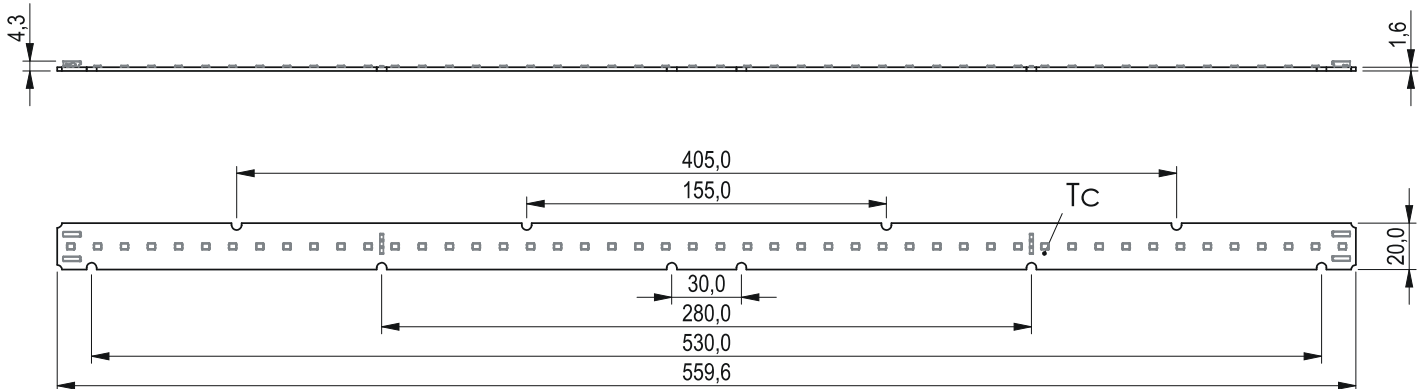


# A5620L48

## Drawing



### Technical data

|                                     |                |
|-------------------------------------|----------------|
| Nominal forward current             | 350 / 700 mA   |
| Maximum forward current             | 600 / 1200 mA  |
| Ambient temperature range           | -25 ... +45 °C |
| tc                                  | 85 °C          |
| tp rated                            | 45 °C          |
| Lumen maintenance L80B10            | 60000h         |
| Lumen maintenance L70B50            | >72000h        |
| Max. working voltage for insulation | 400 V          |
| Insulation test voltage             | 1800 V         |
| Classification acc. to IEC 62031    | Built-in       |
| Risk group (IEC 62471)              | RG1            |
| Type of protection                  | IP00           |
| Beam characteristic                 | 120 °          |

### Product details

- Built-in LED module
- Long life-time
- Ideal for linear luminaires
- Perfectly uniform light
- Dimmension according to L56W2
- 5 years guarantee

| 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 of at tp rated | Energy classification |
|------------------|------------------|----------------------------------|------------------------------------|-----------------|----------------------------------|----------------------------------|-------------------------------|----------------------|----------------------------------|-----------------------|
| A5620L48-350-827 | 827/359          | 2700 lm                          | 2600 lm                            | 350 mA          | 43,7 V                           | 46,2 V                           | 15,8 W                        | 170 lm/W             | 164 lm/W                         | D                     |
| A5620L48-350-830 | 830/359          | 2750 lm                          | 2650 lm                            | 350 mA          | 43,7 V                           | 46,2 V                           | 15,8 W                        | 175 lm/W             | 169 lm/W                         | C                     |
| A5620L48-350-840 | 840/359          | 2900 lm                          | 2800 lm                            | 350 mA          | 43,7 V                           | 46,2 V                           | 15,8 W                        | 182 lm/W             | 177 lm/W                         | C                     |
| A5620L48-350-850 | 850/359          | 2900 lm                          | 2800 lm                            | 350 mA          | 43,7 V                           | 46,2 V                           | 15,8 W                        | 182 lm/W             | 177 lm/W                         | C                     |
| A5620L48-700-827 | 827/359          | 2700 lm                          | 2600 lm                            | 700 mA          | 21,8 V                           | 23,1 V                           | 15,8 W                        | 170 lm/W             | 164 lm/W                         | D                     |
| A5620L48-700-830 | 830/359          | 2750 lm                          | 2650 lm                            | 700 mA          | 21,8 V                           | 23,1 V                           | 15,8 W                        | 175 lm/W             | 169 lm/W                         | C                     |
| A5620L48-700-840 | 840/359          | 2900 lm                          | 2800 lm                            | 700 mA          | 21,8 V                           | 23,1 V                           | 15,8 W                        | 182 lm/W             | 177 lm/W                         | C                     |
| A5620L48-700-850 | 850/359          | 2900 lm                          | 2800 lm                            | 700 mA          | 21,8 V                           | 23,1 V                           | 15,8 W                        | 182 lm/W             | 177 lm/W                         | C                     |

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|                  |         |         |         |        |        |        |        |          |          |   |
|------------------|---------|---------|---------|--------|--------|--------|--------|----------|----------|---|
| A5620L48-350-927 | 927/359 | 2200 lm | 2150 lm | 350 mA | 44,5 V | 47,0 V | 16,2 W | 135 lm/W | 132 lm/W | E |
| A5620L48-350-930 | 930/359 | 2250 lm | 2200 lm | 350 mA | 44,5 V | 47,0 V | 16,2 W | 138 lm/W | 135 lm/W | E |
| A5620L48-350-940 | 940/359 | 2350 lm | 2300 lm | 350 mA | 44,5 V | 47,0 V | 16,2 W | 145 lm/W | 141 lm/W | D |
| A5620L48-700-927 | 927/359 | 2200 lm | 2150 lm | 700 mA | 22,2 V | 23,5 V | 16,2 W | 135 lm/W | 132 lm/W | E |
| A5620L48-700-930 | 930/359 | 2250 lm | 2200 lm | 700 mA | 22,2 V | 23,5 V | 16,2 W | 138 lm/W | 135 lm/W | E |
| A5620L48-700-940 | 940/359 | 2350 lm | 2300 lm | 700 mA | 22,2 V | 23,5 V | 16,2 W | 145 lm/W | 141 lm/W | D |

## A5620L48-350

| Multiplier             | tp 25 °C | tp 45 °C | tp 65 °C | tp 85 °C | If 88 mA | If 175 mA | If 350 mA | If 500 mA |
|------------------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| Expected luminous flux | 1        | 0,96     | 0,93     | 0,89     | 0,26     | 0,51      | 1         | 1,40      |
| Efficacy               | 1        | 0,97     | 0,94     | 0,91     | 1,09     | 1,06      | 1         | 0,96      |

## A5620L48-700

| Multiplier             | tp 25 °C | tp 45 °C | tp 65 °C | tp 85 °C | If 175 mA | If 350 mA | If 700 mA | If 1050 mA |
|------------------------|----------|----------|----------|----------|-----------|-----------|-----------|------------|
| Expected luminous flux | 1        | 0,96     | 0,93     | 0,89     | 0,26      | 0,51      | 1         | 1,47       |
| Efficacy               | 1        | 0,97     | 0,94     | 0,91     | 1,09      | 1,06      | 1         | 0,95       |

## 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 ( $t_c$  and  $t_p$ ) are measured at the same location.

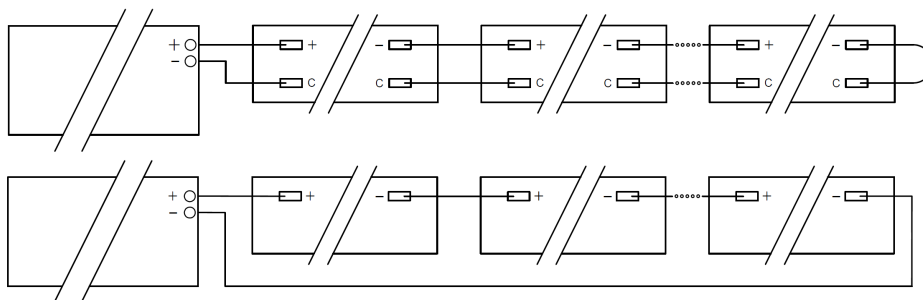
## Installation

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 directly 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.

## Risk of sulfuration

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. Sulfuration of lead frame may cause intensity degradation, change of chromaticity coordinates and, in extreme cases, open circuit. It requires caution. Due to possible sulfuration of lead frame, the LED Modules should not be used and stored together with oxidizing substances made of materials such as rubber, plain paper, lead solder cream, etc.

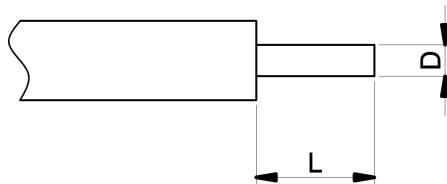
## Wiring example



# A5620L48

## Wiring

The wiring can be in stranded wires or solid with a cross section of 0.2 to 0.75mm<sup>2</sup>.



|                        |                    |                     |
|------------------------|--------------------|---------------------|
| D - wire cross section | Min                | Max                 |
|                        | 0,2mm <sup>2</sup> | 0,75mm <sup>2</sup> |
| L - strip length       | Min                | Max                 |
|                        | 7,5mm              | 9,5mm               |

## Photometric code

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