

The new "GEMMA" series includes a wide range of LED Modules for sign lighting. The exclusive lens with prisms, the high efficiency LEDs and low luminous decay, allow to reduce the quantity of modules required per square meter compared to common modules and to illuminate in a homogeneous and efficient way with significant energy savings. The innovative sturdy structure and the facilitated removal of adhesive protection, significantly reduce installation and maintenance costs.

### Led Module HM30M-2

#### Applications

- Very small size channel letters illumination
- Plexiglass groove lighting
- Linear lighting
- Architectural and decorative applications

#### Benefits

- The small modules with 2 leds optimally diffuses the light along the channels of letters and grooves on plexiglass, making the luminous uniformity perfect, minimizing the light dispersion and increasing the efficiency.
- The 3M VHB adhesive offers greater security and speed in fixing operations, contributing to cost reduction.
- Consistent white light 3-step MacAdam
- Color rendering index Ra: > 80
- Production date is marked on back of module for traceability

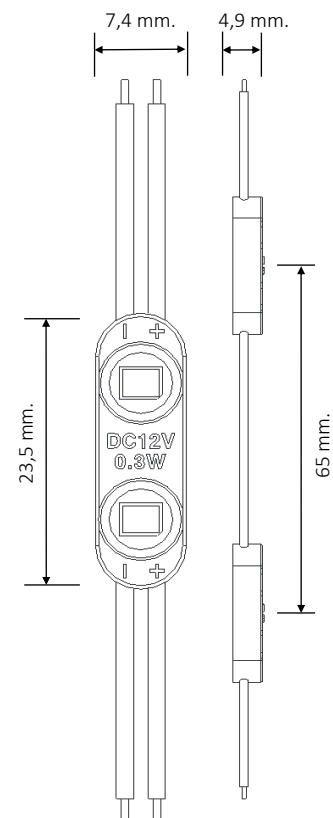
## HM30M-2

Model	Color	CCT / λd	Lumen
HM30M-2CW12	Cool White	8000 k	33

#### Features

Module Operating Voltage	DC 12V
Wattage ( W/Module)	0,30 W
IP Class	IP55
Operating Temperature Range	-40 C° ~ +60 C°
Storage Temperature Range	+5 C° ~ +40 C°
Storage Environment Humidity	RH < 60%
Distance ( Centre Module/Module )	65 mm.
Viewing Angle	130°
Life Time (temperature at T <sub>c</sub> = 75 °C)	50.000h ( L70 )
Consistent white light	< 3 SDCM
Chain ( No. Modules )	50
Bag ( No. Modules )	100
Warranty	4 Years *

\*See terms and conditions



### Electrical Data

Model	Nominal Voltage	Voltage Range	Accidental reverse input voltage protection up to	Nominal wattage per chain	Nominal wattage per module
HM30M-2CW12	12 VDC	11...13 VDC	13 VDC	15 W	0,30 W

### Photometrical Data

Model	Color	Color Temperature	Color Rendering Index	Typical Luminous Flux	Typical Luminous Efficiency
HM30M-2CW12	Cool White	8000K ±5%	> 80	33 Lm	110 Lm/W

### Coding

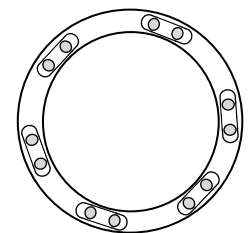
Model	Code
HM30M-2CW12	HTL 000730

### Modules Positioning

The extremely small size of the HM30M-2 module makes it suitable for installation in very small channel letters.

The modules must be fixed by own adhesive by removing the protection film, if the internal surface of channel letter has imperfections it is recommended to add additional fixing points in the wires with neutral silicone.

Do not down modules with various types of resins.



### The product comply with the following European Standard

<input checked="" type="checkbox"/>	EN 62471: 2008	Photobiological safety of lamps and lamp systems
<input checked="" type="checkbox"/>	EN 62031: 2008+A1: 2013	LED modules for general lighting, Safety specifications
<input checked="" type="checkbox"/>	RoHS2 2011/65/UE	Restriction in the use of hazardous substances in electrical and electronic equipment