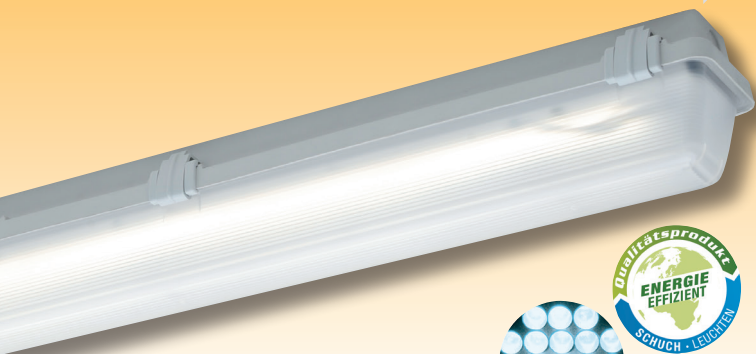


NEW

Dustproof/Waterproof LED Emergency Light Fitting with Diffuser Series 161 ..L../. MA



Application:

At workplaces and for illuminating and identifying escape routes etc.

Mechanical Design:

Housing: Glass fibre reinforced polyester resin, silicone gasket.

Diffuser: Injected, acrylic glass, frosted, additional clear cover over the LED-modules to ensure protection against contact.

Closure: Three-part captive plastic clips (KK), incl. 2 safety clips (KKS)

Reflector: Aluminium, painted can be suspended or removed and carries the electrical components.

Connection: 4-pole terminal.

Cable entries: 2 plugs M20.

Mounting: Closed knock-outs for direct ceiling mounting (to be opened at site). Sealing and pressure disks inside each fitting.

Technical Data:

LED: Line modules 4.000K, $R_a > 80$, life of operation $L_{80} > 50.000h$ at max. ambient temperature

Incorporated NiCd battery, electronic charger, short circuit protected battery and reverse battery protection

Electronic deep discharge protection: acc. to EN 61347-2-7

Re-charging time: 24h, acc. to EN 60598-2-22

Automatic monitoring: of the emergency light fitting according to EN 62034, indication of the test results by 2-coloured LED (luminescence diode) at the luminaire

Mode of operation:

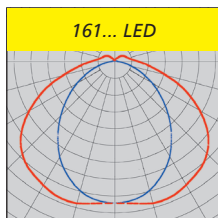
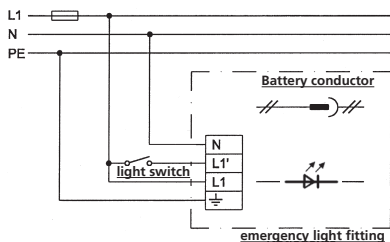
maintained operation = switching over to battery operation in case of mains failure, line modules will be operated with reduced luminous flux as emergency lighting.

Connection voltage: 220-240V 50/60Hz

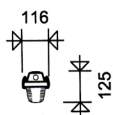
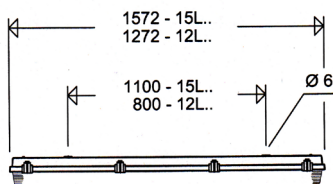
Ambient temperature: -5°C up to +30°C (maintained operation)

Options:

- 6.500K
- for higher ambient temperatures
- according to „International-Food-Standard“ (IFS)
- for application in food industrie (LM)
- dimmable, DALI-interface (DIMD)
- PC-diffuser frosted (FPC)
- Through-wiring
- 4-conductor: L1, L1', N, PE or
- 6-conductor: L1, L1', L2', L3', N, PE



Installation: connect battery conductor
Decommission: disconnect battery conductor



SCHUCH quality - your advantage:

- highest efficiency with luminous efficacy up to 145lm/W
- safety, 100 % luminous flux at low ambient temperatures
- homogeneous illumination by using frosted diffusers, no individual light points visible, comfortable perception of light, brilliant glare limitation
- high colour reproduction $R_a > 80$, according to the workplace guide lines suitable for nearly all plant locations
- low maintenance and downtime costs due to long maintenance intervals
- ECG and reflector with LED modules may be replaced by qualified personal on-site
- future proof by using LED-modules according to Zhaga standard

Article no.	Type	Power consumption [W] * (incl. battery charge)	Luminous flux [lm] *	Luminous flux [lm] * (emergency operation)	Luminous efficacy [lm/W]	Operating time 1h	Operating time 3h	Energy efficiency class	Substitute for **	Weight [kg] (without packing material)
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161 ..L../. MA



with self-contained battery and automatic self-monitoring

16118 0331	161 12L22/1 MA	17	2.300	910	135	•		A++	1 x 36W	3,1
16118 0332	161 15L34/1 MA	26	3.760	900	145	•		A++	1 x 58W	3,8
16118 0333	161 12L42/1 MA	32	4.390	910	137	•		A++	2 x 36W	3,1
16118 0334	161 15L60/1 MA	45	6.290	900	140	•		A++	2 x 58W	3,8
16118 0341	161 12L22/3 MA	18	2.300	870	128		•	A++	1 x 36W	3,5
16118 0342	161 15L34/3 MA	27	3.760	870	139		•	A++	1 x 58W	4,2
16118 0343	161 12L42/3 MA	33	4.390	870	133		•	A++	2 x 36W	3,5
16118 0344	161 15L60/3 MA	46	6.290	870	137		•	A++	2 x 58W	4,2

* see notes ** The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

Notes:

Limitations for LED-light fittings: See chapter „Use of LED lighting in corrosive atmospheres“ in the Technical Appendix.

All technical data is relevant at the time of print. Actual technical data can be found in the internet under www.schuch.de.

Accessories and spare parts please see section „Dustproof/Waterproof LED Light Fitting with Diffuser Series 161/162..L..“ in our catalogue. When ordering electronic parts or battery sets please always mention the article no. of the respective fitting.

NEW

Dustproof/Waterproof LED Light Fitting with Diffuser for high ambient temperatures up to +50°C Series 161/162..L... H50 MA

Application:

For humid and dusty rooms with high ambient temperatures as emergency and safety illumination and for illuminating and identifying escape routes.

Mechanical:

Housing: Glass fibre reinforced polyester resin, silicone gasket.

Diffuser: Injected, acrylic glass, frosted.

Closure: Three-part captive plastic clips (KK), incl. 2 safety clips (KKS) to ensure protection against contact.

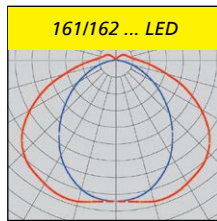
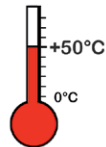
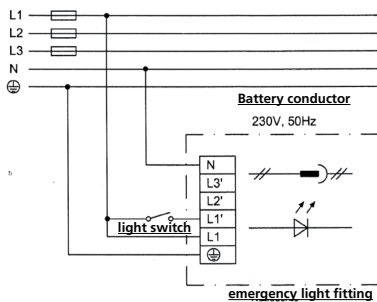
Reflector: Aluminium, painted can be suspended or removed and carries the

electrical components.

Emergency light components installed in a separate glass fibre reinforced polyester box (BR 10150) which is mounted to a carrier rail together with the light fitting as one unit.

Connection: 6-pole terminal for one-sided loop-in/loop-out wiring with 2 plastic cable glands M20 x 1,5

Mounting: Direct ceiling mount or rope/chain mount with eye bolts or hooks.



Technical Data:

LED: Line modules 4.000K, $R_a > 80$, life of operation L70B10 > 50.000h at max. ambient temperature. (see notes)

Incorporated NiCd battery, electronic charger, short circuit protected battery and reverse battery protection

Electronic deep discharge protection: acc. to EN 61347-2-7

Re-charging time: 24h, acc. to EN 60598-2-22

Automatic monitoring the emergency light fitting according to EN 62034, indication of the test results by 2-coloured LED (luminescence diode) at the luminaire.

Mode of operation:

maintained operation = switching over to battery operation in case of mains failure, linear modules will be operated with reduced luminous flux as emergency lighting.

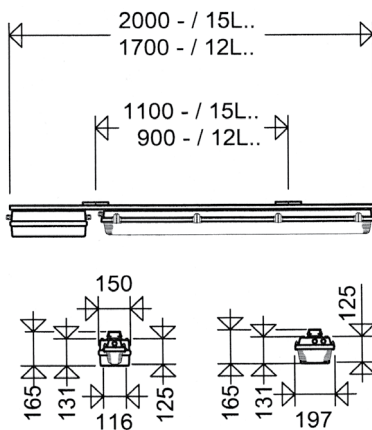
Connection voltage: 220-240V, 50/60Hz

Ambient temperature: 0°C up to +50°C (maintained operation)

Options:

- 6.500K
- according to „International-Food-Standard“ (IFS)
- for application in food industrie (LM)
- PC-diffuser frosted (FPC)

Installation: connect battery conductor
Decommission: disconnect battery conductor



Schuch Quality – your advantage

- highest efficiency / light output up to 139lm/W
- always ready for operation due to permanent trickle charge of the battery
- safety in case of emergency, instant light with maximum light output
- homogeneous illumination by using frosted diffusers, no particular light points visible, comfortable perception of light, brilliant glare limitation
- high colour reproduction $R_a > 80$, according to the workplace guide lines suitable for nearly all plant locations
- low maintenance and downtime costs due to long maintenance intervals
- ECG and reflector with LED modules may be replaced by qualified personal
- future proof by using standardized LED-modules (Zahga)

Article no.	Type	Power consumption [W]* (incl. battery charge)	Luminous flux [lm] *	Luminous flux [lm] * (emergency operation)	Luminous efficacy [lm/W]	Operating hours 1h	Operating hours 3h	Energy efficiency class	Substitute for **	Weight [kg] (without packingmaterial)
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161/162 ..L../. H50 MA



with self-contained battery and automatic self-monitoring

16121 0001	161 12L22/1 H50 MA	18	2.270	840	126	•		A++	1 x 36W	7,0
16121 0002	161 15L34/1 H50 MA	27	3.600	840	133	•		A++	1 x 58W	7,8
16222 0001	162 12L42/1 H50 MA	35	4.610	830	132	•		A++	2 x 36W	7,4
16222 0002	162 15L60/1 H50 MA	47	6.530	850	139	•		A++	2 x 58W	8,2
16121 0003	161 12L22/3 H50 MA	19	2.270	800	119	•	•	A++	1 x 36W	8,6
16121 0004	161 15L34/3 H50 MA	28	3.600	820	129	•	•	A++	1 x 58W	9,6
16222 0003	162 12L42/3 H50 MA	36	4.610	790	128	•	•	A++	2 x 36W	9,0
16222 0004	162 15L60/3 H50 MA	48	6.530	820	136	•	•	A++	2 x 58W	10,0

* see notes ** The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

Notes:

Limitations for LED-light fittings: See chapter „Use of LED lighting in corrosive atmospheres“ in the Technical Appendix.

All technical data is relevant at the time of print. Actual technical data can be found in the internet under www.schuch.de.

Accessories and spare parts please see section „Dustproof/Waterproof LED Light Fitting with Diffuser Series 161/162.. L..“ in our catalogue. When ordering electronic parts or battery sets please always mention the article no. of the respective fitting.

NEW

LED- Emergency Light Fitting for wide temperature range from -40°C up to +45/50°C Series 162 06L08/1 ... MA



Application:

Illumination of escape routes especially in areas with low or high ambient temperatures or with extreme variations in temperature. Wind power stations in towers, gondolas or on platforms. On- and offshore applications.

Mechanical Design:

Housing: Glass fibre reinforced polyester resin. Silicone gasket.

Cover: PMMA frosted.

Closure: Threepart captive plastic clips (KK).

Reflector: White sheet steel, detachable. Electrical components mounted on the reflector. Quarter-turn locks for quick release and assembly. Suspension cords.

Connection: 4-pole terminal.

Cable entry: 2 blanking plugs M20.

Mounting: Closed knock-outs, sealing and pressure disks inside each fitting.

Technical Data:

LED: Line modul 4.000K, R₃80, life expectancy L70B10 > 50.000h, at max. ambient temperature (see notes)

NiCd-Battery: 4,8V 4 Ah, maintenance-free, timed charging and a constant trickle charge to the battery ensures readiness of operation at all times. Battery heating (approx. 40W) with overload protection for safe function of the battery at temperatures down to -40°C (version T40).

Reverse battery protection.

Electronic deep discharge protection

Charging period 24h according EN 60598-2-22.

Automatic monitoring of the fitting according to EN 62034. Test results indicated by 2 colour LED.

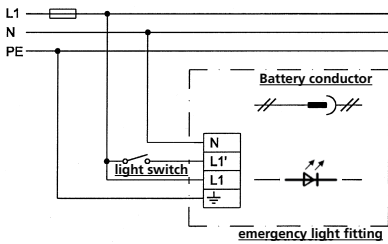
Operating modes:

Maintained Mode: Switching over to battery operation in case of mains failure. LEDs will be operated with reduced luminous flux as emergency lighting.

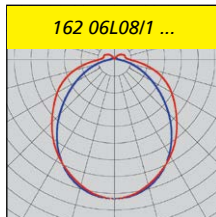
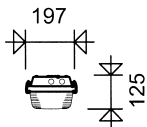
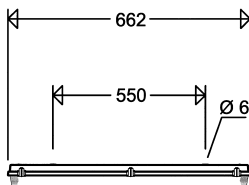
Stand-by Mode: Emergency LED will switch on if mains fails.

Operating voltage: 230V; 50/60Hz

Ambient temperature H50/T40: -5/-40°C up to +45°C in maintained mode
-0/-40°C up to +50°C in stand-by mode



Installation: connect battery conductor
Decommission: disconnect battery conductor



Options:

- 6.500K
- stainless steel clips (KE)
- PC-diffuser frosted (FPC)
- other voltages, e.g. 110V, 1 - 120V, 277V
- for same side in/out wiring: 2 cable entries on one side with 2 cable glands M20 x 1,5 (to save the classical through wiring system)
- for outdoor areas (AUS)

SCHUCH quality - your advantage:

- homogeneous illumination by using frosted diffusers, no particular light points visible, comfortable perception of light, brilliant glare limitation
- high colour reproduction Ra > 80, according to the workplace guide lines suitable for nearly all plant locations
- the special design of version T40 ensures an emergency operation of 1 hour even at -40°C
- constant luminous flux in emergency mode independent from ambient temperature
- 10- to 40-times higher light output at -40 ° C compared to the 18W fluorescent version
- suitable for offshore-applications (salt spray test severity level 2)
- ECG and reflector with LED-modules can be replaced by qualified personnel on-site
- future proof by using standardized LED-modules (Zahga)

Notes:

Limitations for LED-light fittings: See chapter „Use of LED lighting in corrosive atmospheres“ in the Technical Appendix.

All technical data is relevant at the time of print. Actual technical data can be found in the internet under www.schuch.de.

Article no.	Type	Power consumption [W] *	Luminous flux [lm] *	Luminous flux [lm] (emergency mode)	Luminous efficacy [lm/W]	Operating time 1h	Operating time 3h	Energy efficiency class	Weight [kg] without packing material
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162 06L08/1 ... MA



with self-contained battery with automatic self-monitoring

for high ambient temperatures from -5°C/0°C up to +45/50°C

16218 0031	162 06L08/1 H50 MA	11	780	570	71	•		A++	4,4
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for broad temperature range from -40°C/0°C up to +45/50°C

16218 0032	162 06L08/1 T40 MA	11	780	570	71	•		A++	4,4
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* see notes

