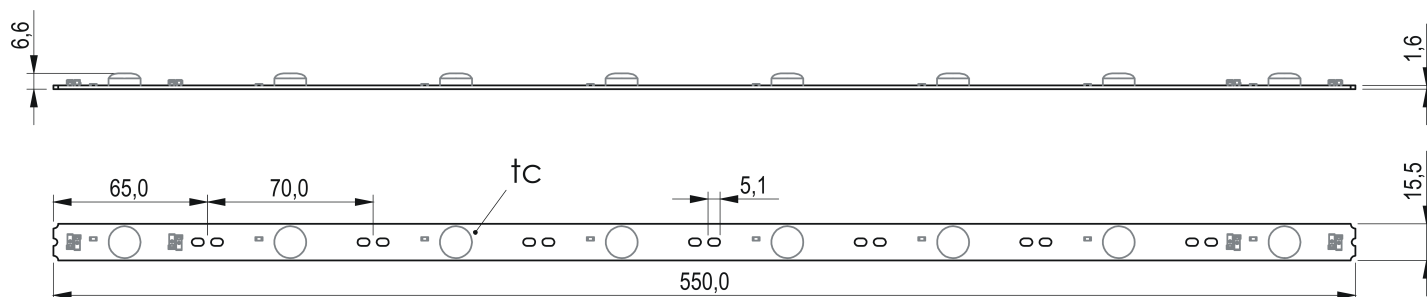


A5616L8 CRI 80/90 1100 lm 350 mA 8C V1

Drawing



Technical data

Nominal forward current	350 mA
Maximum forward current	480 mA
Ambient temperature range	-25 ... +45 °C
tc	85 °C
tp rated	45 °C
Lumen maintenance L70B50	>108000h
Max. working voltage for insulation	<60 V
Insulation test voltage	500 V
Classification acc. to IEC 62031	Built-in
Risk group (IEC 62471)	RG1
Type of protection	IP00
Beam characteristic	160 °

Product details

- Built-in LED module
- Can be cut every 70 mm
- Application of lenses
- SELV module
- Long life-time
- Ideal for linear luminaires
- Perfectly uniform light
- 5 years guarantee

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Product code	Photometric code	Useful luminous flux at tp=25 °C	Expected luminous flux at tp rated	Forward current	Min. forward voltage at tp=85 °C	Max. forward voltage at tp=25 °C	Power consumption at tp=25 °C	Efficacy at tp=25 °C	Expected efficacy at tp rated	Energy classification
A5616L8-830-370-8C-V1	830/359	1080 lm	1050 lm	370 mA	15,4 V	16,8 V	6,0 W	180 lm/W	175 lm/W	C
A5616L8-840-350-8C-V1	840/359	1090 lm	1060 lm	350 mA	15,4 V	16,7 V	5,7 W	191 lm/W	186 lm/W	C
A5616L8-930-450-8C-V1	930/359	1110 lm	1075 lm	450 mA	15,6 V	16,9 V	7,3 W	152 lm/W	147 lm/W	D
A5616L8-940-420-8C-V1	940/359	1120 lm	1090 lm	420 mA	15,5 V	16,9 V	6,8 W	165 lm/W	160 lm/W	D

A5616L8 - Multiplier

Temperature multiplier		
Temperature	Expected luminous flux	Efficacy
tp 25 °C	1	1
tp 45 °C	0,96	0,97
tp 65 °C	0,93	0,94
tp 85 °C	0,89	0,91
Nominal current multiplier		
Nominal current	Expected luminous flux	Efficacy
224 mA	0,64	1,00
240 mA	0,69	0,99
256 mA	0,73	0,99
272 mA	0,78	0,99
288 mA	0,82	0,99
304 mA	0,87	0,99
320 mA	0,91	0,99
336 mA	0,96	0,99
350 mA	1,00	1,00
368 mA	1,04	0,98
384 mA	1,09	0,98
400 mA	1,13	0,98
416 mA	1,18	0,98

Thermal details

Temperature has a great influence on the lifetime of LED products. Exceeding the permissible temperatures can significantly shorten the life of the module or even lead to its destruction. It is necessary to verify compliance with the maximum allowable temperature at the reference point under stable operating conditions. The maximum value should be determined based on the application-specific worst-case conditions. Both reference point temperatures (tc and tp) are measured at the same location.

Instalation

The module are not protected against overvoltages, overcurrents,overloads or short-circuit currents. Wrong polarity can damage the module. The module must be powered by a SELV or non-SELV constant current LED driver. Module can be mounted diectly on earthed metal parts of luminaire only when max working voltage for insulation is higher than max. output voltage of LED driver (also against earth). Otherwise additional insulation between LED module and heat sink is required. At voltages > 60 V an additional protection against direct touch (test finger) to the light emitting side of the module has to be guaranteed. This is typically achieved by means of a non removable light distributor over the module or by a suitable luminaire construction.

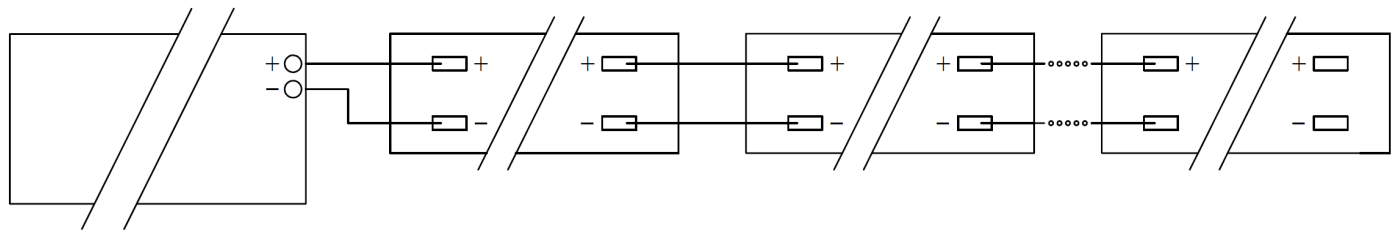


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Risk of sulfurization

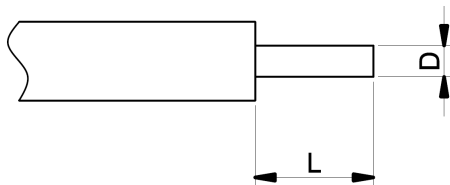
The LED uses a silver-plated lead frame and its surface color may change to black (or dark colored) when it is exposed to sulfur (S),chlorine (Cl) or other halogen compound. Sulfurization of lead frame may cause intensity degradation, change of chromaticity coordinates and, in extreme cases, open circuit. It requires caution. Due to possible sulfurization of lead frame, the LED Modules should not be usedand stored together with oxidizing substances made of materials such as rubber, plain paper, lead solder cream, etc.

Wiring example



Wiring type and cross section

The wiring can be in stranded wires or solid with a cross section of 0.2 to 0.75mm².



D - wire cross section	Min	Max
	0,2mm²	0,5mm²
L - strip lenght	Min	Max
	7,5mm	9,5mm

Photometric code

1 digit	2+3 digit	4 digit	5 digit	6 digit
CRI	Colour temperature in Kelvin x 100	MacAdam initial	Mac Adam after 25 % of the lifetime (max. 6000 h)	Luminous flux after 25% of the lifetime (max. 6000 h)
7 70-79				7 ≥ 70
8 80-89				8 ≥ 80
9 ≥90				9 ≥ 90

