

Benefits of Asymmetric Design

Asymmetric reflector design uses an aiming angle from 0° to a maximum of 20° compared to a typical 45° angle for Symmetric floodlights. This has several benefits:

- **Increased Photometric Efficiency** - Higher lighting levels due to better utilisation of light
- **Increased Energy Efficiency** - Fewer floodlights to meet required lighting levels = reduced energy consumption
- **Reduced glare & Light Pollution** - Lower cut off angle
- **Light where you need it**
- **Better Uniformity of light**

Asymmetric Reflector



Symmetric Reflector



An asymmetric reflector allows the light beam to be both thrown forward a long distance and also light the area below the pole or mounting location is effectively lit.

This efficient lighting profile gives lower glare and light pollution making it ideal for hazardous area applications including:

- **Environmentally sensitive areas**
- **Energy efficient lighting schemes**
- **Tank Farms**
- **Security and Perimeter Lighting**
- **General task area lighting**



Easy Installation and Low Maintenance

Chalmit Lighting luminaires are designed to ensure that they are simple to install and easy to maintain:

- Reduction in maintenance time
- Significantly reduce the overall site maintenance costs

The Evolution range embodies this design philosophy. With its single bolt opening, the Evolution ensures easy access to lamp and control gear. Inspection and maintenance of the flamepaths is not required as they are not exposed. Instead, the unique design locates these within the IP67 sealed area of the control gear. In this respect, the Evolution can effectively be classed as maintenance free.

Simple Re-lamping Complete in Under Three Minutes

1



Access to control gear and re-lamping by use of a single retained socket head cap screw

2



Complete access is afforded by opening the gear cover. The mains terminal block and voltage tapings can be clearly seen and are readily accessible

3



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

4



The lamp housing can then be withdrawn to allow removal and/or inspection of the flamepath.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.

No Exposed Flamepath = No Flamepath Maintenance Routine



Recommended maximum aiming angle 20° from horizontal plane



Optional PTFE Coating

The Evolution II is a photometrically advanced floodlight that combines Ex de protection with optimised utilisation of light through its asymmetric design. The Evolution concept has no exposed flamepaths making the luminaire effectively maintenance free. Access to the lamp and terminal chamber is achieved by the unscrewing of a single captive bolt

Standard Specification		Features
Type of Protection	Ex d e (Flameproof, Increased Safety) Dust protected enclosure	Installation in gas groups IIA and IIB
ATEX Classification	Group II Category 2 GD	Easy and quick access for maintenance
Area Classification	Zone 1 and Zone 21 areas to EN 60079-10-1 and EN 60079-10-2 with installation to EN 60079-14 Gas Groups IIA and IIB	Simple, rapid lamp replacement and flamepath inspection
Certificate Coding	EC Type Examination Certificate Baseefa04ATEX0155 Ⓔ II 2 GD Ex d e IIB Refer to table for T rating and Ambient	Reduced maintenance due to no exposed flamepath
Enclosure	Aluminium alloy LM6 to BS 1490 (AC44100) All fastenings A4 stainless steel Toughened glass window	Exceptional photometric efficiency with reduced glare
Reflector	Asymmetric beam, high purity anodised aluminium	Timed ignitor supplied as standard
Entry	2 x M20 cable entries	
Termination	3 core 6mm ² max. conductor with looping	
Installation	Stirrup mounting bracket with aiming quadrant	
Windage	0.112m ²	
Control Gear	Internal copper/iron with PFC correction capacitor and timed ignitor	
Relamping	Access via hinged end cover on release of single screw	
Burning Position	Universal for HID, +/-45° on horizontal plain for Tungsten-Halogen lamps	
Ingress Protection	IP66/67 to EN 60529	
Electrical Supply	220, 230, 240, 254V 50Hz HPS & Metal Halide 24V - 254V Linear Tungsten-Halogen, 110V - 254V Single ended Tungsten-Halogen	
		International Approvals
		ATEX, GB (China) and GOST IECEx Compliant

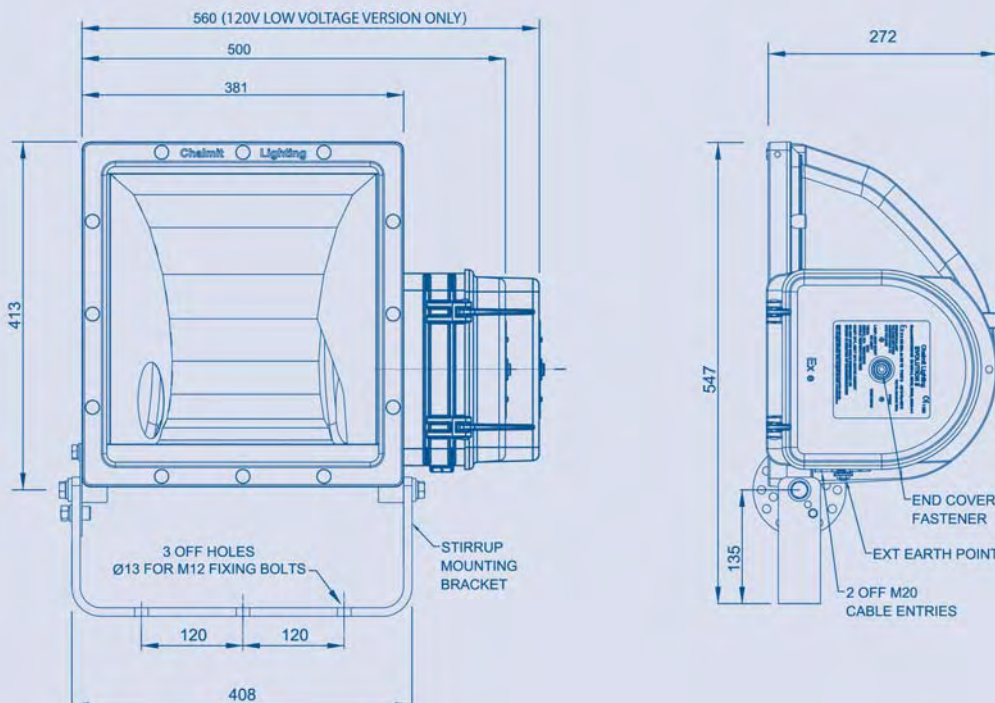
Std. Cat No.	Wattage	Lamp	Lampholder	T Class (Gas)	T °C (Dust)	Ambient °C	Weight
EV2D/150/MS	150W	HPS and Metal Halide	E40	T4	130	-20 to +40	28.0kg
				T3	175	-20 to +55	
EV2D/250/MS	250W	HPS and Metal Halide	E40	T4	130	-20 to +40	28.5kg
				T3	175	-20 to +55	
EV2D/400/MS	400W	HPS and Metal Halide	E40	T3	175	-20 to +55	28.5kg
EV2D/600/HS*	600W	HPS	E40	T3	195	-20 to +35	25.0kg
EV2D/500/TH	500W	Single Ended T/Halogen	E40	T3	195	-20 to +40	25.0kg
EV2D/500/TL	500W	Linear T/Halogen	R7s	T3	195	-20 to +55	25.0kg

*Ignitor only fitted. Remote gear box required (see Universal Box - page 66).

Note: Please specify voltage at time of enquiry/order

Options – Suffix to Catalogue No.

/120	110V - 130V (Weight increase of +10kg)	/P	PTFE coating
/60	60Hz	/PE	Pendant mounted
/208-60	208V 60Hz	/N	Narrow beam option
/M25	M25 cable entries	/IEC	Supplied with IECEx certification label



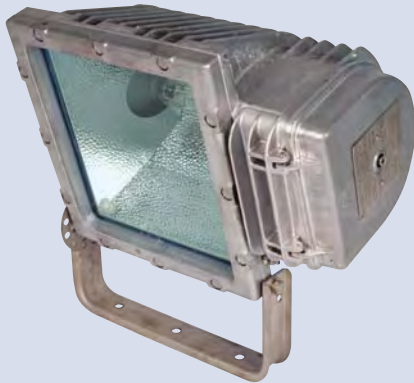
NOTE: 120V version utilises deeper end cover (as shown above)

Accessories Should be ordered separately

Catalogue Order Code

For details of accessories please see page 50 and 51

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



The Evolution is a highly efficient floodlight that combines Ex de protection with optimised utilisation of light through advanced reflector design. The Evolution concept has no exposed flamepaths making the luminaire effectively maintenance free. Access to the lamp and terminal chamber is achieved by the unscrewing of a single captive bolt.

The Evolution is suitable for use in IIC gas environments.



Ex d e 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 d e (Flameproof, Increased Safety) Dust protected enclosure	Installation in gas groups IIA, IIB and IIC
ATEX Classification	Group II Category 2 GD	Easy and quick access for maintenance
Area Classification	Zone 1 and Zone 21 areas to EN 60079-10-1 and EN 60079-10-2 with installation to EN 60079-14 Gas Groups IIA, IIB and IIC	Simple, rapid lamp replacement and flamepath inspection
Certificate	EC Type Examination Certificate BAS98ATEX2373	Reduced maintenance due to no exposed flamepath
Coding	Ⓔ II 2 GD Ex d e IIC Refer to table for T rating and Ambient	Exceptional photometric efficiency
Enclosure	Aluminium alloy LM6 to BS 1490 (AC44100) All fastenings A4 stainless steel Toughened glass window	Effective light distribution for many applications
Reflector	Wide beam, high purity anodised aluminium	Timed ignitor supplied as standard
Entry	2 x M20 cable entries	
Termination	3 core 6mm ² max. conductor with looping	
Installation	Stirrup mounting bracket with aiming quadrant	
Windage	0.159m ² / 0.173m ² (120V version)	
Control Gear	Internal copper/iron with PFC correction capacitor and timed ignitor	
Relamping	Access via hinged end cover on release of single screw	
Burning Position	Universal for HID, +/-45° on horizontal plain for Tungsten-Halogen lamps	
Ingress Protection	IP66/67 to EN 60529	
Electrical Supply	220, 230, 240, 254V 50Hz HPS & Metal Halide 24V - 254V ac/dc linear Tungsten-Halogen, 110V - 254V single ended Tungsten-Halogen	
		International Approvals
		ATEX, GOST, CSA, CEPEL and TIS IECEx Compliant

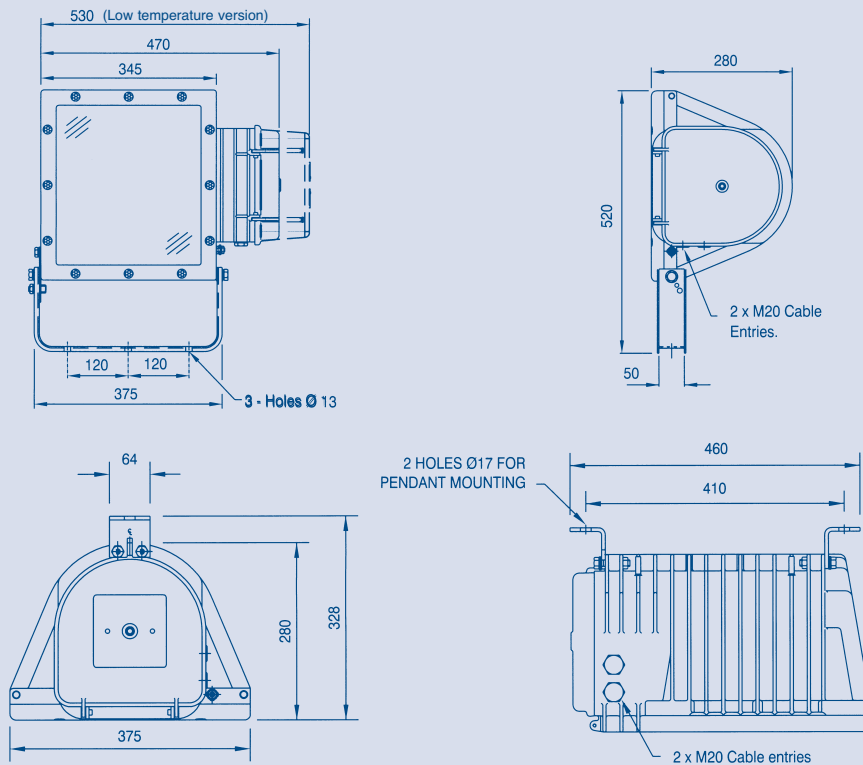
Std. Cat No.	Wattage	Lamp	Lampholder	T Class (Gas)	T °C (Dust)	Ambient °C	Weight
EVOD/150/MS	150W	HPS and Metal Halide	E40	T4	130	40	28.0kg
				T3	175	55	
EVOD/250/MS	250W	HPS and Metal Halide	E40	T4	130	40	28.5kg
				T3	175	55	
EVOD/400/MS	400W	HPS and Metal Halide	E40	T3	175	55	28.5kg
EVOD/600/HS*	600W	HPS	E40	T3	195	35	25.0kg
EVOD/500/TH	500W	Single Ended T/Halogen	E40	T3	195	40	25.0kg
EVOD/500/TL	500W	Linear T/Halogen	R7s	T3	195	55	25.0kg

*Ignitor only fitted. Remote gear box required (see Universal Box - page 66).
For Pendant substitute EVPD for EVOD.

Note: Please specify voltage at time of enquiry/order

Options – Suffix to Catalogue No.

/120	110-130V (Weight increase of +12kg) (Extended end cover)	/M	Medium beam reflector
/60	60Hz	/P	PTFE coating
/M25	M25 cable entries	/LT	Low temperature version -50°C (Gas groups IIA and IIB only)
/N	Narrow beam reflector	/IEC	Supplied with IECEx certification label



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

Accessories Should be ordered separately

Catalogue Order Code

For details of accessories please see page 50 and 51

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EVOLUTION JUNIOR Ex d e FLOODLIGHT

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The Evolution Junior is a lightweight and portable version of the advanced Evolution floodlight. It features the same single bolt access and has a range of floor and tripod stands for a variety of temporary applications.

Standard Specification

Features

Type of Protection	Ex d e (Flameproof, Increased Safety)
ATEX Classification	Group II Category 2 G
Area Classification	Zone 1 and Zone 2 areas to EN 60079-10-1 with installation to EN 60079-14. Gas Groups IIA, IIB and IIC
Certificate	EC Type Examination Certificate BAS99ATEX2228
Coding	Ⓔ II 2 G Ex d e IIC Refer to table for T rating and Ambient
Enclosure	Aluminium alloy LM6 to BS 1490 (AC44100) All fastenings A4 stainless steel Toughened glass window
Reflector	Wide beam, high purity anodised aluminium
Entry	2 x M20 cable entries
Termination	3 core 6mm ² max. conductor with looping
Installation	Stirrup mounting bracket
Windage	0.094m ²
Control Gear	Internal copper/iron with PFC correction capacitor
Relamping	Access via hinged end cover on release of single screw
Burning Position	Universal for HID, +/-45° on horizontal axis for Tungsten-Halogen Lamps
Ingress Protection	IP66/67 to EN 60529
Electrical Supply	220, 230, 240, 254V 50Hz (HID) 24V(ac/dc)-250V (dependant on voltage)

Installation in gas groups IIA, IIB and IIC

Easy and quick access for maintenance

Simple, rapid lamp replacement and flamepath inspection

Exceptional photometric efficiency

Available with secondary protective glass for shot blasting applications

International Approvals

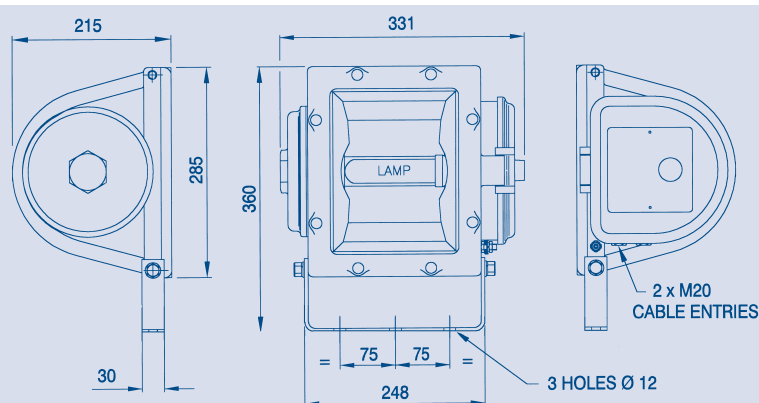
ATEX, GOST CEPEL and TIS

Std. Cat No.	Wattage	Lamp	Lampholder	T Class	Ambient °C	Weight
EVJD/070/MS	70W	HPS and Metal Halide	E27	T4	40	12kg
				T3	55	12kg
EVJD/300/TL	150W	Tungsten-Halogen	R7s	T3	55	10kg
	200W	Tungsten-Halogen	R7s	T3	40	10kg
	250W	Tungsten-Halogen	R7s	T3	20	10kg
				T2	50	10kg
	300W	Tungsten-Halogen	R7s	T2	40	10kg
EVJD/150/TL/24	150W 24V	Tungsten-Halogen	R7s	T3	55	10kg
Secondary Glass Shield Cat Nos.						
EVJD/300/TL/GS	150W	Tungsten-Halogen	R7s	T3	55	10kg
	200W	Tungsten-Halogen	R7s	T3	25	10kg
	200W	Tungsten-Halogen	R7s	T2	50	10kg
	250W	Tungsten-Halogen	R7s	T2	40	10kg
EVJD/300/TL/24/GS	150W 24V	Tungsten-Halogen	R7s	T3	55	10kg

Note: Please specify voltage at time of enquiry/order

Options – Suffix to Catalogue No.

/60	60Hz	/FS	Suitable for use with floor stand (floor stand should be ordered separately)
/M25	M25 cable entries	/CG	Cable and Ex gland fitted (order cable separately - see accessories)
/P	PTFE coating	/CGP	Cable, Ex gland and 110V plug (cable should be ordered separately)
/Y	Yellow painted version (110V only)	/GS	Secondary glass (factory fitted)
/LT	Low temperature version -50°C (IIA & IIB only)		



Accessories Should be ordered separately

Catalogue Order Code

Pole mounting bracket assembly (48-70mm diameter poles)	SEVJ4-0003
Anti-glare shield	SEVJ4-0001
Wire guard	SEVJ4-0002
Floor stand assembly (to be ordered with floor stand version of floodlight)	SEVJR-0001
Tripod stand assembly	SEVJR-0002
Ratchet handles (2 off) for adjustable aiming	SEVJR-0005
Cable (ordered per metre)	E0414-0009

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EVOLUTION RANGE

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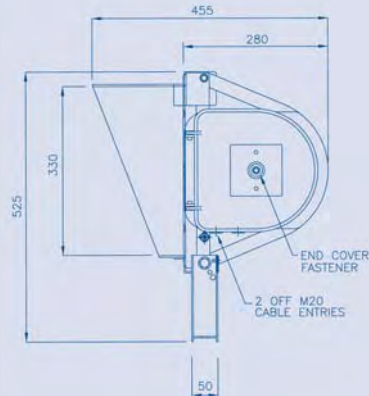
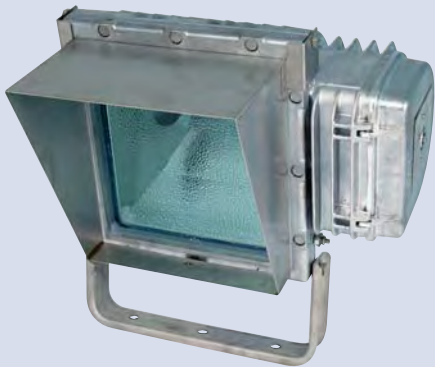
Evolution II & Evolution Guards and Shields



Evolution II	
Wire Guard	SEV04-0020
Evolution	
Anti-Glare Shield	SEV04-0002
Wire Guard	SEV04-0003
Combined Anti-Glare Shield and Wire Guard	SEV04-0008

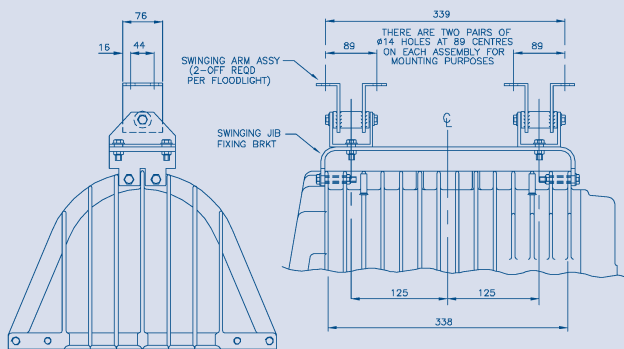
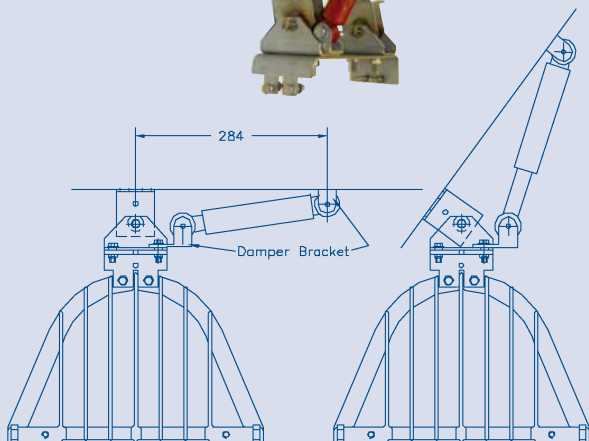
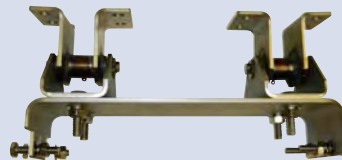
Evolution Anti-Glare Shield

Combined Anti-Glare Shield and Wire Guard



Swing Jib Damper & Bracket Assembly

Evolution only

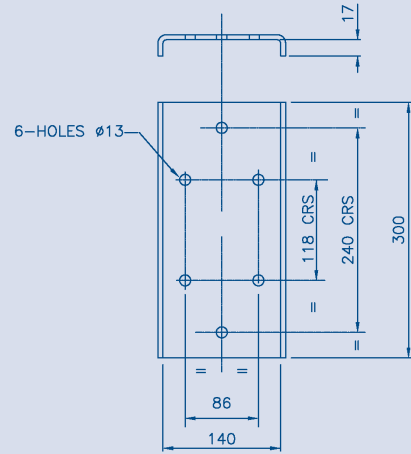
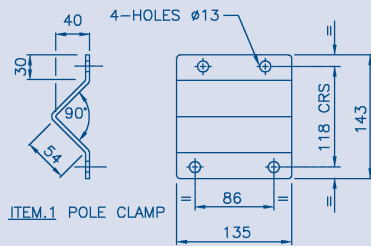


Damper assembly - SEV01-0015

Bracket assembly - SEV04-0009

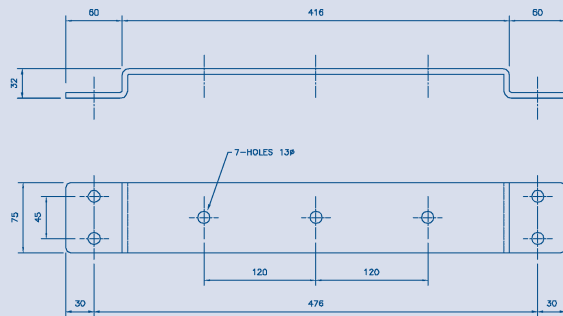
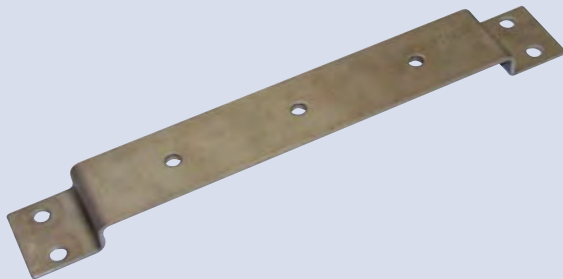
Pole Mounting Bracket Assembly

Cat No. SEVO4-0001



284 Retrofit Bracket

Cat No. SEVO1-0001



Evolution Junior Mounting Accessories

Cat No. SEVJR-0001/SEVJR-0002



Floor assembly SEVJR-0001



Tripod assembly SEVJR-0002