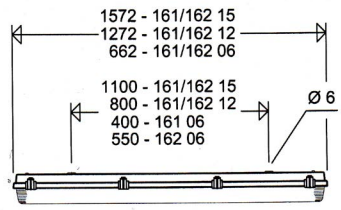


Dustproof/Waterproof LED Light Fitting with Diffuser Series 161/162.. / 161... VARIO

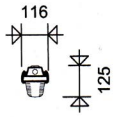
Applications:
Humid, wet and dusty rooms in trade, commerce and industry, multi-storey car parks, underground car parks, cold stores, cold rooms and walk-in cold rooms, covered outdoor areas, etc. (Please enquire in the event of humid, cold ambient conditions with low duty cycles and the presence/ occurrence of chemical substances.)

Design:
Housing: Glass fibre reinforced polyester resin, foamed silicone gasket.
Diffuser: Injection-molded acrylic glass, frosted for glare limitation.
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.
Connection: 3-pole
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.

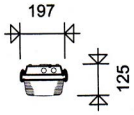
DB standardised by Deutsche Bahn AG



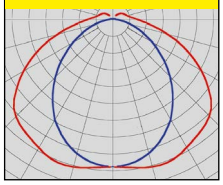
Series161...



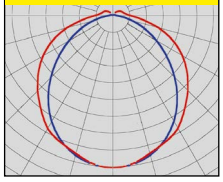
Series 162...



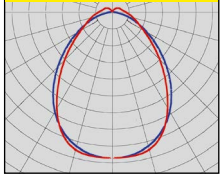
161 ... LED



162 ... LED



161... LED TB



VARIO versions with variable setting of the luminous flux

Applications:
Factories in which, for reasons of maximum standardization and economic storage, only one type of damp-proof luminaire is to be used, which can be used for a wide variety of lighting tasks due to its variably adjustable luminous flux.

Design:
With integrated DIP switch for setting the luminous flux without tools. The luminous flux of the luminaire can be adjusted as required. Depending on the set luminous flux, the power consumption of the light fitting and the maximum permissible ambient temperature change.

Technical data:

LED: Linear modules 4,000 K, CRI > 80, service life L_{90} > 50,000 h and L_{80} > 100,000 h at max. ambient temperature
ECG: 220-240 V, 50/60 Hz, overload and short-circuit protection
Ambient temperature: -20 °C (-40 °C for types ...T40) up to ..°C see article table

Options:

– 2,200 K, 2,700 K, 3,000 K, 5,000 K, 6,500 K; light colours (**822, 827, 830, 850, 865**)
– 1,800 K; light colour (**518**), amber for insect-conscious lighting in outdoor areas etc.
– high colour rendering index Ra > 90
– coloured LEDs, for signal applications
– green LEDs, for lighting potato stores
– through-wiring (**DV**)
– cable looping at 1 small side
– cable entry M25 x 1,5 mm²
– cover made of polycarbonate (**PC**), frosted
– stainless steel clips (**KE**)
– protection class II (**SKII**)
– vibration-resistant design

Product highlights of the VARIO version:

- **universally usable due to variable setting of the luminous flux**, depending on the requirement
- **simple and quick adjustment on-site without tools**
- **can be changed at any time** (e.g. change of use of the premises with new requirements in regard to the level of illumination)
- **maximum standardisation and most economical warehousing**

General product highlights:

- **robust, extremely strong quality light fitting** especially suited for rough industrial use
- **high-impact resistant housing,** excellent chemical and UV-resistance
- **diffuser with high mechanical stability,** fourfold safety against outer impact
- **safety locks** to ensure protection against accidental contact
- **front in/out wiring** (3-pole) possible as standard thanks to 2 entries on one side
- **homogeneous illumination** by using frosted diffusers
- control gear and LED-module replaceable by qualified personnel on-site
- **future proof** by using standardised LED-modules (Zhaga) and long-term availability of spare parts

Cable entries for looping the mains cable on one side (loop in/loop out):
Optionally the light fittings can be supplied with 2 cable entries on one small side.
This feature allows an optimal adjustment to all local conditions and it will consequently save the typical quite expensive through wiring system (preparation at additional cost).





Notes:
Maximum energy saving by using types which are optimized for energy consumption.

Properties, limitations and details for controlling LED-light fittings:
See "Technical Supplement"

All data are correct at the time of printing. Actual technical data can be found under www.schuch.de.

161/162... / 161... VARIO

Article no.	Type	Quantity of ECG	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ambient temperature max.[°C]	Substitute for ca. *	Weight [kg] without packing material
16117 0309	**161 06L12**	1	10	1.390	139	40	1 x 18W	1,8
16117 0310	**161 06L20**	1	16	2.370	148	40	2 x 18W	1,8
16117 0301	**161 12L22**	1	15	2.390	159	40	1 x 36W	2,7
16117 0302	**161 12L42**	1	27	4.240	157	40	2 x 36W	2,7
16117 0305	**161 12L60**	1	39	5.920	152	30	2 x 58W	2,7
16117 0303	**161 15L34**	1	21	3.440	164	40	1 x 58W	3,0
16117 0304	**161 15L60**	1	39	6.160	158	40	2 x 58W	3,0
16117 0306	**161 15L75**	1	49	7.440	152	30	> 2 x 58W	3,0
16215 0302	**162 12L120**	1	78	11.410	146	35	2 x 80 bzw. 3 x 58W	4,3
16215 0303	**162 15L150**	1	97	14.310	148	35	4 x 58W	4,8
16117 0399	**161 12L VARIO**	1	15	2.410	160	45	1 x 36W	2,7
			22	3.610[1)]	164	45	1 x 58W	
			29	4.510	156	40	2 x 36W	
			39	5.920	152	35	2 x 58W	

1) Factory setting

161/162... DIMD

dimmable via DALI interface

Design:

Same as standard version, but with DALI-2-ECG and 2 additional clamping points. Dimming range 1-100 %. Compatible with **LIMAS Line** Light Management System.

16117 0319	**161 06L12 DIMD**	1	10	1.390	139	40	1 x 18W	1,9
16117 0320	**161 06L20 DIMD**	1	16	2.370	148	40	2 x 18W	1,9
16117 0311	**161 12L22 DIMD**	1	15	2.390	159	40	1 x 36W	2,8
16117 0312	**161 12L42 DIMD**	1	27	4.240	157	40	2 x 36W	2,8
16117 0315	**161 12L60 DIMD**	1	39	5.920	152	30	2 x 58W	2,8
16117 0313	**161 15L34 DIMD**	1	21	3.440	164	40	1 x 58W	3,1
16117 0314	**161 15L60 DIMD**	1	39	6.160	158	40	2 x 58W	3,1
16117 0316	**161 15L75 DIMD**	1	49	7.440	152	30	> 2 x 58W	3,1
16215 0312	**162 12L120 DIMD**	1	78	11.410	146	35	2 x 80 bzw. 3 x 58W	4,4
16215 0313	**162 15L150 DIMD**	1	97	14.310	148	35	4 x 58W	4,9

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





161... DIMC/SENS - General information

Applications:
Areas in which the lighting is controlled via motion sensors or door contacts, e.g. storage areas, rack aisles. parking garages etc.
SENS luminaires: are controlled by L' and can generate L'
DIMC luminaires: are controlled by L'

Design:
As standard version but with DALI-2 ECG and additional terminal point, labeled L', optionally with HF sensor (SENS types), see table.

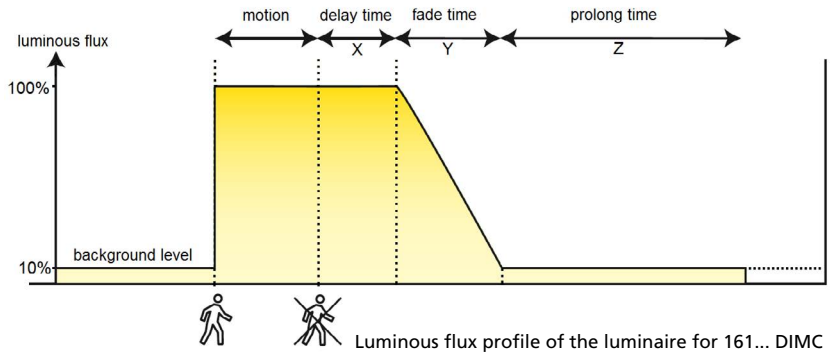
	Clamping point L'	powerless switching	Integrated sensor	Switches off after 30 minutes
161... DIMC	x	x	–	–
161... DIMC-Z30	x	x	–	x
161... SENS	x	x	x	-
161... SENS-Z30	x	x	x	x

Product highlights:

- simple installation and commissioning
- no software or apps required for operation
- only one mains-insulated control cable is required
- "Stand-alone operation" of the SENS luminaires possible, no control phase is required for this
- large energy saving potential through
  – Power consumption reduced by up to 90 % in dimming mode
  – shorter operating time for Z30 versions
- no gateway required
- use of external sensors possible

Technical data:
Control: Any number of DIMC or SENS luminaires can be controlled via the control phase of the SENS luminaires. Switching is powerless. If movement is no longer detected by a SENS luminaire or an external sensor detected (depending on the set hold time), the control phase switches to 0 V and all luminaires connected to the control phase dim to 10 % (factory setting). Please observe the installation instructions in the Technical Supplement.
Programming: the following parameters, among others, can be changed on the LED control gear via the NFC interface: Luminous flux, dimming ramp, switch-off time.
Programming can be done via smartphone and free app.
Detection range of the HF sensor: Depending on the light point height, the detection range is 1-5 m:
– Light point height approx. 2.5 m: Detection area approx. 3 m diameter
– Light point height approx. 5 m: Detection area max. 5 m diameter
Structures such as concrete pillars can restrict the detection area. Materials such as drywall can be penetrated.

Factory settings:
– Standard sensor hold time (X): 5 minutes can be set (see setting options), only for SENS types
– Dimming ramp (Y): 30 seconds, for DIMC and SENS types
– Reduced operation (L' = 0 V): 10 % luminous flux if no activity is detected, for SENS and DIMC types
– Automatic switch-off deactivated (Z), luminaire never switches off.
– For further information, see illustration "Luminous flux profile of the luminaire" for 161... DIMC.
Setting options for SENS luminaires: Via potentiometer on the sensor or optionally via IR remote control (article number 90295 9000):
– Sensitivity of the sensor to avoid unwanted detections in the edge area
– Hold time of the sensor from 10 seconds to 30 minutes, with IR remote control up to 60 minutes
Ambient temperature: -20 °C to see table



Luminous flux profile of the luminaire for 161... DIMC

Article no.	Type	Quantity of ECG	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ambient temperature max. [°C]	Substitute for ca. *	Weight [kg] without packing material

161... DIMC

IP65

dimmable via Corridor Mode

Factory settings DIMC types:
– Automatic switch-off deactivated, light never switches off.

16117 0420	**161 12L22 DIMC**	1	15	2.390	159	40	1 x 36W	2,8
16117 0421	**161 12L42 DIMC**	1	27	4.240	157	40	2 x 36W	2,8
16117 0422	**161 15L34 DIMC**	1	21	3.440	164	40	1 x 58W	3,1
16117 0423	**161 15L60 DIMC**	1	39	6.160	158	40	2 x 58W	3,1

161... DIMC-Z30

IP65

dimmable via Corridor Mode and automatic switch-off function (30 minutes)

Factory settings DIMC-Z30 types:
– Automatic switch-off activated: 30 minutes 10 % background level, then standby mode (0 %).

16117 0710	**161 12L22 DIMC-Z30**	1	15	2.390	159	40	1 x 36W	2,8
16117 0711	**161 12L42 DIMC-Z30**	1	27	4.240	157	40	2 x 36W	2,8
16117 0712	**161 15L34 DIMC-Z30**	1	21	3.440	164	40	1 x 58W	3,1
16117 0713	**161 15L60 DIMC-Z30**	1	39	6.160	158	40	2 x 58W	3,1



161... SENS

IP65

DIMC version with integrated motion sensor

Design:
As DIMC version, but with integrated motion sensor. As a master luminaire, the luminaire can control all DIMC luminaires connected to it.

Factory settings SENS types:
– Automatic switch-off deactivated, light never switches off.

16117 0697	**161 12L22 SENS**	1	15	2.390	159	40	1 x 36W	2,9
16117 0698	**161 12L42 SENS**	1	27	4.240	157	40	2 x 36W	2,9
16117 0699	**161 15L34 SENS**	1	21	3.440	164	40	1 x 58W	3,2
16117 0700	**161 15L60 SENS**	1	39	6.160	158	40	2 x 58W	3,2



161... SENS-Z30

IP65

DIMC-Z30 version with integrated motion sensor and automatic switch-off function (30 minutes)

Design:
As DIMC-Z30 version, but with integrated motion sensor. As a master luminaire, the luminaire can control all DIMC-Z30 luminaires connected to it.

Factory settings SENS-Z30 types:
- Automatic switch-off activated: 30 minutes 10 % background level, then standby mode (0 %).

16117 0715	**161 12L22 SENS-Z30**	1	15	2.390	159	40	1 x 36W	2,9
16117 0716	**161 12L42 SENS-Z30**	1	27	4.240	157	40	2 x 36W	2,9
16117 0718	**161 15L34 SENS-Z30**	1	21	3.440	164	40	1 x 58W	3,2
16117 0719	**161 15L60 SENS-Z30**	1	39	6.160	158	40	2 x 58W	3,2

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

Article no.	Type	Quantity of ECG	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ambient temperature max. [°C]	Substitute for ca. *	Weight [kg] without packing material

162... TB

IP65

with optics for shelf storage aisles and workplace lighting

Applications:
High-bay warehouses, shelf storage aisles, workplace lighting, etc.

Design:
Same as standard versions 162..., but with narrow-wide beam optics (**TB**).

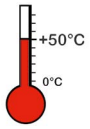
16215 0601	**162 15L120TB**	1	78	11.960	153	40	2 x 80 bzw. 3 x 58W	5,4

161... H50

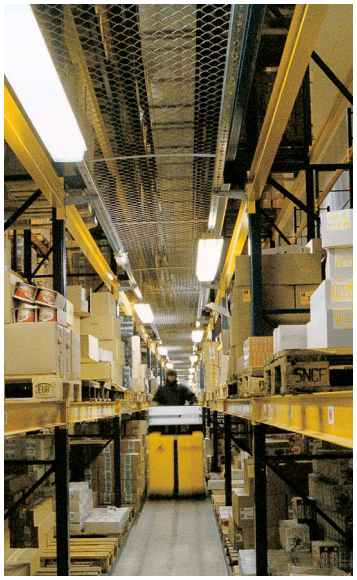
IP65

for high ambient temperatures up to +50 °C

Applications:
Power plants, steel plants, machine-oriented areas, areas with high process waste heat, areas close to the ceiling with accumulating heat etc.



16117 0324	**161 06L12 H50**	1	10	1.390	139	50	1 x 18W	2,0
16117 0490	**161 06L20 H50**	1	16	2.370	148	50	2 x 18W	2,0
16117 0321	**161 12L22 H50**	1	15	2.390	159	50	1 x 36W	2,7
16117 0491	**161 12L42 H50**	1	27	4.240	157	50	2 x 36W	2,7
16117 0322	**161 15L34 H50**	1	21	3.440	164	50	1 x 58W	3,0
16117 0492	**161 15L60 H50**	1	39	6.160	158	50	2 x 58W	3,0
16117 0334	**161 06L12 H50 DIMD**	1	10	1.390	139	50	1 x 18W	2,0
16117 0493	**161 06L20 H50 DIMD**	1	16	2.370	148	50	2 x 18W	2,0
16117 0331	**161 12L22 H50 DIMD**	1	15	2.390	159	50	1 x 36W	2,8
16117 0494	**161 12L42 H50 DIMD**	1	27	4.240	157	50	2 x 36W	2,8
16117 0332	**161 15L34 H50 DIMD**	1	21	3.440	164	50	1 x 58W	3,1
16117 0495	**161 15L60 H50 DIMD**	1	39	6.160	158	50	2 x 58W	3,1



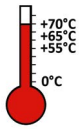
161/162... T40 / H...

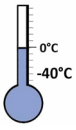
IP65

for wide temperature ranges from -40 °C up to +70 °C

Applications:
Climatic chambers, material container, test benches in the automotive industry, regions with extreme temperature fluctuations etc.

Design:
As standard version, but:
Diffuser: Injection-molded polycarbonate, frosted for glare limitation.





16117 0509	**161 06L12 T40 H65**	1	9	1.190	132	65	1 x 18W	1,8
16117 0510	**161 06L20 T40 H55**	1	18	2.620	146	55	2 x 18W	1,8
16117 0501	**161 12L22 T40 H65**	1	14	2.390	171	65	1 x 36W	2,7
16117 0502	**161 12L42 T40 H55**	1	27	4.240	157	55	2 x 36W	2,7
16117 0503	**161 15L34 T40 H65**	1	21	3.440	164	65	1 x 58W	3,0
16117 0504	**161 15L60 T40 H55**	1	38	6.160	162	55	2 x 58W	3,0
16215 0520	**162 12L22 T40 H70**	1	15	2.390	159	70	1 x 36W	4,1
16215 0521	**162 12L42 T40 H70**	1	28	4.840	173	70	2 x 36W	4,1
16215 0501	**162 15L34 T40 H70**	1	21	3.440	164	70	1 x 58W	4,8
16215 0502	**162 15L60 T40 H60**	1	39	6.590	169	60	2 x 58W	4,8

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

Notes:

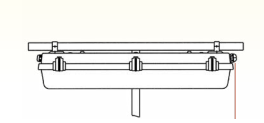
The light fitting is **not suitable** for use in extremely exposed locations with high mechanical stress (wind load) or infrequent or occasional use (e.g. maintenance or inspection lighting).

For use in extremely exposed locations with high mechanical loads (wind load), we recommend our **series 144 ... AUS** or **107 ... G2 (PRIMO XR)**.

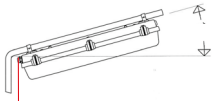
For infrequent or occasional use, we recommend our **series 107 ... G2 (PRIMO XR)**.

When mounting the light fittings on bracket poles or tubular beams/pipes always use original SCHUCH pipe clamps with support (see accessories).

pole mount with pipe clamps



pressure compensation element



pressure compensation element



Article no.	Type	Quantity of ECG	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ambient temperature max.[°C]	Substitute for ca. *	Weight [kg] without packing material

161/162... AUS / 161... VARIO AUS

IP65

for application in unprotected outdoor areas

Applications:
In protected and unprotected outdoor areas and industrial plants, mounted to walls, ceilings, catwalks and steel structures, pipe brackets, grating, under canopies, bus stops, train stations, subways, construction sites, etc.

Design:
As type 161/162... LED, but:
Diffuser: UV proof
Pressure compensation element: M20
Entries: 1 gland M20 at one small side, pressure compensation element M20 at the other small side.

Mounting:
Ceiling and horizontal wall mount or mounting to outreaches, poles, steel structures, catwalks, etc. by means of pipe clamps. For vertical mounting please consult us.

Advantages of the AUS design:

- glass fibre reinforced polyester housing, durable resistant against UV-radiation and chemical components
- our injection-molded PMMA-covers are extremely UV-resistant and robust (wall thickness 1.9 mm)
- profile gaskets are UV-, ozone-, weather-, chemically resistant and non-aging
- pressure compensation element provides controlled venting and thus protects against condensation
- the fitting can be installed in canopied as well as in entirely open outdoor areas

16117 0350	**161 06L12 AUS**	1	10	1.390	139	40	1 x 18W	1,8
16117 0358	**161 06L20 AUS**	1	16	2.370	148	40	2 x 18W	1,8
16117 0351	**161 12L22 AUS**	1	15	2.390	159	40	1 x 36W	2,7
16117 0352	**161 12L42 AUS**	1	27	4.240	157	40	2 x 36W	2,7
16117 0355	**161 12L60 AUS**	1	39	5.920	152	30	2 x 58W	2,7
16117 0353	**161 15L34 AUS**	1	21	3.440	164	40	1 x 58W	3,0
16117 0354	**161 15L60 AUS**	1	39	6.160	158	40	2 x 58W	3,0
16117 0356	**161 15L75 AUS**	1	49	7.440	155	30	> 2 x 58W	3,0
16215 0352	**162 12L120 AUS**	1	78	11.410	146	35	2 x 80 bzw. 3 x 58W	4,3
16215 0353	**162 15L150 AUS**	1	97	14.310	148	35	4 x 58W	4,8
16117 0359	**161 12L VARIO AUS**	1	15	2.410	160	45	1 x 36W	2,7
			22	3.610[1)]	164	45	1 x 58W	
			29	4.510	156	40	2 x 36W	
			39	5.920	152	35	2 x 58W	

1) Factory setting

Notes:
The light fittings in Version IFS are not suitable for cleaning with cleaning agents or disinfectants as well as the cleaning with water-jet units.

Why use PC covers for IFS luminaires?
– splinter-free (in contrast to PMMA)
– risk minimisation, no risk of food contamination (see IFS Standard Food Issue 8, chapter 4.12 risk minimisation)
– extension of the inspection intervals in the risk zones of production

161/162... IFS

IP65

for application in food industry areas

Applications:
Food industry or food processing factories, suppliers to the food industry who are falling in the International Featured Standard Food, BRC, HACCP or who are subject to comparably strict requirements.

Design:
Same as type 161/162 .. L..but:
Diffuser: cover Polycarbonate, frosted.
Closure clips: Stainless steel (**KE**), incl. 2 safety clips (**KES**) to ensure protection against contact.

16119 0039	**161 06L12 IFS**	1	10	1.390	139	40	1 x 18W	1,8
16119 0040	**161 06L20 IFS**	1	16	2.370	148	40	2 x 18W	1,8
16119 0041	**161 12L22 IFS**	1	15	2.390	159	40	1 x 36W	2,7
16119 0043	**161 12L42 IFS**	1	27	4.240	157	40	2 x 36W	2,7
16119 0305	**161 12L60 IFS**	1	39	5.920	152	30	2 x 58W	2,7
16119 0042	**161 15L34 IFS**	1	21	3.440	164	40	1 x 58W	3,0
16119 0044	**161 15L60 IFS**	1	39	6.160	158	40	2 x 58W	3,0
16119 0046	**161 15L75 IFS**	1	49	7.440	155	30	> 2 x 58W	3,0
16219 0302	**162 12L120 IFS**	1	78	11.410	146	35	2 x 80 bzw. 3 x 58W	4,3
16219 0004	**162 15L150 IFS**	1	97	14.310	148	35	4 x 58W	4,8

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

IFS/BRC/VDMA/HACCP
SCHUCH Light Fittings designed for food and beverage industry applications are in accordance with IFS/BRC/VDMA standards. They can be operated without restrictions in operations that must fulfill the HACCP Concept.

Note:
The diffusers of all 161PX... LM luminaires are made from 45 % bio-based plastics.



Note:
The colour rendering index Ra does not incorporate the remaining part (R9) in the light spectrum. The standard light colour 840 has only a minor R9 value. For meat processing factories, we recommend the use of our light fittings with light colour 940 (special version), which emits a bigger amount of red light.

161/162... LM / 161... VARIO LM

IP65

for application in food areas

Applications:
Food industry or food processing factories especially in risky areas of the food production or processing, suppliers to the food industry who are falling in the International Featured Standard Food, BRC or HACCP standards or who are subject to comparably strict requirements (e.g. production of food packaging).

Design:
Same as type 161/162... LED but:
Diffuser: Shatterproof, high chemical resistance, elements for glare limitation mounted to the reflector.
Closure clips: Stainless steel (**KE**), incl. 2 safety clips (**KES**) to ensure protection against contact.

Advantages of the LM version:

- shatterproof diffuser with very high impact resistance (16 Nm!) even at a high continuous operating temperature
- resistant to grease and aggressive cleaning agents, disinfectants and solvents (we recommend the respective cleaning agents and disinfectants to be tested on their resistance (resistance index on request.)
- Risk minimisation, **no risk of food contamination** (see IFS Standard Food Issue 8, Chapter 4.12 Risk minimisation)
- **Extension of the inspection** intervals in the risk zones of production

IFS/BRC/VDMA/HACCP
SCHUCH Light Fittings designed for food and beverage industry applications are in accordance with IFS/BRC/VDMA standards. They can be operated without restrictions in operations that must fulfill the HACCP Concept.

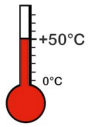
Article no.	Type	Quantity of ECG	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ambient temperature max. [°C]	Substitute for ca. *	Weight [kg] without packing material
16119 0005	**161 06L12 LM**	1	10	1.390	139	40	1 x 18W	1,8
16119 0006	**161 06L20 LM**	1	16	2.370	148	40	2 x 18W	1,8
16119 0001	**161 12L22 LM**	1	15	2.390	159	40	1 x 36W	2,7
16119 0003	**161 12L42 LM**	1	27	4.240	157	40	2 x 36W	2,7
16119 0018	**161 12L60 LM**	1	39	5.920	152	30	2 x 58W	2,7
16119 0002	**161 15L34 LM**	1	21	3.440	164	40	1 x 58W	3,0
16119 0004	**161 15L60 LM**	1	39	6.160	158	40	2 x 58W	3,0
16119 0019	**161 15L75 LM**	1	49	7.440	152	30	> 2 x 58W	3,0
16219 0006	**162 12L120 LM**	1	78	11.410	146	35	2 x 80 bzw. 3 x 58W	4,3
16219 0002	**162 15L100 LM**	1	67	10.510	157	40	2 x 80W	4,8
16219 0007	**162 15L150 LM**	1	97	14.310	148	35	4 x 58W	4,8
16119 0399	**161 12L VARIO LM**	1	15	2.410	160	45	1 x 36W	2,7
			22	3.610[1)]	164	45	1 x 58W	
			29	4.510	156	40	2 x 36W	
			39	5.920	152	35	2 x 58W	

1) Factory setting

161... LM H50

IP65

for high ambient temperatures up to +50 °C

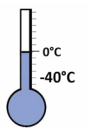


16119 0067	**161 06L12 LM H50**	1	10	1.390	139	50	1 x 18W	2,0
16119 0050	**161 06L20 LM H50**	1	16	2.370	148	50	2 x 18W	2,0
16119 0051	**161 12L22 LM H50**	1	15	2.390	159	50	1 x 36W	2,8
16119 0053	**161 12L42 LM H50**	1	27	4.240	157	50	2 x 36W	2,8
16119 0052	**161 15L34 LM H50**	1	21	3.440	164	50	1 x 58W	3,0
16119 0054	**161 15L60 LM H50**	1	39	6.160	158	50	2 x 58W	3,0

161... LM T40

IP65

for ambient temperatures down to -40 °C

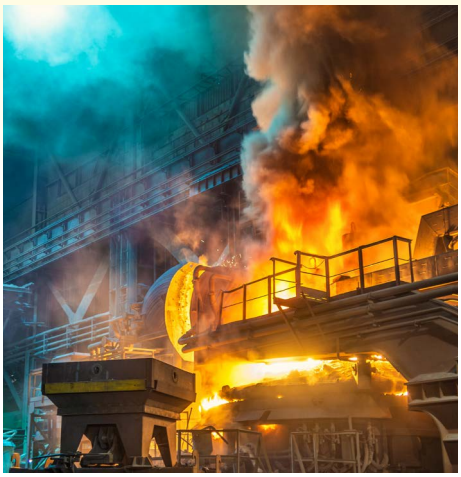


16119 0101	**161 12L22 LM T40**	1	14	2.390	171	40	1 x 36W	2,7
16119 0103	**161 12L42 LM T40**	1	27	4.240	157	40	2 x 36W	2,7
16119 0102	**161 15L34 LM T40**	1	21	3.440	164	40	1 x 58W	3,2
16119 0104	**161 15L60 LM T40**	1	38	6.160	162	40	2 x 58W	3,2

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

Article no.	Type	Quantity of ECG	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ambient temperature max. [°C]	Substitute for ca. *	Weight [kg] without packing material

Note:
See notes in the technical appendix, chapter 4.4.



161... ER / HR (RESISTANT)

IP65

for use in hazardous areas

Applications:
Areas in trade, trade and industry with corrosive atmospheres or craft gases and vapors that can damage the LED up to and including total failure.
E.g. chemical industry, galvanizing plants, electroplating plants, foundries, tire production and storage, paper mills, sewage treatment plants, waste incineration plants etc. Advice on request.

Design:
Like the standard version, but with modifications for increased (**ER**) or high (**HR**) protection against corrosive atmospheres or harmful gases.

16123 0003	**161 12L22 ER**	1	15	2.490	166	40	1 x 36W	2,7
16123 0004	**161 12L42 ER**	1	27	4.410	163	40	2 x 36W	2,7
16123 0005	**161 15L34 ER**	1	21	3.590	171	40	1 x 58W	3,0
16123 0006	**161 15L60 ER**	1	39	6.400	164	40	2 x 58W	3,0
16123 0503	**161 12L22 HR**	1	15	2.490	166	40	1 x 36W	3,0
16123 0504	**161 12L42 HR**	1	27	4.410	163	40	2 x 36W	3,0
16123 0505	**161 15L34 HR**	1	21	3.590	171	40	1 x 58W	3,3
16123 0506	**161 15L60 HR**	1	39	6.400	164	40	2 x 58W	3,3

NEW

162... DB

IP65



Photo: Lothar - Beeck

Applications:
Interior spaces and outdoor facilities in areas away from the tracks, e.g. technical rooms, switchgear, damp rooms etc.
Deutsche Bahn listing:
DB Netze AG
List sheet number 5J10

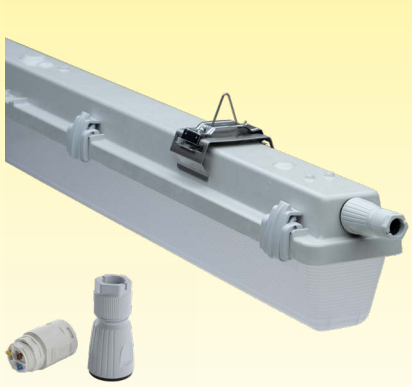
Design:
Like the standard version, but:
Housing:cover Polycarbonate, frosted
Closure clips: Stainless steel (**KE**), incl. 2 safety clips (**KES**) to ensure protection against contact.
Colour rendering: Ra > 90
Protection class: II
Ambient temperature: from -25°C to 45 °C

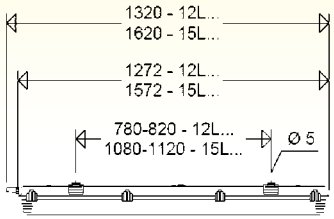
Product highlights of this version:

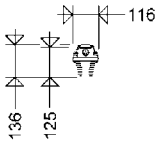
- Deutsche Bahn listing
- extremely robust construction of the housing and diffuser
- cost-efficient operation thanks to a long service life
- future-proof product design

16215 0389	**162 06L20KE 940 SKII**	1	35	4.520	129	45	2 x 36W	3,9
16215 0388	**162 12L42KE 940 SKII**	1	18	2.190	122	45	2 x 18W	2,3

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







Article no.	Type	Quantity of ECG	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ambient temperature max.[°C]	Substitute for ca. *	Weight [kg] without packing material

161... FF/FC

IP65

with FastFix mounting system

Design: Same as standard but, **with pre-assembled quick mounting system (FastFix) and quick connection plug (FastConnect)**, for 3-pole connecting cable up to 2.5 mm² (Ø 7.5 – 12.5 mm)

Advantages of the FastFix/FastConnect version:

- FastFix bracket and quick connection plug pre-assembled
- installation and electrical connection without opening the light fitting
- saves at least 60 % mounting time

16117 0801	**161 12L22 FF/FC**	1	15	2.390	159	40	1 x 36W	2,7
16117 0802	**161 12L42 FF/FC**	1	27	4.240	157	40	2 x 36W	2,7
16117 0803	**161 15L34 FF/FC**	1	21	3.440	164	40	1 x 58W	3,0
16117 0804	**161 15L60 FF/FC**	1	39	6.160	158	40	2 x 58W	3,0

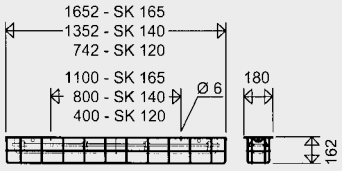
* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

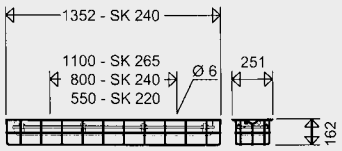
Note:
The FC version can be supplied together with various special versions. The maximum possible ambient temperature is 50 °C.

Accessories / Spare Parts

Article no.	Type		Article no	Type	
spare glasses, PMMA frosted			**spare glasses, PC frosted**		
16111 9035	**ABD 161 018 F**	for 161 06..	16111 9036	**ABD 161 018 F PC**	for 161 06..
16111 9031	**ABD 161 036 F**	for 161 12..	16111 9033	**ABD 161 036 F PC**	for 161 12..
16111 9032	**ABD 161 058 F**	for 161 15..	16111 9034	**ABD 161 058 F PC**	for 161 15..
16211 9035	**ABD 162 018 F**	for 162 06..	16211 9030	**ABD 162 018 F PC**	for 162 06..
16211 9031	**ABD 162 036 F**	for 162 12..	16211 9033	**ABD 162 036 F PC**	for 162 12..
16211 9032	**ABD 162 058 F**	for 162 15..	16211 9034	**ABD 162 058 F PC**	for 162 15..
spare glasses LM-version 161...			**spare glasses LM-version 162...**		
16111 9017	**ABD 161 018 LM**	for 161 06..			
16111 9018	**ABD 161 036 LM**	for 161 12..	16211 9018	**ABD 162 036 LM**	for 162 12..
16111 9019	**ABD 161 058 LM**	for 161 15..	16211 9019	**ABD 162 058 LM**	for 162 15..
Wire guards, powder coated					
90004 0001	**SK 120**	for 161 06..	90004 0004	**SK 220**	for 162 06..
90004 0002	**SK 140**	for 161 12..	90004 0005	**SK 240**	for 162 12..
Fasteners					
90053 9008	**KK/KKS FR VE10**	plastic, incl. 2 safety clips (packing unit 10 pcs.)			
90055 9004	**KE/KES VE10**	stainless steel, incl. 2 safety clips (packing unit 10 pcs.)			
90053 9004	**KKS P**	1 pair of safety clips (for LED version), plastic			
90055 9005	**KES P**	1 pair of safety clips (for LED version), stainless steel			
Cable entries/pressure compensation elements					
90063 9000	**2511**	blanking plug M20			
25610 9000	**2561**	plastic cable gland M20 x 1,5			
25600 9000	**2560**	plastic cable gland M25 x 1,5			
90259 9002	**DAE20**	pressure compensation element M20			
90259 9003	**DAE 20/25**	adapter gland M20 -> M25 with pressure compensation			
Pipe clamps					
90093 0002	**183 RO 112 A P**	2 pcs., 1 1/2" stainless steel, with support			
90094 0002	**183 RO 2 A P**	2 pcs., 2" stainless steel, with support			
Consider mounting distances when installing the light fittings by pipe clamps to pole outreaches or any brackets.					
Angle brackets, aluminium					
90045 9001	**HW 30 P**	pair of angle brackets 30°			
90045 9002	**HW 45 P**	pair of angle brackets 45°			
90045 9004	**HW 60 P**	pair of angle brackets 60°			
90045 9003	**HW 90 P**	pair of angle brackets 90°			
Mointing accesories for ceiling mounting					
90049 0002	**183 S**	hook for chain suspension			
90095 0001	**DS 183**	stainless steel bracket with bolt M5			
Infrared remote control for SENS-light fittings					
90295 9000	**FB SENSOTEC-MINI**	Infrared remote control for 161... SENS			

Protective guard





Pipe clamp R1 1/2" - Ø 48,3 mm
R2" - Ø 60,3 mm



Ceiling bracket 183 DS

