

- ⚡ **High Intensity**
- ⚡ **High efficiency LED technology**
- ⚡ **Area lighting and indicator function**
- ⚡ **Low profile**
- ⚡ **Magnetic or bolt mounting**
- ⚡ **Intrinsically safe**
- ⚡ **Long life**
- ⚡ **Certified for Group I and IIB**



DESCRIPTION

The intrinsically safe Type LLS2 LED luminaire is part of the Austdac area lighting system that is designed to provide plant and area illumination in Group I and IIB harsh and hazardous areas. The LLS2 LED finds application on longwalls, around load centres and on machinery such as road headers, continuous miners and roof bolters for general area illumination. In addition, the integrated tri-colour indicator can provide warning or status information to the user.

The LLS2 LED luminaire uses high efficiency LED technology to provide both a compact low profile form factor and a long life maintenance free area illumination solution. The tri-colour indicator uses, yellow and red LEDs which can be mixed to provide amber. The tri-colour indicator is fitted with a diffuser to provide a wide viewing angle.

The luminaire can be powered from a general-purpose intrinsically safe 12V power supply or UPS such as the Austdac AC36W or 12/NMH/288 for Group I applications. The AC36W is capable of powering up to 5 LLS2 LEDs (500mA version).

The LLS2 LED luminaire is fitted with two power connectors which allow the LLS2 LED to be daisy chained. A standard 10m long cable is supplied with LLS2 LED however custom length cables can be supplied at an additional cost. The LLS2 LED luminaire cable can be a maximum of 50m in length.

The sealed construction of the LLS2 LED luminaire provides an ingress protection rating of IP65.

The LLS2 LED can be mounted by the integral high strength magnets or may be bolted in place using the two external 12mm mounting holes. These two simple mounting alternatives and integral connector make the LLS2 LED particularly suited for use as longwall area lighting as the lighting system can be quickly removed during longwall relocations.

The LLS2 LED luminaire provides a high intensity, cool white, 90° beam of light with a luminous flux of 650lm.

Each LLS2 LED luminaire draws a maximum of 500mA at 12V.

CERTIFICATION

The LED luminaire type LLS2 is IECEx certified for use in Group I and IIB hazardous areas. The LLS2 IECEx certificate is IECEx TSA 15.0028X

The LLS2 LED markings are:
Ex ia I Ma and Ex ia IIB T3 Ga.

For Group IIB applications the user should refer to the User's Manual regarding potential electrostatic charging hazard.

SPECIFICATION

GENERAL

Name	Luminaire LED
Type	LLS2
Mounting	M12 @ 340mm centres
Size	100(H)x360(W)x42(D)mm 3.93(H)x14.17(W)x1.65(D)inches
Mass	1100g
Electrical connections	Integral connector
Maximum cable length	50m (164 feet)
Ingress protection	IP65
Operating temp range	-20°C to +40°C -04°F to +104°F

POWER SUPPLY

Operating Voltage	10.0 – 12.6Vdc
Current Consumption	500mA
U _i	12.6Vdc
I _i	3.3A
C _i	3.3uF
L _i	0uH

PHOTOMETRICS

Luminance Flux	650lm
Beam angle	90°
Colour temperature	5000-8300°K

DIMENSIONS



INDICATOR



CONNECTION DIAGRAM

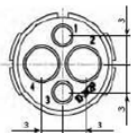
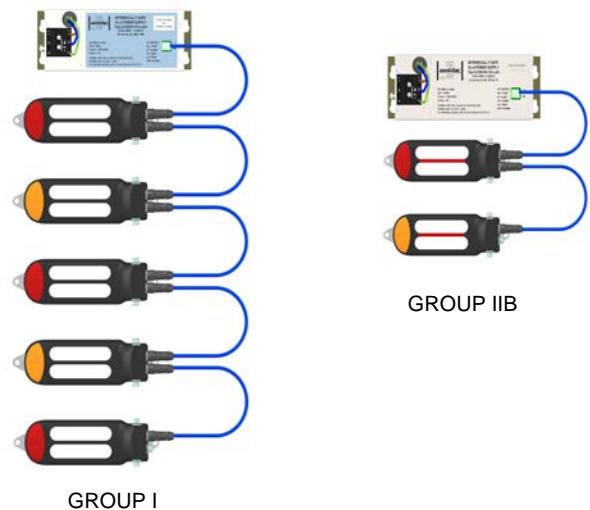


Table 1 : Connector Details

Connector Pin	Cable Wire Colour	Description
1	Yellow	Yellow Indicator
2	White	White Area Lighting
3	Red	Red Indicator
4	Black	0V

TYPICAL APPLICATION



ORDERING DETAILS

DESCRIPTION	ORDER CODE
LED LIGHT HEAD LUMINAIRE TYPE LLS2 - GROUP I	LLS002
LED LIGHT HEAD LUMINAIRE TYPE LLS2 - GROUP IIB	LLS002-GIIB
CABLE LLS2 - 2 CONNECTOR – 10m	LLS002-C2-10
LED LIGHTING SYSTEM 2 TYPE LLS2 - GROUP I (INC 1 X 10M CABLE – 2 CONNECTORS)	LLS002-KIT-001
LED LIGHTING SYSTEM 2 TYPE LLS2 - GROUP IIB (INC 1 X 10M CABLE – 2 CONNECTORS)	LLS002-GIIB-KIT-001