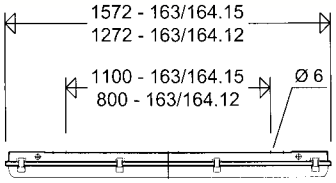
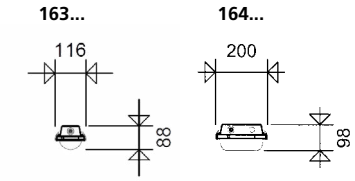


Dustproof/Waterproof LED Light Fitting with Diffuser Series 163... G2 VARIO / 164... G2

Applications:
In humid, wet and dusty indoor areas of industrial and agricultural premises, for workshops and car parks, cold stores, low temperature stores, cooling chambers and walkable low temperature cabins in hotels, hard to reach areas with high downtime and maintenance costs when replacing the lamps. (For damp and cold ambient conditions with low duty cycles and in the case of aggressive atmosphere, please contact us)

Design:
Housing: Glass fibre reinforced polyester resin, foamed gasket.
Diffuser: PMMA, modified for higher impact resistance, frosted for glare limitation.
Closure: External plastic clips (**KK**) incl. 2 safety clips (**KKS**) to ensure protection against contact.
Reflector: Painted, removable complete with electronic components.
Electrical connection: 3-pole terminal block.
Cable entries: 2 blanking plugs M20. Cable entries open at the front. Variable cable entry pre-pressed on the long side and top side.
Mounting system: 2 holes for ceiling mounting. Sealing and pressure disks for sealing are supplied inside the fitting.





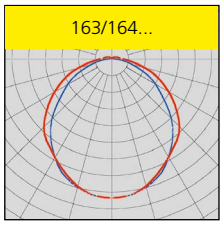
VARIO versions with variable setting of the luminous flux

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 luminaire luminous flux can be set to four values. 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**)
– coloured LEDs, for signal applications
– through-wiring (**DV**)
– cable looping at 1 small side
– rear cable entry
– cover made of polycarbonate (**PC**), clear pearled
– stainless steel clips (**KE**)

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:

- **quality luminaire with above-average mechanical strength**
- **safety locks** to ensure protection against accidental contact
- **variable cable entry** thanks to additional entries along and at the top of the housing
- **homogeneous illumination by using frosted diffusers,** comfortable perception of light and brilliant glare limitation
- 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



! 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.

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
163... G2 VARIO / 164... G2								
16302 0010	**163 12LG2 VARIO**	1	20	3.100	155	40	1 x 36W	2,3
			25	3.870	155	40	1 x 58W	
			29	4.640	160	40	2 x 36W	
			34	5.420[1)]	159	35	2 x 58W	
16302 0011	**163 15LG2 VARIO**	1	25	3.880	155	40	1 x 58W	2,8
			30	4.800	160	40	2 x 36W	
			36	5.760	160	40	2 x 58W	
			42	6.650[1)]	158	35	> 2 x 58W	
16415 0016	**164 12L90G2**	1	57	8.990	158	40	2 x 80W	3,1
16415 0017	**164 15L120G2**	1	78	12.030	154	40	4 x 58W	3,8

1) Factory setting

163/164... G2 DIMD

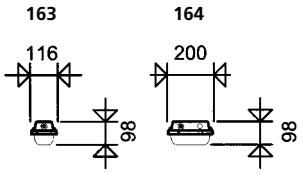
dimmable via DALI interface

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.

16302 0020	**163 12L22G2 DIMD**	1	15	2.390	159	40	1 x 36W	2,3
16302 0022	**163 12L42G2 DIMD**	1	27	4.210	156	40	2 x 36W	2,3
16302 0021	**163 15L34G2 DIMD**	1	21	3.450	164	40	1 x 58W	2,8
16302 0023	**163 15L60G2 DIMD**	1	39	6.140	157	40	2 x 58W	2,8
16415 0018	**164 12L90G2 DIMD**	1	57	8.990	158	40	2 x 80W	3,1
16415 0019	**164 15L120G2 DIMD**	1	78	12.030	154	40	4 x 58W	3,8

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





163... VARIO IFS / 164... IFS

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 163/164 .. L..but:
Diffuser: cover Polycarbonate stippled clear.
Closure clips: Stainless steel (**KE**), incl. 2 safety clips (**KES**) to ensure protection against contact.

16319 0010	**163 12L VARIO IFS**	1	20	3.290	165	40	1 x 36W	2,3
			25	4.100	164	40	1 x 58W	
			29	4.920	170	40	2 x 36W	
			34	5.750[1)]	169	35	2 x 58W	
16319 0011	**163 15L VARIO IFS**	1	25	4.110	164	40	1 x 58W	2,8
			30	5.090	170	40	2 x 36W	
			36	6.100	169	40	2 x 58W	
			42	7.050[1)]	168	35	> 2 x 58W	
16419 0001	**164 12L90 IFS**	1	57	9.530	167	40	2 x 80W	3,1
16419 0002	**164 15L120 IFS**	1	78	12.750	163	40	4 x 58W	3,8

1) Factory setting

* 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.

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



163/164... 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'

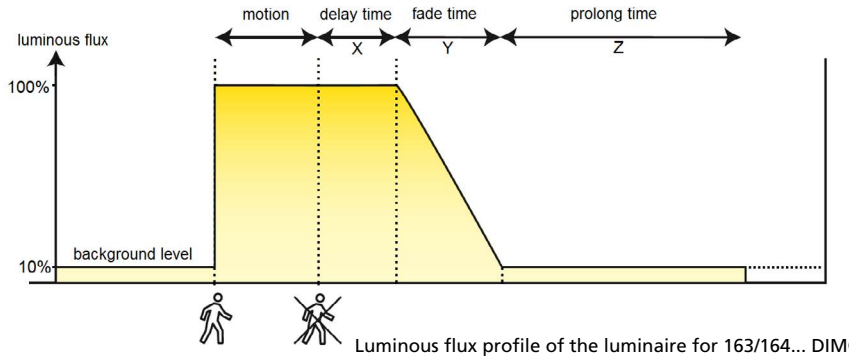
Design:
As standard version but with DALI-2 ECG and additional terminal point, labeled L', optionally with HF sensor (SENS types), see table.

	Clamping point L'	powerless switching	Integrated sensor	Switches off after 30 minutes
163/164... DIMC	x	x	–	–
163/164... DIMC-Z30	x	x	–	x
163... SENS	x	x	x	–
163... SENS-Z30	x	x	x	x

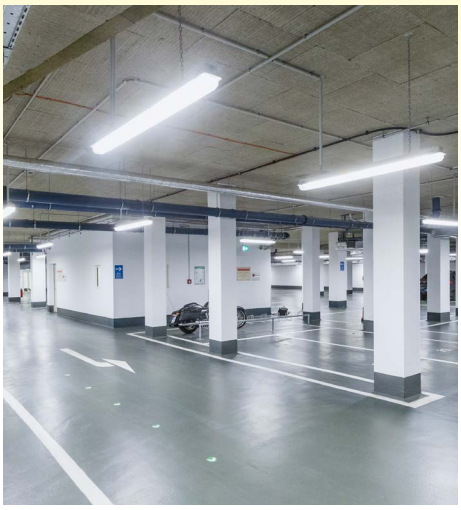
Product highlights:

- 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 163/164... 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 163/164... DIMC



163/164 ... G2 DIMC

IP65

dimmable via Corridor Mode

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

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
16302 0024	**163 12L22G2 DIMC**	1	15	2.390	159	40	1 x 36W	2,3
16302 0026	**163 12L42G2 DIMC**	1	27	4.210	156	40	2 x 36W	2,3
16302 0025	**163 15L34G2 DIMC**	1	21	3.450	164	40	1 x 58W	2,8
16302 0027	**163 15L60G2 DIMC**	1	39	6.140	157	40	2 x 58W	2,8
16415 0020	**164 12L90G2 DIMC**	1	57	8.990	158	40	2 x 80W	3,1
16415 0021	**164 15L120G2 DIMC**	1	78	12.030	154	40	4 x 58W	3,8

163/164 ... G2 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 %).

16302 0120	**163 12L22G2 DIMC-Z30**	1	15	2.390	159	40	1 x 36W	2,3
16302 0122	**163 12L42G2 DIMC-Z30**	1	27	4.210	156	40	2 x 36W	2,3
16302 0121	**163 15L34G2 DIMC-Z30**	1	21	3.450	164	40	1 x 58W	2,8
16302 0123	**163 15L60G2 DIMC-Z30**	1	39	6.140	157	40	2 x 58W	2,8
16415 0030	**164 12L90G2 DIMC-Z30**	1	57	8.990	158	40	2 x 80W	3,1
16415 0031	**164 15L120G2 DIMC-Z30**	1	78	12.030	154	40	4 x 58W	3,8



163... G2 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.

16302 0030	**163 12L22G2 SENS**	1	15	2.390	159	40	1 x 36W	2,1
16302 0031	**163 12L42G2 SENS**	1	27	4.210	156	40	2 x 36W	2,1
16302 0028	**163 15L34G2 SENS**	1	21	3.450	164	40	1 x 58W	2,5
16302 0029	**163 15L60G2 SENS**	1	39	6.140	157	40	2 x 58W	2,5



163... G2 SENS-Z30

IP65

DIMC-Z30 version with integrated motion sensor and automatic switch-off (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 %).

16302 0124	**163 12L22G2 SENS-Z30**	1	15	2.390	159	40	1 x 36W	2,1
16302 0126	**163 12L42G2 SENS-Z30**	1	27	4.210	156	40	2 x 36W	2,1
16302 0125	**163 15L34G2 SENS-Z30**	1	21	3.450	164	40	1 x 58W	2,5
16302 0127	**163 15L60G2 SENS-Z30**	1	39	6.140	157	40	2 x 58W	2,5

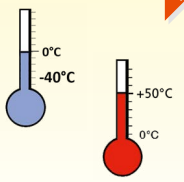
* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

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

NEW

163... G2 T40/H50

IP65



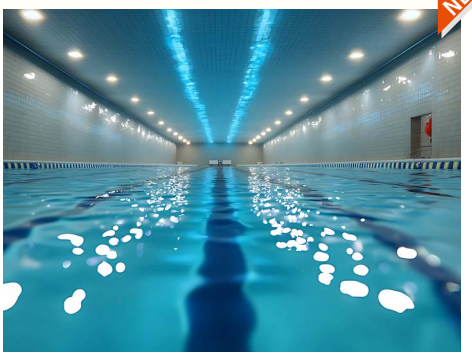
for wide temperature ranges from -40 °C up to +50°C

16302 0080	**163 12L22G2 T40 H50**	1	15	2.390	159	50	1 x 36W	2,4
16302 0082	**163 12L42G2 T40 H50**	1	27	4.210	156	50	2 x 36W	2,4
16302 0081	**163 15L34G2 T40 H50**	1	21	3.450	164	50	1 x 58W	2,8
16302 0083	**163 15L60G2 T40 H50**	1	39	6.140	157	50	2 x 58W	2,8

NEW

163... G2 VARIO SBL

IP65



for use in Swimming pools

Applications:
Swimming pools, indoor pools and chlorinated environments

Design:
Modified for high protection against chlorinated atmospheres.

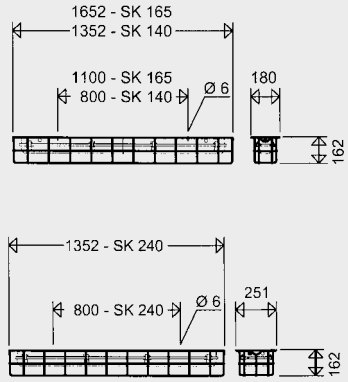
Attention: Fixing cables, ceiling brackets and wall brackets must be specially designed (on request).

16302 0200	**163 12LG2 VARIO SBL**	1	19	3.210	169	40	1 x 36W	2,3
			24	3.920	163	40	1 x 58W	
			29	4.620	159	40	2 x 36W	
			35	5.340[1)]	153	35	2 x 58W	
16302 0201	**163 15LG2 VARIO SBL**	1	24	4.010	167	40	1 x 58W	2,8
			31	4.900	158	40	2 x 36W	
			37	5.770	156	40	2 x 58W	
			43	6.680[1)]	155	35	> 2 x 58W	

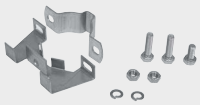
1) Factory setting

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

Protective guard



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



Ceiling bracket 183 DS



Accessories / Spare Parts

Article no.	Type		Article no.	Type	
Spare glasses, PMMA, frosted			**Spare glasses, PC, stippled clear**		
16711 9001	**ABD 163 036 F G2**	for 163 12L.. G2	16311 9004	**ABD 163 036 PC**	for 163 12L.. IFS
16711 9002	**ABD 163 058 F G2**	for 163 15L.. G2	16311 9005	**ABD 163 058 PC**	for 163 15L.. IFS
16411 9008	**ABD 164 036 F G2**	for 164 12L.. G2	16411 9004	**ABD 164 036 PC**	for 164 12L.. IFS
16411 9009	**ABD 164 058 F G2**	for 164 15L.. G2	16411 9005	**ABD 164 058 PC**	for 164 15L.. IFS
16311 9006	**ABD 163 036 F**	for 163 12L...			
16311 9007	**ABD 163 058 F**	for 163 15L...			
16411 9006	**ABD 164 036 F**	for 164 12L...			
16411 9007	**ABD 164 058 F**	for 164 15L...			
Fasteners					
90123 9007	**163 KK/KKS V08**	plastic, incl. 2 safety clips (packing unit 8 pcs.)			
90123 9006	**163 KE/KES V08**	stainless steel, incl. 2 safety clips (packing unit 8 pcs.)			
90123 9004	**163 KKS P**	1 pair of safety clips (for LED version), plastic			
90123 9005	**163 KES P**	1 pair of safety clips (for LED version), stainless steel			
Cable entries					
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			
Protective guard, powder coated					
90004 0002	**SK 140**	for 163 12...			
90004 0005	**SK 240**	for 164 12...			
Pipe clamps					
90245 0003	**163 RO 112A P**	1 1/2", stainless steel, with support (pair) for 163...			
90245 0004	**163 RO 2A P**	2", stainless steel, with support (pair) for 163...			
90245 0005	**164 RO 112A P**	1 1/2", stainless steel, with support (pair) for 164...			
90245 0006	**164 RO 2A P**	2", stainless steel, with support (pair) for 164...			
Attention: Observe the fixing distance when mounting on boom with pipe clamps (boom length!)					
Accessories for ceiling mounting					
90049 0002	**183 S**	swing hook for chain suspension			
90095 0001	**DS 183**	stainless steel bracket, with screw M5			
Infrared remote control for SENS-light fittings					
90295 9000	**FB SENSOTEC-MINI**	Infrared remote control for 163 .. SENS			