



# Explosion-proof LED Flexible Strip Light

ZM-SL01 Series

ZM hazardous locations



# ZM-SL01 Series EXPLOSION-PROOF LED FLEXIBLE STRIP LIGHT

#### 1. Functions & Features

#### Product description

The ZM-SLD1 Series, an innovative line of LED hazardous area lighting products, specifically designed for use in potentially explosive atmospheres (Zone 1/21 & 2/22) within harsh industrial settings such as coal mines and oil & gas facilities. Our Explosion Proof Strip Lights are designed to provide a reliable and safe lighting solution that provide continuous area lighting and targeted lighting for equipment areas.

#### Features

- Explosion-Proof: ATEX approved for Zone 1/21 & 2/22, suitable for methane, coal dust, and various combustible gases.
- Long Life, Low Energy: 50,000+ hours lifespan, low energy consumption, and high efficiency,
- Versatile Lighting: White for continuous lighting, colored versions for safety systems.
- Robust Design: Flexible silica gel material, waterproof connector, and controllers for underground mines.
- High-Quality LED: High-brightness SMD LED chips for superior illumination.
- Voltage Compatibility: Rated input voltage of 48v, 36v, and 24v DC/AC for flexible installation.
- IP67 Rating: Injection-molded silicone for dust and water protection.
- · Consistent Performance: High color consistency and uniformity for visually cohesive lighting,

#### Application

• Wastewater treatment, oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities,

tunnels, outdoor or indoor mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present.

• Applies to hazardous locations of Zone 1/21 & 2/22 with explosive gas atmosphere.

#### Certification

II 2G Ex mb op is IIC T4 Gb
II 2D Ex mb op is IIIC T135°C Db



# 2. Technical Data of Strip Light

#### Parameters

EX marking	<ul> <li>II 2G Ex mb op is IIC T4 Gb</li> <li>II 2D Ex mb op is IIIC T135°C Db</li> </ul>			
Operating temperature range	-40°C~80°C			
Dimension	W20mm*H10mm			
IP degree of protection	IP67			
Impact strength	IK10			
Standards	EN IEC 60079-0 EN IEC 60079-18 EN IEC 60079-28			
Weight	285g/m			

Voltage	LED QTY/m		Rated power/m	Color	Rated Current (A/m)	PF
AC48V	84	800im	12W	White	0.27	0.92
AC48V	84	250lm	10W	Amber	0.22	0.96
AC48V	84	670lm	10W	Green	0.22	0.94
AC48V	84	280im	10W	Red	0.22	0.96

Voltage	LED QTY/m	Lumen/m	Rated power/m	Color	Rated Current (A/m)	PF
DC48V	84	1000lm	12W	White	0.25	1
DC48V	84	320lm	10W	Amber	0.21	1
DC48V	84	850lm	10W	Green	0.21	1
DC48V	84	340lm	10W	Red	0.21	1

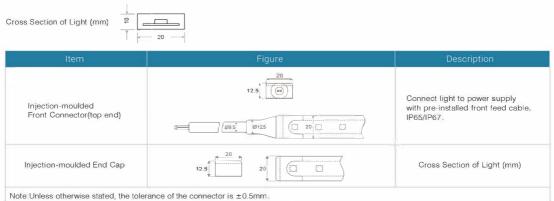
Voltage	LED QTY/m	Lumen,m.	Rated power/m	Color	Rated Cerrent (A/m)	PF
AC36V	88	800im	12W	White	0.37	0.91
AC36V	88	260lm	10W	Amber	0.29	0.96
AC36V	88	660lm	10W	Green	0.30	0.93
AC36V	88	270im	10W	Reel	0.29	0.96

Voltage	LED QTY/m	ירוארפייייע ב	Rated power/m	Color	Rated Current (A/m)	PF
DC36V	88	1000lm	12W	White	0.33	<u>(</u> 1
DC36V	88	330lm	10W	Amber	0.28	1
DC36V	88	900lm	10W	Green	0.28	1
DC36V	88	330lm	10W	Red	0.28	1

Voltage	LED QTY/m	men/m	Rated power/m	Color	Rated Current (A/m)	PF
AC24V	84	800im	12W	White	0.55	0.91
AC24V	84	270lm	10W	Amber	0.43	0.96
AC24V	84	630lm	10W	Green	0.45	0.93
AC24V	84	260lm	10W	Red	0.43	0.96

Voltage	LED QTY/m	יייוארפיייעבו	Rated power/m	Color	Rated Cerrent (A/m)	PF
DC24V	84	1000lm	12W	White	0.50	1
DC24V	84	350im	10W	Amber	0.42	1
DC24V	84	880im	10W	Green	0.42	1
DC24V	84	310lm	10W	Red	0.42	1

#### Dimension



### **3. Electrical Accesories**

#### Explosion-proof box

Models	ZM-SL01	ZM-SL02 -	
External dimensions	350mm*200mm*170mm	250mm*200mm*170mm	
Internal dimensions	280mm*130mm*128mm	180mm*130mm*128mm	
ATEX marking		©Ⅱ 2D Ex tb IIIC T135°C Db	
IECEx marking	Ex db IIB+H₂T4 Gb	Ex tb IIIC T135°C Db	
Operating temperature range	-43°	C~60°C	
IP degree of protection	IP 67		
Weight	9KG 8KG		

#### Power source

#### Meawell Driver

Input	Output	Max Power	
100-240V/277V 50/60Hz	DC 12V/24V/36V/48V	200W	

#### Backup Battery (Optional)

12W Power, 1.5 Hours for Emergency Lighting



## 4. Installation mode

Surface mounting	the same of the second se
Pendant mounting	