

# EVOLUTION

## Ex de FLOODLIGHT

The revolutionary Evolution concept is now highly valued for many applications where its use achieves optimum lighting levels with minimum maintenance costs. There are no exposed flameproof paths. The only essential flameproof path at the lampholder spigot is contained within the increased safety control gear and terminal chamber located at the end of the main flameproof lamp enclosure. This is accessed by a single captive screw in the hinged cover.

The ATEX category 2 G D luminaire utilises Ex de protection and IP66/67 sealing making it suitable for use for ignitable gas and dust applications. The Evolution can be used as standard with up to 400W HID lamps or increased to 600W with a separate Ex e control gear box.

Explosion protection for gas group IIC (Hydrogen) is standard and a low temperature version for gas group IIB at -50°C is available.

### Ex de PENDANT HIGH BAY

The Pendant version has simple mounting points and is designed for use in high bay applications.



### Standard Specification

### Features

Type of Protection	Ex de (Flameproof, Increased Safety) Dust protected enclosure	Installation in gas groups IIA, IIB and IIC
ATEX Classification	Group II Category 2 G D	Easy and quick access for maintenance
Area Classification	Zone 1 and Zone 21 areas to EN 60079-10 and EN 50281-3 with installation to EN 60079-14 and EN 50281-1-2 Gas Groups IIA, IIB and IIC	Simple, rapid lamp replacement and flamepath inspection
Apparatus Standard	EN 50014 EN 50018 EN 50019 EN 50281-1-1	Reduced maintenance due to no exposed flamepath
Certificate	EC Type Examination Certificate BAS98ATEX2373	Exceptional photometric efficiency
Coding	⊕ II 2 G D EEx de IIC (refer to table for T rating and Ambient)	Effective light distribution for many applications
Enclosure	Aluminium alloy LM6 to BS 1490 All fastenings stainless steel. Toughened glass window	GOST Approved
Reflector	Wide beam, high purity anodised aluminium	CEPEL Approved
Entry	2 x M20 cable entries	CSA Approved
Termination	3 core 6mm <sup>2</sup> max. conductor with looping	IEC Ex Compliant
Installation	Stirrup mounting bracket with aiming quadrant	
Control Gear	Internal copper/iron with PFC correction capacitor and timed ignitor	
Relamping	Access via hinged end cover on release of single screw	
Lampholder	E40 (R7s for linear Tungsten-Halogen)	
Lamp Type	HPS, Metal Halide or Tungsten-Halogen	
Burning Position	Universal for HID, +/-45° on horizontal plain for Tungsten-Halogen lamps	
Ingress Protection	IP66/67 to EN 60529	
Electrical Supply	110, 120, 220, 230, 240, 254V 50Hz HPS & Metal Halide 24V - 254V ac/dc linear Tungsten-Halogen (500W) 110V - 254V single ended Tungsten-Halogen	

Chalmit Lighting, 388 Hillington Road, Glasgow G52 4BL

Tel: +44 (0) 141 882 5555 Fax: +44 (0) 141 883 3704

Email: [info@chalmit.com](mailto:info@chalmit.com)

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

# ATEX CATEGORY 2 ZONE 1 & 21 APPLICATIONS

Std. Cat No.	Wattage	Lamp	Lampholder T Class (Gas)	T °C (Dust)	Ambient °C	Weight	
<b>EVOD/150/MS</b>	150W	HPS and Metal Halide	E40	T4 T3	130 175	40 55	28kg
<b>EVOD/250/MS</b>	250W	HPS and Metal Halide	E40	T4 T3	130 175	40 55	28.5kg
<b>EVOD/400/MS</b>	400W	HPS and Metal Halide	E40	T3	175	55	28.5kg
<b>EVOD/600/HS*</b>	600W	HPS	E40	T3	195	35	25kg
<b>EVOD/500/TH</b>	500W	Single Ended T/Halogen	E40	T3	195	40	25kg
<b>EVOD/500/TL</b>	500W	Linear T/Halogen	R7s	T3	195	55	25kg

**For Pendant substitute EVPD for EVOD**

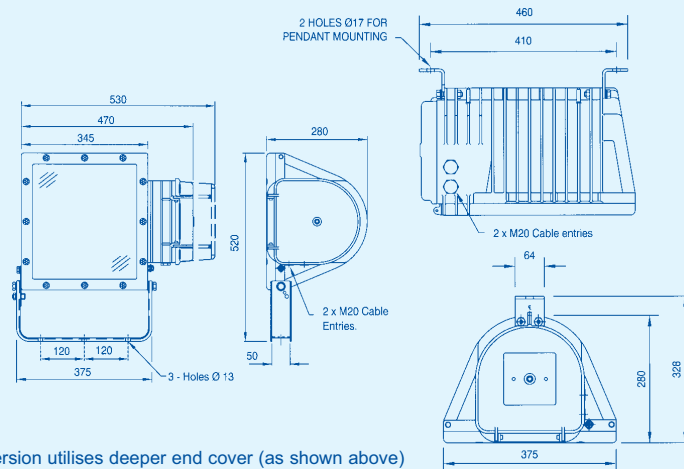
\*Ignitor only fitted. Remote gear box required.

## Options - Suffix to Catalogue No.

- /120** 120V (Weight increase of +12kg) (Extended end cover)
- /60** 60Hz
- /M25** M25 Entries
- /N** Narrow beam reflector
- /M** Medium beam reflector
- /P** PTFE coating
- /LT** Low temperature version -50°C (Gas groups IIA and IIB only)
- /D** Dust protected (Only marked for dust when this option is added)

## Applications

- Zone 1 and 2 hazardous areas
- Aircraft hangers
- Tank farms
- Offshore oil and gas platforms
- Chemical industry
- Distilleries
- Security and perimeter lighting
- Sewage treatment plants
- Drum storage areas
- General area floodlighting
- Gas pumping stations
- Pharmaceutical industry



NOTE: 120V version utilises deeper end cover (as shown above)

## Accessories (Should be ordered separately)

## Catalogue Order Code

284 retrofit bracket (allows Evolution to pick-up 284 fixings)	<b>SEVO1-0001</b>
Pole mounting brackets	<b>SEVO4-0001</b>
Anti-glare shield	<b>SEVO4-0002</b>
Wire guard	<b>SEVO4-0003</b>
Swing jib damper assembly	<b>SEVO1-0015</b>
Swinging jib bracket assembly	<b>SEVO4-0009</b>
120V Swinging jib bracket assembly	<b>SEVO4-0012</b>

Product design and specifications are subject to change without notice, please check the Chalmite website for latest specifications.



Electrical Products

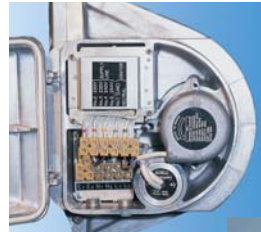
Rev 01 - Sept 2006

# EVOLUTION RANGE

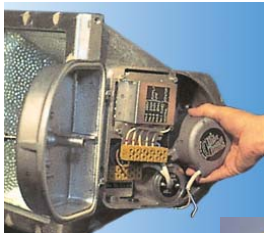
## FLOODLIGHT



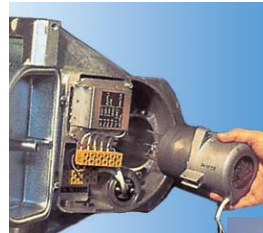
Access to control gear and relamping effected by use of single retained socket head cap screw



View shows the complete access afforded by opening the gear cover. The mains terminal block and voltage tappings can be clearly seen and are readily accessible



The lamp enclosure is easily removed by disconnecting the lamp supply cables and rotating the housing to disengage from the locating spigots



The lamp housing can then be withdrawn to allow replacement of the lamp and/or inspection of the flamepath. With this done the lamp housing can be inserted back into the enclosure and located on the spigots and the cables connected. The whole operation from start to finish takes less than 3 minutes



## EVOLUTION JUNIOR MOUNTING ACCESSORIES



**Accessories** (Should be ordered separately)

Floor stand assembly (to be ordered with floor stand version of floodlight)

Tripod stand assembly

**Catalogue Order Code**

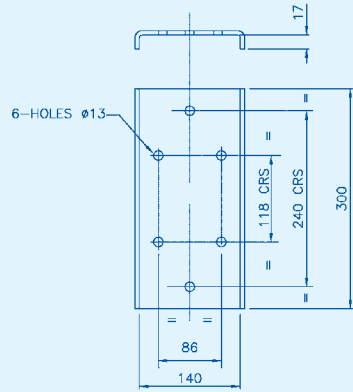
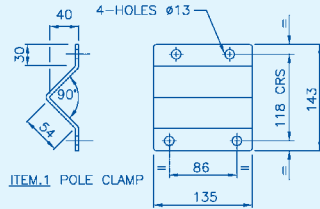
**SEVJR-0001**

**SEVJR-0002**

# SERVICING & MOUNTING ACCESSORIES

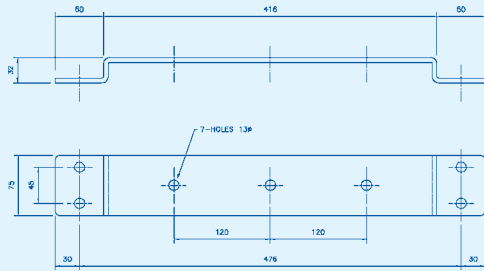
## POLE MOUNTING BRACKET

Cat No. SEV04-0001



## 284 RETROFIT BRACKET

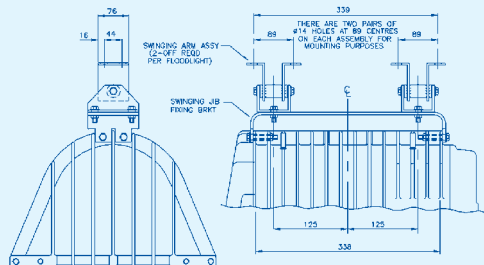
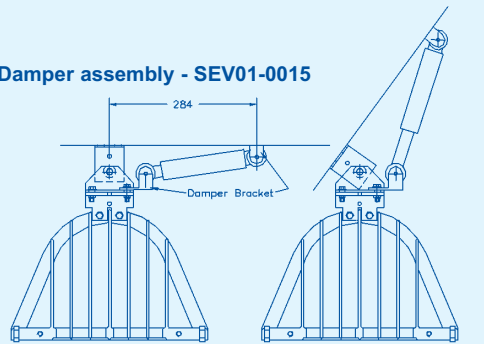
Cat No. SEV01-0001



## SWING JIB DAMPER & BRACKET ASSEMBLY



Damper assembly - SEV01-0015



Bracket assembly - SEV04-0009

