



Module SLE G6 FASHION EXC

Module SLE EXCITE

Product description

- Optimized light spectrum for perfect fashion presentation
- Best balanced Fashion light for all colours (typical CRI 95)
- Housing with Snap-On feature for easy reflector mounting
- 50 mm housing with 35 mm mounting hole distance acc. to Zhaga
- Warm, thrilling colours with a high saturation combined with a pure and shiny white
- Luminous flux up to 7,370 lm at $t_p = 65^\circ\text{C}$
- High colour consistency (MacAdam 3)
- Excellent thermal management by COB technology
- Uniform radiation with Dam&Fill technology
- Fixing holes for M3 screws
- Integrated LED module
- Cooling required
- Flexible operating modes
- 5-year guarantee



LES19 + LES23 with housing



LES17 D50 with housing



LES19



LES17



LES15

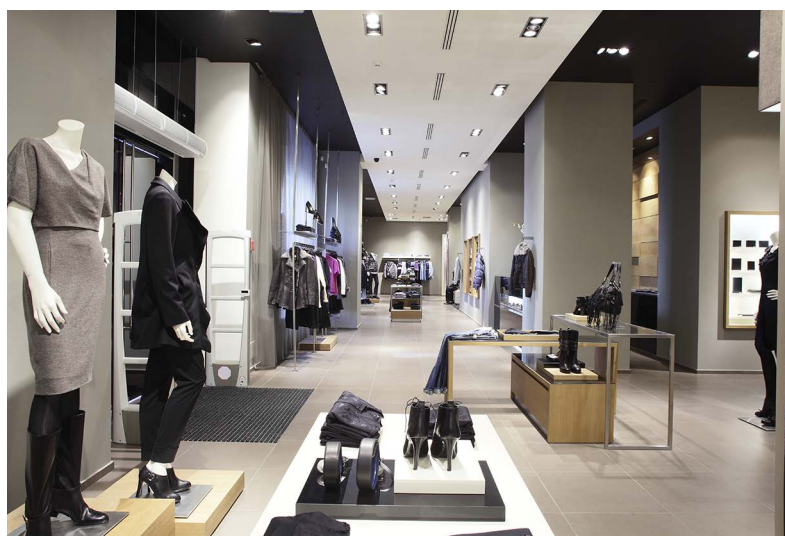


LES10



Standards, page 4

Colour temperatures and tolerances, page 10



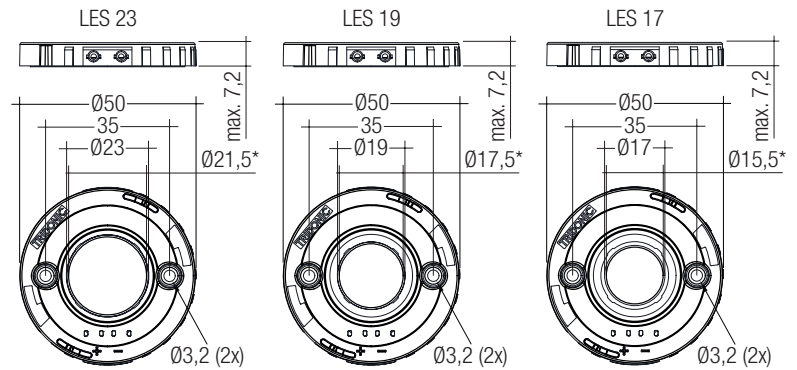


Module SLE G6 FASHION EXC

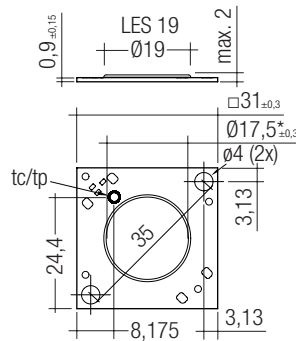
Module SLE EXCITE

Technical data

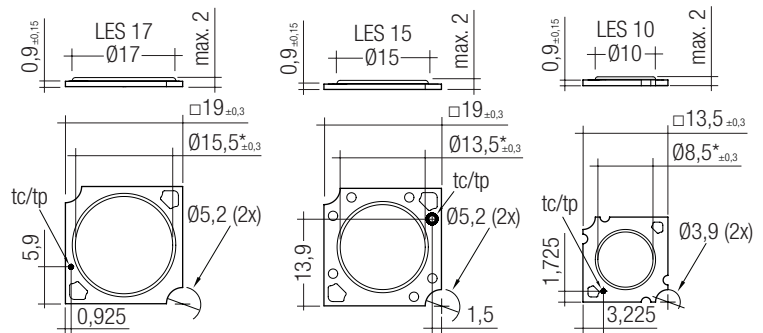
Beam characteristic	115°
Ambient temperature range	-25 ... +50 °C
tp rated	65 °C
tc ^①	Up to 100 °C
Max. allowed Silicontemperature	150 °C
Irated for LES10	350 mA
Irated for LES15	500 mA
Irated for LES17	900 mA
Irated for LES19	1,050 mA
Irated for LES23	1,400 mA
Imax for LES10	500 mA
Imax for LES15	900 mA
Imax for LES17	1,200 mA
Imax for LES19	1,400 mA
Imax for LES23	2,000 mA
Max. DC forward current for LES10 ^②	720 mA
Max. DC forward current for LES15 ^②	1,200 mA
Max. DC forward current for LES17 ^②	1,440 mA
Max. DC forward current for LES19 ^②	1,680 mA
Max. DC forward current for LES23 ^②	2,400 mA
Max. permissible LF current ripple for LES10	720 mA
Max. permissible LF current ripple for LES15	1,200 mA
Max. permissible LF current ripple for LES17	1,440 mA
Max. permissible LF current ripple for LES19	1,680 mA
Max. permissible LF current ripple for LES23	2,400 mA
Max. permissible peak current for LES10	1,080 mA / max. 8 ms
Max. permissible peak current for LES15	1,800 mA / max. 8 ms
Max. permissible peak current for LES17	2,160 mA / max. 8 ms
Max. permissible peak current for LES19	2,520 mA / max. 8 ms
Max. permissible peak current for LES23	3,600 mA / max. 8 ms
Max. working voltage for insulation nonSELV ^③	50 V
Max. working voltage for insulation SELV for	60 V
LES10, LES15, LES17 ^④	
Max. working voltage for insulation SELV for LES19, LES23 ^④	75 V
Insulation test voltage	0.5 kV
CTI of the printed circuit board	< 600 V
ESD classification	Severity level 4
Risk group (EN 62471:2008) for LES10	RG2 (Eth _r = 1547 lx, RG1 at d = 80 cm)
Risk group (EN 62471:2008) for LES15	RG1
Risk group (EN 62471:2008) for LES17	RG1
Risk group (EN 62471:2008) for LES19	RG1
Risk group (EN 62471:2008) for LES23	RG1
Type of protection	IP00



Dimensions in mm, *optical LES



Dimensions in mm, *optical LES



Dimensions in mm, *optical LES

Ordering data

Type	Article number	Colour temperature	Housing	Connec- tion cable	Pa- ckaging	Weight per pc.
SLE G6 10mm 1200lm FASHION C EXC	89602881	3,250 K	no	yes	20 pc(s).	0.004 kg
SLE G6 15mm 3000lm FASHION R EXC	89602827	3,250 K	no	no	20 pc(s).	0.001 kg
SLE G6 15mm 3000lm FASHION C EXC	89602880	3,250 K	no	yes	20 pc(s).	0.004 kg
SLE G6 17mm 4000lm FASHION R EXC	89602802	3,250 K	no	no	20 pc(s).	0.001 kg
SLE G6 17mm 4000lm FASHION H EXC D50	89602828	3,250 K	yes	no	50 pc(s).	0.003 kg
SLE G6 19mm 5000lm FASHION C EXC	89602851	3,250 K	no	yes	20 pc(s).	0.008 kg
SLE G6 19mm 5000lm FASHION H EXC	89602784	3,250 K	yes	no	50 pc(s).	0.007 kg
SLE G6 23mm 6000lm FASHION H EXC	89602791	3,250 K	yes	no	50 pc(s).	0.007 kg

Specific technical data

Type®	Photometric code	Forward current	Luminous flux at tp = 25 °C®	Luminous flux at tp = 65 °C®	Power consumption at tp = 65 °C®	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Colour rendering index CRI
SLE 10mm 1200lm – Operating mode HE at 250 mA								
SLE G6 10mm 1200lm FASHION EXC	932/359	250 mA	1,110 lm	940 lm	8.8 W	32.2 V	39.1 V	95
SLE 10mm 1200lm – Operating mode NM at 350 mA								
SLE G6 10mm 1200lm FASHION EXC	932/359	350 mA	1,360 lm	1,260 lm	12.7 W	33.2 V	40.3 V	95
SLE 10mm 1200lm – Operating mode HO at 500 mA								
SLE G6 10mm 1200lm FASHION EXC	932/359	500 mA	1,820 lm	1,700 lm	19.1 W	34.9 V	42.4 V	95
SLE 15mm 3000lm – Operating mode HE at 350 mA								
SLE G6 15mm 3000lm FASHION EXC	932/359	350 mA	1,530 lm	1,430 lm	11.8 W	30.8 V	37.4 V	95
SLE 15mm 3000lm – Operating mode NM at 500 mA								
SLE G6 15mm 3000lm FASHION EXC	932/359	500 mA	2,130 lm	1,980 lm	17.3 W	31.6 V	38.4 V	95
SLE 15mm 3000lm – Operating mode HO at 900 mA								
SLE G6 15mm 3000lm FASHION EXC	932/359	900 mA	3,530 lm	3,280 lm	33.1 W	33.7 V	40.9 V	95
SLE 17mm 4000lm – Operating mode HE at 500 mA								
SLE G6 17mm 4000lm FASHION EXC	932/359	500 mA	2,150 lm	2,000 lm	17.0 W	31.1 V	37.7 V	95
SLE 17mm 4000lm – Operating mode NM at 900 mA								
SLE G6 17mm 4000lm FASHION EXC	932/359	900 mA	3,640 lm	3,380 lm	32.4 W	32.9 V	40.0 V	95
SLE 17mm 4000lm – Operating mode HO at 1,200 mA								
SLE G6 17mm 4000lm FASHION EXC	932/359	1,200 mA	4,610 lm	4,290 lm	44.9 W	34.2 V	41.6 V	95
SLE 19mm 5000lm – Operating mode HE at 500 mA								
SLE G6 19mm 5000lm FASHION EXC	932/359	500 mA	2,250 lm	2,090 lm	16.8 W	30.7 V	37.3 V	95
SLE 19mm 5000lm – Operating mode NM at 1,050 mA								
SLE G6 19mm 5000lm FASHION EXC	932/359	1,050 mA	4,380 lm	4,070 lm	37.8 W	33.0 V	40.1 V	95
SLE 19mm 5000lm – Operating mode HO at 1,400 mA								
SLE G6 19mm 5000lm FASHION EXC	932/359	1,400 mA	5,550 lm	5,160 lm	52.5 W	34.3 V	41.7 V	95
SLE 23mm 6000lm – Operating mode HE at 700 mA								
SLE G6 23mm 6000lm FASHION EXC	932/359	700 mA	3,180 lm	2,960 lm	23.4 W	30.6 V	37.2 V	95
SLE 23mm 6000lm – Operating mode NM at 1,400 mA								
SLE G6 23mm 6000lm FASHION EXC	932/359	1,400 mA	5,900 lm	5,490 lm	49.9 W	32.6 V	39.6 V	95
SLE 23mm 6000lm – Operating mode HO at 2,000 mA								
SLE G6 23mm 6000lm FASHION EXC	932/359	2,000 mA	7,920 lm	7,370 lm	74.8 W	34.2 V	41.6 V	95

® See derating curves in data sheet section 2.3.

® Max. DC forward current varies over the temperature of the LED module. See derating curves in data sheet section 2.3.

® The detailed explanation, see data sheet section 3.1.

® Tolerance range for optical and electrical data: ±10 %.

® Assumed efficiency for the LED Driver is 0.9.

® HE ... high efficiency, NM ... nominal mode, HO ... high output.

Unique light quality – listing of the Ri values*

Ra8	Ra14	Ri01	Ri02	Ri03	Ri04	Ri05	Ri06	Ri07	Ri08	Ri09	Ri10	Ri11	Ri12	Ri13	Ri14
95	94	99	96	91	91	97	95	93	95	98	91	91	89	99	94

* Approximate values – Deviations can occur caused phosphor mixtures.

1. Standards

EN 62031
EN 62471
IEC 62717
IEC 61000-4-2

1.1 Glow wire test

according to EN 62031 with increased temperature of 850 °C passed.

1.2 Photometric code

Key for photometric code, e. g. 830 / 359

1 st digit	2 nd + 3 rd digit	4 th digit	5 th digit	6 th digit
Code	CRI	Colour temperature in Kelvin x 100	McAdam after 25% of the life-time (max.6000h)	Luminous flux after 25% of the life-time (max.6000h)
7	70 – 79	McAdam initial	(max.6000h)	Code
8	80 – 89			Luminous flux
9	≥90			
				7 ≥ 70 %
				8 ≥ 80 %
				9 ≥ 90 %

1.3 Energy classification

Type	Forward current	Energy classification
SLE G6 10mm 1200lm FASHION EXC	250 mA	A+
	350 mA	A+
	500 mA	A+
SLE G6 15mm 3000lm FASHION EXC	350 mA	A+
	500 mA	A+
	900 mA	A+
SLE G6 17mm 4000lm FASHION EXC	500 mA	A+
	900 mA	A+
	1,200 mA	A+
SLE G6 19mm 5000lm FASHION EXC	500 mA	A+
	1,050 mA	A+
	1,400 mA	A+
SLE G6 23mm 6000lm FASHION EXC	700 mA	A+
	1,400 mA	A+
	2,000 mA	A+

2. Thermal details

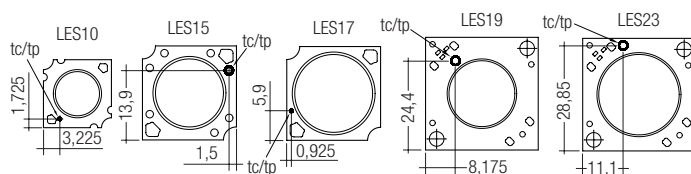
2.1 tp point, ambient temperature and life-time

The temperature at tp reference point is crucial for the light output and life-time of a LED product.

For SLE G6 a tp temperature of 65 °C has to be complied in order to achieve an optimum between heat sink requirements, light output and life-time.

Compliance with the maximum permissible reference temperature at the tp point must be checked under operating conditions in a thermally stable state. The maximum value must be determined under worst-case conditions for the relevant application.

To check the tc / tp temperature, the temperature sensor has to be mounted on the PCB at the marked position as stated in the drawing.



2.2 Storage and humidity

storage temperature	-30 ... +80 °C
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Operation only in non condensing environment.

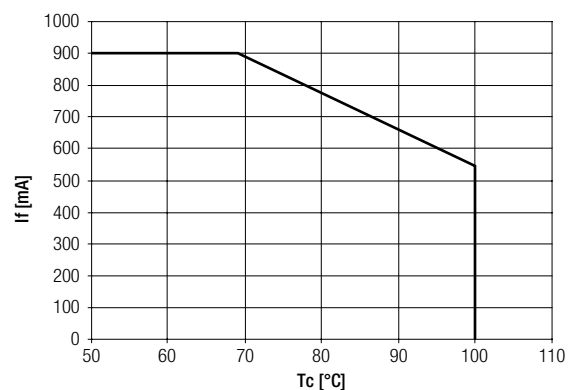
Humidity during processing of the module should be between 30 to 70 %.

2.3 Derating curves

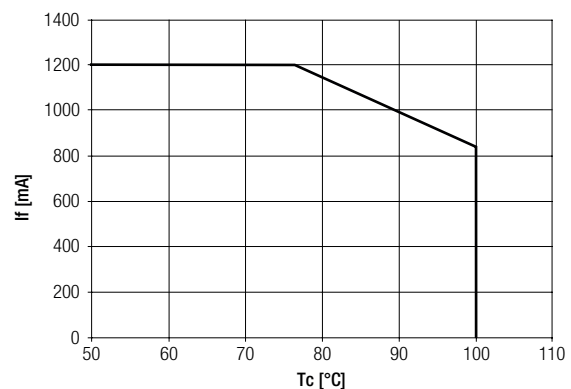
SLE G6 10mm 1200lm FASHION EXC

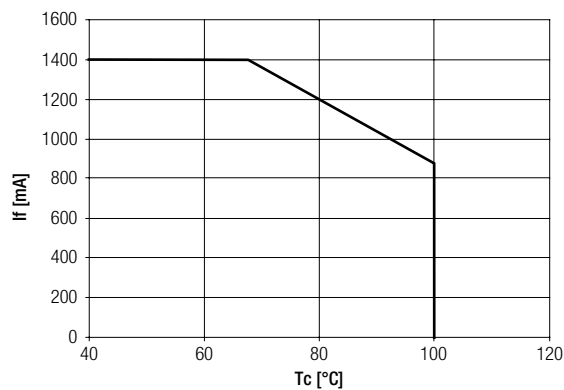
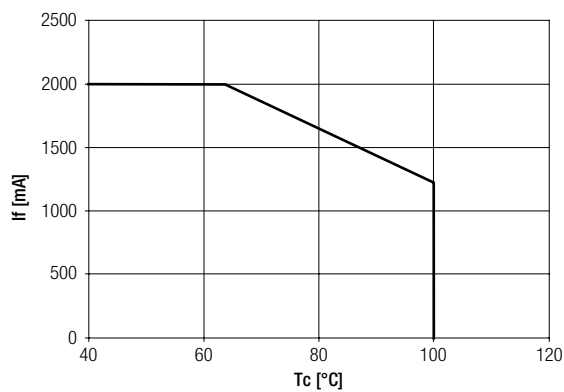


SLE G6 15mm 3000lm FASHION EXC



SLE G6 17mm 4000lm FASHION EXC



SLE G6 19mm 5000lm FASHION EXC**SLE G6 23mm 6000lm FASHION EXC****2.4 Thermal design and heat sink**

The rated life of LED products depends to a large extent on the temperature. If the permissible temperature limits are exceeded, the life of the SLE G6 will be greatly reduced or the SLE G6 may be destroyed.

2.5 Heat sink values**SLE G6 10mm 1200lm FASHION EXCITE**

ta	tp	Operating current	R _{th, hs-a}
25 °C	65 °C	250 mA	7.47 K/W
30 °C	65 °C	250 mA	6.53 K/W
40 °C	65 °C	250 mA	4.67 K/W
50 °C	65 °C	250 mA	2.80 K/W
25 °C	65 °C	350 mA	4.93 K/W
30 °C	65 °C	350 mA	4.32 K/W
40 °C	65 °C	350 mA	3.08 K/W
50 °C	65 °C	350 mA	1.85 K/W
25 °C	65 °C	500 mA	3.10 K/W
30 °C	65 °C	500 mA	2.71 K/W
40 °C	65 °C	500 mA	1.94 K/W
50 °C	65 °C	500 mA	1.16 K/W

SLE G6 15mm 3000lm FASHION EXCITE

ta	tp	Operating current	R _{th, hs-a}
25 °C	65 °C	350 mA	5.71 K/W
30 °C	65 °C	350 mA	4.97 K/W
40 °C	65 °C	350 mA	3.51 K/W
50 °C	65 °C	350 mA	2.04 K/W
25 °C	65 °C	500 mA	3.68 K/W
30 °C	65 °C	500 mA	3.20 K/W
40 °C	65 °C	500 mA	2.24 K/W
50 °C	65 °C	500 mA	1.28 K/W
25 °C	65 °C	900 mA	1.68 K/W
30 °C	65 °C	900 mA	1.45 K/W
40 °C	65 °C	900 mA	1.00 K/W
50 °C	65 °C	900 mA	0.53 K/W

SLE G6 17mm 4000lm FASHION EXCITE

ta	tp	Operating current	R _{th, hs-a}
25 °C	65 °C	500 mA	3.83 K/W
30 °C	65 °C	500 mA	3.33 K/W
40 °C	65 °C	500 mA	2.34 K/W
50 °C	65 °C	500 mA	1.34 K/W
25 °C	65 °C	900 mA	1.78 K/W
30 °C	65 °C	900 mA	1.53 K/W
40 °C	65 °C	900 mA	1.05 K/W
50 °C	65 °C	900 mA	0.57 K/W
25 °C	65 °C	1,200 mA	1.18 K/W
30 °C	65 °C	1,200 mA	1.00 K/W
40 °C	65 °C	1,200 mA	0.68 K/W
50 °C	65 °C	1,200 mA	0.34 K/W

SLE G6 19mm 5000lm FASHION EXCITE

ta	tp	Operating current	R _{th, hs-a}
25 °C	65 °C	500 mA	4.29 K/W
30 °C	65 °C	500 mA	3.74 K/W
40 °C	65 °C	500 mA	2.64 K/W
50 °C	65 °C	500 mA	1.54 K/W
25 °C	65 °C	1,050 mA	1.63 K/W
30 °C	65 °C	1,050 mA	1.41 K/W
40 °C	65 °C	1,050 mA	0.97 K/W
50 °C	65 °C	1,050 mA	0.54 K/W
25 °C	65 °C	1,400 mA	1.07 K/W
30 °C	65 °C	1,400 mA	0.93 K/W
40 °C	65 °C	1,400 mA	0.63 K/W
50 °C	65 °C	1,400 mA	0.33 K/W

SLE G6 23mm 6000lm FASHION EXCITE

ta	tp	Operating current	R _{th, hs-a}
25 °C	65 °C	700 mA	3.07 K/W
30 °C	65 °C	700 mA	2.68 K/W
40 °C	65 °C	700 mA	1.88 K/W
50 °C	65 °C	700 mA	1.08 K/W
25 °C	65 °C	1,400 mA	1.23 K/W
30 °C	65 °C	1,400 mA	1.06 K/W
40 °C	65 °C	1,400 mA	0.72 K/W
50 °C	65 °C	1,400 mA	0.39 K/W
25 °C	65 °C	2,000 mA	0.72 K/W
30 °C	65 °C	2,000 mA	0.62 K/W
40 °C	65 °C	2,000 mA	0.41 K/W
50 °C	65 °C	2,000 mA	0.20 K/W

Notes

The actual cooling can differ because of the material, the structural shape, outside influences and the installation situation. A thermal connection between SLE G6 and heat sink with heat-conducting paste or heat conducting adhesive film is absolutely necessary.

Additionally the SLE G6 has to be fixed on the heat sink with M3 screws to optimise the thermal connection.

Use of thermal interface material with thermal conductivity of $\lambda > 1 \text{ W/mK}$ and layer thickness of interface material with max. 50 μm or a similar interface material where the quotient of layer thickness and thermal conductivity $b < 50 \mu\text{mmK/W}$.

3. Installation / wiring**3.1 Electrical supply/choice of LED Driver**

SLE G6 from Tridonic are not protected against overvoltages, overcurrents, overloads or short-circuit currents. Safe and reliable operation can only be guaranteed in conjunction with a LED Driver which complies with the relevant standards. The use of LED Drivers from Tridonic in combination with SLE G6 guarantees the necessary protection for safe and reliable operation.

If a LED Driver other than Tridonic is used, it must provide the following protection:

- Short-circuit protection
- Overload protection
- Overtemperature protection

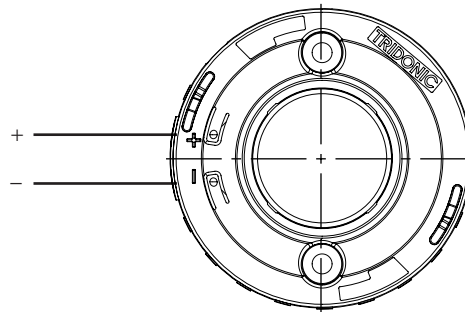
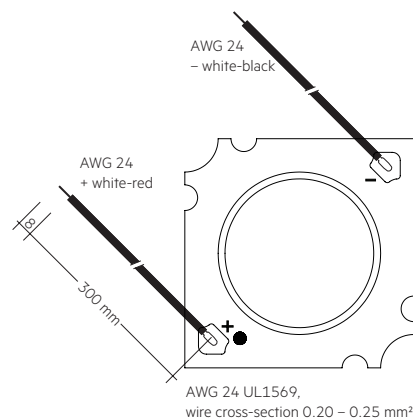
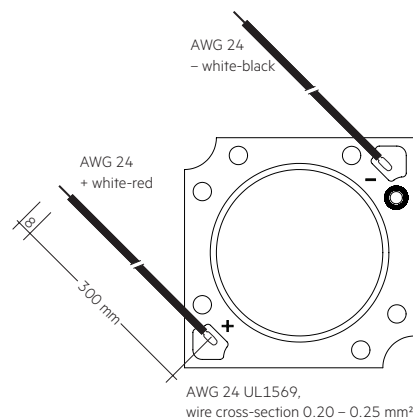


SLE G6 must be supplied by a constant current LED Driver. Operation with a constant voltage LED Driver will lead to an irreversible damage of the module. Wrong polarity can damage the SLE G6.

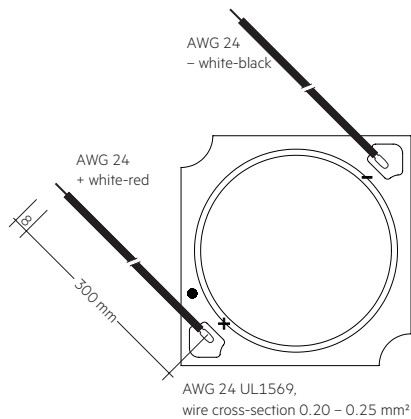


SLE G6 are basic isolated up to 75 V SELV (LES19 and LES23) / 60 V SELV (LES15 and LES17) / 50 V nonSELV against ground and can be mounted directly on earthed metal parts of the luminaire. If the max. output voltage of the LED Driver (also against earth) is above 75 V SELV (LES19 and LES23) / 60 V SELV (LES15 and LES17) / 50 V, an additional isolation between LED module and heat sink is required (for example by isolated thermal pads) or by a suitable luminaire construction.

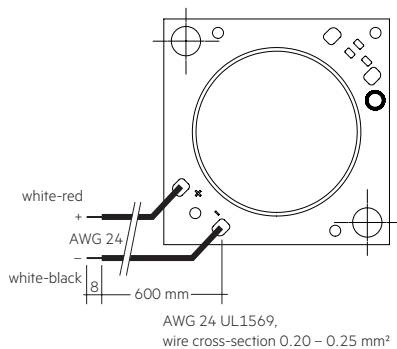
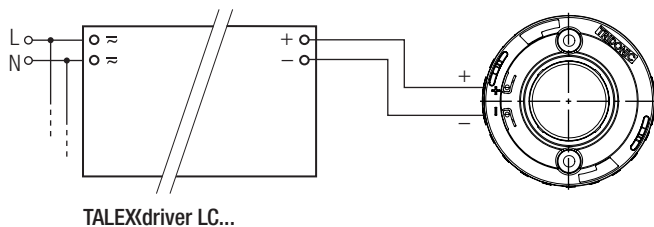
At voltages > 60 V an additional protection against direct touch (test finger) to the light emitting side of the module has to be guaranteed. This is typically achieved by means of a non removable light distributor over the module.

3.2 Wiring**Wiring with housing****Wiring without housing****LES10****LES15**

LES17



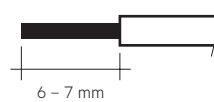
LES19

**Wiring example****3.3 Wiring type and cross section**

The wiring has to be solid cable with a cross section of 0.5 to 0.75 mm² or with stranded wire with soldered ends with a cross section of 0.5 mm². For the push-wire connection you have to strip the insulation (6 – 7 mm).

Loosen wire through twisting and pulling.

wire preparation:

**3.4 Mounting instruction**

SLE G6 from Tridonic which have to be installed on a heat sink have to be connected with heat-conducting paste or heat conducting adhesive film and fixed with M3 screws.

The fixing/cooling surface must be cleaned by removing all dirt, dust and grease before installing the LED modules.

None of the components of the SLE G6 (substrate, LED, electronic components etc.) may be exposed to tensile or compressive stresses.



Max. torque for fixing: 0.5 Nm.

The LED modules are mounted with 2 screws per module. In order not to damage the modules only rounded head screws and an additional plastic flat washer should be used for LED modules without housing.

For further information please refer to the brochure entitled "Technical Design-In-Guide SLE GEN6".



Chemical substance may harm the LED module. Chemical reactions could lead to colour shift, reduced luminous flux or a total failure of the module caused by corrosion of electrical connections.

Materials which are used in LED applications (e.g. sealings, adhesives) must not produce dissolver gas. They must not be condensation curing based, acetate curing based or contain sulfur, chlorine or phthalate.

Avoid corrosive atmosphere during usage and storage.

3.5 EOS/ESD safety guidelines

The device / module contains components that are sensitive to electrostatic discharge and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken. No special measures need be taken for devices/modules with enclosed casings (contact with the pc board not possible), just normal installation practice.

For further information for EOS/ESD safety guidelines and the ESD classification please refer to the brochure entitled <http://www.tridonic.com/esd-protection>.

4. Life-time

4.1 Life-time, lumen maintenance and failure rate

The light output of an LED Module decreases over the life-time, this is characterized with the L value. L70 means that the LED module will give 70 % of its initial luminous flux. This value is always related to the number of operation hours and therefore defines the life-time of an LED module.

As the L value is a statistical value and the lumen maintenance may vary over the delivered LED modules. The B value defines the amount of modules which are below the specific L value, e.g. L70B10 means 10 % of the LED modules are below 70 % of the initial luminous flux, respectively 90 % will be above 70 % of the initial value.

In addition the percentage of failed modules (fatal failure) is characterized by the C value.

The F value is the combination of the B and C value. That means for F degradation and complete failures are considered, e.g. L70F10 means 10 % of the LED modules may fail or be below 70 % of the initial luminous flux.

4.2 Lumen maintenance

Life-time declarations are informative and represent no warranty claim.

SLE G6 10mm 1200lm FASHION EXCITE

Operating current	tp temperature	L80 / F10	L80 / F50	L70 / F10	L70 / F50
250 mA	65 °C	49,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	43,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	38,000 h	57,000 h	>60,000 h	>60,000 h
350 mA	65 °C	46,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	40,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	35,000 h	53,000 h	56,000 h	>60,000 h
500 mA	65 °C	40,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	35,000 h	53,000 h	56,000 h	>60,000 h
	85 °C	31,000 h	47,000 h	50,000 h	>60,000 h

SLE G6 15mm 3000lm FASHION EXCITE

Operating current	tp temperature	L80 / F10	L80 / F50	L70 / F10	L70 / F50
350 mA	65 °C	51,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	44,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	39,000 h	58,000 h	>60,000 h	>60,000 h
500 mA	65 °C	48,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	42,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	37,000 h	55,000 h	58,000 h	>60,000 h
900 mA	65 °C	39,000 h	59,000 h	>60,000 h	>60,000 h
	75 °C	34,000 h	51,000 h	54,000 h	>60,000 h
	85 °C	30,000 h	45,000 h	48,000 h	>60,000 h

SLE G6 17mm 4000lm FASHION EXCITE

Operating current	tp temperature	L80 / F10	L80 / F50	L70 / F10	L70 / F50
500 mA	65 °C	49,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	43,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	38,000 h	57,000 h	>60,000 h	>60,000 h
900 mA	65 °C	42,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	37,000 h	55,000 h	59,000 h	>60,000 h
	85 °C	32,000 h	49,000 h	52,000 h	>60,000 h
1,200 mA	65 °C	37,000 h	55,000 h	59,000 h	>60,000 h
	75 °C	32,000 h	48,000 h	51,000 h	>60,000 h
	85 °C	28,000 h	42,000 h	45,000 h	>60,000 h

SLE G6 19mm 5000lm FASHION EXCITE

Operating current	tp temperature	L80 / F10	L80 / F50	L70 / F10	L70 / F50
500 mA	65 °C	51,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	44,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	39,000 h	58,000 h	>60,000 h	>60,000 h
1,050 mA	65 °C	42,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	37,000 h	55,000 h	59,000 h	>60,000 h
	85 °C	32,000 h	49,000 h	52,000 h	>60,000 h
1,400 mA	65 °C	37,000 h	55,000 h	59,000 h	>60,000 h
	75 °C	32,000 h	48,000 h	51,000 h	>60,000 h
	85 °C	28,000 h	42,000 h	45,000 h	>60,000 h

SLE G6 23mm 6000lm FASHION EXCITE

Operating current	tp temperature	L80 / F10	L80 / F50	L70 / F10	L70 / F50
700 mA	65 °C	51,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	44,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	39,000 h	58,000 h	>60,000 h	>60,000 h
1,400 mA	65 °C	43,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	38,000 h	57,000 h	>60,000 h	>60,000 h
	85 °C	33,000 h	50,000 h	53,000 h	>60,000 h
2,000 mA	65 °C	37,000 h	55,000 h	59,000 h	>60,000 h
	75 °C	32,000 h	48,000 h	51,000 h	>60,000 h
	85 °C	28,000 h	42,000 h	45,000 h	>60,000 h

5. Electrical values**5.1 Declaration of electrical parameters**

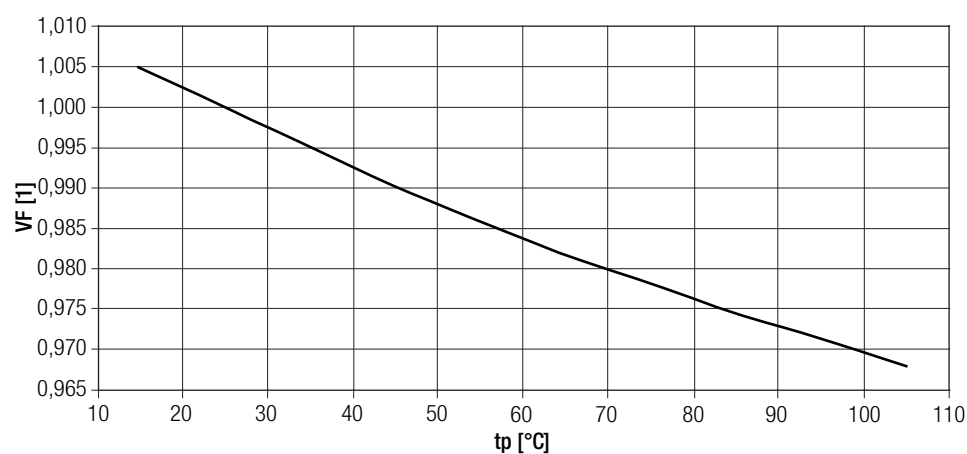
I_{rated} ... Nominal operating current the module is designed for.

I_{max} ... Max. permissible continuous operating current.

Max. DC forward current ... Max. permissible continuous operating current incl. the tolerances of the LED Driver. LED module may be destroyed if this value is exceeded.

Max. permissible LF current ripple ... Max. output current of the LED Driver incl. tolerances and LF current ripple must not exceed this value.

Max. permissible peak current ... The max. output peak current of the LED Driver must not exceed this value.

5.2 Forward voltage vs. tp temperature

The diagrams based on statistic values.
The real values can be different.

6. Photometric characteristics

6.1 Coordinates and tolerances according to CIE 1931

The specified colour coordinates are measured integral after a settling time of 100 ms. The current impuls depends on the module type.

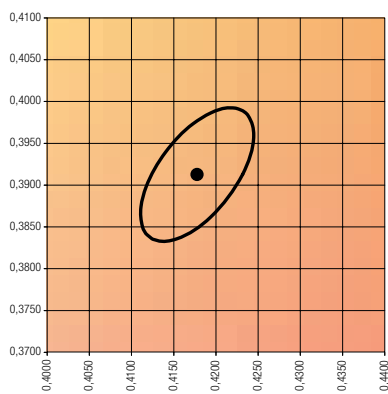
Module type	Current impulse
Module SLE G6 10mm 1200lm FASHION EXC	350 mA
Module SLE G6 15mm 3000lm FASHION EXC	500 mA
Module SLE G6 17mm 4000lm FASHION EXC	900 mA
Module SLE G6 19mm 5000lm FASHION EXC	1,050 mA
Module SLE G6 23mm 6000lm FASHION EXC	1,400 mA

The ambient temperature of the measurement is $t_a = 25^\circ\text{C}$.

The measurement tolerance of the colour coordinates are ± 0.01 .

3,250 K

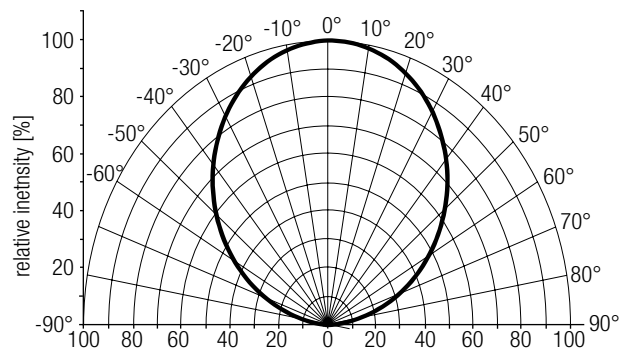
	x0	y0
Centre	0.4177	0.3918



MacAdam ellipse: 3SDCM

6.2 Light distribution

The optical design of the SLE product line ensures optimum homogeneity for the light distribution.



For further information see Design-in Guide, 3D data and photometric data on www.tridonic.com or on request.

6.3 Relative luminous flux vs. tp temperature

