

MERLIN[®]

LED BEACONS LIGHT



Catalogue 2023

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WHAT SETS THE MERLIN LIGHTING SOLUTIONS LED BEACONS LIGHT RANGE APART

Designed, Engineered and tested to suit local market conditions. A product for every price point and application with features matched to market needs:

DURABILITY

Ultra durable with military spec vibration resistance and ingress resistance up to IP-69K. Virtually unbreakable polycarbonate lenses. Products built to last backed by market-leading warranties.

PERFORMANCE

Strobes in a range of sizes to suit industry needs. Up to 6x brighter than SAE minimum with SAE-approved beam patterns. Performance you need, exactly how

COMPLIANCE

SAE, R65, R10, CISPR25, ROHS, Reach, IP. Ultra bright, smooth output which meets or exceeds all international standard, giving you more time to focus on your industry.

VERSATILITY

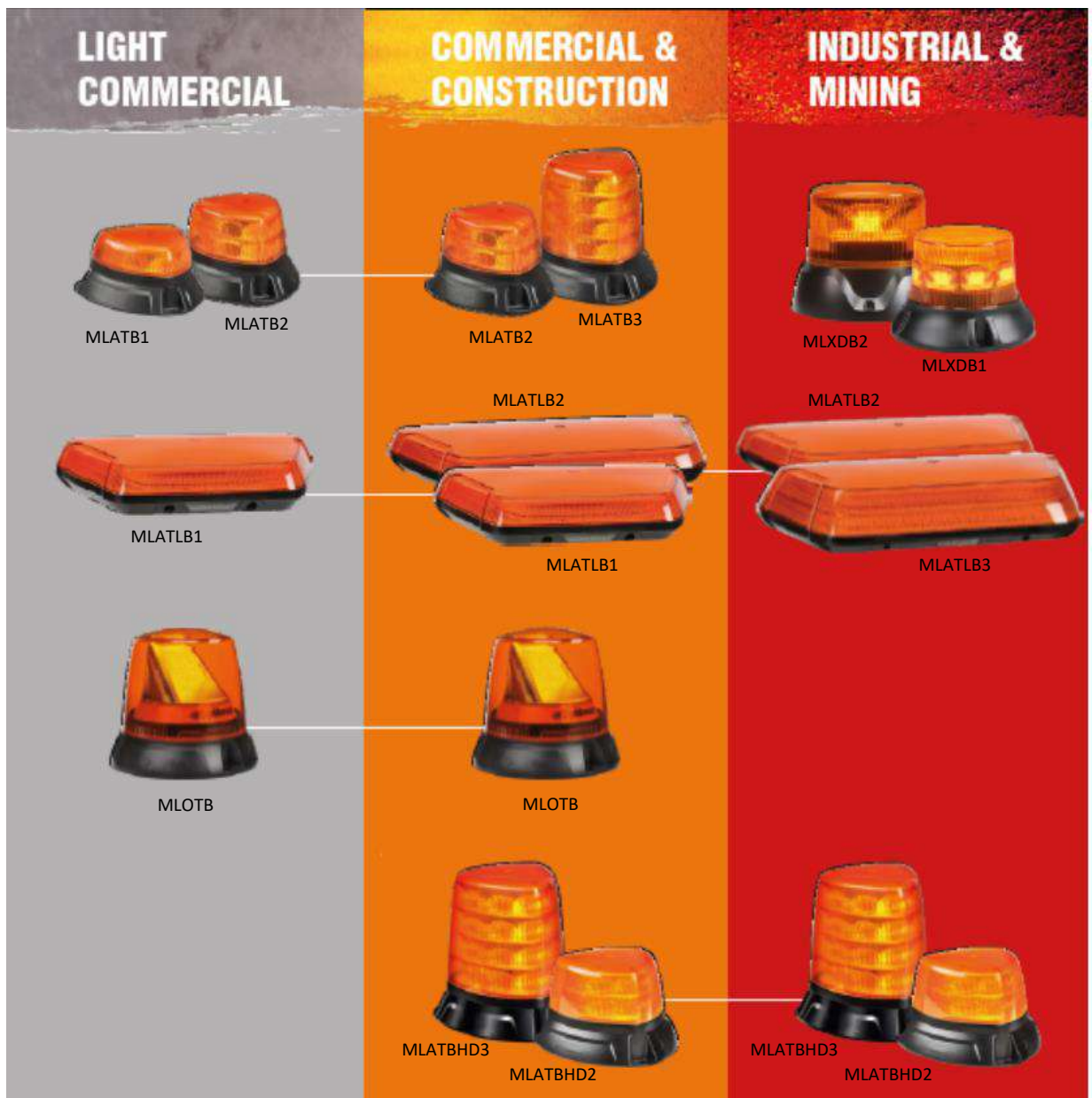
Product to suit each application, available in a range of sizes and colors. Premium parts and a variety of mounting options; expertly-designed beacons for any task industrial, commercial, or more.

LED BEACONS RANGE

The LED Beacons range has one or more products to suit any amber applications. The more rigorous the applications the further to the right on the chart the suitable product is. This also applies to larger applications, as the vehicle gets larger, more light is required to effectively warn those around the vehicle.

Beacon vs Light Box:

There are three main types of primary warning light, each provide different features to the user. The LED Beacons range has been designed so that for just about every application there is at least one beacon, one strobe and one light box that can meet the applications needs.



QUALITY

Visibility Upgrade Experience

ENVIRONMENTAL TESTING:

Our testing lab has extensive environmental testing equipment including thermal shock, dust, rain, temperature and humidity training. Each warning light in the LED Beacons range is tested to ensure it is fit for the application it is designed for as well as the conditions it will operate under.

PHOTOMETRIC TESTING:

The LED Beacons warning lights are tested in the light lab as well as independently certified labs to ensure they meet all the relevant standards including SAE, ECE and California title 13.

All LED Beacons warning lights are also tested and certified to ensure electrical safety as well as ensuring no radio frequency interference.

All products adhere to ECE R10 for electrical safety and most are also CISPR25 rated for added RFI protection.

VIBRATION TESTING:

Vibration is a major factor that can cause premature failure in emergency lighting products as they are used in the worlds harshest conditions. The manufacturer tests all their warning lights to international standards in independent laboratories. Where products will be used in industrial and mining applications

The manufacturer also tests to the more stringent military standard MIL-STD-810G. This testing ensures the lamps will not fail due to the conditions they are used in. Most are also CISPR25 rated for added RFI protection.



APPLICATION GUIDE

PART NO.	LIGHT COMMERCIAL							COMMERCIAL & CONSTRUCTION					INDUSTRIAL & MINING				
	Outdoor Forklift	Vans	Flat Beds	Sweepers	Pick-ups	Small Trucks	Traffic Management	Utility Bodies	Maintenance Vehicles	Light Construction	Tractors	Heavy Transport	Heavy Construction	Garbage Trucks	Forestry	Mining Trucks	Mining Equipment (eg drills)
				Occasional			Occasional							Acceptable	Occasional		
											Occasional						
		Acceptable															
		Occasional	Acceptable	Acceptable										Acceptable	Occasional		
		Occasional	Acceptable			Occasional								Occasional	Occasional	Occasional	Occasional
		Not suitable	Acceptable										Acceptable	Occasional	Occasional	Occasional	Occasional
		Acceptable	Acceptable	Acceptable													
		Occasional	Acceptable	Acceptable	Acceptable						Occasional					Acceptable	Acceptable
		Occasional	Acceptable	Acceptable	Acceptable												
		Not suitable	Occasional	Occasional	Occasional	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

Ideal
 Acceptable
 Occasional
 Not suitable

The LED Beacons Primary Warning Light Range has multiple options for each application with most allowing the user to choose between at least one beacon, strobe and light box. It is important to match the application to the product at the heavy duty end but equally important for the light commercial end as over specified products may be uncompetitive in that market. For that reason we have compiled a simple color coded guide for some key applications. This is by no means an exhaustive list but most applications can be categorized in one of these applications.

ATB LED BEACONS



MLATB1



MLATB2

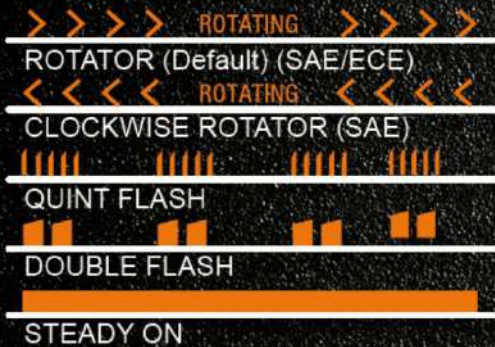


MLATB3

VISIBLE, DURABLE, ADAPTABLE

ATB is a family of LED strobes designed to make strobe selection easy. The range features strobes to suit any amber application. The key is that no matter the strobe the three key reasons to buy remain the same. ATB strobes are Visible, Durable and Adaptable.

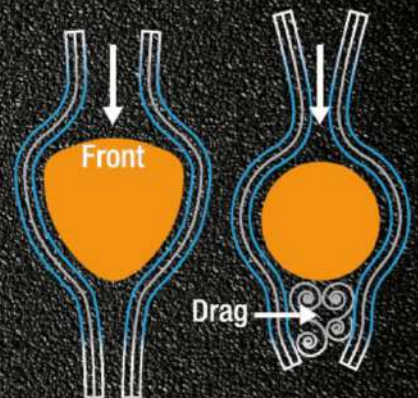
4 FLASH PATTERNS



Integrated light sensor ensures no dazzling in low light conditions (Night Mode). Sensor can be overridden if required.

MORE AERODYNAMIC

The unique shape reduces drag by up to 60% which results in less high speed wind noise.



ATB LED BEACONS

KEY FEATURES



VERSATILE MOUNTING

Available in 3 Bolt (Flange), Single Bolt, DIN Mount, Flexible Pole Mount and Vacuum Magnetic Mount



FLANGE



SINGLE BOLT



FIXED DIN



FLEX DIN



MAGNETIC

TECHNICAL INFORMATION

10-33 Volt

SAE Class 1

ECE R10 Approved

ISO 58 Grms 50G Shock Test

CISPR 25 Class 3

ECE R65 Approved

Model	PN	LED	MOUNTING	AMP.@12V	WATTS	WEIGHT (kg)	DIMENSIONS (cm)	ECE APPROVAL
	MLATB1-FL	9x5W	Flange	0.6A Rot/1.4A Flash	45W	0.33	13.5x13.4x6.8	ECE R65 TA1, ECE R10
	MLATB1-SB	9x5W	Single Bolt	0.6A Rot/1.4A Flash	45W	0.33	13.5x13.4x6.8	ECE R65 TA1, ECE R10
	MLATB1-FI	9x5W	Fixed DIN	0.6A Rot/1.4A Flash	45W	0.33	13.5x13.4x6.8	ECE R65 TA1, ECE R10
	MLATB1-FX	9x5W	Flex DIN	0.6A Rot/1.4A Flash	45W	0.33	13.5x13.4x6.8	ECE R65 TA1, ECE R10
	MLATB1-MA	9x5W	Magnetic	0.6A Rot/1.4A Flash	45W	0.33	13.5x13.4x6.8	ECE R65 TA1, ECE R10
	MLATB2-FL	18x5W	Flange	1A Rot/1.6A Flash	90W	0.41	13.5x13.4x9	ECE R65 TA2, ECE R10
	MLATB2-SB	18x5W	Single Bolt	1A Rot/1.6A Flash	90W	0.41	13.5x13.4x9	ECE R65 TA2, ECE R10
	MLATB2-FI	18x5W	Fixed DIN	1A Rot/1.6A Flash	90W	0.41	13.5x13.4x9	ECE R65 TA2, ECE R10
	MLATB2-FX	18x5W	Flex DIN	1A Rot/1.6A Flash	90W	0.41	13.5x13.4x9	ECE R65 TA2, ECE R10
	MLATB2-MA	18x5W	Magnetic	1A Rot/1.6A Flash	90W	0.41	13.5x13.4x9	ECE R65 TA2, ECE R10
	MLATB3-FL	36x1W	Flange	1A Rot/1.6A Flash	36W	0.59	13.5x13.4x13	ECE R65 TA2, ECE R10
	MLATB3-SB	36x1W	Single Bolt	1A Rot/1.6A Flash	36W	0.59	13.5x13.4x13	ECE R65 TA2, ECE R10
	MLATB3-FI	36x1W	Fixed DIN	1A Rot/1.6A Flash	36W	0.59	13.5x13.4x13	ECE R65 TA2, ECE R10
	MLATB3-FX	36x1W	Flex DIN	1A Rot/1.6A Flash	36W	0.59	13.5x13.4x13	ECE R65 TA2, ECE R10
	MLATB3-MA	36x1W	Magnetic	1A Rot/1.6A Flash	36W	0.59	13.5x13.4x13	ECE R65 TA2, ECE R10

ATB HEAVY DUTY LED BEACONS



MLATBHD2



MLATBHD3

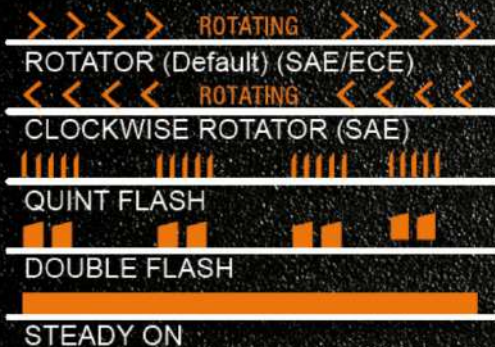


Available in multiple colors

VISIBLE, DURABLE, ADAPTABLE

Building on the ATB family are the ATB HD LED Strobes. These strobes are designed to be more visible and more durable making the ATB range even more adaptable to any application. Designed to thrive in all conditions, especially industrial and mining conditions. These strobes suit even the biggest vehicles in the toughest conditions.

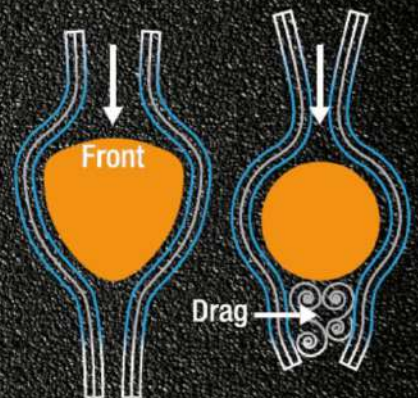
4 FLASH PATTERNS



Integrated light sensor ensures no dazzling in low light conditions (Night Mode). Sensor can be overridden if required.

MORE AERODYNAMIC

The unique shape reduces drag by up to 60% which results in less high speed wind noise.



ATB HEAVY DUTY LED BEACONS

KEY FEATURES



TECHNICAL INFORMATION

10-33 Volt

SAE Class 1

ECE R10 Approved

MIL Spec Vibration Rated

CISPR 25 Class 3

ECE R65 Approved

PN	LED	LENS COLOR	AMP.@12V	WATTS	WEIGHT (kg)	DIMENSIONS (cm)	ECE APPROVAL
MLATBHD2-A	18x5W	Amber	1.1A Rot/2.4A Flash	90W	0.62	15.5x15.5x10	ECE R65 TA2, ECE R10
MLATBHD3-A	36x3W	Amber	1.1A Rot/2.4A Flash	108W	0.88	15.5x15.5x16	ECE R65 TA2, ECE R10
MLATBHD3-B	36x3W	Blue	1.1A Rot/2.4A Flash	108W	0.88	15.5x15.5x16	ECE R65 TA2, ECE R10
MLATBHD3-A	36x3W	Green	1.1A Rot/2.4A Flash	108W	0.88	15.5x15.5x16	ECE R65 TA2, ECE R10

- Large profile for maximum visibility
- Allows more reflector space than the same sized round strobe, resulting in a wider illumination area.
- Alternating or synchronized operations of up to 6 strobe units
- 6x Brighter than SAE minimum
- SAE Class 1 and ECE R65 TA2 complied
- CISPR25 Class 3 and ECE R10 complied

AT LIGHT BOXES LED BEACONS



MLATLB1-C



MLATLB1-A

MLATLB2-C



MLATLB2-A

MLATLB3-C



MLATLB3-A

6 FLASH PATTERNS

Optional Day/Night mode ensures not to dazzle in low light conditions while being ultra visible during the day.



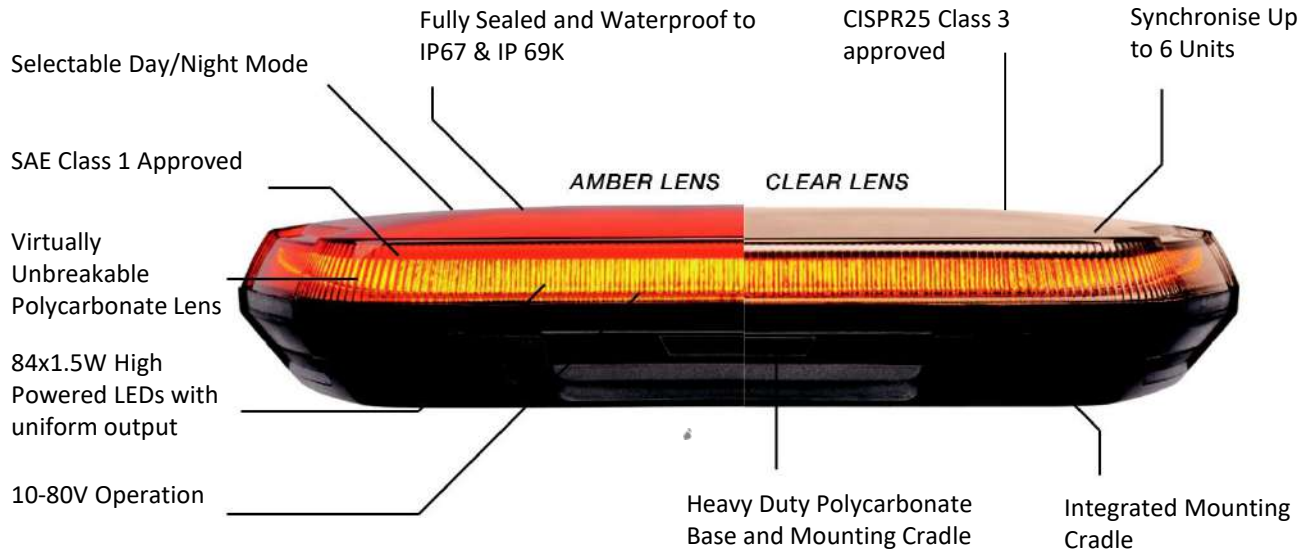
VISIBLE, DURABLE, ADAPTABLE

The revolutionary ATB Light Boxes range is the brightest in the range of primary warning lights. Featuring 3 sizes which can suit everything from light commercial up to transport, construction and mining applications. ATB Light Boxes are also easy and versatile to mount because of the integrating cradle which allows mounting with or without the cradle. The range includes amber and clear lens models as well as magnetic mounting versions with over 9 feet of cable as well as in dual color.

- Most visible primary warning lights
- Ultra bright, smooth output which meets and exceeds all international standards
- Optional night mode via extra wire
- Ultra durable with extreme vibration resistance
- Versatile, easy mounting
- Available in a range of sizes and colours to suit just about any application

MOUNTING OPTIONS

Magnetic mounting option rated to 120 km/h
 MLATLB1-A-M
 MLATLB1-C-M



TECHNICAL INFORMATION

10-80 Volt

SAE Class 1

ECE R10 Approved

Iso 58Grms 50G Shock Tested

CISPR 25 Class 3

ECE R65 Approved

PN	LED	LENS	AMP.@12V	WATTS	WEIGHT (kg)	DIMENSIONS (cm)	ECE APPROVAL
MLATLB1-A	54x1.5W	Amber	1.7A Rot/3.5A Flash	81W	1.9	15.6x25x6.4	ECE R65 TA2, ECE R10
MLATLB1-C	54x1.5W	Clear	1.7A Rot/3.5A Flash	81W	1.9	15.6x25x6.4	ECE R65 TA2, ECE R10
MLATLB2-A	84x1.5W	Amber	2.1A Rot/3.7A Flash	126W	1.9	20x38x6.7	ECE R65 TA2, ECE R10
MLATLB2-C	84x1.5W	Clear	2.1A Rot/3.7A Flash	126W	1.9	20x38x6.7	ECE R65 TA2, ECE R10
MLATLB3-A	168x1.5W	Amber	2.0A Rot/4.3A Flash	252W	2.1	19.9x38x8.9	ECE R65 TA2, ECE R10
MLATLB3-C	168x1.5W	Clear	2.0A Rot/4.3A Flash	252W	2.1	19.9x38x8.9	ECE R65 TA2, ECE R10

OTB LED BEACONS



MLOTB-A

Available in
multiple colors



MLOTB-AG

THE HALOGEN KILLER

OTB LED Beacon range has been designed to blend the halogen beacon with LED technology to create a range of products that will change the market forever. Never before has an LED beacon been at or below the price of a halogen beacon with such high quality, durable construction.

UPGRADED VISIBILITY

- 2x Brighter than SAE standard
- 6 x 5 Watt high powered LEDs
- Proprietary Reflector Optic
- Ultra smooth rotating beam
- Visibility range comparable to 55W or 70W halogen bulb version
- Dual color output (The beacon is designed only to switch between colors not run two colors alternating)

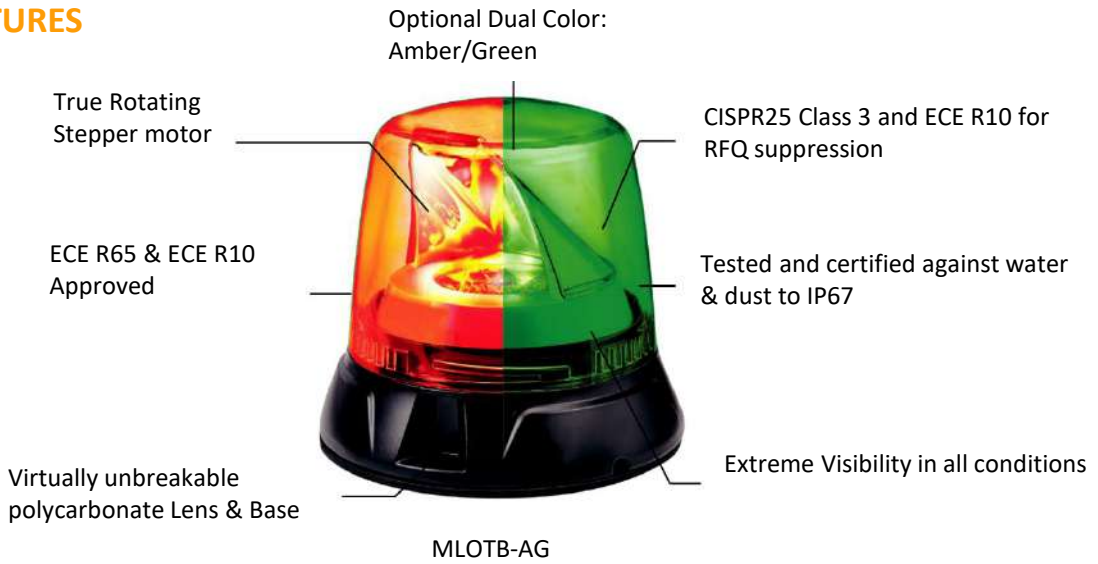


UPGRADED RELIABILITY

- Virtually unbreakable polycarbonate lens
- SAE Class 1 and ECE R65 TA2 complied
- Non-reflective reflector back
- 10-33V Multi Volt operation
- Reverse polarity protected
- Stepper motor for reliable, quiet operation
- Fully sealed and waterproof (IP67)
- Heavy duty die-cast aluminum base

OTB LED BEACONS

KEY FEATURES



TECHNICAL INFORMATION

10-33 Volt

SAE Class 1

ECE R10 Approved

ISO 21Grms 50G shock Tested

CISPR 25 Class 3

ECE R65 Approved

PN	LED	LENS COLOR	AMP.@12V	WATTS	WEIGHT (kg)	DIMENSIONS (cm)	ECE APPROVAL
MLOTB-AG	6x5W	Amber/Green	1.0 A	30W	0.33	15.4x15.4x13.9	ECE R65 TA2, ECE R10
MLOTB-C	6x5W	Clear	1.0 A	30W	0.33	15.4x15.4x13.9	ECE R65 TA2, ECE R10
MLOTB-A	6x5W	Amber	1.0 A	30W	0.33	15.4x15.4x13.9	ECE R65 TA2, ECE R10
MLOTB-B	6x5W	Blue	1.0 A	30W	0.33	15.4x15.4x13.9	ECE R65 TA2, ECE R10
MLOTB-G	6x5W	Green	1.0 A	30W	0.33	15.4x15.4x13.9	ECE R65 TA2, ECE R10
MLOTB-R	6x5W	Red	1.0 A	30W	0.33	15.4x15.4x13.9	ECE R65 TA2, ECE R10

VERSATILE MOUNTING

Available in 3 Bolt (Flange), Single Bolt, DIN Mount, Flexible Pole Mount and Vacuum Magnetic Mount



XDB LED BEACONS



MLXDB1-A



MLXDB1-C

BRIGHTER, QUIETER AND MORE DURABLE

Specifically designed to thrive in the super harsh environment of mines, the XDB Small mining strobes are rated to IP69K and IP67. Featuring a die-cast aluminium base and virtually unbreakable polycarbonate lens, these strobes are made to last. They can be washed with a pressure washer and steam cleaned without compromising the product.

5 FLASH PATTERNS

- Flash rate - rotate at 120 FPM
- Flash rate - single flash at 122 FPM
- Night Mode output - 20%



ULTRA FLASH



ROTATOR QUINT FLASH



QUINT FLASH



STEADY ON

UPGRADED DURABILITY

- Military spec vibration resistance
- IP69K ingress protection - allows for pressure washing at heat
- Heavy duty die-cast aluminum base and polycarbonate lens
- Advanced circuitry and high output LEDs
- Smooth external lens to prevent external dust and dirt build up



XDB LED BEACONS

KEY FEATURES



TECHNICAL INFORMATION

9-80 Volt

SAE Class 1

IP 69K Rated

MIL Spec Vibration Rated

CISPR 25 Class 3

Title 13 CA Approved

PN	LED	LENS COLOR	AMP.@12V	WATTS	WEIGHT (kg)	DIMENSIONS (cm)	ECE APPROVAL
MLXDB1-A	8x5W	Amber	2.0 A	40W	0.6	12.5x12.5x9.1	ECE R65, ECE R10
MLXDB1-C	8x5W	Clear	2.0 A	40W	0.6	12.5x12.5x9.1	ECE R65, ECE R10

IMPROVED VISIBILITY

- 8 Powerful LEDs, SAE Class 1 compliant
- 5 Selectable flash patterns
- Multiple units can be synchronised to flash together
- Ambient Light Sensor automatically dims the output in dark conditions

XDB LED BEACONS



MLXDB2-A



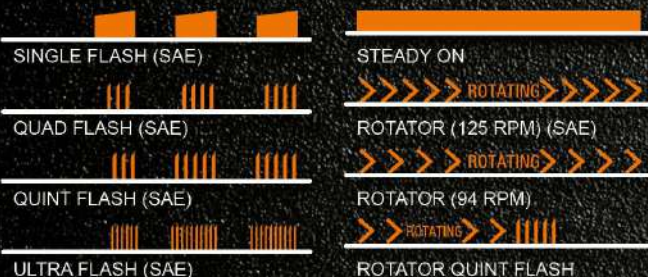
MLXDB2-C

BRIGHTER, QUIETER AND MORE DURABLE

XDB LED strobe has been upgraded to be brighter, quieter and more durable. The XDB LED strobe has been tested in some of the harshest conditions including industrial and mining applications. The XDB LED strobe has had it's key features significantly increased to now be ideal not only for industrial and above ground mining but also below ground mining applications.

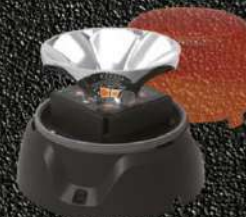
7 FLASH PATTERNS

- Rotates in either direction at 120 RPM
- Night Mode - Day/Night mode switching via third wire



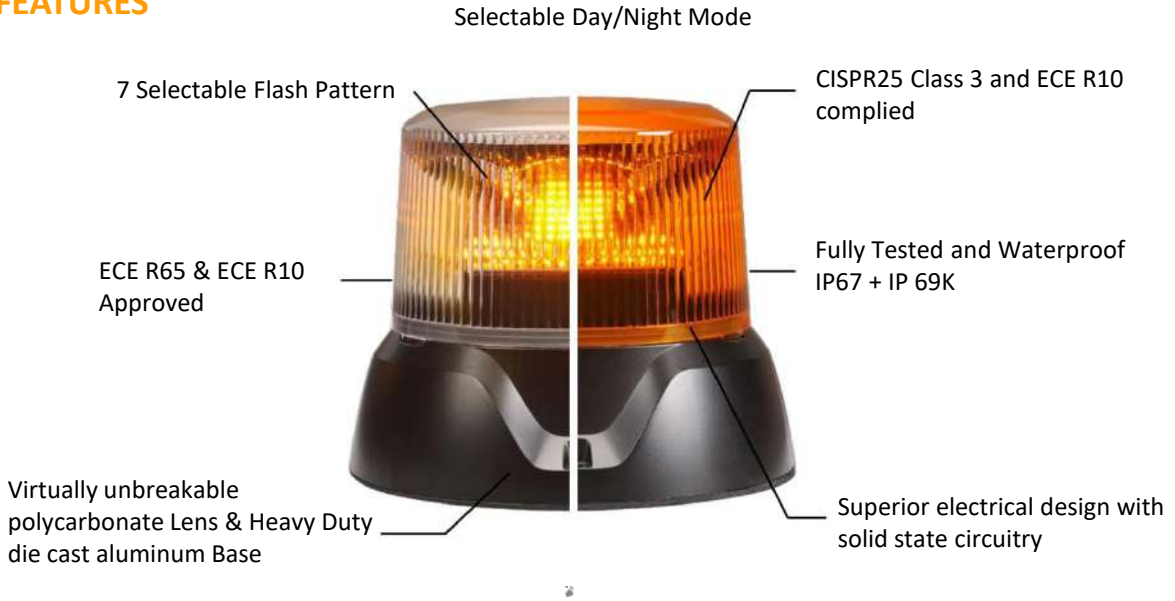
UPGRADED DURABILITY

- Military spec vibration resistance
- IP69K ingress protection - allows for pressure washing at heat
- Heavy duty die-cast aluminum base and polycarbonate lens
- Advanced circuitry and high output LEDs
- Smooth external lens to prevent external dust and dirt build up



XDB LED BEACONS

KEY FEATURES



TECHNICAL INFORMATION

12/24 Volt

SAE Class 1

IP 69K Rated

MIL Spec Vibration Rated

CISPR 25 Class 3

Title 13 CA Approved

PN	LED	LENS COLOR	AMP.@12V	WATTS	WEIGHT (kg)	DIMENSIONS (cm)	ECE APPROVAL
MLXDB2-A	16x3W	Amber	1.85 A	48W	1.0	16.7x16.7x16.7	ECE R10
MLXDB2-C	16x3W	Clear	1.85 A	48W	1.0	16.7x16.7x16.7	ECE R10

ULTIMATE VISIBILITY

Improved optical design ensures extreme visibility for ultra safe worksites

- Rotate pattern is up to 5x more visible than the competition
- Strobe pattern is up to 3x more visible than the competition.

Precision optic ensures the XDB meets and exceeds SAE Class 1 in both flash and rotate (76% brighter than SAE minimum)

Optical precision provides a smooth rotating pattern that ensures optimal visibility and SAE Class 1 compliance. This is market leading as most strobes do not pass SAE for rotate.

Includes 2 rotate patterns (clockwise and counter clockwise) for increased visual effect.

Single upward facing high power LED provides significant increase in upward illumination - ideal on sides with tall vehicles.

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