	>70
Maintenance	M8 Hex Head and M6 SKT Head
Emergency Duration	90mins (75%) or 3hrs (37.5%)
Ingress Protection	IP66/67 to EN 60529
Surge Protection	4kV line to line, 6kV line to earth
Electrical Supply	100-254V AC 50/60Hz

## Features

- ◆ Highly Energy Efficient
- ◆ Instant on crisp white light output
- ◆ Modular design allowing up to three interlinked luminaires, each providing a delivered output > 5500lm
- ◆ Lower power consumption than HID lamps
- ◆ Lightweight (9kg per Emergency module) lighting solution
- ◆ >150,000 maintenance free hours at 25°C (L70)

HDN106N					
Version <sup>1</sup>	Beam Pattern <sup>2</sup>	Light (CCT)	Cable Entries	Material & Paint	Options
<b>E</b> - EM (48 LEDs) [62W]	<b>N</b> - Narrow (6565lm)	<b>W</b> - Cool White (5000K)	<b>O</b> - M20	<b>O4</b> - RAL 7035 (Grey)	<b>FG</b> - Glass front cover <sup>3</sup>
<b>ES</b> - EM/Std (96 LEDs) [105W]	<b>M</b> - Medium (5882lm)		<b>5</b> - M25		<b>BNI</b> - Batteries Not Included <sup>4</sup>
<b>EE</b> - EM/EM (96 LEDs) [122W]	<b>W</b> - Wide (5624lm)		<b>OBP</b> - M20 Brass Nickel Plated Plugs		<b>RCG</b> - Rapid Connection Gland for single entry <sup>5</sup>
<b>SES</b> - Std/EM/Std (144 LEDs) [149W]	<b>X</b> - Extra Wide (5547lm)		<b>5BP</b> - M25 Brass Nickel Plated Plugs		<b>RCGL</b> - Rapid Connection Glands for looping <sup>5</sup>
<b>ESE</b> - EM/Std/EM (144 LEDs) [165W]					
<b>EEE</b> - EM/EM/EM (144 LEDs) [184W]					

<sup>1</sup> Power consumption provided in square brackets

<sup>2</sup> Delivered outputs based on single module 48LED version

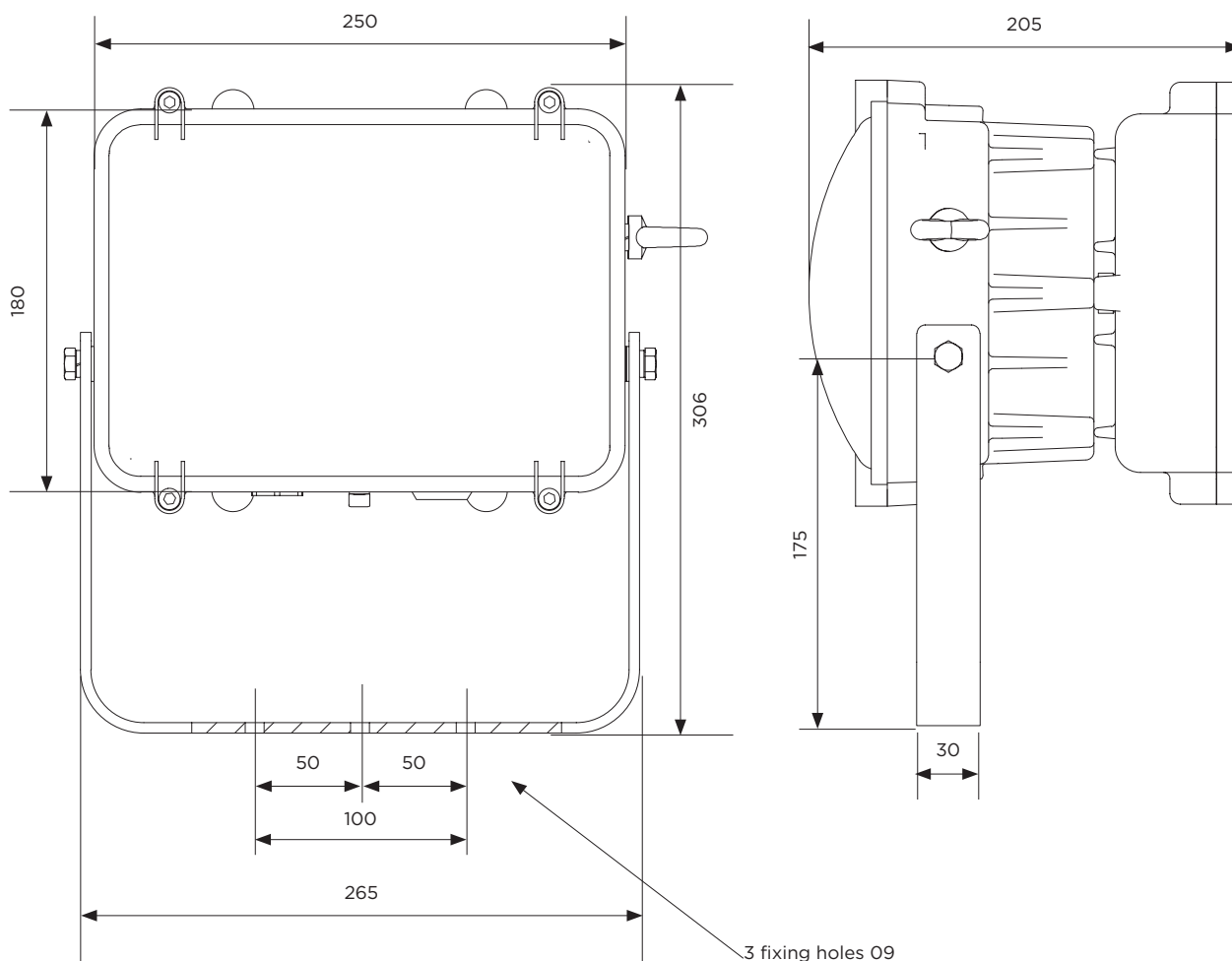
<sup>3</sup> Standard Cover Front Clear Polycarbonate (No Abbreviation required)

<sup>4</sup> Battery assembly HDLAL11131S to be ordered separately when required by site.  
Qty 1 HDLAL11131S assembly per emergency unit e.g. HDL106NESE\*\*\* requires Qty 2 HDLAL11131S.

<sup>5</sup> Factory fitted with 4pin Rapid Connection Gland entry only. Purchaser to supply appropriately sized RCG body as determined by site specific cable requirement.

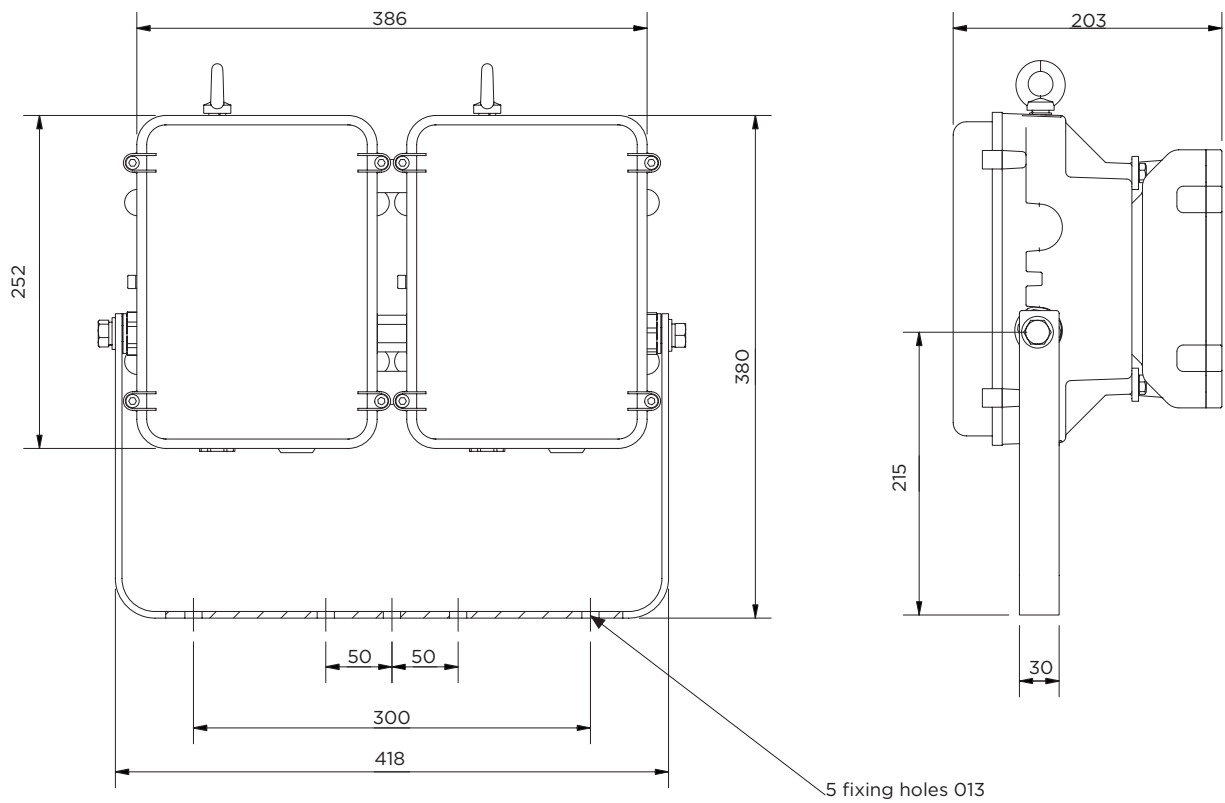
Typical ordering reference: **HDN106NESMW004FG**

### Single unit (48 LEDs)

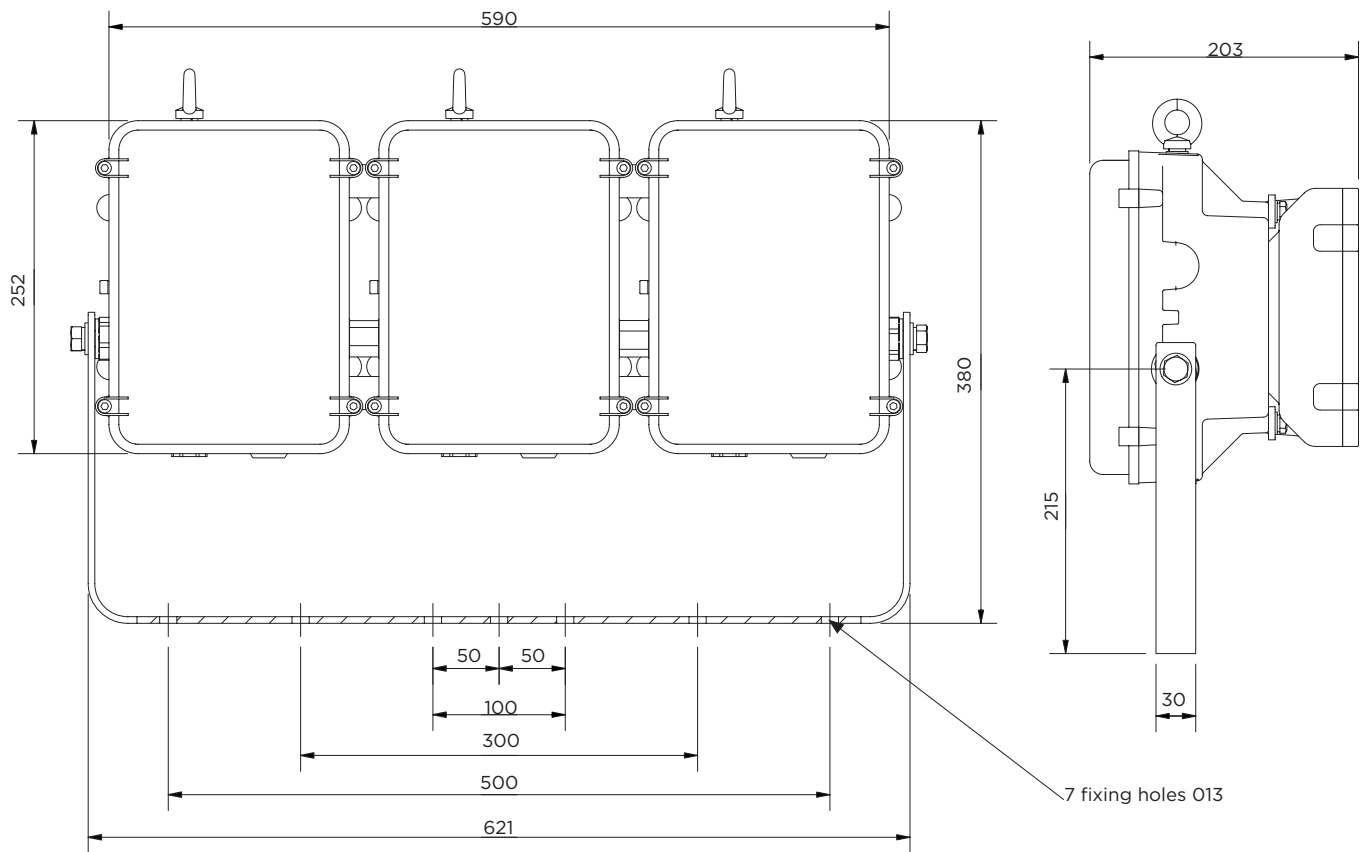




Double unit (96 LEDs)



Triple unit (144 LEDs)



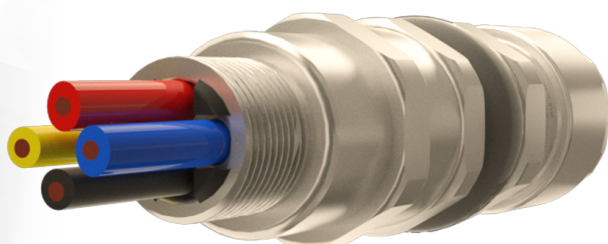


## More than a Cable Gland

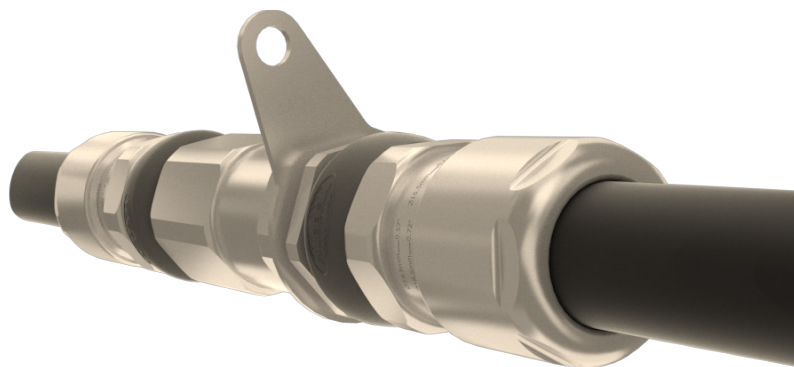
The ultimate hybrid of Cable Gland and Connector makes Hawke's **Rapid Connection Gland** the perfect partner to Chalmers LED luminaires.

The **501/RCG** (Rapid Connection Gland) combines the features of Hawke's market leading Cable Gland range with the plug and play benefits of a connector.

The **Rapid Connection Gland** provides rapid termination and disconnection in a cost-effective package, reducing ownership expenses by decreasing the time it takes to carry out essential inspection, maintenance and repair.



The **RCG Coupler** provides the means to extend an existing cable without the need to use a junction box, or a more permanent splice kit. Combining two **RCG cable glands** and a simple termination system makes the upgrading of installations fast and easy.



View Hawke's full range of products at  
[www.hubbell.com/hawke](http://www.hubbell.com/hawke)



# ARRAN X

LED Floodlight

The **Arran X** is a new, revolutionary, energy efficient floodlight designed to withstand the most industrial harsh environments, without sacrificing light quality, durability, or safety. With a robust clamshell design, including a captive swing barrel latch, that offers complete and unimpeded access to the wiring chamber, which allows for a quick and easy installation. Multiple optic types are also available, so that light distribution can be tailored to application need.

Intelligent battery backup is also available as an option which includes Self-Testing feature which runs a 30 second test every 30 days and a 90 or 180 minute test every twelve months. Bi-coloured LED indicator provides a visual fault detection and charging status. With a greater range of output and optic options the Arran X offers a complete package for all Industrial floodlight applications.



International Approvals

## Mounting Options

Floodlight. Pole/Column. High Bay

## Standard Specification

Arran X LED Floodlight

Enclosure	Marine grade Copper-Free Aluminium body with standard glass diffuser. Epoxy powder finish (Grey)
Entry	2 x M20 cable entries
Termination	3 core 6mm <sup>2</sup> max. conductor with looping
Installation	Stirrup mounting bracket
Control Gear	Electronic Driver
Optical Distribution	Wide Beam
Colour Temperature (CCT)	5000K (Cool White)
Colour Rendering Index (Ra)	>70
Maintenance	Easy Install with clamshell splice box for unimpeded wiring access. Slotted screws
LED Lifetime @ 60°C Ambient	L70>96,800hrs
System Lifetime @ Ambient	>100,000hrs @ 25°C (excluding battery)
Battery	Lithium Iron Phosphate
Emergency Duration	1000 lumens for 90 minutes or 500 lumens for 3 hours
Impact Protection	IK10
Ingress Protection	IP66
Surge Protection	6kV & 4kV for 30L
Electrical Supply	120-277V AC 50/60Hz

## Features

- ◆ Easy Install with clamshell splice box for unimpeded wiring access
- ◆ Optics options including Asymmetric, Narrow and Extra Wide
- ◆ Front access cover with screwless mains terminals for easy termination
- ◆ Intelligent battery backup with built in self-monitoring and testing
- ◆ Light weight at 11.3kg



Std. Cat No.	Delivered Output	Power Consumption	Ambient °C	Weight
ARXI/07L/LE	7407 lm	63W	-50 to +55	11.3kg
ARXI/10L/LE	10264 lm	91W	-50 to +55	11.3kg
ARXI/14L/LE	14133 lm	118W	-50 to +55	11.3kg
ARXI/20L/LE	18954 lm	178W	-50 to +55	11.3kg
ARXI/30L/LE	28423 lm	269W	-50 to +55	11.3kg
ARXI/07L/LE/EM	7407 lm	63W	-20 to +50	12.03kg
ARXI/14L/LE/EM	14133 lm	118W	-20 to +50	12.03kg

Standard fitting supplied without optics with a wide beam distribution

ARXI/07L/LE/EM 1000 lumens 90 minute emergency duration

ARXI/14L/LE/EM 1000 lumens 90 minute emergency duration

Glass lens as standard

## Intelligent Battery Backup

- Self-diagnostics monitors LED luminaire status
- Self-Test feature automatically runs a 1 month and bi-yearly functional test
- LED indicator provides visible fault detection and charging status
- User initiated 1, or 90-minute system test feature
- 15 minute re-transfer delay
- Automatic unit transfer when there is an unintentional drop in voltage. (below 80% of nominal AC input voltage)

## Options - Suffix to Catalogue No.

/M25	M25 cable entries	/3H	3 hour battery duration (500 lumens)
/AS	Asymmetric distribution	/3K	3000K (Warm White) LEDs
/N	Narrow Beam distribution	/ADE	Amber LED Turtle friendly*
/X	Extra Wide Beam distribution	/DM	DALI Dimmable driver**

\* only available with the 14L and 30L options

\*\* Available up to the 20L option

Optics are not available on the 30L fitting

## Accessories *order separately*

	Order Code
Wire Guard 316 Stainless Steel (not used with KFLX-DARK)	KFLX-GUARD
Anti Glare Shield Visor that blocks upward light when mounting at angles above 45° (not used with KFLX-GUARD)	KFLX-DARK
Pole Mounting Bracket Assembly (48-70mm Pole Diameter)	S2400-0002



# ECLIPSE X

LED Bay Light

The Eclipse X is designed to minimise installation and maintenance activities whilst increasing photometric and electrical efficiency. The detachable hinge system allows installation and wiring to the mounting and terminal arrangement without the need to support the body, control gear and lamp assembly; enabling the installation process to be completed by a single installer.

The Eclipse X can also be easily retro-fit into existing Eclipse II applications with minimal installation time. Next generation energy efficient control gear and LED array provides the Eclipse X with sustainable credentials required of a modern LED fixture. With a range of lumen outputs, mounting options and a copper-free (epoxy painted) aluminium housing the Eclipse X will operate efficiently and effectively in the most arduous of environments.

CE

International Approvals

## Mounting Options:

Ceiling. Stanchion. Wall. Pendant. High Bay. Medium Bay. Low Bay.

## Standard Specification

Eclipse X Industrial LED Bay Light

Enclosure	Copper free aluminium enclosure, epoxy painted (RAL 7008) with glass globe and diffuser guard
Cable Entry	4 x M20 cable entries c/w 3x plastic blanking plugs and 1x plastic travel plug
Termination	3 core 4mm <sup>2</sup> max. conductor with looping
Installation	Surface/Ceiling mounted 2 x 8.5mm dia holes
Control Gear	Electronic Driver
Optical Distribution	Wide Beam
Colour Temperature (CCT)	5000K (Cool White)
Colour Rendering Index (Ra)	>70
Maintenance	Barrel nut fastener
LED Lifetime @ 55°C Ambient L70	>100,000 hours
Ingress Protection	IP66
Surge Protection	6kV
Electrical Supply	120-277V AC, 50/60Hz

## Features

- ◆ Highly Energy Efficient up to 134 lm/W
- ◆ Instant on crisp white light output
- ◆ Simple retrofit to existing installations
- ◆ New light weight technology
- ◆ Wide ambient applications from -40°C to +55°C
- ◆ L70 greater than 100,000 hours at 55°C

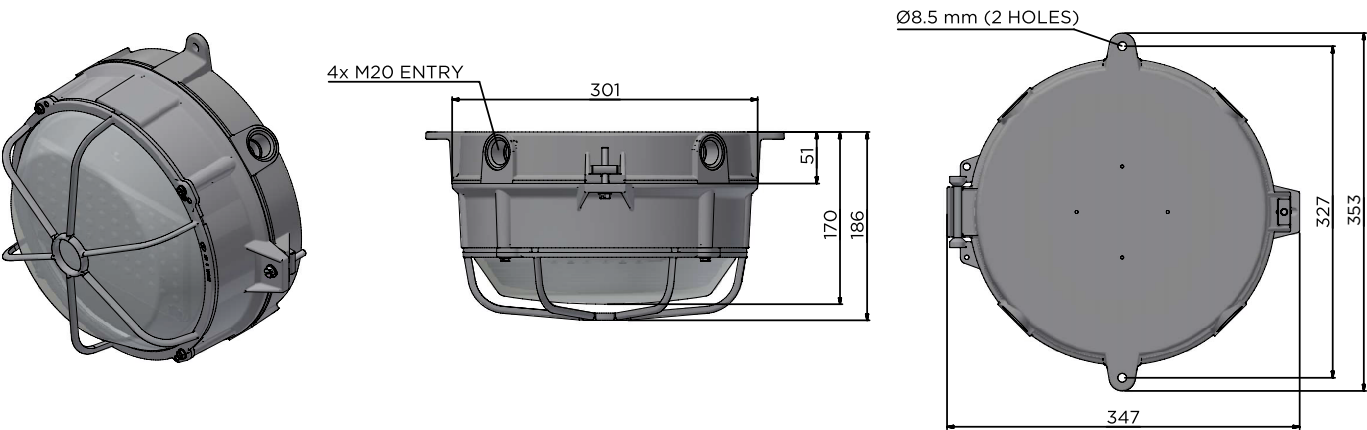
Std. Cat No.	Delivered Output	Power Consumption	Ambient °C	Weight
ECXI/05L/LE	5,052 lm	40W	-40 to +55	4.9 kg
ECXI/09L/LE	9,430 lm	75W	-40 to +55	4.9 kg
ECXI/18L/LE	17,873 lm	140W	-40 to +55	6.1 kg
ECXI/28L/LE	26,977 lm	250W	-40 to +55	11.5 kg

Note: other ouptputs may be availble upon request.

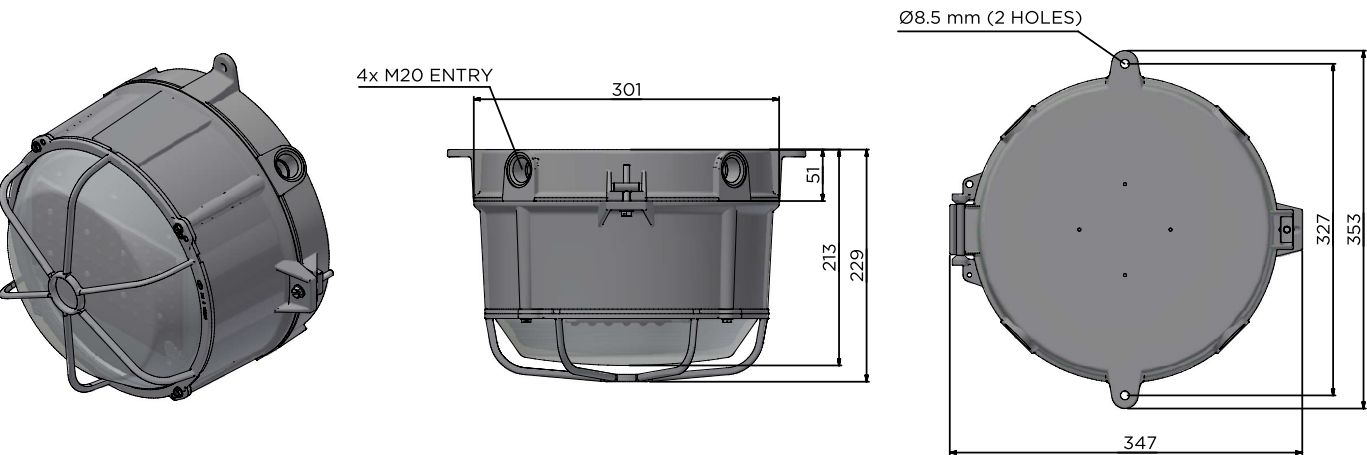
Options - Suffix to Catalogue No.			
/M25	M25 Cable entries (surface mount only)	/ST	Stanchion mounted version (25°)
/WM	Wall mounted version (2xM20 and 2xM25 entries)	/PE	Pendant mounted version (for M25 conduit)

Accessories (order separately)	
Dome Reflector	Order Code SECXO-0001
30° Angled Reflector	SECXO-0002

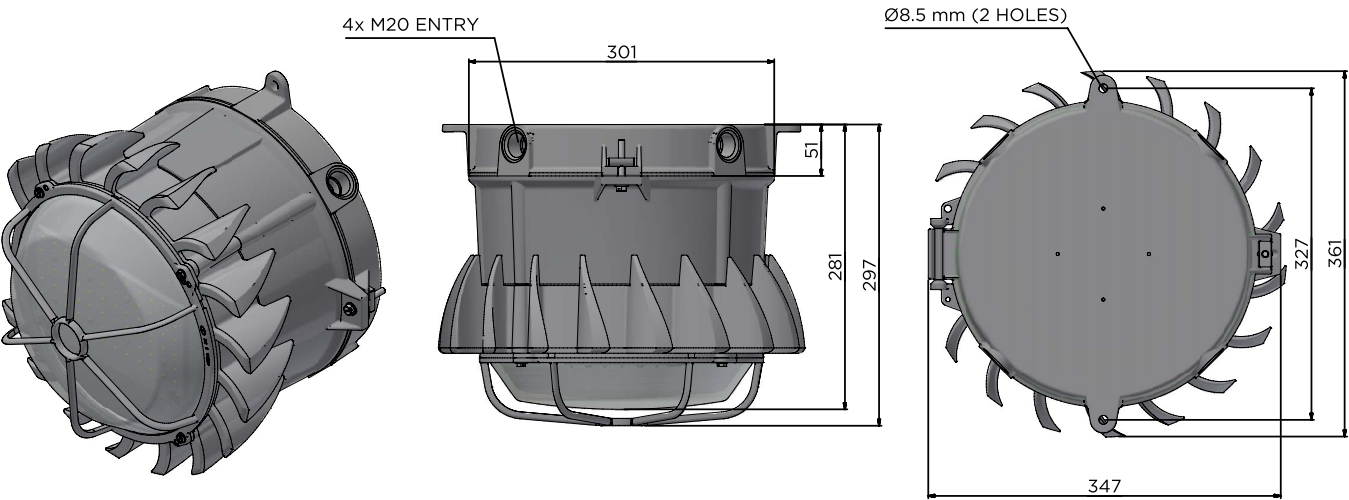
ECXI/05L/LE & ECXI/09L/LE



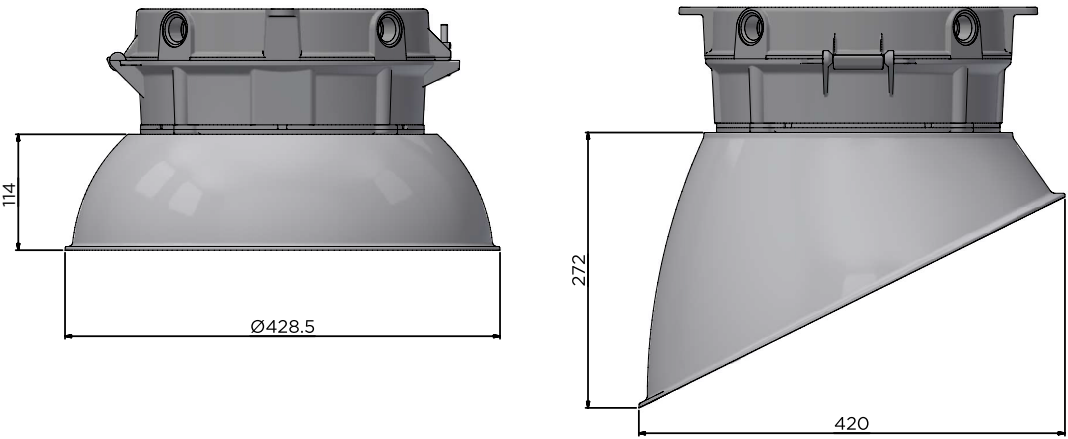
ECXI/18L/LE



ECXI/28L/LE



Reflector Options



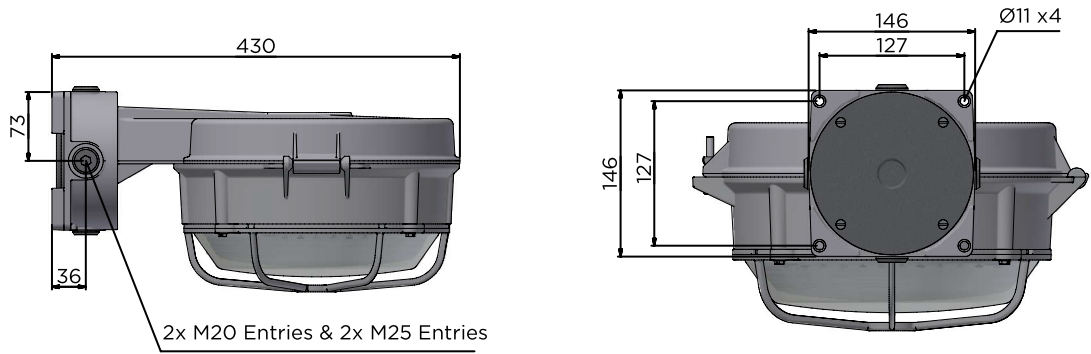
Dome Reflector  
(SECXO-0001)

Angled Reflector  
(SECXO-0002)

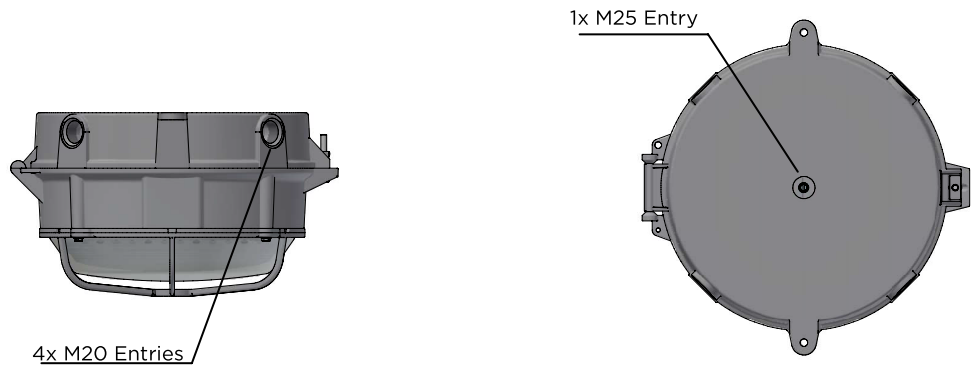


# Mounting Options

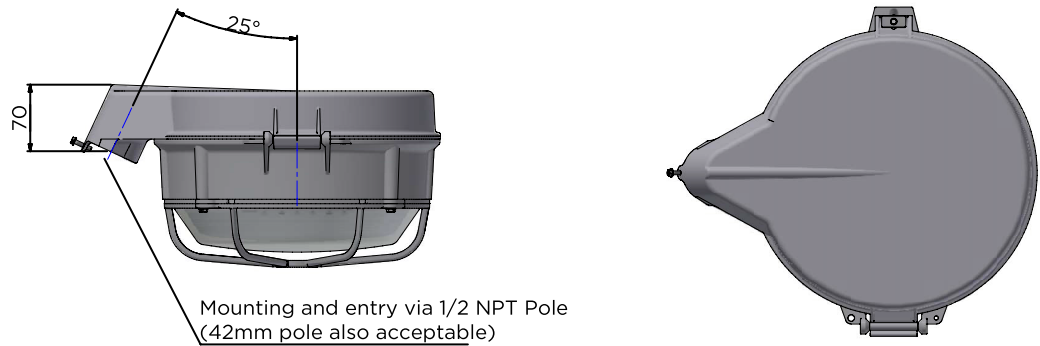
Wall Mount  
(/WM)



Pendant Mount  
(/PE)



Stanchion Mount  
(/ST)





# NexLED III

LED Bulkhead

The **NexLED III** delivers an instant bright white light, with a variety of output options. Designed for low profile applications, the bulkhead can be mounted on walls, handrails and ceilings making it ideal for walkways or restricted height areas.

The emergency version benefits from the same features as the standard NexLED, but provides effective illumination off the integral battery to ensure safe egress in the event of a power outage. This comes with a 3 hour duration in Emergency mode, and automatic self test functionality.



International Approvals

### Mounting Options

Ceiling. Wall. Recessed. Pole/Stanchion. Bulkhead.

## Standard Specification

NexLED III LED Bulkhead

Enclosure	Aluminium LM6 body, RAL-9005 black epoxy polyester paint finish with toughened glass and silicone gasket
Geartray	Aluminium
Entry	3 x M20 cable entries
Termination	3 core 4mm <sup>2</sup> max conductor with looping [4 core on Emergency]
Installation	Surface mounted, 4 mounting holes located outside of seal
Control Gear	Electronic Driver
Colour Temperature (CCT)	4000K (Neutral White)
Colour Rendering Index (Ra)	>80
Maintenance	M6 Slotted Screws
LED Lifetime @ 50°C Ambient	L70 > 133,000hours
System Life @ Ambient	>100,000hrs @ 25°C [excluding battery]
Battery	Internal NiMH (4.8V) [Emergency only]
Emergency Duration	3 Hours (500lm min. output)
Impact Protection	IK09
Ingress Protection	IP66/67 to EN 60529
Surge Protection	4kV (O2L and O4L version); 1kV (O1L version)
Electrical Supply	120-277V AC 50/60HZ; 127-300V DC 220-240V AC 50/60Hz [Emergency only]

## Features

- Highly Energy Efficient
- Highly visible, instant light
- Easy to install and maintain
- Battery management and automatic self test
- System life >100,000hrs at 25°C

Std. Cat No.	Delivered Output	Power Consumption	Ambient °C	Weight
NL3I/01L/LE/24*	816lm	5w	-15 to +50	3kg
NL3I/01L/LE	1187 lm	10W	-40 to +50	3.4kg
NL3I/02L/LE	2245 lm	19W	-40 to +50	3.6kg
NL3I/04L/LE	3872 lm	31W	-40 to +50	3.7kg
NL3I/01L/LE/EM	1187 lm	11W	-20 to +50	3.7kg
NL3I/02L/LE/EM	2245 lm	20W	-20 to +50	3.9kg
NL3I/04L/LE/EM	3872 lm	32W	-20 to +50	4.0kg

\* Suitable for 24V DC supply only

### Options - Suffix to Catalogue No.

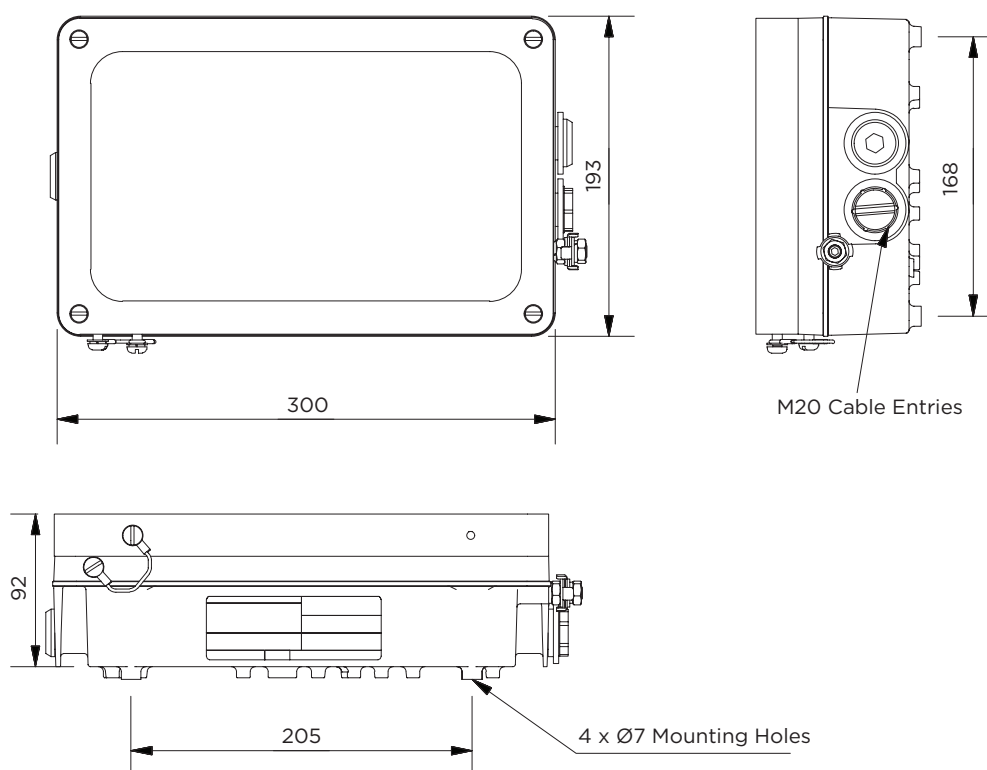
/OD	Internal opal diffusers (approx. 25% reduction in output; EM max ambient reduces to +45°C)	/5K*	5000K (Cool White) LED strips
/NM	Non-maintained (01L only, with 4W power consumption)	/NST	Non self test inverter (EM only)

\* Alternative colour temperatures may be subject to Minimum Order Quantities

### Accessories *Accessories should be ordered separately*

	Order Code
Standard Exit Sign Kit (supplied with up, down, left and right labels*)	SNEL1-0008
Canadian Exit Sign Kit (supplied with up, down, left and right labels*)	SNEL1-100272

\* Refer to NexLED Exit Kit for further information. Other signage options available upon request, please contact Chalmit Internal sales.





# STARLINE II

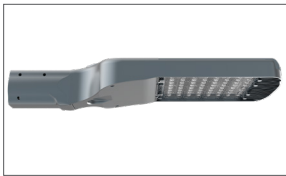
LED Bulkhead

The **Starline II** LED perfectly combines innovations in heat management, optical performance and energy saving in a sleek exterior.

The ultimate solution to replace traditional HID sources with versatility and reliability. High power LEDs minimise energy and operating costs, while the low profile appearance and low weight allow the Starline II to be safely installed on new and existing infrastructure.

**Mounting Options**

Post Top/Slip Fitter. Side Entry Spigot. Wall Mount.



## Standard Specification

Starline II LED Streetlight

Enclosure	Die cast aluminum alloy with RAL7030 grey polyester powder coat paint
Entry	Side entry as standard
Termination	Pre-installed flying leads
Installation	Spigot entry (48-60mm OD pole)
Control Gear	Electronic Driver
Colour Temperature (CCT)	5000K (Cool White)
Colour Rendering Index (Ra)	>70
Maintenance	Underside access, secured by socket heads
Ingress Protection	IP65 to EN 60529
Surge Protection	6kV
Electrical Supply	120-240V AC 50/60Hz

## Features

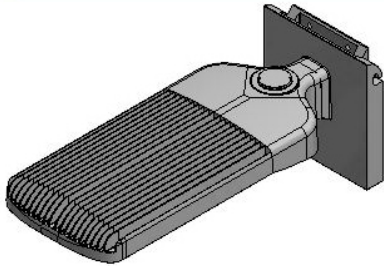
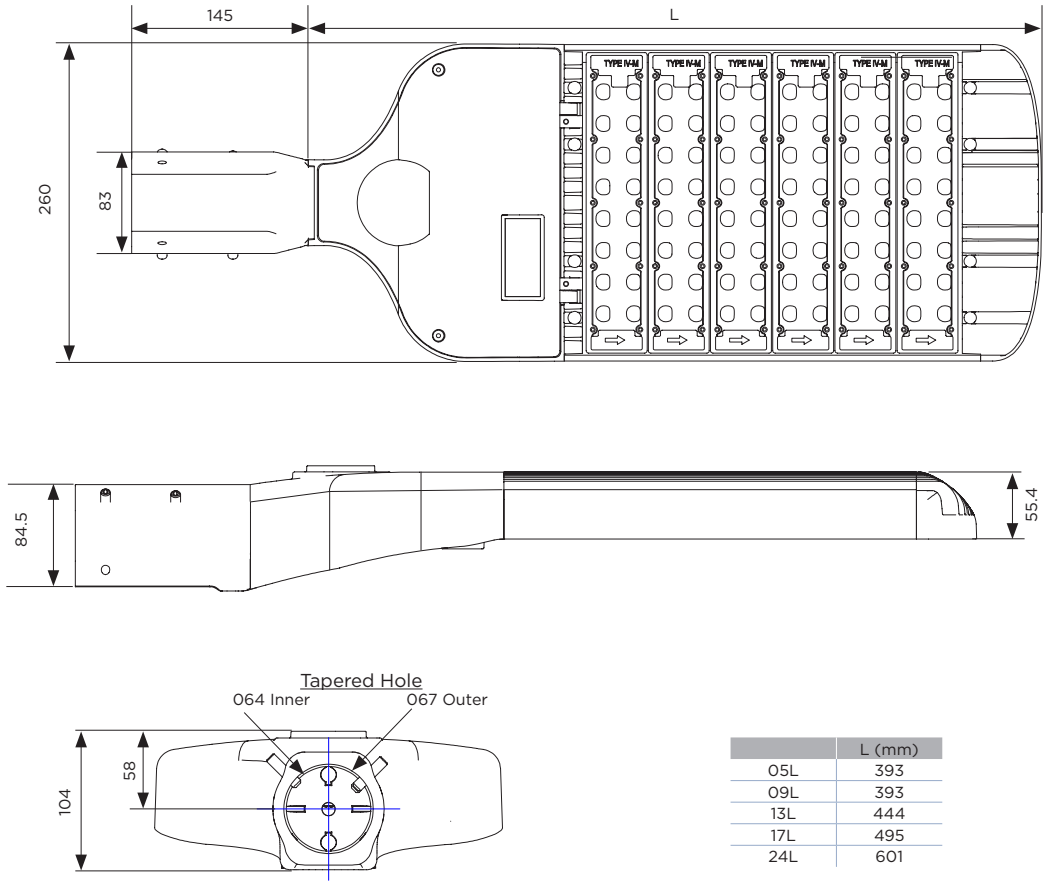
- Highly Energy Efficient
  - Slim, elegant design
  - Dark sky friendly, no upward light
- Lightweight and low windage
  - 130,000 maintenance free hours at 25°C (L70)



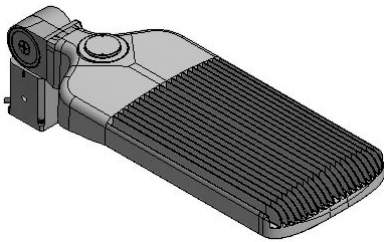
Std. Cat No.	Delivered Output	Power Consumption	Ambient °C	Weight
SL2I/05L/LE	4835 lm	40W	-40 to +55	5.0kg
SL2I/09L/LE	8923 lm	75W	-40 to +55	5.0kg
SL2I/13L/LE	13226 lm	120W	-40 to +55	6.0kg
SL2I/17L/LE	17355 lm	150W	-40 to +55	6.5kg
SL2I/24L/LE	24318 lm	200W	-40 to +55	8.0kg

Options - Suffix to Catalogue No

/SF	Slip Fitter mount (40-55mm OD column)	/WM	Wall mount
/10C	10m (3 core) cable - fitted for ease of installation [spigot entry only]		



Wall Mount



Slip Fitter (Post Top) Mount

The background of the page features a collection of various Hawke Cable Glands, including different sizes and types, arranged in a way that suggests a product catalog or a technical manual. The glands are shown in a light gray tone against a dark gray background, creating a subtle watermark effect.

## Hawke Cable Glands

121

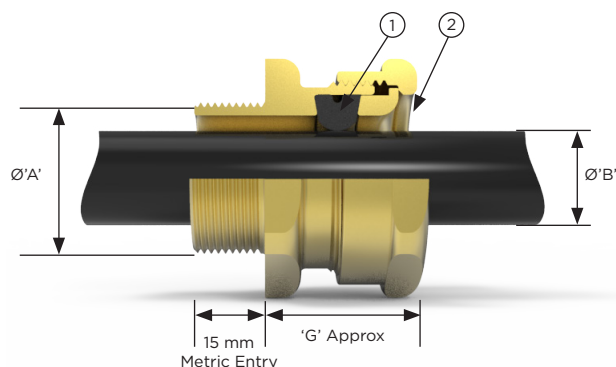
Industrial gland for indoor or outdoor use



International Approvals

## Features

- Elastomeric seal on cable inner sheath
- Rounded Cable entry to prevent cable damage



The 121 industrial cable gland is intended for use on non-armoured elastomer and plastic insulated cables in indoor and outdoor applications. This cable gland may be used with braided cables where the braid and outer sheath pass into the enclosure. The braid must then be suitably terminated inside the enclosure.

Cable Gland Selection Table

Size Ref.	Entry Thread Size 'A'		Cable Acceptance Details				' G'	Hexagon Dimensions	
	Metric	NPT*	Outer Sheath 'B'					Across Flats	Across Corners
			Standard Seal		Alternative Seal (S)				
			Min	Max	Min	Max			
2K	M16	–	3.2	8	–	–	23.5	19.0	21.2
Os	M20 <sup>2</sup>	½"	3.2	8	–	–	23.8	24.0	26.5
O	M20 <sup>2</sup>	½"	6.5	11.9	–	–	23.8	24.0	26.5
A	M20	¾" or ½"	10	14.3	9	13.4	24.8	30.0	32.5
B	M25	1" or ¾"	13	20.2	9.5	15.4	25.8	36.0	39.5
C	M32	1¼" or 1"	19.5	26.5	15.5	21.2	28.2	46.0	50.5
C2	M40	1½" or 1¼"	25	32.5	22	28.0	29.5	55.0	60.6
D	M50	2" or 1½"	31.5	44.4 / 42.3 <sup>1</sup>	27.5	34.8	40.4	65.0	70.8
E	M63	2½" or 2"	42.5	56.3 / 54.3 <sup>1</sup>	39	46.5	38.2	80.0	88.0
F	M75	3" or 2½"	54.5	68.2 / 65.3 <sup>1</sup>	49.5	58.3	40.5	95.0	104.0
G	M80	3½"	67	73	–	–	41.0	106.4	115.0
H	M90	3½"	67	77.6	–	–	41.0	115.0	130.0
J	M100	4"	75	91.6	–	–	41.0	127.0	142.0
K	M110	5"	75	91.6	–	–	59.0	127.0	142.0
L	M120	5"	88	104.5	–	–	63.0	140.0	150.0

All dimensions in millimetres (except \* where dimensions are in inches)

2K-F size metric entry threads are 1.5mm pitch, 15mm length of thread as standard

G-L size metric entry threads are 2mm pitch, 20mm length of thread as standard

<sup>1</sup> Smaller value is applicable when selecting reduced NPT entry option.

<sup>2</sup> Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable outer sheath diameter is 10.9mm

## Technical Data

Material Options	Manufactured in Brass, Nickel Plated Brass or 316L Stainless Steel
Construction & Test Standards	IEC/EN 62444 (Anchorage Type B)
Ingress Protection	IP66 and IP67* to IEC/EN 60529
Enclosure Protection	IK10 to IEC 62262
Deluge Protection	Deluge Protection to DTS01
Operating Temperature	-60°C to +100°C

## Ordering Information

If brass is required please omit material selection

Format for ordering is as follows: Alternative Seal (S), add suffix S to ordering information

Cable Gland Type	Size	Thread	Material	(Optional)
121	C	M32		S
121	C	1.25	NP	S

Order Example: 121CM32S

Please note all NPT entries should be state as a decimal

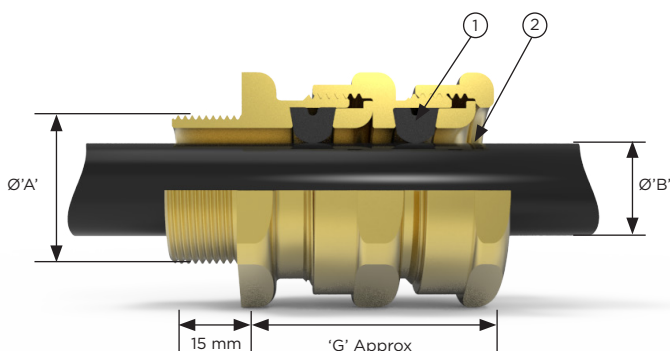
Please refer to part code logic information page for further details on product options



# 123

Industrial gland for indoor or outdoor use

International Approvals



#### Features

- Elastomeric seal on cable inner sheath
- Rounded Cable entry to prevent cable damage

The 123 dual seal industrial cable gland incorporates two independent seals and is intended for use on non-armoured elastomer and plastic insulated cables in indoor or outdoor applications. This cable gland may be used with braided cables where the braid and outer sheath pass into the enclosure. The braid must then be suitably terminated inside the enclosure. The two seals provide superior cable retention over standard unarmoured cable glands.

### Cable Gland Selection Table

Size Ref.	Entry Thread Size 'A'		Cable Acceptance Details				'G'	Hexagon Dimensions	
	Metric	NPT* Standard	Outer Sheath 'B'					Across Flats	Across Corners
			Standard Seal		Alternative Seal (S)				
			Min	Max	Min	Max			
Os	M20 <sup>2</sup>	½"	3.2	8	–	–	40.0	24.0	26.5
O	M20 <sup>2</sup>	½"	6.5	11.9	–	–	40.0	24.0	26.5
A	M20	¾" or ½"	10	14.3	9	13.4	43.0	30.0	32.5
B	M25	1" or ¾"	13	20.2	9.5	15.4	46.6	36.0	39.5
C	M32	1¼" or 1"	19.5	26.5	15.5	21.2	48.8	46.0	50.5
C2	M40	1½" or 1¼"	25	32.5	22	28.0	51.1	55.0	60.6
D	M50	2" or 1½"	31.5	44.4 / 42.3 <sup>1</sup>	27.5	34.8	67.7	65.0	70.8
E	M63	2½" or 2"	42.5	56.3 / 54.3 <sup>1</sup>	39	46.5	65.2	80.0	88.0
F	M75	3" or 2½"	54.5	68.2 / 65.3 <sup>1</sup>	49.5	58.3	67.5	95.0	104.0
G	M80	3½"	67	73	–	–	68.0	106.4	115.0
H	M90	3½"	67.0	77.6	–	–	68.0	115.0	130.0
J	M100	4"	75.0	91.6	–	–	68.0	127.0	142.0

All dimensions in millimetres (except \* where dimensions are in inches). Os-F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. For G size glands and above, a 2mm pitch is supplied as standard, 20mm length of thread (1.5mm pitch with 15mm length of thread can be supplied).

<sup>1</sup> Smaller value is applicable when selecting reduced NPT entry option.

<sup>2</sup> Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable outer sheath diameter is 10.9mm

### Technical Data

Material Options	Manufactured in Brass, Nickel Plated Brass or 316L Stainless Steel
Construction & Test Standards	BS EN 62444 (Anchorage Type B)
Enclosure Protection	IK10 to IEC 62262
Ingress Protection	IP66 and IP67 to IEC/EN 60529
Deluge Protection	Deluge Protection to DTS01
Operating Temperature	-60°C to +100°C

### Ordering Information

If brass is required please omit material selection

Format for ordering is as follows: Alternative Seal (S), add suffix S to ordering information

Cable Gland Type	Size	Thread	Material	(Optional)
123	C	M32		S
123	C	1.25	NP	S

Order Example: 123CM32S

Please note all NPT entries should be state as a decimal

Please refer to part code logic information page for further details on product options



# 151 RAC

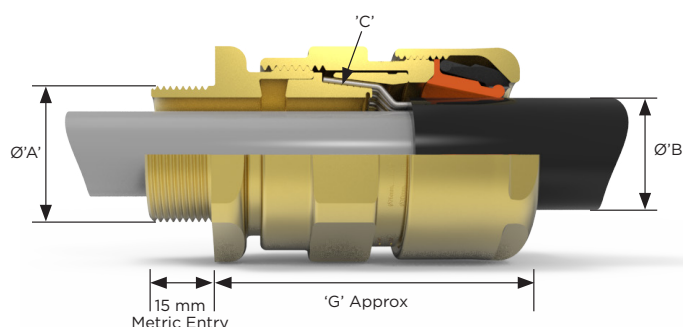
Industrial gland for indoor or outdoor use



International Approvals

## Features

- Reversible Armour Clamp - For all types of armour and braid
- Patented Cable Gland Tightening Guide - Helps prevent damage caused by over tightening
- Unique Rear Seal - Offering ultimate sealing over an extremely wide cable acceptance range



The 151/RAC Cable Gland is an industrial gland for indoor or outdoor use, robust and for use with single wire armour, wire braid, steel tape armour, elastomer and plastic insulated cables. The gland provides a low smoke, zero halogen IP and retention seal onto the cable outer sheath.

### Cable Gland Selection Table

Size Ref.	Entry Thread Size		Cable Acceptance Details					'G'	Hexagon Dimensions	
	Metric	NPT*	Inner Sheath "ØA'	Outer Sheath 'ØB'		Armour Braid 'C'			Across Flats	Across Corners
			Max	Min	Max	Orientation 1	Orientation 2			
Os	M20 <sup>2</sup>	½"	8.0	5.5	12.0	0.8 / 1.25	0.0 / 0.8	52.0	24.0	26.5
O	M20 <sup>2</sup>	½"	11.9	9.5	16.0	0.8 / 1.25	0.0 / 0.8	53.0	24.0	26.5
A	M20	¾" or ½"	14.3	12.5	20.5	0.8 / 1.25	0.0 / 0.8	53.0	30.0	32.5
B	M25	1" or ¾"	20.2	16.9	26.0	1.25 / 1.6	0.0 / 0.7	69.5	36.0	39.5
C	M32	1¼" or 1"	26.5	22.0	33.0	1.6 / 2.0	0.0 / 0.7	64.0	46.0	50.5
C2	M40	1½" or 1¼"	32.5	28.0	41.0	1.6 / 2.0	0.0 / 0.7	68.3	55.0	60.6
D	M50	2" or 1½"	44.4 / 42.3 <sup>1</sup>	36.0	52.6	1.8 / 2.5	0.0 / 1.0	79.0	65.0	70.8
E	M63	2½" or 2"	56.3 / 54.3 <sup>1</sup>	46.0	65.3	1.8 / 2.5	0.0 / 1.0	78.9	80.0	88.0
F	M75	3" or 2½"	68.2 / 65.3 <sup>1</sup>	57.0	78.0	1.8 / 2.5	0.0 / 1.0	83.7	95.0	104.0
G	M80	3½"	73.0	75.0	89.5	2.0 / 3.5	0.0 / 1.0	95.6	106.4	115.0
H	M90	3½"	77.6	75.0	89.5	2.0 / 3.5	0.0 / 1.0	95.6	115.0	130.0
J	M100	4"	91.6	88.0	104.5	2.5 / 4.0	0.0 / 1.0	95.6	127.0	142.0

All dimensions in millimetres (except \* where dimensions are in inches).

Os - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. G - J size metric entry threads are 2mm pitch as standard, 20mm length of thread.

<sup>1</sup> Smaller value is applicable when selecting reduced NPT entry option.

<sup>2</sup> Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable outer sheath diameter is 10.9mm

## Technical Data

Material Options	Manufactured in Brass, Nickel Plated Brass or 316L Stainless Steel
Construction & Test Standards	IEC/EN 62444 (Anchorage Type D)
Ingress Protection	IP66 to IEC/EN 60529
Enclosure Protection	IK10 to IEC 62262
Operating Temperature	-60°C to +100°C

## Alternative Reversible Armour Clamping Ring Size Selection

Size Ref	Orientation 1	Orientation 2
B	0.9 - 1.25	0.5 - 0.9
C	1.2 - 1.6	0.6 - 1.2
C2	1.2 - 1.6	0.6 - 1.2
D	1.45 - 1.8	1.0 - 1.45
E	1.45 - 1.8	1.0 - 1.45
F	1.45 - 1.8	1.0 - 1.45

## Ordering Information

If brass is required please omit material selection

Format for ordering is as follows: Alternative Ring (R), add suffix R to ordering information

Cable Gland Type	Size	Thread	Material	(Optional)
151R	C	M32		R
151R	C	1.25	NP	R

Order Example: 151RCM32R

Please note all NPT entries should be state as a decimal

Please refer to part code logic information page for further details on product options

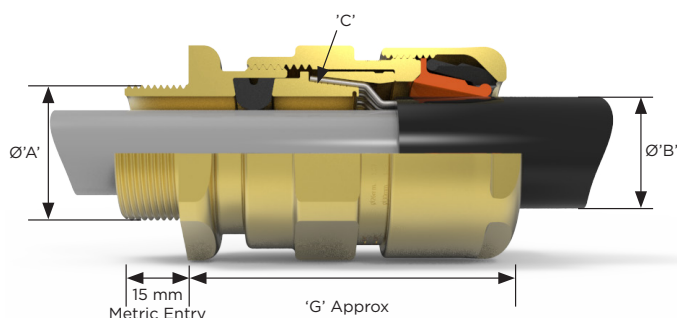


# 153 RAC

Industrial gland for indoor or outdoor use



International Approvals



## Features

- Elastomeric seal on cable inner sheath
- Fully Inspectable Armour Clamp
- Patented Cable Gland Tightening Guide - Helps prevent damage caused by over tightening
- Unique Rear Seal - Offering ultimate sealing over an extremely wide cable acceptance range

The 153/RAC Cable Gland is an industrial gland for indoor or outdoor use, robust and for use with single wire armour 'W', wire braid 'X', steel tape armour 'Z', elastomer and plastic insulated cables. The gland provides an elastomeric seal on the cable inner sheath, and a low smoke, zero halogen IP and retention seal onto the cable outer sheath.

### Cable Gland Selection Table

Size Ref.	Entry Thread 'A'		Cable Acceptance Details								'G'	Hexagon Dimensions	
	Metric	NPT* Standard	Inner Sheath				Outer Sheath 'B'		Armour/Braid 'C'			Across Flats	Across Corners
			Std Seal		Alt Seal (S)		Min	Max	Orientation 1	Orientation 2			
Os	M20 <sup>2</sup>	½"	3.2	8	-	-	5.5	12.0	0.8/1.25	0.0/0.8	52.0	24.0	26.5
O	M20 <sup>2</sup>	½"	6.5	11.9	-	-	9.5	16.0	0.8/1.25	0.0/0.8	52.0	24.0	26.5
A	M20	¾" or ½"	10	14.3	9	14.3	12.5	20.5	0.8/1.25	0.0/0.8	53.0	30.0	32.5
B	M25	1" or ¾"	13	20.2	9.5	15.4	16.9	26.0	1.25/1.6	0.0/0.7	69.5	36.0	39.5
C	M32	1¼" or 1"	19.5	26.5	15.5	21.2	22.0	33.0	1.6/2.0	0.0/0.7	64.0	46.0	50.5
C2	M40	1½" or 1¼"	25	32.5	22	28	28.0	41.0	1.6/2.0	0.0/0.7	68.3	55.0	60.6
D	M50	2" or 1½"	31.5	44.4/42.3 <sup>1</sup>	27.5	34.8	36.0	52.6	1.8/2.5	0.0/1.0	79.0	65.0	70.8
E	M63	2½" or 2"	42.5	56.3/54.3 <sup>1</sup>	39	46.5	46.0	65.3	1.8/2.5	0.0/1.0	78.9	80.0	88.0
F	M75	3" or 2½"	54.5	68.2/65.3 <sup>1</sup>	49.5	58.3	57.0	78.0	1.8/2.5	0.0/1.0	83.7	95.0	104.0
G	M80	3½"	67	73	-	-	75.0	89.5	2.0/3.5	0.0/1.0	95.6	106.4	115.0
H	M90	3½"	67	77.6	-	-	75.0	89.5	2.0/3.5	0.0/1.0	95.6	115.0	130.0
J	M100	4"	77	91.6	-	-	88.0	104.5	2.5/4.0	0.0/1.0	95.6	127.0	142.0

All dimensions in millimetres (except \* where dimensions are in inches).

Os - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. G - J size metric entry threads are 2mm pitch as standard, 20mm length of thread

<sup>1</sup> Smaller value is applicable when selecting reduced NPT entry option.

<sup>2</sup> Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable inner sheath diameter is 10.9mm

## Technical Data

<b>Material Options</b>	Manufactured in Brass, Nickel Plated Brass or 316L Stainless Steel
<b>Construction &amp; Test Standards</b>	IEC/EN 62444 (Anchorage Type D)
<b>Ingress Protection</b>	IP66, IP67 to IEC/EN 60529 and NEMA 4X
<b>Enclosure Protection</b>	IK10 to IEC 62262
<b>Deluge Protection</b>	DTS01
<b>Operating Temperature</b>	-60°C to +100°C

## Alternative Reversible Armour Clamping Ring Size Selection

Size Ref	Orientation 1	Orientation 2
B	0.9 - 1.25	0.5 - 0.9
C	1.2 - 1.6	0.6 - 1.2
C2	1.2 - 1.6	0.6 - 1.2
D	1.45 - 1.8	1.0 - 1.45
E	1.45 - 1.8	1.0 - 1.45
F	1.45 - 1.8	1.0 - 1.45

## Ordering Information

If brass is required please omit material selection

Format for ordering is as follows: Alternative Seal (S), Alternative Ring (R), add suffix S and/or R to ordering information

Cable Gland Type	Size	Thread	Material	(Optional)
153R	C	M32		R
153R	C	1.25	NP	S

Order Example: 153RCM32R

# 153 UNIV

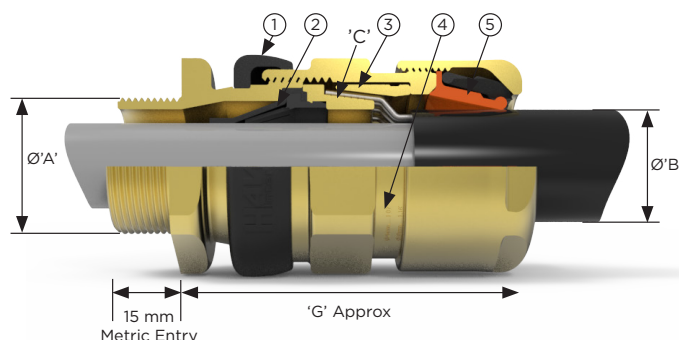
Industrial gland for indoor or outdoor use



International Approvals

## Features

- Inspectable Deluge Seal  
- Offering IP66, IP67, IP68 & IP69 Ingress Protection
- Passive diaphragm seal - Suitable for cables exhibiting 'Cold Flow.' Fully inspectable
- Reversible Armour Clamp - For all types of armour and braid
- Patented Cable Gland Tightening Guide  
- Helps prevent damage caused by over tightening
- Unique Rear Seal - Offering ultimate sealing over an extremely wide cable acceptance range



The industrial 153/Universal Cable Gland is robust and for use with single wire armour 'W', wire braid 'X', steel tape armour 'Z', elastomer and plastic insulated cables. For particular use with cables that exhibit 'Cold Flow' characteristics.

## Cable Gland Selection Table

Size Ref.	Entry Thread Size 'A'		Cable Acceptance Details						'G'	Hexagon Dimensions	
	Metric	NPT*	Inner Sheath		Outer Sheath 'B'		Armour/Braid 'C'			Across Flats	Across Corners
			Min	Max	Min	Max	Orientation 1	Orientation 2			
Os	M20 <sup>2</sup>	½"	3.5	8.1	5.5	12	0.8/1.25	0.0/0.8	58.4	24	26.5
O	M20 <sup>2</sup>	½"	6.5	11.4	9.5	16	0.8/1.25	0.0/0.8	58.4	24	26.5
A	M20	¾" or ½"	8.4	14.3	12.5	20.5	0.8/1.25	0.0/0.8	59.6	30	32.5
B	M25	1" or ¾"	11.1	19.7	16.9	26	1.25/1.6	0.0/0.7	66.4	36	39.5
C	M32	1¼" or 1"	17.6	26.5	22	33	1.6/2.0	0.0/0.7	71.2	46	50.5
C2	M40	1½" or 1¼"	23.1	32.5	28	41	1.6/2.0	0.0/0.7	75.2	55	60.6
D	M50	2" or 1½"	28.9	44.4/42.3 <sup>1</sup>	36	52.6	1.8/2.5	0.0/1.0	98	65	70.8
E	M63	2½" or 2"	39.9	56.3/54.3 <sup>1</sup>	46	65.3	1.8/2.5	0.0/1.0	94.4	80	88.0
F	M75	3" or 2½"	50.5	68.2/65.3 <sup>1</sup>	57	78	1.8/2.5	0.0/1.0	102	95	104.0
G	M80	3½"	67	73	75	89.5	2.0/3.5	0.0/1.0	90.6	106.4	115.0
H	M90	3½"	67	77.6	75	89.5	2.0/3.5	0.0/1.0	90.6	115	130.0
J	M100	4"	75	91.6	88	104.5	2.5/4.0	0.0/1.0	90.6	127	142.0

All dimensions in millimetres (except \* where dimensions are in inches). Os - F size metric entry threads are 1.5mm pitch as standard, 15mm length of thread. For G size glands and above, a 2mm pitch is supplied as standard, 20mm length of thread (1.5mm pitch with 15mm length of thread can be supplied) please specify when ordering. G size and above are available in the 153/RAC design style.

<sup>1</sup> Smaller value is applicable when selecting reduced NPT entry option.

<sup>2</sup> Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable inner sheath diameter is 10.9mm

## Technical Data

Material Options	Manufactured in Brass, Nickel Plated Brass or 316L Stainless Steel
Construction & Test Standards	IEC/EN 62444 (Anchorage Type D)
Ingress Protection	IP66, IP67, IP69 to IEC/EN 60529 and NEMA 4X
Enclosure Protection	IK10 to IEC 62262
Deluge Protection	DTS01
Operating Temperature	-60°C to +80°C

## Ordering Information

If brass is required please omit material selection

Format for ordering is as follows: Alternative Ring (R), add suffix R to ordering information

Cable Gland Type	Size	Thread	Material	(Optional)
153U	C	M32		R
153U	C	1.25	NP	R

Order Example: 153UCM32R

Please note all NPT entries should be state as a decimal

Please refer to part code logic information page for further details on product options

# Cable Gland Tightening Guide

Whilst Hawke International goes to great lengths to ensure products are designed to be as simple to install, inspect and maintain as is possible, differing levels of competency, training and understanding can lead to glands being incorrectly installed. With hazardous area products, any poor installation issues can not only lead to expensive equipment failure, but also potential explosion risks and associated risk to life.

To help address issues with the overtightening of cable glands and the resultant damage to cables and seals, Hawke International has developed the patented INBUILT TIGHTENING GUIDE.

Without the need for fiddly measuring systems, the guide provides a permanent visual indication of the gland tightness through installation, inspection and maintenance.

## How it works

The gland is permanently marked with various lines/numbers indicating the correct tightening level related to the cable diameter. Following the relevant cable gland Installation Instructions, the back seal should be tightened until a seal is formed on the cable outer sheath and then tightened one further turn.

Step 1



1

Follow cable gland installation instructions until final stage – tightening of rear seal

Step 2



2

Tighten backnut until a seal is formed onto the cable, then tighten one further turn

Step 3



3

The backnut should be level with the marking guide corresponding to its diameter – this can be visually inspected and adjusted as necessary

*Note: The cable gland installation instructions have a printed cable OD measure for if the cable OD is not known*

Alternative Reversible Armour Clamping Ring Size Selection		
Size Ref	Orientation 1	Orientation 2
B	0.9 - 1.25	0.5 - 0.9
C	1.2 - 1.6	0.6 - 1.2
C2	1.2 - 1.6	0.6 - 1.2
D	1.45 - 1.8	1.0 - 1.45
E	1.45 - 1.8	1.0 - 1.45
F	1.45 - 1.8	1.0 - 1.45

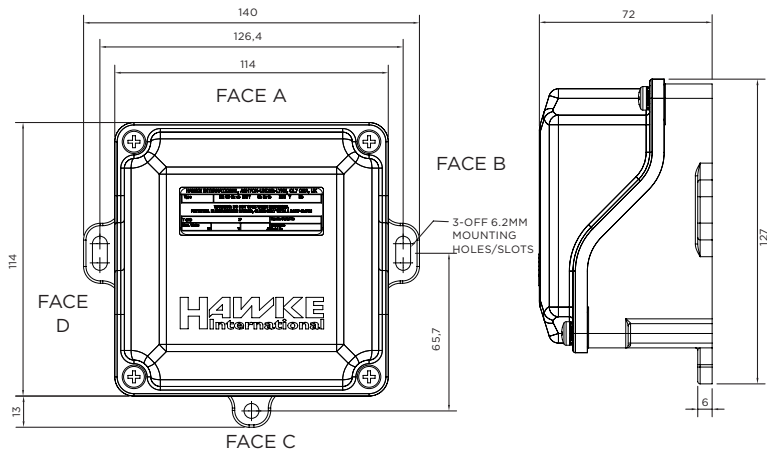


## Hawke PL5 Enclosures



# PL511

Increased Safety Exe Dual Certified ATEX / IECEx



Reduce costs and installation time with our most economical Enclosure range. Moulded with Glass Reinforced Plastic, the ATEX & IECEx certified, PL511 offers ultimate strength in the world's most demanding environments.

Terminal Capacity									
Terminal Type	Conductor Size (mm2)		Max Volts	Rail Orientation	Max. Physical Terminal Content			Reduced Terminal Content at Max Amps	
	Min.	Max.			Terminal Qty	Rail Qty	Amps	Terminal Qty	Amps
WDU 2.5N	0.5	2.5	440	V	9	1	11	3	17
WDU 2.5	0.5	2.5	690	V	9		11	3	17
UT 2.5	0.14	3	690	V	9		11	6	15
WDU 4	0.5	4	690	V	8		15	3	22
UT 4	0.14	4	690	V	8		15	5	20
WDU 6	0.5	6	690	V	5		23	3	29
UT6	0.2	6	690	V	6		21	4	28
HPB4	0.5	Max. per Pillar	550	N/A	1	Conductor Size mm <sup>2</sup>	Max. Amps per Pillar	N/A	N/A
		2 x 10mm2				0.5	1		
		3 x 6mm2				0.75	1		
		4 x 4mm2				1	8		
		4 x 0.5mm2				1.5	10		
		2 x 2.5mm2				2.5	15		
		Solid				4	21		
		1 x 6.0mm2				6	26		
		Stranded				10	37		

\* Max terminals are split across the quantity of terminal rails

## Features

- Enables finger access for easy wiring and inspection of terminations
- Eliminates the need to remove the lid when mounting the enclosure on the wall.
- Provides Ingress Protection to IP66/67. Optimum performance at low and high temperature extremes.
- Prevents loss of screws during assembly and maintenance.
- Designed to withstand impact resistance up to 7Nm. Glass Reinforced Plastic construction provides a high degree of resistance to corrosive atmospheres.



Technical Data	
Ingress Protection	IP66 IP67 to IEC/EC 60529
Material	Glass Reinforced Plastic (GRP) Natural Black Finish
Service Temperature	-60°C to +75°C
Temperature Class and Ambient	T6 40°C as standard Optional T5 with ambients up to 65°C For additional options see technical data
ATEX/IECEX	
ATEX/IECEX Protection Class	Ex II 2 GD Ex eb IIC Gb; Ex tb IIIC Db
ATEX Certificate No	Baseefa14ATEX0268X (PL511) Baseefa14ATEX0248U (ZPL511)
IECEX Certificate Number	IECEX BAS 14.0123X (PL511) IECEX BAS 14.0120U (ZPL511)
Construction & Test Standards	IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31
Marine Approvals	ABS: 17-LD1653735-PDA Bureau Veritas: 43523/A1
Additional Certifications	EAC: RU C-GB.AA87.B.00430 Inmetro: IEx 16.0143X PESO: P457331
NEC/CEC	
NEC Protection Class	Class I, Zone 1, AEx e IIC Gb Zone 21, AEx tb IIIC T80°C Db
CEC Protection Class	Ex e IIC Gb Ex tb IIIC T80°C Db
c CSA us Certificate	70039997
Construction & Test Standards	UL 50E, UL508, UL12.12.01, UL/CSA-C22.2 60079-0, UL/CSA-C22.2 60079-7, UL/CSA-C22.2 60079-31, CSA-C22.2 No. 94-M91, CSA-C22.2 No. 14-M91

Maximum Quantity of Entries Per Face								
Thread Size	M16	M20	M25	M32	M40	M50	M63	M75
Face B	1	1	-	-	-	-	-	-
Face C	2	2	-	-	-	-	-	-
Face D	1	1	-	-	-	-	-	-

CAUTION: Entry quantities are calculated based on standard gland diameters. Entry quantity may be affected if using accessories (locknuts, washers etc) with large diameters.

## Simplify your Engineering Projects with BoxHUBB



**BoxHUBB** is Hawke's fast, free and simple solution for configuring enclosures online.

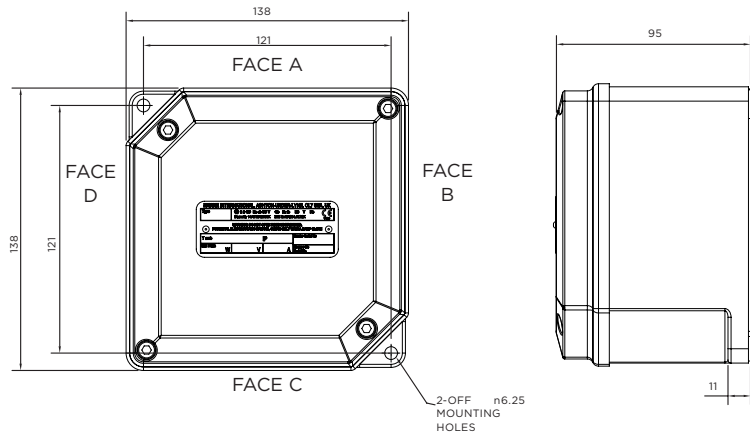
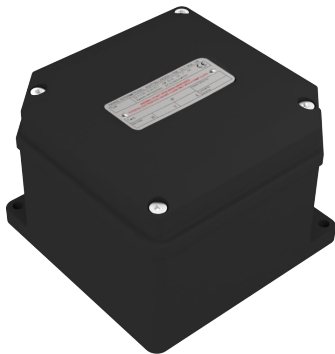
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# PL513

Increased Safety Exe Dual Certified ATEX/ IECEx



Moulded from robust Glass Reinforced Plastic with a natural Black Finish. The versatile PL513 has a wide operating temperature range in both in normal impact and in low risk Impact applications.

## Terminal Capacity

Terminal Type	Conductor Size (mm <sup>2</sup> )		Max Volts	Rail Orientation	Max. Physical Terminal Content			Reduced Terminal Content at Max Amps	
	Min.	Max.			Terminal Qty	Rail Qty	Amps	Terminal Qty	Amps
WDU 2.5N	0.5	2.5	440.0	V / H D	16 18	1	12 11	7	17
WDU 2.5	0.5	3	690	V / H D	16 18		12 11	7	17
UT 2.5	0.14	3	690	V / H D	16 17		12 11	10	15
WDU 4	0.5	4	690	V / H D	13 15		16 15	7	22
UT 4	0.14	4	690	V / H D	13 14		17 16	9	20
WDU 6	0.5	6	690	V / H D	10 11		23 22	6	29
UT 6	0.2	6	690	V / H D	9 11		24 22	6	28
WDU 10	1.5	10	690	V / H D	8 9		32 30	5	40
UT 10	0.5	10	690	V / H D	7 8		35 33	5	39
HTB 6	0.5	Max. per Pillar 2 x 10mm <sup>2</sup> 3 x 6mm <sup>2</sup> 4 x 4mm <sup>2</sup> 4 x 0.5mm <sup>2</sup> 2 x 2.5mm <sup>2</sup> Solid 1 x 6.0mm <sup>2</sup> Stranded	550	N/A	1	Conductor Size mm <sup>2</sup> 0.5 0.75 1 1.5 2.5 4 6 10	Max. Amps per Pillar 1 1 8 10 15 21 26 37	N/A	N/A

\* Max terminals are split across the quantity of terminal rails

## Features

- Excellent operating temperature range for normal impact and low impact risk applications
- ATEX, IECEx and CSA certified
- Robust Glass Reinforced Plastic Construction
- External Mounting Feet - eliminates the need to remove the lid when mounting the enclosure on the wall.
- Corrosion Resistant Lid Fixing Screws with Retaining Feature - prevents the loss of screws during assembly and maintenance.

Technical Data	
Ingress Protection	IP66 IP67 to IEC/EC 60529
Material	Glass Reinforced Plastic (GRP) Natural Black Finish
Service Temperature	-60°C to +75°C
Temperature Class and Ambient	T6 40°C as standard Optional T5 with ambients up to 65°C For additional options see technical data
ATEX/IECEX	
ATEX/IECEX Protection Class	Ex II 2 GD Ex eb IIC Gb; Ex tb IIIC Db
ATEX Certificate No	Baseefa14ATEX0268X (PL513) Baseefa14ATEX0248U (ZPL513)
IECEX Certificate Number	IECEX BAS 14.0123X (PL513) IECEX BAS 14.0120U (ZPL513)
Construction & Test Standards	IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31
Marine Approvals	ABS: 17-LD1653735-PDA Bureau Veritas: 43523/A1
Additional Certifications	EAC: RU C-GB.AA87.B.00430 Inmetro: IEx 16.0143X PESO: P457331
NEC/CEC	
NEC Protection Class	Class I, Zone 1, AEx e IIC Gb Zone 21, AEx tb IIIC T80°C Db
CEC Protection Class	Ex e IIC Gb Ex tb IIIC T80°C Db
c CSA us Certificate	70039997
Construction & Test Standards	UL 50E, UL508, UL12.12.01, UL/CSA-C22.2 60079-0, UL/CSA-C22.2 60079-7, UL/CSA-C22.2 60079-31, CSA-C22.2 No. 94-M91, CSA-C22.2 No. 14-M91

Maximum Quantity of Entries Per Face								
Thread Size	M16 / M20/O	M20/A	M25	M32	M40	M50	M63	M75
Face A/B/C/D	5	3	2	-	-	-	-	-

CAUTION: Entry quantities are calculated based on standard gland diameters. Entry quantity may be affected if using accessories (locknuts, washers etc) with large diameters.

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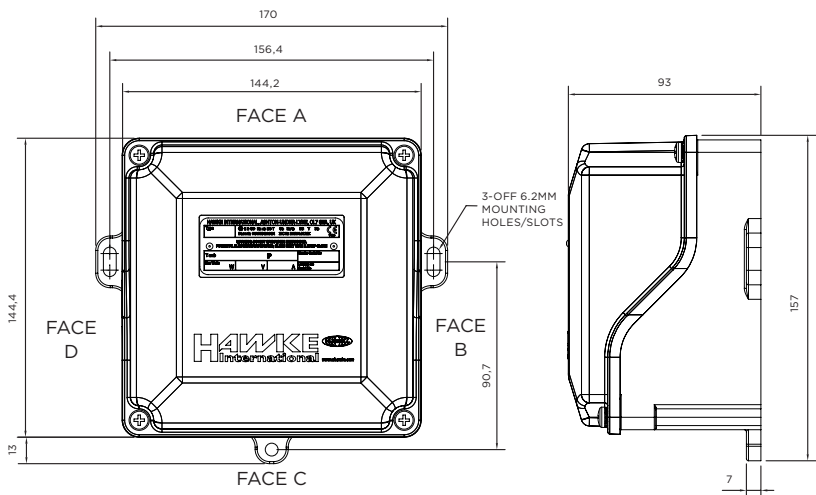
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# PL514

Increased safety & dust protection



Offering exceptional strength, easy installation and global certification, the PL514 is the ideal alternative to traditional Glass Reinforced Polyester Enclosures.

## Terminal Capacity

Terminal Type	Conductor Size (mm2)		Max Volts	Rail Orientation	Max. Physical Terminal Content			Reduced Terminal Content at Max Amps	
	Min.	Max.			Terminal Qty	Rail Qty	Amps	Terminal Qty	Amps
WDU 2.5N	0.5	2.5	440	V	18	1	11	7	17
WDU 2.5	0.5	2.5	690	V	18		11	7	17
UT 2.5	0.1	2.5	690	V	17		11	10	15
WDU 4	0.5	4.0	690	V	14		15	7	22
UT 4	0.1	4.0	690	V	14		16	9	20
WDU 6	0.5	6.0	690	V	11		22	6	29
UT6	0.2	6.0	690	V	10		23	6	28
WDU 10	1.5	10.0	690	V	8		32	5	40
UT 10	0.5	10.0	690	V	8		33	5	39
HPB4	0.5	Max. per Pillar	550	N/A	1	Conductor Size mm <sup>2</sup>	Max. Amps per Pillar	N/A	N/A
		2 x 10mm2				0.5	1		
		3 x 6mm2				0.75	1		
		4 x 4mm2				1	8		
		4 x 0.5mm2				1.5	10		
		2 x 2.5mm2				2.5	15		
		Solid				4	21		
		1 x 6.0mm2 Stranded				6	26		
						10	37		

\* Max terminals are split across the quantity of terminal rails

## Features

- Unparalleled strength at 50% less weight that traditional Glass Reinforced Polyester enclosures
- Complete IP66/67 and 4X protection
- External mounting feet eliminate the need to remove the lid when mounting or removing the enclosure from a wall or other surface.
- Dropped lid design makes installation and inspection easier than ever before
- Earth Continuity Plate is available in Zintec or Brass
- Wide operating temperature

Technical Data	
Ingress Protection	IP66 IP67 to IEC/EC 60529
Material	Glass Reinforced Plastic (GRP) Natural Black Finish
Service Temperature	-60°C to +75°C
Temperature Class and Ambient	T6 40°C as standard Optional T5 with ambients up to 65°C For additional options see technical data
ATEX/IECEX	
ATEX/IECEX Protection Class	Ex II 2 GD Ex eb IIC Gb; Ex tb IIIC Db
ATEX Certificate No	Baseefa14ATEX0268X (PL514) Baseefa14ATEX0248U (ZPL514)
IECEX Certificate Number	IECEX BAS 14.0123X (PL514) IECEX BAS 14.0120U (ZPL514)
Construction & Test Standards	IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31
Marine Approvals	ABS: 17-LD1653735-PDA Bureau Veritas: 43523/A1
Additional Certifications	EAC: RU C-GB.AA87.B.00430 Inmetro: IEx 16.0143X PESO: P457331
NEC/CEC	
NEC Protection Class	Class I, Zone 1, AEx e IIC Gb Zone 21, AEx tb IIIC T80°C Db
CEC Protection Class	Ex e IIC Gb Ex tb IIIC T80°C Db
c CSA us Certificate	70039997
Construction & Test Standards	UL 50E, UL508, UL12.12.01, UL/CSA-C22.2 60079-0, UL/CSA-C22.2 60079-7, UL/CSA-C22.2 60079-31, CSA-C22.2 No. 94-M91, CSA-C22.2 No. 14-M91

Maximum Quantity of Entries Per Face								
Thread Size	M16	M20	M25	M32	M40	M50	M63	M75
Face B	2	2	1	-	-	-	-	-
Face C	6	6	2	2	-	-	-	-
Face D	2	2	1	-	-	-	-	-

CAUTION: Entry quantities are calculated based on standard gland diameters. Entry quantity may be affected if using accessories (locknuts, washers etc) with large diameters.

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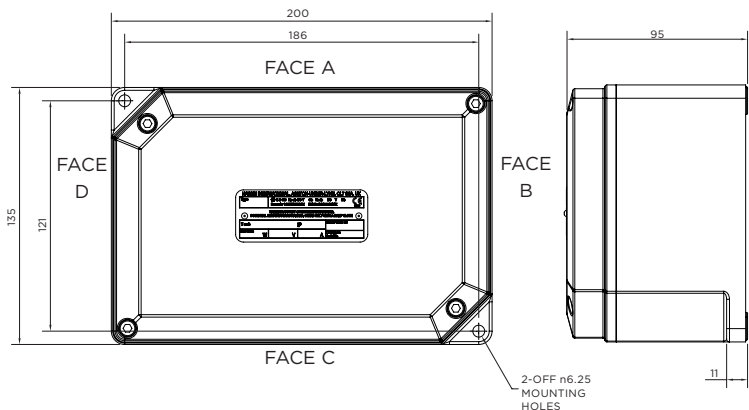
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# PL520

Increased Safety Exe Dual Certified ATEX/ IECEx



Moulded from tough Glass Reinforced Plastic, the globally certified PL520 is built to withstand some of the world's most arduous environments. With a wide operating temperature, superior corrosion resistance and more, the PL520 is the ultimate in tough construction.

## Terminal Capacity

Terminal Type	Conductor Size (mm2)		Max Volts	Rail Orientation	Max. Physical Terminal Content			Reduced Terminal Content at Max Amps	
	Min.	Max.			Terminal Qty	Rail Qty	Amps	Terminal Qty	Amps
WDU 2.5	0.5	2.5	690	V H	16 30	1	12 8	7	17
UT 2.5	0.14	3	690	V H	16 29		11 8	9	15
WDU 4	0.5	4	690	V H	13 25		16 11	7	22
UT 4	0.14	4	690	V H	13 24		16 12	8	20
WDU 6	0.5	6	690	V H	10 19		23 16	6	29
UT6	0.2	6	690	V H	9 18		24 17	6	28
WDU 10	1.5	10	690	V H	8 15		32 23	5	40
UT 10	0.5	10	690	V H	7 14		35 24	5	39
HTB 6	0.5	Max. per Pillar 2 x 10mm2 3 x 6mm2 4 x 4mm2 4 x 0.5mm2 2 x 2.5mm2 Solid 1 x 6.0mm2 Stranded	550	N/A	1	Conductor Size mm <sup>2</sup> 0.5 0.75 1 1.5 2.5 4 6 10	Max. Amps per Pillar 1 1 8 10 15 21 26 37	N/A	N/A

\* Max terminals are split across the quantity of terminal rails

## Features

- ATEX/IECEx Internationally Approved certification
- Fast Installation and Easy Inspection
- Corrosion Resistant by Design
- Multiple Lid Fixing Points
- Better Tool Access and Concealed Silicone Gasket



Technical Data	
Ingress Protection	IP66 IP67 to IEC/EC 60529
Material	Glass Reinforced Plastic (GRP) Natural Black Finish
Service Temperature	-60°C to +75°C
Temperature Class and Ambient	T6 40°C as standard Optional T5 with ambients up to 65°C For additional options see technical data
ATEX/IECEX	
ATEX/IECEX Protection Class	Ex II 2 GD Ex eb IIC Gb; Ex tb IIIC Db
ATEX Certificate No	Baseefa14ATEX0268X (PL520) Baseefa14ATEX0248U (ZPL520)
IECEX Certificate Number	IECEX BAS 14.0123X (PL520) IECEX BAS 14.0120U (ZPL520)
Construction & Test Standards	IEC/EN 60079-0, IEC/EN 60079-7 and IEC/EN 60079-31
Marine Approvals	ABS: 17-LD1653735-PDA Bureau Veritas: 43523/A1
Additional Certifications	EAC: RU C-GB.AA87.B.00430 Inmetro: IEx 16.0143X PESO: P457331
NEC/CEC	
NEC Protection Class	Class I, Zone 1, AEx e IIC Gb Zone 21, AEx tb IIIC T80°C Db
CEC Protection Class	Ex e IIC Gb Ex tb IIIC T80°C Db
c CSA us Certificate	70039997
Construction & Test Standards	UL 50E, UL508, UL12.12.01, UL/CSA-C22.2 60079-0, UL/CSA-C22.2 60079-7, UL/CSA-C22.2 60079-31, CSA-C22.2 No. 94-M91, CSA-C22.2 No. 14-M91

Maximum Quantity of Entries Per Face								
Thread Size	M16 / M20/O	M20/A	M25	M32	M40	M50	M63	M75
Face A/C	9	5	3	-	-	-	-	-
Face B/D	5	3	2	-	-	-	-	-

CAUTION: Entry quantities are calculated based on standard gland diameters. Entry quantity may be affected if using accessories (locknuts, washers etc) with large diameters.

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A faint, stylized illustration of an industrial facility, including tall distillation columns, storage tanks, and a network of pipes, rendered in a light gray tone against a dark gray background.

## GAI-Tronics Industrial Telephones

## TITAN

Metal Bodied Telephone



GAI-Tronics Titan is constructed of powder coated die-cast aluminium and includes rear enclosure with door.



- VoIP-SIP (RFC3261, open protocol)
- PoE or 24-48Vdc
- SNMP set up and configuration
- 4 inputs, 2 outputs
- Acoustic Path self-test
- Redundancy: registers with 4 servers
- Remote programming and real-time monitoring & reporting
- Weather Protection: IP66 (door closed), IP65 (door open)
- Keypad: 0, 6 and 18 button options available
- Large tactile button: easy to see, and operate with gloves
- Vandal resistant handset and cord (Stainless steel or Curled)
- Multipurpose design for Wall or Post mounting
- Posts available
- Colour: yellow
- Analogue and GSM options also available

## COMMANDER

Metal Bodied Telephone



GAI-Tronics Commander is constructed of GRP and offers rugged communications in harsh and saline environments.



- VoIP-SIP (RFC3261, open protocol)
- PoE or 24-48Vdc
- SNMP set up and configuration
- 4 inputs, 2 outputs
- Acoustic Path self-test
- Redundancy: registers with 4 servers
- Remote programming and real-time monitoring & reporting
- Weather Protection: Up to IP66
- Keypad: 0, 6 and 18 button options available
- Large tactile button: easy to see, and operate with gloves
- Vandal resistant handset and cord (Stainless steel or Curled)
- Multipurpose design for Wall, Desk or Post mounting
- Posts available
- Colour: yellow
- Analogue and GSM options also available



# SUSTAINABILITY

## At Hubbell

At Hubbell we are committed to reducing the environmental impact of our operations.

We are continually developing products and processes that support sustainability and offer energy efficient solutions for our customers and partners.

Our focus remains addressing and managing the risks associated with climate change and we are committed to facilitating a sustainable future.

For more information visit us at [www.hubbell.com/hubbell/en/sustainability](http://www.hubbell.com/hubbell/en/sustainability)

### Our ESG Goals



**10%**  
Reduction in  
GHG Emissions  
*By 2025*



**10%**  
Reduction in  
Water Consumption  
*By 2025*

Hubbell have been recognised as **one of the most ethical companies in the world**





## WHERE WE ARE

- Expanded public ESG disclosures, including alignment with leading sustainability frameworks
- Established goals for reducing greenhouse gas emissions and water consumptions
- Launched sustainability website and increased employee awareness of ESG topics
- Hired sustainability and diversity leaders to manage and drive ESG efforts
- Signed the Paradigm for Parity pledge and were recognized as one of the 2021 World's Most Ethical Companies
- Enhanced focus on products that enable sustainability for customers and value chain



## WHERE WE'RE HEADED

- Publishing an inaugural sustainability report and enhancing climate change disclosures
- Expanding and refining company wide sustainability strategy
- Formalizing Hubbell's sustainability governance and ESG policies
- Pursuing product stewardship and circular economy opportunities
- Promoting sustainability and managing risks in Hubbell's supply chain
- Developing new environmental and social targets
- Increasing supplier diversity and engaging with vendors on ESG topics w



### Social Responsibility

- Host two Employee Inclusion Groups: Women Advancing Their Careers At Hubbell (WATCH) and Multicultural Men (MCM)
- Hubbell Foundation donated over \$1 million in 2020
- Employee development formalized through Hubbell University



### Environmental Stewardship

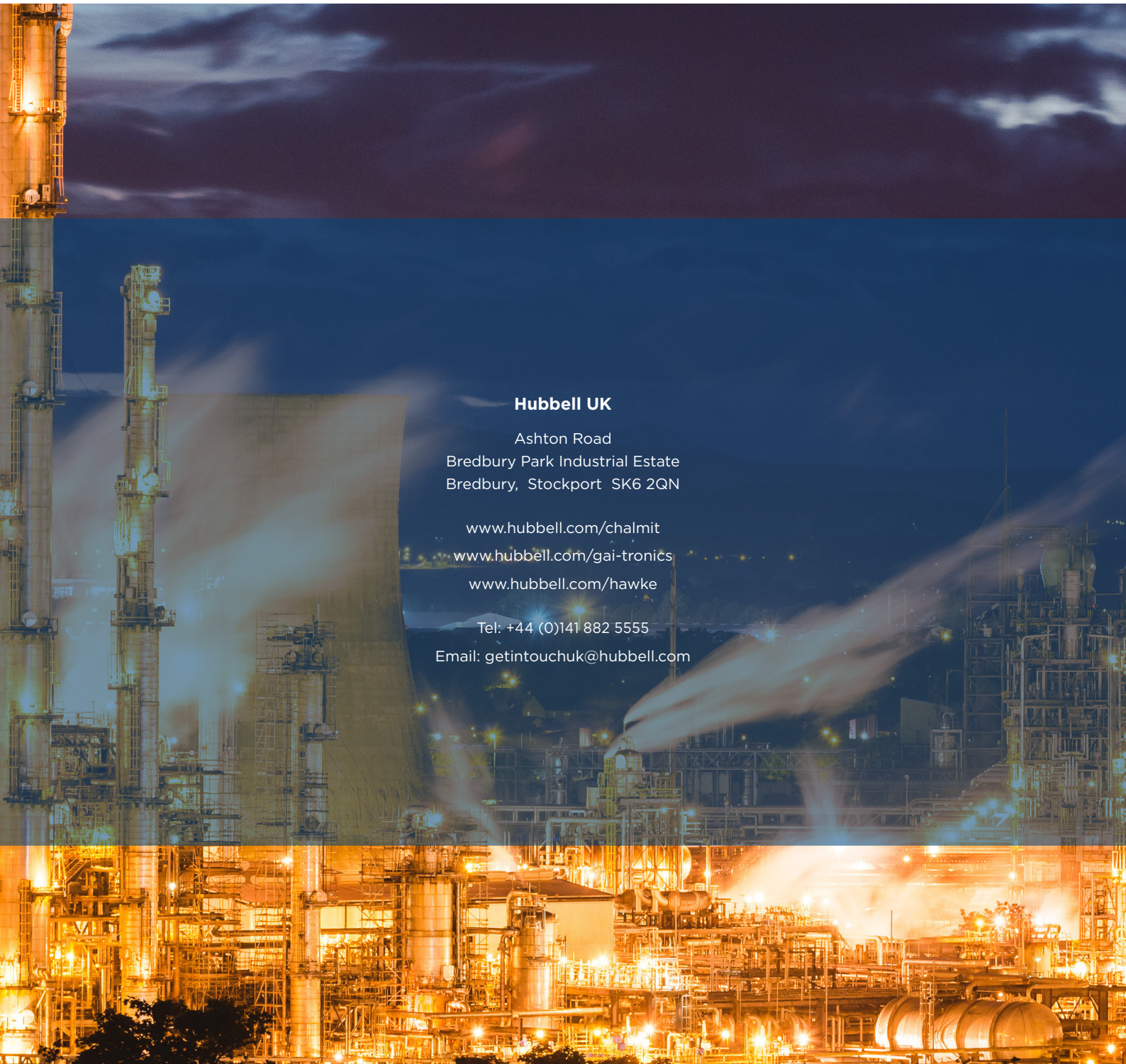
- Track environmental performance including greenhouse gas emissions, water and waste
- Audited largest facilities for energy reduction opportunities and implementing efficiency initiatives
- Launched a Hubbell Sustainability and Infrastructure Management Handbook which provides guidelines on improving the efficiency and sustainability of our facilities



### Products With Impact

- Offer products that support renewable energy infrastructure
- LED lighting products allow for greater energy efficiency
- All products are designed with reliability and safety in mind





## Hubbell UK

Ashton Road  
Bredbury Park Industrial Estate  
Bredbury, Stockport SK6 2QN

[www.hubbell.com/chalmit](http://www.hubbell.com/chalmit)

[www.hubbell.com/gai-tronics](http://www.hubbell.com/gai-tronics)

[www.hubbell.com/hawke](http://www.hubbell.com/hawke)

Tel: +44 (0)141 882 5555

Email: [getintouchuk@hubbell.com](mailto:getintouchuk@hubbell.com)