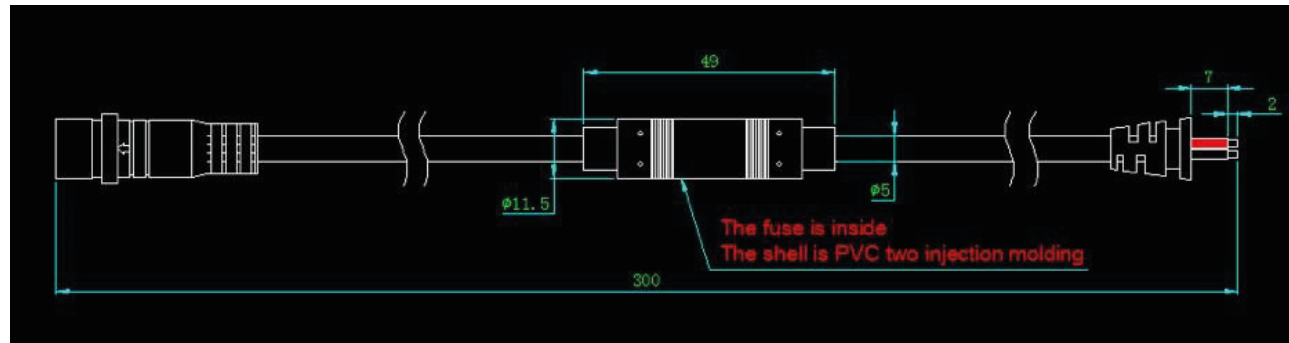
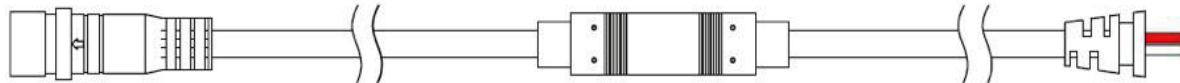


HALO 1 2nd Generation



SAFETY

In the installation of HALO it is important to ensure that the electrical installation is in compliance with "Mine Health & Safety Standards" and that all standard electrical protection devices are in place as with any normal lighting installation, however HALO has implemented its own "fail safe protection" which is provided with each and every high voltage HALO solution which will ensure immediate isolation of the electricity feed should the integrity of the LED strip lighting be compromised, this will ensure complete safety for all users of HALO always!



DESIGN

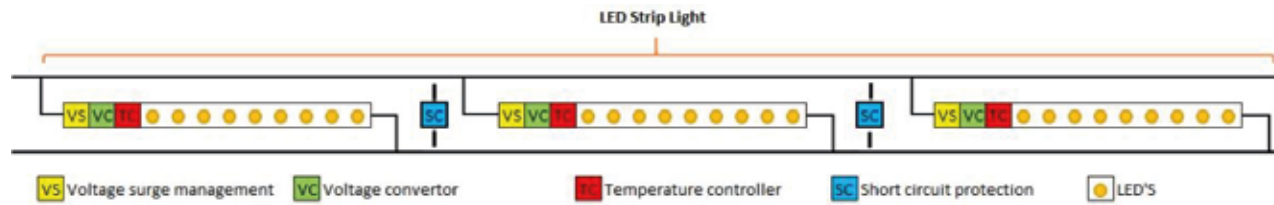
The new designs incorporate cluster management technology, whereas the LEDs are fixed onto PCB boards forming clusters which are then welded together and extruded in a food grade silicone to form the actual strip lighting, these PCB boards are connected in parallel with the electrical circuit working together in synergy as a lighting platform, but independently in the unlikely case of failure, this means if there is a failure on any components of the lighting it would be isolated and not affect the remaining lighting system.

Each independent cluster is fitted with the cutting edge new HALO developments such as:

- "Intelligent temperature control"** electronics, which carefully monitors the LED temperatures within the cluster; should the safe parameters be exceeded then the "intelligent temperature controller" will automatically reduce the current flow which will dim the affected cluster until the safe temperatures parameters are restored, & then restore the maximum current.
- Built in short circuit protection** which automatically cuts the power in the event of a short circuit & normalizes once restored.
- Voltage surge management** devices which effectively manages voltage fluctuations by preventing heightened voltages from damaging the LED's by limiting the voltage to an acceptable value.

d) **Miniature AC/DC convertors** which convert the VAC to VDC to energize the LED's.

These unique and cutting edge improvements mark a drastic technological leap ahead from the discontinued 1st generation and were strategically implemented to nullify the relevant and prevalent issues encountered in the harsh mining conditions which are detrimental to LED technology, and continue to define HALO as the market leader in providing the industry with the proven most reliable and technologically advanced underground lighting systems available globally.



LONG RANGE

HALO has a long-range functionality able to easily illuminate 100 meter runs which require only one electrical connection at the beginning of the length which is all that is needed to energize the entire 100-meter run; this unique feature means that electrical cabling and infrastructure usually required to be fitted throughout underground tunnels are no longer necessary saving massive amounts of monies in equipment & manpower.



This feature can be doubled up in tunnels of 200 meters whereas only one power point on either end is required and HALO can light up the entire tunnel with both ends meeting in the middle.

Código	Descripción
I1203008584	CINTA LED INDUST HALO ALPHA 16.8 W/M IP68 3000K 220V ROLLO 10MTS + 20 CLIPS DE FIJACION PARA CINTA LED MARCA HALO
I1203008428	CINTA LED INDUST HALO ALPHA 16.8 W/M IP68 5000K 220V ROLLO 10MTS + 20 CLIPS DE FIJACION PARA CINTA LED MARCA HALO



PACKING

The lighting is supplied and packaged in lightweight & easy to manage 10 meter rolls, each of which comes complete with male and female adaptors, one on each end which provides a “plug and play” modular functionality allowing various lengths to be easily joined together or removed to reach the desired length from 10 to 40 meters. Also, the various segments are interchangeable, this means any of the four options being Alpha, Beta, Gamma & Delta may be incorporated in any configuration within a single run of lighting emitting different levels of lighting throughout the length or different colours as desired, provided that the maximum range of 100 meters is not exceeded. This 10-meter segmented plug and play design, ensures for quick and efficient replacements should any damage occur on any lighting segment.



INSTALLATION

Installation of the HALO lighting solution is an effortless and rapid exercise with one team of only two people able to install up to 1000 meters per day; the lighting is rolled out across the area to be installed and simply fixed onto any existing structures such as straining wires etc. by means of cable straps or any other means preferred.





SPECIFICATIONS

SPECIFICATIONS								
Model	ALPHA	BETA	GAMMA	DELTA	ALPHA	BETA	GAMMA	DELTA
Description	AC230V constant current				AC110V constant current			
Range fed from ONE side	100 Meters				100 Meters			
Operating temperature	-40 - +45 degrees C				-40 - +45 degrees C			
IP Rating strip	68				68			
IP Rating connectors	68				68			
Power Consumption per Meter	17 W	12 W	10 W	9 W	17 W	10 W	9 W	8 W
Colour Rendering Index CRI	> 80				> 80			
Colour temperature	6500 Kelvin				6500 Kelvin			
Luminous Efficacy	88 L/W	80 L/W	80 L/W	80 L/W	88 L/W	80 L/W	80 L/W	80 L/W
Lumens P/M	1500-1600	1200-1300	920-1100	700-800	1500-1600	1200-1300	920-1100	700-800
Supply voltage VAC	200 ~ 240 VAC				90 ~ 140 VAC			
Light maintenance	15% - 20% Drop in 5 years				15% - 20% Drop in 5 years			
Expected Lifespan	5 - 10 Years				5 - 10 Years			
Warranty Lighting	3 Years				3 Years			
Fire Retardant	Yes				Yes			
Outer covering	Food grade silicone				Food grade silicone			
Dimensions	4mm X 14mm				4mm X 14mm			
Connectors	Factory fitted				Factory fitted			
Tensile strength	+50KG				+50KG			
Overvoltage protection	Yes				Yes			
Overheat protection	Yes				Yes			
Packing	10 Meter interjoinable segments				10 Meter interjoinable segments			

