

automotive, off-road and battery powered vehicles

product reference catalogue 2009

delta

design

... advanced warning technology

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ADVANCED WARNING TECHNOLOGY... part of **ECCO** Group

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Innovation and quality from Europe's Xenon and LED beacon and light bar specialist

Established in 1975, Delta Design developed the first low profile xenon beacon for the intruder market in 1978. Since then Delta design has become a leader in vehicle, industrial and material handling markets with an emphasis on innovative design of electronics and optics along with a reputation for quality and reliability.

More recently Delta Design has led the field in LED innovation and is pleased to present its current standard product range for industrial, safety and security applications. Work is often undertaken in co-operation with original equipment manufacturers to design product for specialist applications. Please call our sales team if you cannot locate in this catalogue the exact product you require.

Delta Design recently became part of the global ECCO Group with sales of \$100m to over 50 countries worldwide, a manufacturing presence on 4 continents and headquarters in UK, USA and Australia.

... simply brilliant



CERTIFICATE NO. 11211

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How to find usinside back cover

Key to symbols used throughout this catalogue:



Brightness:
cd = effective candela
in accordance with the
Blondel & Rey formula



Single flash



Quad flash



Voltage range



Flash rate



Double flash



Current
consumption



Siren output



Ingress protection
rating



Triple flash



Current consumption at
given voltage (*n*)



Weight

All specifications are nominal and subject to change without notice.

COMPACT VEHICLE BEACONS

Alpha Star RB4XDV/2



Certified to EMC directive 2004/104/EC.

CE – complies with EMC Directive 89/336/EEC.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20° to $+55^{\circ}\text{C}$.



10cd (amber)	75/min	single flash	145mA	110mA	IP65	0.27kg

Features:

A low cost 2W Xenon beacon with four mounting options.

- Dual voltage 12/24V (10 – 30Vdc)
- Bright, intense Xenon flash
- No moving parts – maintenance free
- Very low power consumption
- 3,000 hours tube life
- 12 months' guarantee

Applications:

Off-road use

Materials:

Polycarbonate lens, ABS base

Lens Colour	Three Bolt	Magnetic	Single Bolt	Pole Mount
Amber	420012	420042	420022	420002
Blue	420014	420044	420024	420004
Red	420013	420043	420023	420003
Clear	420011	420041	420021	420001
Green	420015	420045	420025	420005
<p>Drilling for Panel Mounting (ISO 4148)</p> <p>4 holes 7mm dia.</p> <p>120°</p> <p>120°</p> <p>Cable entry</p> <p>130 mm dia.</p>				
	<p>148 mm</p> <p>120 mm</p>			

See page 43 for accessories.

Beta Star RB4XDV/6



Certified to EMC directive 2004/104/EC.

CE – complies with EMC Directive 89/336/EEC.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20° to +55°C.



50cd (amber)	75/min	single flash	600mA	300mA	IP65	0.27kg

Features:

A low cost high brightness 6W general purpose Xenon beacon.

- Dual voltage 12/24V (10 – 32Vdc)
- Bright, intense Xenon flash
- No moving parts – maintenance free
- Very low power consumption
- 3,000 hours tube life
- 12 months' guarantee

Applications:

Wide range of vehicle applications including fleet, utilities, road maintenance, agriculture and construction plant.

Materials:

Polycarbonate lens, ABS base

Lens Colour	Three Bolt	Magnetic	Single Bolt	Pole Mount
Amber	468012	468022	468082	468002
Blue	468014	-	-	468004
Red	468013	-	-	468003
Clear	468011	-	-	468001
Green	468015	468025	-	468005
<p>Drilling for Panel Mounting (ISO 4148)</p> <p>4 holes 7mm dia.</p> <p>120°</p> <p>120°</p> <p>Cable entry</p> <p>130 mm dia.</p>				
<p>148 mm</p> <p>120 mm</p>				

COMPACT VEHICLE BEACONS

Delta Star RB2XDV/15



Certified to EMC directive 2004/104/EC.

CE - Complies with EMC Directive 89/336/EEC.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20°C to +50°C.



60cd (amber)	125/min	single flash	1.5A	750mA	IP65	0.27kg

Features:

A very bright 15W Xenon beacon with a 125/min flash rate.

- Dual voltage 12/24V (10 – 30Vdc)
- Bright, intense Xenon flash
- No moving parts – maintenance free
- Low power consumption
- Compact design
- 3,000 hours tube life
- 12 months' guarantee

Applications:

Cars, vans, light trucks and large vehicles.

Materials:

Polycarbonate lens, ABS base.

Lens Colour	Three Bolt	Magnetic	Single Bolt	Pole Mount
Amber	470002	470017	470012	470032
Blue	470004	470019	470014	470034
Red	470003	470018	470013	470033
Clear	470001	470016	470011	470031
Green	470005	470020	470015	470035
<p>Drilling for Panel Mounting (ISO 4148)</p> <p>4 holes 7mm dia.</p> <p>120°</p> <p>120°</p> <p>Cable entry</p> <p>130 mm dia.</p>				
	<p>148 mm</p> <p>120 mm</p>			

See page 43 for accessories.

Gamma Star RC4XDV/6



Features:

A 6W Xenon beacon with flexible single bolt base.

- Dual voltage 12/24V (10 – 32Vdc)
- Vibration protected circuit and impact resistant lens
- Flexible EVA single bolt mounting base
- Very low power consumption
- Long life
- Maintenance free
- 12 months' guarantee

Applications:

Applications include fleet, road maintenance, agriculture, construction plant, utilities, large vehicles and refuse trucks.

Lens Colour	Single Bolt
Amber	468092

Materials:

Polycarbonate lens, ABS base, EVA flexible mounting base.

Durastrobe RD4XDV/5A



Features:

A 5W Xenon beacon with flexible pole mount base.

- Dual voltage 12/24V (10 – 32Vdc)
- Vibration protected circuit and impact resistant lens
- Flexible EVA pole mounting base to DIN 14 620
- Very low power consumption
- Long life
- Maintenance free
- 12 months' guarantee

Applications:

Applications include construction plant, contracting and agricultural vehicles.

See page 43 for accessories.

Lens Colour	Pole Mount
Amber	466002

Gamma Star	60cd (amber)	75/min	single flash	356mA	280mA	IP55	0.325kg
Durastrobe	50cd (amber)	75/min	single flash	340mA	186mA	IP65	0.325kg

Certified to EMC directive 2004/104/EC.

CE – complies with EMC Directive 89/336/EEC.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20° to +55°C.



MID SIZE VEHICLE BEACONS

Zeta Star ZB2SXDV/10



Certified to EMC directive 95/54.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -30°C to $+55^{\circ}\text{C}$ (-30°C lower limit subject to intermittent and non-continuous use at temperatures below -20°C).

> 60cd (amber)	120/min	single flash	1.2A	0.7A	IP65	0.37kg

Features:

A low cost 10W Xenon beacon.

- Dual voltage 12/24V (10 – 30Vdc)
- Bright, intense Xenon flash
- No moving parts – maintenance free
- Low power consumption
- 3,000 hours tube life
- 12 months' guarantee

Applications:

Suitable for all vehicles including large vehicles, refuse trucks, recovery, fleets, highway maintenance and emergency services.

Materials:

Polycarbonate lens and base.

Lens Colour	Three Bolt	Magnetic	Single Bolt	Pole Mount	Flexi Pole
Amber	493052	493072	493062	493082	493092
Red	493053	–	–	–	–
Blue	493054	–	–	–	–
Green	493055	–	–	–	–
<p>Drilling for Panel Mounting (ISO 4148 / DIN 14620)</p> <p>4 holes 7mm dia.</p> <p>120°</p> <p>120°</p> <p>Cable entry</p> <p>130 mm dia.</p>					

See page 43 for accessories.

Lunar Star LB2DXDV/15

ECE R65 Approved



>100cd (amber) >42cd (blue)	120/min	double flash	1.5A	0.7A	IP65	0.37kg

Features:

A high powered 15W Xenon beacon.

- Dual voltage 12/24V (10 – 30Vdc)
- Bright, intense Xenon flash
- No moving parts – maintenance free
- Low power consumption
- 3,000 hours tube life
- 12 months' guarantee
- Up to 4 beacons can be synchronised

Applications:

Suitable for all vehicles including large vehicles, refuse trucks, recovery, fleets, highway maintenance and emergency services.

Materials:

Polycarbonate lens and base.

Certified to EMC directive 2004/104/EC.

Certified to ECE R65.

High voltage transient and polarity reversal protection fitted.

Operating temperature: –30°C to +55°C (–30°C lower limit subject to intermittent and non-continuous use at temperatures below –20°C).

Lens Colour	Three Bolt	Magnetic	Single Bolt	Pole Mount	Flexi Pole
Amber	493002	493022	493012	493032	493042
Blue	493004	493024	493014	493034	493044
<p>Drilling for Panel Mounting (ISO 4148 / DIN 14620)</p> <p>4 holes 7mm dia.</p> <p>120°</p> <p>120°</p> <p>Cable entry</p> <p>← 130 mm dia. →</p>					
	<p>← 145mm →</p> <p>↑ 150mm ↓</p>				

LARGE VEHICLE BEACONS

Solar Star SCU2DXDV/15

ECE R65 Approved



>100cd (amber) >42cd (blue)	120/min	double flash	1.25A	600mA	IP65	0.45kg

Features:

A high powered Xenon beacon with high performance optics.

- Automatically adjusts to both 12V and 24V (11.5 – 30Vdc)
- Homologated to ECE R65
- Up to 4 beacons can be synchronised
- 3,000 hours tube life
- 12 months' guarantee

Applications:

Suitable for all vehicles including large vehicles, refuse trucks, recovery, fleets, highway maintenance and emergency services.

Materials:

Polycarbonate lens, ABS base.

Certified to EMC directive 2004/104/EC.

CE – complies with EMC Directive 89/336/EEC.

Certified to ECE R65.

High voltage transient and polarity reversal protection fitted.

Operating temperature: –30°C to +55°C (–30°C lower limit subject to intermittent and non-continuous use at temperatures below –20°C).



Lens Colour	Three Bolt	Magnetic	Pole Mount
Amber	470090	470092	470094
Blue	470091	470093	470095
Drilling for Panel Mounting (ISO 4148 / DIN 14620) 4 holes 7mm dia. Cable entry ← 130 mm dia. →			

Non ECE R65 Approved Version	Clear Lens
SCB2DXDV/15	470075

See page 43 for accessories.

Turbo Star ELU2DXDV/15

ECE R65 Approved



>100cd (amber) >42cd (blue)	120/min	double flash	1.25A	600mA	IP65	0.45kg

Features:

A high powered Xenon beacon with an inner fresnel lens and a smooth easy-clean outer lens.

- Automatically adjusts to both 12V and 24V (11.5 – 30Vdc)
- Homologated to ECE R65
- Up to 4 beacons can be synchronised
- 3,000 hours tube life
- 12 months' guarantee

Applications:

Suitable for all vehicles including large vehicles, refuse trucks, recovery, fleets, highway maintenance and emergency services.

Materials:

Polycarbonate lens, ABS base.

Certified to EMC directive 2004/104/EC.

CE – complies with EMC Directive 89/336/EEC.

Certified to ECE R65.

High voltage transient and polarity reversal protection fitted.

Operating temperature: –30°C to +55°C (–30°C lower limit subject to intermittent and non-continuous use at temperatures below –20°C).



Lens Colour	Three Bolt	Magnetic	Pole Mount
Amber	470042	470045	470047
Blue	470044	470046	470048
<p>Drilling for Panel Mounting (ISO 4148 / DIN 14620)</p> <p>4 holes 7mm dia. 120° 120° Cable entry 130 mm dia.</p>			
	<p>160 mm 175 mm</p>		

Non ECE R65 Approved Versions	Red Lens	Clear Lens	Green Lens
ELB2DXDV/15	470053	470051	470055

See page 43 for accessories.

LP Synchronous Flash LP4XDV/2 SYNC (2watt) and LP4XDV/5 SYNC (5watt)



Certified to EMC directive 2004/104/EC.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20°C to $+55^{\circ}\text{C}$.

see table	75/min	single flash	2W: 192mA 5W: 333mA	2W: 96mA 5W: 220mA	IP67	100gms

Features:

A compact directional Xenon beacon with synchronous flash capability.

- Dual voltage 12/24V (10 – 30Vdc)
- Synchronous flash capability
- Vibration protected circuit
- 2W and 5W versions available
- 12 months' guarantee

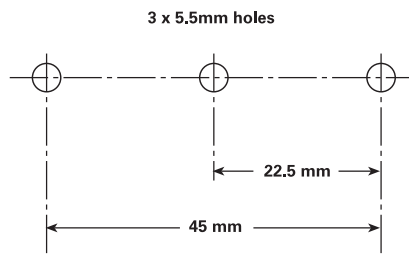
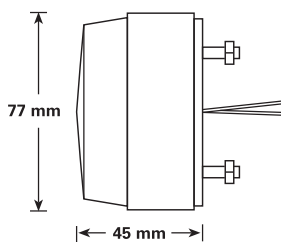
Applications:

Suitable for many vehicle applications including fleet, cars, delivery, refuse trucks, large vehicles, road maintenance, recovery, utilities, road safety, plant and contracting.

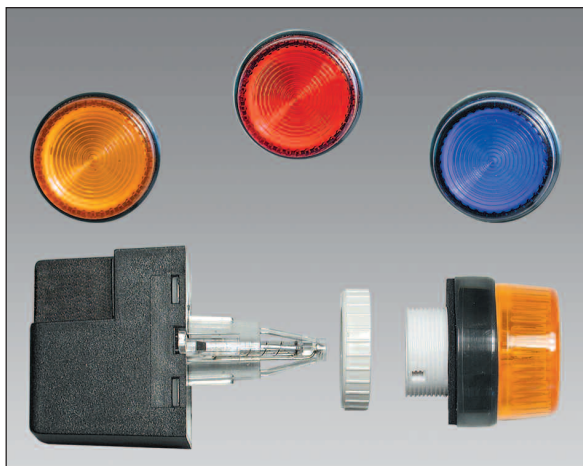
Materials:

Polycarbonate lens and base.

Lens Colour	Power	Light Output	Part Number
Clear	2W	50cd	442001
	5W	85cd	439001
Amber	2W	25cd	442002
	5W	45cd	439002
Red	2W	11cd	442003
	5W	19cd	439003
Blue	2W	10cd	442004
	5W	18cd	439004
Green	2W	10cd	442005
	5W	18cd	439005



Microstrobe VQ XP4XMV/1-VQ



Certified to EMC directive 95/54.

CE – complies with EMC Directive 89/336/EEC and Low Voltage Directive 2006/95/EC.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20°C to +50°C.



12cd (amber)	75/min	single flash	190mA	105mA	IP67 (lens)	50gms

Features:

A compact and reliable high intensity Xenon warning light. Its small size makes it easy to install.

- Multivoltage 10V – 100Vdc
- Simple to install in 22mm drilled hole plus keyway
- 12 months' guarantee

Applications:

Applications include high level hazard warning for trucks and trailers, in-cab warning light for auxiliary equipment, temperature control indicator for refrigerated vehicles, reversing systems and as a vehicle security alarm indicator.

Materials:

Polycarbonate lens unit, ABS back box.

Amber	Red	Blue
425082	425083	425084

SignalLED

Available from first quarter 2009.



12-24Vdc	multi flash	0.2A (max)	IP67

Features:

A compact low power consumption maintenance-free LED beacon providing wide-angle light dispersion.

- 3 wide angled LED optics
- 14 flash patterns including 3 integral alternating flash modes
- 100,000 hours operation
- Die cast aluminium housing
- 5 year warranty

SAE J845 Class II. Certified to EMC directive 2006/28/EC

CE – complies with EMC Directive 89/336/EEC

Operating temperature: -30°C to +50°C.

Amber	Red	Blue
DAD1001	DAD1002	DAD1003



Universal mounting bracket. DAD1004.



Window mounting bracket. DAD1005.



Deck mounting bracket. DAD1006.

DIRECTIONAL VEHICLE BEACONS

VigiLED DR4TXDV/LED



Certified to EMC directive 2004/104/EC.

CE – complies with EMC directive 89/336/EEC.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -30°C to $+55^{\circ}\text{C}$ (-30°C lower limit subject to intermittent and non-continuous use at temperatures below -20°C).



> 80cd (amber) > 80cd (red) > 76cd (blue) > 80cd (white)	75/min	triple flash	120mA	65mA	IP67	170gms

Features:

Surface mount or bracket mount triple flash LED directional.

- Dual voltage 12/24V (10 – 30Vdc)
- High brightness 100,000 hour rated LEDs
- Multiple beacons may be connected together to provide synchronous or alternate flash patterns
- Clear lens with coloured LEDs
- Ultra low power consumption
- Integral electronics – no need for separate power supply or control unit
- IP67 rated
- 3 year guarantee

Applications:

Suitable for many vehicle applications including fleet, cars, delivery, refuse trucks, large vehicles, road maintenance, recovery, utilities and road safety.

Materials:

Polycarbonate lens and base.

Amber	Red	Blue	White
497022	497023	497024	497021

SecuriLED SS20XDV/LED

Surface Mount



ECE R65 Approved

SecuriLED SB20XDV/LED

Bracket Mount



>200cd (amber) >200cd (red) >100cd (blue) >200cd (white)	120/min	quad flash	400mA (1.5A Peak)	200mA (750mA Peak)	IP67	370gms

Features:

Surface mount or bracket mount quad flash LED directional.

- Intensely bright 3rd generation LEDs
- Dual voltage 12/24V (10 – 30Vdc)
- Multiple beacons may be connected together to provide synchronous or alternate flash patterns
- Bracket mount version adjusts horizontally and vertically
- Ultra low power consumption
- Integral electronics – no need for separate power pack or control unit
- IP67 rated
- 3 year guarantee

Certified to EMC directive 2004/104/EC.

CE – complies with EMC Directive 89/336/EEC.

Certified to ECE R65 (amber and blue).

Certified to PITO ACS 5.

High voltage transient and polarity reversal protection fitted.

Operating temperature: –30°C to +55°C (–30°C lower limit subject to intermittent and non-continuous use at temperatures below –20°C).



Applications:

Suitable for many vehicle applications including fleet, cars, delivery, refuse trucks, large vehicles, road maintenance, recovery, utilities and road safety.

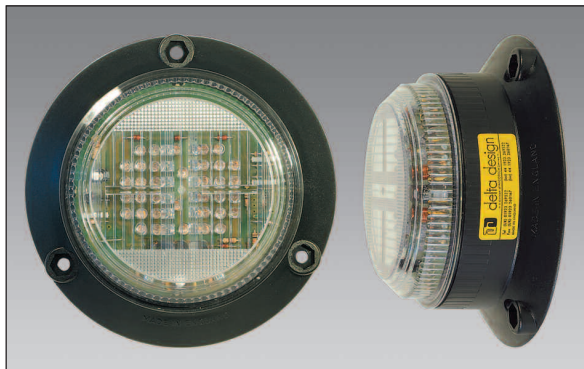
Materials:

Polycarbonate lens, Aluminium base coated black.

Amber	Red	Blue	White
497032	497033	497034	497031

Amber	Red	Blue	White
497042	497043	497044	497041

Rearguard LED



Certified to EMC directive 95/54.

CE – complies with EMC Directive 89/336/EEC.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20°C to $+55^{\circ}\text{C}$.



Amber
497001

>80cd	75/min	triple flash	145mA	120mA	IP65	240gms

Features:

Low profile directional LED beacon.

- Dual voltage 12/24V (10 – 30Vdc)
- High intensity directional hazard warning
- Up to 8 beacons may be connected to flash synchronously or alternately
- Clear lens with amber LEDs
- 12 months' guarantee

Applications:

Suitable for many vehicle applications including utility, refuse trucks, street cleaners, delivery, recovery and large vehicles.

Materials:

Polycarbonate lens, ABS base.

Rearguard Xenon SQ4XDV/5 RG



Certified to EMC directive 95/54.

CE – complies with EMC Directive 89/336/EEC.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20°C to $+55^{\circ}\text{C}$.



Amber	Blue	Red	Clear	Green
426002	426004	426003	426001	426005

>70cd (amber)	75/min	single flash	380mA	180mA	IP65	242gms

Features:

Low profile directional Xenon beacon.

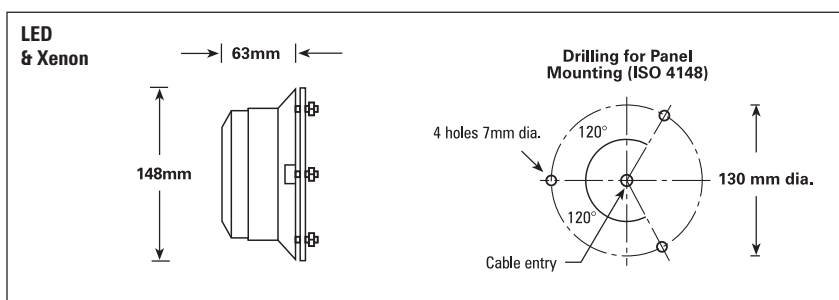
- Dual voltage 12/24V (10 – 30Vdc)
- High intensity hazard warning light
- Directional – all light transmitted in chosen direction
- Up to 8 beacons may be connected to flash synchronously or alternately
- 12 months' guarantee

Applications:

Suitable for many vehicle applications including utility, refuse trucks, street cleaners, drain cleaners, agricultural, delivery, recovery and emergency services.

Materials:

Polycarbonate lens, ABS base.



Orion 3XMV/LED

Patent Pending / Registered Community Design / US Design Patent



CE – certified to EMC directive 2004/108/EC.

Complies with low voltage directive 2006/95/EC.

High voltage transient and polarity reversal protected.

Operating temperature: -20°C to + 50°C.

Beacon should be operated in a vertical position with lens uppermost.



1scd	65 flashes/min 6 bursts/flash	10–100Vdc	350mA	60mA	IP65	0.31kg

Features:

A bright, multivoltage, amber LED beacon with low power consumption.

- Multivoltage 10 – 100 Vdc
- Clear lens with amber coloured LEDs
- Bright, intense '6 burst' LED flash
- Low power consumption
- 3 year guarantee
- Weatherproof to IP65

Product options:

- European 130mm PCD hole pattern to ISO 4148
- US 118mm (4 5/8") PCD hole pattern
- Sounder plinth, fixes to base of beacon

Applications:

Suitable for fork lift trucks and battery powered vehicles.

Materials:

Polycarbonate lens, EVA/PVC base.

Product is ROHS compliant.

Amber	498001	498010
	Europe	USA
	<p>Drilling for Panel Mounting (ISO 4148)</p> <p>4 holes 7mm dia.</p> <p>Cable entry</p> <p>← 130 mm dia. →</p>	<p>Drilling for Panel Mounting (USA Hole Pattern)</p> <p>4 holes 6mm (0.236ins) dia.</p> <p>Cable entry</p> <p>← 118 mm dia. →</p>

Husky Pup ^{RB4XMV/2P}



18cd (light amber)	75 flashes/min	10–100Vdc 20–72Vac	145mA	40mA	IP65	0.4kg

Features:

A bright, multivoltage 2W Xenon beacon.

- Multivoltage 10 – 100 Vdc, 20 – 72 Vac
- Bright, intense Xenon flash
- Ultra-low power consumption
- 3,000+ hours tube life, 12 months' guarantee
- Weatherproof to IP65

Product options:

- European 130mm PCD hole pattern to ISO 4148
- US 118mm (4 5/8") PCD hole pattern
- Sounder plinth, fixes to base of beacon

CE – certified to EMC directive 89/336/EEC.

Complies with low voltage directive 2006/95/EC.

High voltage transient and polarity reversal protected.

Operating temperature: –20°C to + 55°C.

Beacon should be operated in a vertical position with lens uppermost.



Applications:

Suitable for fork lift trucks and battery powered vehicles.

Materials:

Polycarbonate lens, ABS base.

Lens Colour	Three Bolt Europe	Three Bolt USA	Magnetic	Pole Mount
Amber	469040	469062	469086	469082
Red	469041	469063	–	–
Blue	469042	–	–	–
Clear	469039	–	–	–
Green	469043	–	–	–
	<p>Drilling for Panel Mounting (ISO 4148)</p> <p>4 holes 7mm dia.</p> <p>Cable entry</p> <p>← 130 mm dia. →</p>	<p>Drilling for Panel Mounting (USA Hole Pattern)</p> <p>4 holes 6mm (0.236ins) dia.</p> <p>Cable entry</p> <p>← 118 mm dia. →</p>		

Pup2 PU4XMV/2P



CE – certified to EMC directive 89/336/EEC.

Complies with low voltage directive 2006/95/EC.

UL listed – file AU 3700.

High voltage transient and polarity reversal protected.

Operating temperature: -20°C to $+55^{\circ}\text{C}$.

Beacon should be operated in a vertical position with lens uppermost.



>18cd	75 flashes/min	10–100Vdc 20–72Vac	145mA	40mA	IP65	0.244kg

Features:

A bright, multivoltage 2W Xenon beacon.

- Multivoltage 10 – 100 Vdc, 20 – 72 Vac
- Bright, intense Xenon flash
- Ultra-low power consumption
- 3,000+ hours tube life, 12 months' guarantee
- Weatherproof to IP65

Product options:

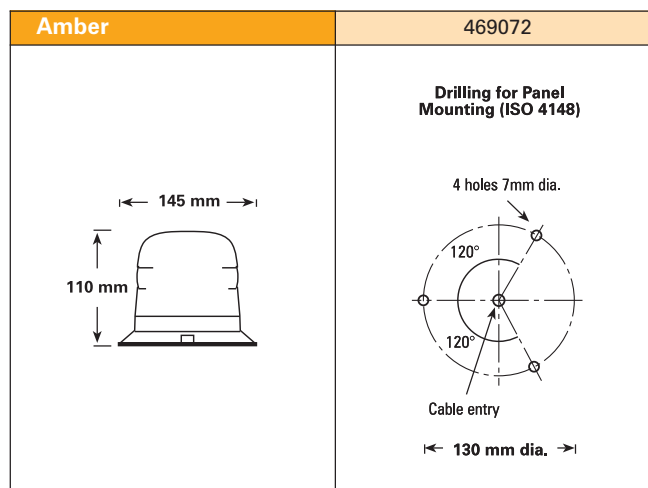
- Sounder plinth, fixes to base of beacon

Applications:

Suitable for fork lift trucks and battery powered vehicles.

Materials:

Polycarbonate lens, EVA/PVC base.



MATERIALS HANDLING BEACONS

Husky RB4XMV/5



CE – certified to EMC directive 89/336/EEC.

Complies with low voltage directive 2006/95/EC.

High voltage transient and polarity reversal protected.

Operating temperature: -20°C to $+55^{\circ}\text{C}$.

Beacon should be operated in a vertical position with lens uppermost.



4cd (amber)	75 flashes/min	10–100Vdc 30–60Vac	360mA	60mA	IP65	0.4kg

Features:

A bright, multivoltage 5W Xenon beacon.

- Multivoltage 10 – 100 Vdc, 30 – 60 Vac
- Bright, intense Xenon flash
- Low power consumption
- 3,000+ hours tube life, 12 months' guarantee
- Replaceable Xenon tube
- Weatherproof to IP65

Product options:

- Sounder plinth, fixes to base of beacon

Applications:

Suitable for fork lift trucks and battery powered vehicles.

Materials:

Polycarbonate lens, ABS base.

Amber	469012
Red	469013
Blue	469004
Clear	469011
Green	469005
	<p>Drilling for Panel Mounting (ISO 4148)</p> <p>4 holes 7mm dia.</p> <p>Cable entry</p> <p>← 130 mm dia. →</p>

See page 43 for accessories.

Hedgehog LED SQ1XMV/LED 360/24 and SQ1X12/LED 360/24



Lens Colour	20 – 100 Vdc	10 – 15 Vdc
Amber	424001	424011

SQ1XMV/LED 360/24	60 flashes/min	20–100Vdc	24mA	IP65	0.3kg
SQ1X12/LED 360/24	60 flashes/min	10–15Vdc	48mA	IP65	0.3kg

Features:

A bright low profile LED beacon.

- High intensity flash
- Ultra-low power consumption
- 3 year guarantee
- Weatherproof to IP65
- Can be installed lens upwards or inverted

Product options:

- Multivoltage 20 – 100 Vdc or 10 – 15 Vdc version
- Sounder plinth, fixes to base of beacon (see Husky product options)

Hedgehog Xenon SQ4XMV/2 360



Amber	Red
424095	424096

75 flashes/min	10–100Vdc 20–72Vac	145mA	40mA	IP65	0.3kg

Features:

A bright, multivoltage low profile 2W Xenon beacon.

- Multivoltage 10 – 100 Vdc, 20 – 72 Vac
- Bright, intense Xenon flash
- Ultra-low power consumption
- 12 months' guarantee
- Weatherproof to IP65
- Can be installed lens upwards or inverted

Product options:

- Sounder plinth, fixes to base of beacon (see Husky product options)

Information common to both Hedgehog LED and Hedgehog Xenon beacons

CE – certified to EMC directive 89/336/EEC.

Complies with low voltage directive 2006/95/EC.

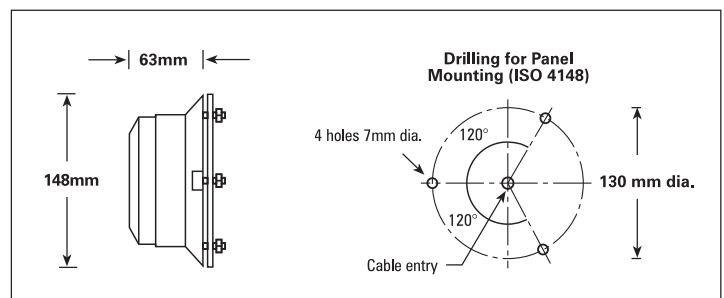
Operating temperature: –20°C to +55°C (max 40°C above 80V).



Applications:

Suitable for fork lift trucks, industrial sweepers and battery powered vehicles.

Materials: Polycarbonate lens, ABS base.



See page 43 for accessories.

MINI LIGHT BARS

Pulsar ECE

ECE R65 Approved



Certified to EMC directive 95/54.

Certified to ECE R65.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20° to $+55^{\circ}\text{C}$.

>100cd (amber) >42cd (blue)	120/min	double flash	3A	1.6A	IP54	1.41kg (fixed) 2.15kg (mag)

Features:

ECE R65 certified mini light bar with 2 synchronised strobes.

- Dual voltage 12/24V (10.5 – 30Vdc)
- Magnetic mount version available
- 3,000 hours tube life
- 12 months' guarantee

Applications:

Suitable for many vehicle applications including fleet, road maintenance, cars, large vehicles, refuse trucks, road safety and emergency services.

Materials:

Polycarbonate base and cover.

Lens Colour	Fixed	Magnetic
Amber	483002	483012
Blue	483004	483014








Pulsar Economy



Certified to EMC directive 95/54.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20° to +55°C.

						
> 50cd (amber) > 21cd (blue)	75/min	single flash alternate	1.1A	760mA	IP54	1.16kg (fixed) 1.9kg (mag)

Features:

Low cost mini light bar with 2 alternating strobes.

- Dual voltage 12/24V (10.5 – 30Vdc)
- Magnetic mount version available
- 3,000 hours tube life
- 12 months' guarantee

Applications:

Suitable for many vehicle applications including fleet, road maintenance, cars, large vehicles, refuse trucks, road safety and emergency services.

Materials:

Polycarbonate base and cover.

Lens Colour	Fixed	Magnetic
Amber	483022	483032
Blue	483024	483034

Xenergy Range

ECE R65 Approved



Features:

An extensive range of high quality competitively priced light bars for amber and blue markets.

- Dual voltage 12/24V
- Double flash end strobes
- Five lengths available: 610, 860, 1110, 1360 and 1610mm
- Clear cover versions available in each length
- Long life Xenon flash tubes
- Low power consumption
- 12 months' guarantee

Options:

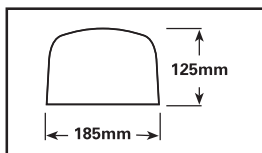
- Centre Illumination / Lettering service
- LED directional strobes
- LED stop/tail/indicator light clusters
- Work lights
- Alley lights
- Easily installed and removed magnetic mount option for a range of 610 and 860mm bars. Tested by TÜV, the German automotive test house, to 200km/hr.

Applications:

Suitable for all sectors of the commercial vehicle market and emergency services.

Materials:

Polycarbonate lens covers, aluminium base extrusion.



End strobes	>100cd (amber) >42cd (blue)	120/min	double flash synchronous	IP65
Directional front/rear strobes	>400cd	65/min (nominal)	random	

Certified to EMC directive 2004/104/EC.

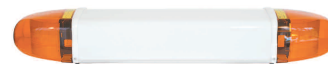
Certified to ECE R65.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -30°C to +55°C (-30°C lower limit subject to intermittent and non-continuous use at temperatures below -20°C).



<- 610mm ->



<- 860mm ->



<- 1110mm ->



<- 1360mm ->



<- 1610mm ->

Key to Model Numbers:
2 X A I. 1360

↑ ↑ ↑ ↑ ↑
Length (mm)
Centre Illumination Panel
 I = 250mm illumination panel
 2I = 500mm illumination panel
 3I = 750mm illumination panel

Main Lens Colour
 A = Amber, B = Blue,
 C = Precedes lens colour if clear cover.








Xenergy

Strobes
 2 = 2 end strobes
 For numbers above 2 add directional strobes, e.g. 4 means two end strobes and two directional strobes.

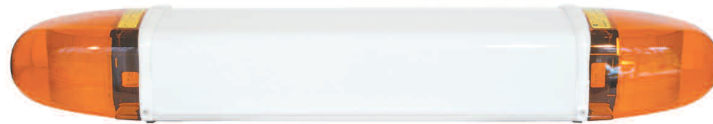
Other letters denote:
 R = Bar designed for recovery market
 L = LED stop/tail/indicator light cluster
 W = Work light
 MAG = Magnetic mount kit
 V/LED F&R = LED directional front and rear

Xenergy 610



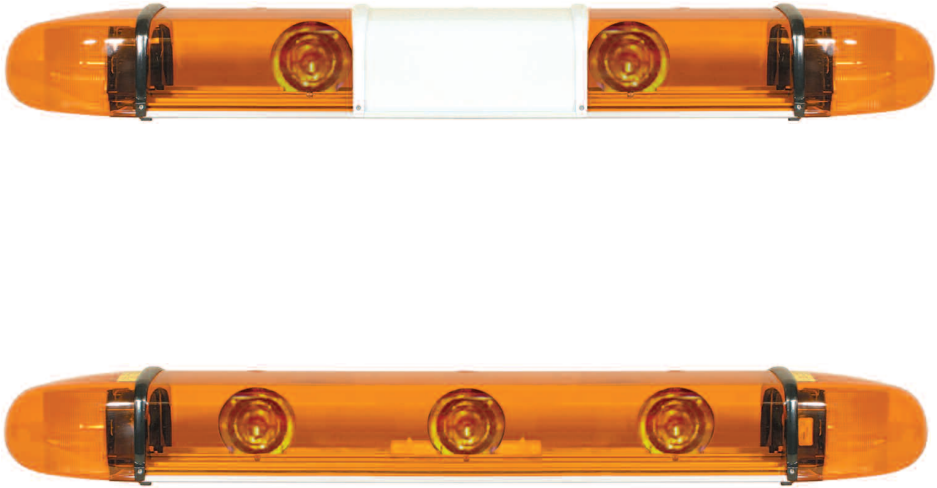
Product	12V	24V	Dual 12/24V	<i>i</i> 12V	<i>i</i> 24V	
2XA.610	-	-	490001	3A	1.42A	
2XB.610	-	-	490002			
2XAI.610	490003	490007	-	3.83A	1.83A	
2XBI.610	490004	490008	-			
2XCA.610	-	-	490005	3A	1.42A	
2XCB.610	-	-	490006			
3XA.610	-	-	490009	3.4A	1.7A	
3XB.610	-	-	489999			
2XA.610 2 V/LED F&R	-	-	491050	3.5A	1.7A	
2XA.610 MAG	-	-	491001	3A	1.42A	
2XB.610 MAG	-	-	491002			
2XAI.610 MAG	491003	491007	-	3.83A	1.83A	
2XBI.610 MAG	491004	491008	-			
2XCB.610 MAG	-	-	491006	3A	1.42A	
2XA.610 2 V/LED F&R MAG	-	-	491051	3.5A	1.7A	

Xenergy 860



Product	12V	24V	Dual 12/24V	<i>i</i> 12V	<i>i</i> 24V	
2XA.860	–	–	490011	3A	1.42A	
2XB.860	–	–	490012			
2XA2I.860	490013	490017	–	4.67A	2.25A	
2XB2I.860	490014	490018	–			
2XCA.860	–	–	490015	3A	1.42A	
2XCB.860	–	–	490016			
4XA.860	–	–	489902	4A	2A	
2XA.860 2 V/LED F&R	–	–	491055	3.5A	1.7A	
2XA.860 MAG	–	–	491011	3A	1.42A	
2XB.860 MAG	–	–	491012			
2XA2I.860 MAG	491013	491017	–	3.83A	1.83A	
2XB2I.860 MAG	491014	491018	–			
2XCB.860 MAG	–	–	491016	3A	1.42A	
4XA.860 MAG	–	–	491019	4A	2A	

Xenergy 1110



Product	12V	24V	Dual 12/24V	<i>i</i> 12V	<i>i</i> 24V	
2XA.1110	-	-	490026	3A	1.42A	
2XB.1110	-	-	490036			
2XAI.1110	490020	490030	-	3.83A	1.83A	
2XBI.1110	490021	490031				
4XA.1110	-	-	490027	4.15A	2.03A	
4XB.1110			490029			
4XAI.1110	490022	490032	-	4.98A	2.45A	
4XBI.1110	490023	490033				
4XCA.1110	-	-	490024	4.15A	2.03A	
4XCB.1110			490025			
2XA3I.1110	490028	490038	-	5.2A	2.6A	
2XB3I.1110	490034	490037				
5XA.1110	-	-	490035	4.6A	2.3A	
5XB.1110	-	-	489903			
4XRL.1110	490081	490087	-	6A	3A	
4XRW.1110	490085	-	-	11A	-	
2XA.1110 4 V/LED F&R	-	-	491060	4A	2A	

XENERGY BARS

Xenergy 1360



Product	12V	24V	Dual 12/24V	<i>i</i> 12V	<i>i</i> 24V	
2XA.1360	-	-	490047	3A	1.42A	
2XB.1360	-	-	490057			
2XA2I.1360	490041	490051	-	4.67A	2.25A	
2XB2I.1360	490042	490052	-			
4XA.1360	-	-	490043	4.15A	2.03A	
4XB.1360	-	-	490044			
6XA.1360	-	-	489904	5.2A	2.6A	
4XCA.1360	-	-	490045	4.15A	2.03A	
4XCB.1360	-	-	490046			
2XA4I.1360	490050	490053	-	6A	3A	
2XB4I.1360	-	490055	-			
4XA2I.1360	490049	490054	-	5.6A	2.8A	
4XB2I.1360	490048	-	-			
6XCB.1360	-	-	490093	5.2A	2.6A	
4XRL.1360	490082	490088	-	6A	4A	
4XRW.1360	-	490086	-	-	7A	

Xenergy 1610



Product	12V	24V	Dual 12/24V	<i>i</i> 12V	<i>i</i> 24V	
2XA3I.1610	490061	490071	–	5.5A	2.67A	
2XB3I.1610	490062	490072	–			
4XA1.1610	490063	490073	–	4.89A	2.45A	
4XB1.1610	490064	490074	–			
4XA.1610	–	–	489905	4A	2A	
4XCA.1610	–	–	490065	4.15A	2.03A	
4XCB.1610	–	–	490066			
4XA3I.1610	–	490075	–	–	3.2A	
8XA.1610	–	–	490067	5.4A	3.1A	
4XL4W.1610	–	490078	–	–	8.5A	
4XRLW.1610	490083	490089	–	12A	6A	
4XRL.1610	–	490090	–	–	4A	
4XRL3I.1610	–	490091	–	–	4A	

SIREN BARS

500mm Xenergy Siren Bar

ECE R65 Approved



>100cd (amber) >42cd (blue)	120/min	double flash	4.5A (max)	IP65	40W 100dB

Features:

Dual-tone siren bar.

- Magnetic and permanent mount versions
- Magnetic version certified by TÜV for speeds up to 200kph
- 12 volt
- 40W (100dB) siren with 'Wail' and 'Yelp' tones
- Magnetic version has DIN plug with integral 3 position selector switch for siren
- Xenon strobes certified to ECE R65 (blue and amber versions)
- 12 months' guarantee

Applications:

Emergency, fire and medical services.

Materials:

Polycarbonate lens covers, aluminium base extrusion.

Certified to EMC directive 2004/104/EC.

Certified to ECE R65.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -30°C to +55°C (-30°C lower limit subject to intermittent and non-continuous use at temperatures below -20°C).

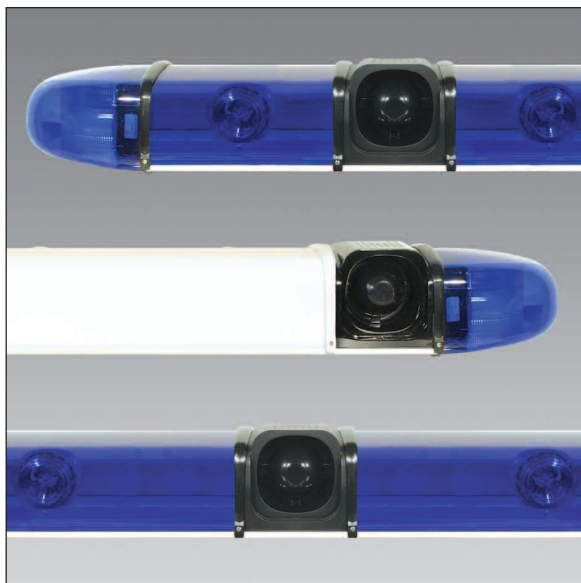
Suitable for emergency, fire, medical and security services.

Tested by TÜV Germany to 200kph

Type	Blue	Green	Blue/Green	Amber
Magnetic Mount	492001	492007	492004	492003
Permanent Mount	492002	492008	492005	492006

40W/80W Xenergy Siren Bars

ECE R65 Approved



Certified to EMC directive 2004/104/EC.

Certified to ECE R65.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -30°C to +55°C (-30°C lower limit subject to intermittent and non-continuous use at temperatures below -20°C).

End strobes	> 42cd (blue)	120/min	double flash synchronous	IP65	40W: 100dB 80W: 105dB
Directional front/rear strobes	> 400cd	65/min (nominal)	random		

Features:

Dual-tone siren bar.

- 40W and 80W versions
- 3 lengths available: 1000, 1400 and 1500mm
- 12 volt
- Siren with 'Wail' and 'Yelp' tones
- Xenon strobes certified to ECE R65
- 12 months' guarantee

Applications:

Emergency, fire and medical services.

Materials:

Polycarbonate lens covers, aluminium base extrusion.

Suitable for emergency, fire, medical and security services.

Product	40W	80W	Length		
2XB.1000	492040	–	1000mm	4.5A (max)	
4XB.1000	492041	–	1000mm	5.5A (max)	
2XB3I.1400	492044	492048	1400mm	40W 6.7A (max) 80W 8.2A (max)	
4XB1.1400	492045	492049	1400mm	40W 6.5A (max) 80W 8A (max)	
2XB3BI.1400	492046	492050	1400mm	40W 6.7A (max) 80W 8.2A (max)	
4XB1BI.1400	492047	492051	1400mm	40W 6.5A (max) 80W 8A (max)	
2XB.1500	492042	–	1500mm	4.5A (max)	
4XB.1500	492043	–	1500mm	5.5A (max)	

Delta Bar Range

ECE R65 Approved



Features and Options:

A range of high quality low profile light bars for amber and blue markets. Xenon, xenon/LED and Full LED variants are available.

- Dual voltage 12/24V
- Single flash Xenon corner strobes
- Intensely bright 3rd generation LED corners
- Xenon face strobes feature a choice of high visibility ripple flash pattern
- LED face modules feature a unique high visibility tri-phase flash pattern
- Five lengths available: 520, 750, 980, 1200 and 1430
- Aluminium box extrusion with front and rear face modules
- Long life Xenon flash tubes and LED modules
- Low power consumption
- Easily installed and removed magnetic mount version for a range of 520 and 750mm bars. Please call for further information
- 12 months' guarantee

Mounting Options:

- Standard mount consists of four rubber feet. Side mounting kit available for specific applications.

Applications:

Suitable for all sectors of the commercial vehicle market and emergency services.

Materials:

Polycarbonate lens covers, aluminium box extrusion.

Xenon corner strobes	>100cd (amber) >42cd (blue)	120/min	single flash	IP65
LED corner strobes	>100cd (amber) >50cd (blue)	120/min	quad flash	IP65

Certified to EMC directive 2004/104/EC.

Certified to ECE R65 (Xenon – amber and blue, LED – blue only).

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20° to +55°C.

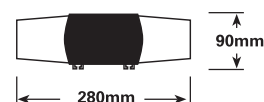
1DB 520 (20")

2DB 750 (30")

3DB 980 (39")

4DB 1200 (47")

5DB 1430 (56")



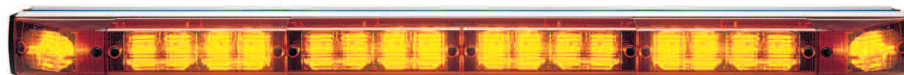
Maxisafe

Standard light bar for the recovery, rescue and road maintenance markets.

Incorporating full Xenon strobes and highly visible ripple flash pattern to the rear face of the light bar.



Maxisafe 4DB front and rear








Product	Length (mm)	12V	24V			Each bar shown front & rear (front at the top)
Maxisafe 4DB	1200	880074	880073	12.86A	6.44A	
Maxisafe 5DB	1430	880075	880072	15.09A	7.56A	

LED

Enhanced Delta Bar with Xenon strobe corners and LED modules. Tri-phase flash pattern to front and rear.



5DB LED (front and rear are identical)

Product	Length (mm)	Dual Voltage	<i>i</i> 12V	<i>i</i> 24V	Each bar is identical front and rear
LED/LED 1DB	520	880410	4A	2A	
LED/LED 2DB	750	880420	5.2A	2.8A	
LED/LED 3DB	980	880430	6.4A	3.2A	
LED/LED 4DB	1200	880440	7.6A	5.6A	
LED/LED 5DB	1430	880450	8.8A	4.4A	

Maxi-LED






Featuring corners fitted with 3rd generation high brightness LEDs, quad flash pattern.



NEW LED corner module



5DB LED (front and rear are identical)

Product	Length (mm)	Dual Voltage	<i>i</i> 12V	<i>i</i> 24V	Each bar is identical front and rear
LED/LED 1DB	520	880510	2.8A	1.4A	
LED/LED 2DB	750	880520	4A	2A	
LED/LED 3DB	980	880530	5.2A	2.6A	
LED/LED 4DB	1200	880540	6.4A	3.2A	
LED/LED 5DB	1430	880550	7.6A	3.8A	

Solus Bar Range

Both Amber and Blue Versions Certified to ECE R65



Features and Options:

A range of high quality low profile LED light bars for all amber and blue market sectors.

- Dual voltage 12/24V
- Intensely bright 3rd generation LED corners and face modules
- Five lengths available: 560, 860, 1160, 1460 and 1760mm
- Low power consumption
- Weatherproof to IP65
- 3 year guarantee

Options:

- Centre illumination
- LED stop/tail/indicator light clusters
- Work lights
- Alley lights

Mounting Options:

- Standard mount option consists of four rubber feet
- FX44 raised mounting kit option available separately (part No. 521082).



Materials:

Polycarbonate lenses, ABS top covers, aluminium base extrusion.

Flash Patterns:

The corner modules on all patterns are left & right quad flash.

Standard Flash:

Face modules – left & right quad flash.

Bi-Phase:

Face modules – left & right triple flash / quad flash all.

Implode/Explode:

Face modules – outer to inner / inner to outer.

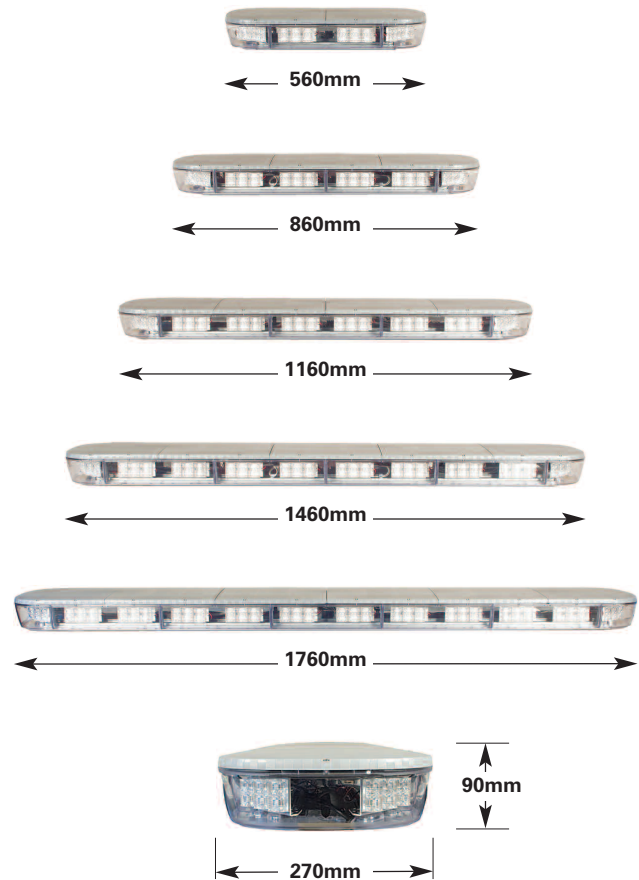
LED corner strobes	> 150cd (amber) > 118cd (blue)	120/min	quad flash

Certified to EMC directive 2006/28/EC.

Certified to ECE R65 (amber and blue).

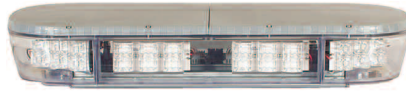
High voltage transient and polarity reversal protection fitted.

Operating temperature: -20° to +55°C.



Solus 560

560mm length multi-voltage 12V/24Vdc LED lights bars.



611003 (amber LEDs) or 611006 (blue LEDs)

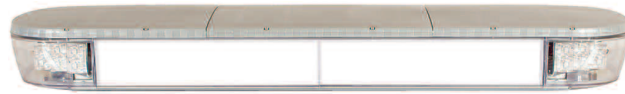


Part Number (Amber or blue LEDs)	Flash Pattern	<i>i</i> 12V	<i>i</i> 24V	Each bar shown front & rear (front at the top)
611001	Standard	2.7A	1.4A	
611004	Standard	3.7A	1.9A	
611002	Standard	4.3A	2.2A	
611005	Standard	5.9A	3.0A	
611003	Standard	5.9A	3.0A	
611006	Standard	8.1A	4.0A	

Please refer to the matrix on the page 38 for full specification.

SOLUS LED BARS

Solus 860 860mm length multi-voltage 12V/24Vdc LED lights bars.



611023 (amber LEDs) or 611028 (blue LEDs)



Part Number (Amber or blue LEDs)	Flash Pattern	<i>i</i> 12V	<i>i</i> 24V	Each bar shown front & rear (front at the top)
611020	Standard	2.7A	1.4A	
611025	Standard	3.7A	1.9A	
611021	Standard	5.9A	3.0A	
611026	Standard	8.1A	4.0A	
611022	Standard	3.4A	1.8A	
611027	Standard	4.7A	2.4A	
611023	Standard	6.6A	3.4A	
611028	Standard	9.1A	4.6A	
611024	Standard	9.1A	4.6A	
611029	Standard	12.6A	6.3A	

Please refer to the matrix on the page 38 for full specification.

Solus 1160

1160mm length multi-voltage 12V/24Vdc LED lights bars.



611045 (amber LEDs) or 611052 (blue LEDs)



Part Number (Amber or blue LEDs)	Flash Pattern	<i>i</i> 12V	<i>i</i> 24V	Each bar shown front & rear (front at the top)
611040	Standard	2.7A	1.4A	
611047	Standard	3.7A	1.9A	
611041	Standard	3.8A	2.0A	
611048	Standard	5.2A	2.6A	
611042	Bi-Phase	8.6A	4.4A	
611049	Bi-Phase	11.8A	5.9A	
611043	Standard	9.1A	4.6A	
611050	Standard	12.6A	6.3A	
611044	Bi-Phase	7.5A	3.8A	
611051	Bi-Phase	10.4A	5.2A	
611045	Standard	9.5A	4.8A	
611052	Standard	13.0A	6.5A	
611046	Bi-Phase	12.3A	6.2A	
611053	Bi-Phase	17.0A	8.5A	

Please refer to the matrix on the page 38 for full specification.

SOLUS LED BARS

Solus 1460 1460mm length multi-voltage 12V/24Vdc LED lights bars.



611062 (amber LEDs) or 611068 (blue LEDs)

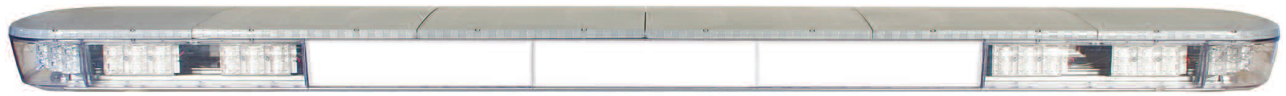


Part Number (Amber or blue LEDs)	Flash Pattern	<i>i</i> 12V	<i>i</i> 24V	Each bar shown front & rear (front at the top)
611065	Bi-Phase	8.1A	3.0A	
611060	Standard	9.1A	4.6A	
611066	Standard	12.6A	6.3A	
611061	Standard	9.8A	5.0A	
611067	Standard	13.5A	6.8A	
611062	Implode / Explode	13A	6.7A	
611068	Implode / Explode	17.9A	9.0A	
611063	Implode / Explode	9.1A	4.6A	
611069	Implode / Explode	12.6A	6.3A	
611064	Implode / Explode	15.5A	7.8A	
611070	Implode / Explode	21.4A	10.7A	

Please refer to the matrix on the page 38 for full specification.

Solus 1760

1760mm length multi-voltage 12V/24Vdc LED lights bars.



611083 (amber LEDs) or 611088 (blue LEDs)



Part Number (Amber or blue LEDs)	Flash Pattern	<i>i</i> 12V	<i>i</i> 24V	Each bar shown front & rear (front at the top)
611080	Standard	9.1A	4.6A	
611085	Standard	12.6A	6.3A	
611081	Standard	10.2A	5.2A	
611086	Standard	14.0A	7A	
611082	Implode / Explode	10.7A	5.4A	
611087	Implode / Explode	14.8A	7.4A	
611083	Implode / Explode	15.0A	7.6A	
611088	Implode / Explode	20.6A	10.3A	
611084	Implode / Explode	18.7A	9.4A	
611089	Implode / Explode	25.8A	12.9A	

Please refer to the matrix on the page 38 for full specification.

Solus LED Bar Specifications

Part No.	Length (mm)	Description	Flash Pattern	Corner LEDs	Front Modules					Rear Modules					Current consumption (A)	12V	24V	
					1	2	3	4	5	1	2	3	4	5				
611001	560	Solus 560 A	Standard	Amber	Dummy						Dummy						2.7	1.4
611002	560	Solus 560 A 2AR	Standard	Amber	Dummy						2 Amber						4.3	2.2
611003	560	Solus 560 A 2AF 2AR	Standard	Amber	2 Amber						2 Amber						5.9	3.0
611020	860	Solus 860 A	Standard	Amber	Dummy						Dummy						2.7	1.4
611021	860	Solus 860 A 4AR	Standard	Amber	Dummy						2 Amber						5.9	3.0
611022	860	Solus 860 A 2LF	Standard	Amber	illum.						Dummy						3.4	1.8
611023	860	Solus 860 A 2LF 4AR	Standard	Amber	illum.						2 Amber						6.6	3.4
611024	860	Solus 860 A 4AF 4AR	Standard	Amber	2 Amber						2 Amber						9.1	4.6
611040	1160	Solus 1160 A	Standard	Amber	Dummy						Dummy						2.7	1.4
611041	1160	Solus 1160 A 3ILF	Standard	Amber	illum.						Dummy						3.8	2.0
611042	1160	Solus 1160 A 3ILF 6AR	Bi-Phase	Amber	illum.						2 Amber						8.6	4.4
611043	1160	Solus 1160 A 4AF 4AR	Standard	Amber	2 Amber						2 Amber						9.1	4.6
611044	1160	Solus 1160 A 6AR	Bi-Phase	Amber	Dummy						2 Amber						7.5	3.8
611045	1160	Solus 1160 A 4AF 4AR	Standard	Amber	2 Amber						2 Amber						9.5	4.8
611046	1160	Solus 1160 A 6AF 6AR	Bi-Phase	Amber	2 Amber						2 Amber						12.3	6.2
611060	1460	Solus 1460 A 4AF 4AR	Standard	Amber	2 Amber						2 Amber						9.1	4.6
611061	1460	Solus 1460 A 4AF 2LF 4AR	Standard	Amber	2 Amber						2 Amber						9.8	5.0
611062	1460	Solus 1460 A 4AF 2LF 8AR	Implode/Explode	Amber	2 Amber						2 Amber						13.0	6.7
611063	1460	Solus 1460 A 8AR	Implode/Explode	Amber	Dummy						2 Amber						9.1	4.6
611064	1460	Solus 1460 A 8AF 8AR	Implode/Explode	Amber	2 Amber						2 Amber						15.5	7.8
611080	1760	Solus 1760 A 4AF 4AR	Standard	Amber	2 Amber						2 Amber						9.1	4.6
611081	1760	Solus 1760 A 4AF 3ILF 4AR	Standard	Amber	2 Amber						2 Amber						10.2	5.2
611082	1760	Solus 1760 A 10AR	Implode/Explode	Amber	Dummy						Dummy						10.7	5.4
611083	1760	Solus 1760 A 4 AF 3ILF 10AR	Implode/Explode	Amber	2 Amber						2 Amber						15.0	7.6
611084	1760	Solus 1760 A 10AF 10AR	Implode/Explode	Amber	2 Amber						2 Amber						18.7	9.4
611004	560	Solus 560 B	Standard	Blue	Dummy						Dummy						3.7	1.9
611005	560	Solus 560 B 2BR	Standard	Blue	Dummy						2 Blue						5.9	3.0
611006	560	Solus 560 B 2BF 2BR	Standard	Blue	2 Blue						2 Blue						8.1	4.0
611025	860	Solus 860 B	Standard	Blue	Dummy						Dummy						3.7	1.9
611026	860	Solus 860 B 4BR	Standard	Blue	Dummy						2 Blue						8.1	4.0
611027	860	Solus 860 B 2LF	Standard	Blue	illum.						Dummy						4.7	2.4
611028	860	Solus 860 B 2LF 4BR	Standard	Blue	illum.						2 Blue						9.1	4.6
611029	860	Solus 860 B 4BF 4BR	Standard	Blue	2 Blue						2 Blue						12.6	6.3
611047	1160	Solus 1160 B	Standard	Blue	Dummy						Dummy						3.7	1.9
611048	1160	Solus 1160 B 3ILF	Standard	Blue	illum.						Dummy						5.2	2.6
611049	1160	Solus 1160 B 3ILF 6BR	Bi-Phase	Blue	illum.						2 Blue						11.8	5.9
611050	1160	Solus 1160 B 4BF 4BR	Standard	Blue	2 Blue						2 Blue						12.6	6.3
611051	1160	Solus 1160 B 6BR	Bi-Phase	Blue	Dummy						2 Blue						10.4	5.2
611052	1160	Solus 1160 B 4BF 4BR	Standard	Blue	2 Blue						2 Blue						13.0	6.5
611053	1160	Solus 1160 B 6BF 6BR	Bi-Phase	Blue	2 Blue						2 Blue						17.0	8.5
611067	1460	Solus 1460 B 4BF 4BR	Standard	Blue	2 Blue						2 Blue						13.5	6.8
611068	1460	Solus 1460 B 4BF 2LF 4BR	Standard	Blue	2 Blue						2 Blue						12.6	6.3
611068	1460	Solus 1460 B 4BF 2LF 8BR	Implode/Explode	Blue	2 Blue						2 Blue						17.9	9.0
611069	1460	Solus 1460 B 8BR	Implode/Explode	Blue	Dummy						2 Blue						12.6	6.3
611070	1460	Solus 1460 B 8BF 8BR	Implode/Explode	Blue	2 Blue						2 Blue						21.4	10.7
611085	1760	Solus 1760 B 4BF 4BR	Bi-Phase	Blue	2 Blue						Dummy						8.1	3.0
611086	1760	Solus 1760 B 4BF 3ILF 4BR	Standard	Blue	2 Blue						2 Blue						12.6	6.3
611087	1760	Solus 1760 B 10BR	Standard	Blue	2 Blue						2 Blue						14.0	7.0
611087	1760	Solus 1760 B 10BR	Implode/Explode	Blue	Dummy						Dummy						14.8	7.4
611088	1760	Solus 1760 B 4BF 3ILF 10BR	Implode/Explode	Blue	2 Blue						2 Blue						20.6	10.3
611089	1760	Solus 1760 B 10BF 10BR	Implode/Explode	Blue	2 Blue						2 Blue						25.8	12.9

Hi-Wave

ECE R65 Approved



Certified to EMC directive 95/54.

Certified to ECE R65.

High voltage transient and polarity reversal protection fitted.

Operating temperature: -20° to $+55^{\circ}\text{C}$.



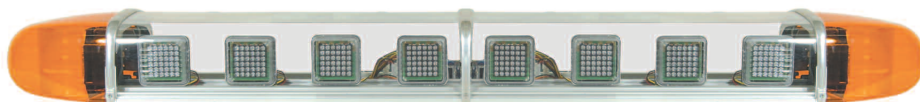
Hi-Wave Delta 980



Hi-Wave Delta 1200



Hi-Wave Xenergy 1110



Hi-Wave Xenergy 1360

Features:

A range of dual function bars with amber Xenon strobe end modules and amber LED rear-facing modules. Offers 3 traffic directing sequences and 5 high visibility warning flash patterns. Supplied with remote control unit with cradle for dash mounting.

- Dual voltage 12/24V (10.5 – 30Vdc)
- Standard and low-profile versions
- 8 flash patterns
- Real-time flash pattern display on controller
- Low power consumption
- High reliability ultra bright LEDs and Xenon strobe tubes
- 12 months' guarantee

Controller Features:

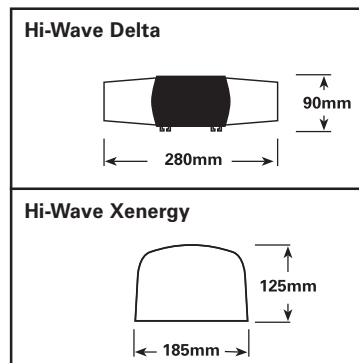
- Backlit pattern selector
- Fitted with 5m cable, with extension available
- Independent switch for end / corner strobes



Flash Patterns:

- 3 directional patterns and 5 high visibility warning flash patterns

Materials:

Polycarbonate lens covers, aluminium extrusions.



Model	Part No.	Length	Description	 12V	 24V
Hi-Wave Delta 980	880011	980mm	6 rear facing LED blocks + 4 Xenon 6W corner strobe modules	4.4A	2.2A
Hi-Wave Delta 1200	880012	1200mm	8 rear facing LED blocks + 4 Xenon 6W corner strobe modules	4.9A	2.4A
Hi-Wave Xenergy 1110	491030	1110mm	6 rear facing LED blocks + 2 Xenon end strobes	4.6A	2.3A
Hi-Wave Xenergy 1360	491040	1360mm	8 rear facing LED blocks + 2 Xenon end strobes	3.1A	2.5A
Hi-Wave Extension Cable	521095	5m	Extension cable	–	–

Incandescent Work Lamps



Features:

A range of four high quality incandescent work lights.

- Supplied without bulbs ready for your choice of 12V or 24V use
- Symmetric standard lenses
- Free form dye cast aluminium reflectors
- 30mm brackets – upright mount

Materials:

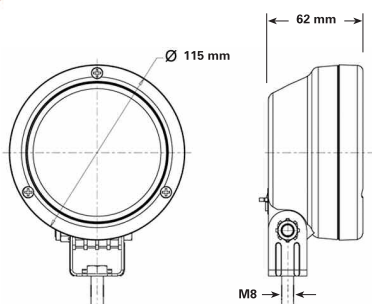
Fibreglass reinforced nylon housing, gold passivated carbon steel bracket.

Model	Part No.	Bulb 12V (not supplied)	Bulb 24V (not supplied)	Bulbs Required	Spade Connectors
Series 115	PW 115 SP	H3 12V 55W	H3 24V 70W	1	6.35mm (1/4")
Series 1010	PW 1010 SP	H3 12V 55W	H3 24V 70W	1	6.35mm (1/4")
Series 1014	PW 1014 SP	H3 12V 55W	H3 24V 70W	1	6.35mm (1/4")
Series 1117	PW 1117 SP	H3 12V 55W	H3 24V 70W	2	6.35mm (1/4")

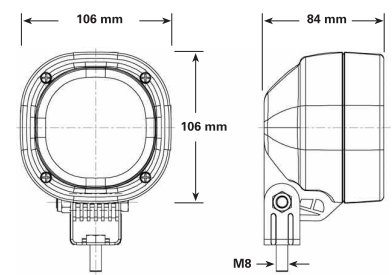
6.35mm spade
connectors



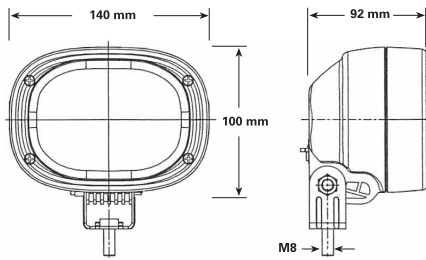
Series 115



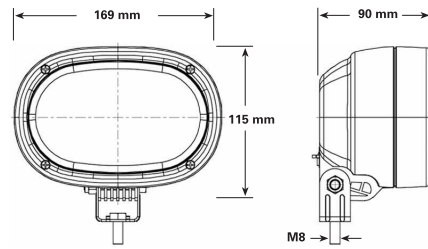
Series 1010



Series 1014



Series 1117 TWIN BULB



HID & LED Work Lamps

Available from first quarter 2009.



Features:

A range of high quality HID & LED work lamps

- Latest HID & LED technology
- 30mm brackets, upright mount
- 20,000 hours life (LED), 2,500 hours (HID)

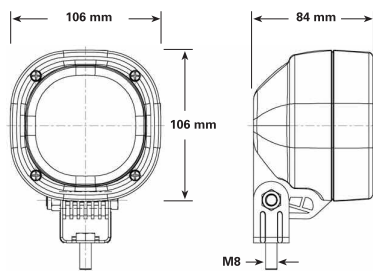
Materials:

Fibreglass reinforced nylon housing, carbon steel bracket.

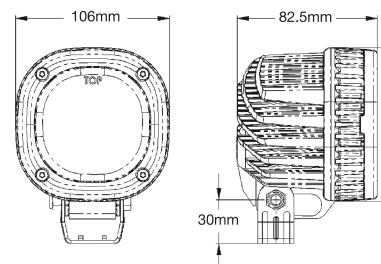
Type	Part No.	Voltage	Bulb (supplied)
1010 HID	PW 1010HID 12 DT	12V	35W Xenon
	PW 1010HID 24 DT	24V	35W Xenon
4 LED	PW 4LED DT	12/24V	4 x high power LED



1010 HID



4 LED



CCTV Range

Available from first quarter 2009.



Features:

The Delta Design CCTV range is packed full of premium features and utilises the latest technology available. All products within the range are manufactured to the highest standards with cameras featuring Sharp CCD technology.



5.6" Colour TFT single image standard colour camera kit. Includes 4 pin 20m extension cable. Part No. DAC1001



7" Colour TFT standard colour camera kit. Includes 4 pin 20m extension cable. Single image screen: Part No. DAC1002 Quad image screen: Part No. DAC1003



Side view 120° camera. Part No. DAC1004



Auto-shutter 180° camera (5 pin). Part No. DAC1005



Standard colour 180° camera. Part No. DAC1006



Flush mount 120° camera. Part No. DAC1007



Dome 120° camera. Part No. DAC1008



5.6" Colour TFT single image screen with built-in controller. Part No. DAC1009



7" Colour TFT screen with built-in controller. Single image: Part No. DAC1010 Quad image: Part No. DAC1011



Cable adaptor, 22pin AV & power supply. Part No. DAC1013



Centre mount monitor bracket. Part No. DAC1014



Cable extensions: 4 pin, 10m, Part No. DAC1015 4 pin, 20m, Part No. DAC1016 5 pin, 10m, Part No. DAC1017 5 pin, 20m, Part No. DAC1018

Note. All kits and screen types are capable of controlling up to four cameras. The single image screens can be switched between camera views.

Camera Features	DAC 1004	DAC 1005	DAC 1006	DAC 1007	DAC 1008
Ingress Protection	IP67				N/A
Night Vision Distance	3-5m	10m (approx)	10m	N/A	7m
Front Speaker	No	Yes		No	
Mirror / Normal Switch	No	Yes	No		
No. Infra-red Lights	5	12		N/A	18
Day/Night Sensor (automatically adjusts)	Yes			N/A	Yes
Effective Pixels	512 x 582				
Microphone	No	Yes		No	
Current Consumption	100mA (max)	430mA (max)	400mA (max)	100mA (max)	300mA (max)
Power Supply	12Vdc (from monitor)				
Connection	RCA/4 pin DIN	RCA/5 pin DIN	RCA/4 pin DIN		
Anti-vibration	10g				
Operating Temperature	-20°C to +70°C				
Lens Angle	92°/120°	180°		120°	
Weight	0.37kg	0.8kg	0.5kg	0.07kg	0.14kg
Certificates	CE, FCC, EMARK.				

Monitor Features	DAC 1009	DAC 1010	DAC 1011
Display Type	TFT Wide Angle		
No. Languages	11		
Auto Backlit Buttons	Yes		
Brightness Control	Automatic or manual (selectable)		
LCD Size	5.6"	7"	
Resolution (pixels)	960(H) x 234(V)	1440(H) x 234(V)	
Power Consumption	8W		25W (max)
Power Inputs	12-32Vdc		
Anti-vibration	5g		
Operating Temperature	-20°C to +65°C		
Dimensions WxHxT (mm)	145 x 136 x 31.5	182 x 122 x 26	
Weight	1.6kg		1.85kg
Certificates	CE, FCC, EMARK.		

Additional Features for DAC 1011 Monitor

- Four trigger signal inputs, auto switch to the working camera.
- 16:9 Aspect Ratio.
- Trigger wire for dual picture, relative cameras can be combined optionally.
- Quad/dual picture priority can be selected.
- Reversing distance grid and left/right turning indicator arrow on the screen.
- AV input for DVD.
- Live video output. Connected monitor can display synchronously.
- REC video output, and picture can be single or split.
- Auto-controlled day and night brightness mode.
- Brightness, color, contrast, volume and sharpness of each camera can be set up separately.
- Mirror/Normal image for each camera can be selected separately.
- Single, dual, tribal, quad image.
- On-board speaker.
- Auto scan available, image switching time from 1-30 seconds.

Beacon Accessories

Reference	Description	Part Number	Alpha Star Beta Star Delta Star	Zeta Star Lunar Star	Solar Star Turbo Star	Durastrobe	Rearguard Hedgehog	Husky Husky Pup Pup2	Orion
FX60	Mag Kit/Cable/Cigar DIN Plug	521036	✓					✓	
FX11	Triple Mag Kit	521022		✓	✓				
FX7	Single Bolt Kit	521015	✓	✓			✓	✓	
FX12	Single Bolt Kit	521019			✓				
FX13	Pole Mount Kit	521024	✓	✓	✓			✓	
FX30	Flexible Pole Mount Kit	521048	✓	✓	✓				
FX21	Pole Mount Connector – Female	521035	✓		✓	✓			
FX14	Mounting Bracket	521018	✓	✓	✓		✓	✓	✓
FX16	Backing Plate	521027	✓		✓				
FX9	Protector Guard	521033	✓					✓	✓
FX37	Protector Guard	521053		✓					
FX10	Protector Guard	521021			✓				
FX23	Protector Guard	521040					✓		
FX24	Surface / Side Entry Kit	521043					✓		
FX35	Pole Mount Connector – Female Threaded	521055	✓	✓	✓	✓			



Beacon & Light Bar Spare Parts

Beacons and Mini Light Bars

Product	Beacon	Clear / None	Amber	Red	Blue	Green
RB Lens Kit	Alpha/Beta/Delta/Durastrobe/Gamma/Husky/Husky Pup.	517001	517002	517052	517053	517005
SQ Lens Kit	Rearguard	517091	517092	517093	517094	517095
EL Lens Kit	Turbo Star	517021	517026	517023	517027	517025
SC Lens Kit	Solar Star	–	517010	–	517011	–
ZB Lens Kit	Zeta Star	–	517122	517123	517124	517125
LB Lens Kit	Lunar Star	–	517122	–	517124	–
Orion Lens Kit	Orion	517126	–	–	–	–
PU Lens Kit	Pup2	–	517127	–	–	–
Hedgehog Lens Kit	Hedgehog	–	517102	517103	–	–
Pulsar Lens Kit	Pulsar	–	517032	517034	–	–
Replacement Circuit	Alpha Star/Husky Pup/Pup2	570013	–	–	–	–
Replacement Circuit	Beta Star	568005	–	–	–	–
Replacement Tube	Delta Star	570009	–	–	–	–
Replacement Tube	Husky	569016	–	–	–	–
Replacement Tube	Solar Star, Turbo Star	570080	–	–	–	–
Replacement Tube	Zeta Star	593005	–	–	–	–
Replacement Tube	Lunar Star	593001	–	–	–	–

Delta Bars

Product	Clear	Amber	Red	Blue	Green	Opal	12V	24V
12W double face xenon module	–	400050	400051	400052	400053	–	–	–
6W double face xenon module	–	400055	400056	400057	400058	–	–	–
Xenon corner module slave	–	400031	–	400032	–	–	–	–
Xenon corner module master	–	400041	–	400042	–	–	–	–
LED face module	–	400076	400078	400077	–	–	–	–
LED corner module	–	400035	–	400036	–	–	–	–
Alley light kit	–	–	–	–	–	–	400004	400005
Illumination	–	–	–	–	–	–	400070	400075
Work light kit – single left	–	–	–	–	–	–	400080	400090
Work light kit – single right	–	–	–	–	–	–	400085	400095
Work light xenon left – no bulb	–	–	–	–	–	–	400060	400060
Work light xenon right – no bulb	–	–	–	–	–	–	400061	400061
Coloured infill	–	–	053134	–	–	–	–	–
Coloured inserts	–	053132	053130	053131	–	–	–	–
Corner lens kit	400020	400021	400022	400023	400024	400026	–	–
Face lens kit	400010	400011	400012	400013	400014	400016	–	–

Xenergy Bars

Product	Clear / None	Amber	Red	Blue	Opal	Silver	Black
Replacement end assembly	490109	–	–	–	–	–	–
Replacement tube – end assembly	490108	–	–	–	–	–	–
Replacement end cover	490101	490102	–	490103	–	–	–
Replacement centre cover	490121	490122	–	490123	490124	–	–
Replacement double length centre cover	517111	517112	–	517114	517113	–	–
Replacement triple length centre cover	517115	517116	–	517118	517117	–	–
Replacement end strap	–	–	–	–	490118	490119	490117
Replacement centre strap	–	–	–	–	490128	490129	490127
Directional strobe	490131	490132	490134	490133	–	–	–
Replacement stop/tail assembly 12V	490140	–	–	–	–	–	–
Replacement stop/tail assembly 24V	490142	–	–	–	–	–	–
Replacement indicator assembly 12V	490141	–	–	–	–	–	–
Replacement indicator assembly 24V	490143	–	–	–	–	–	–

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