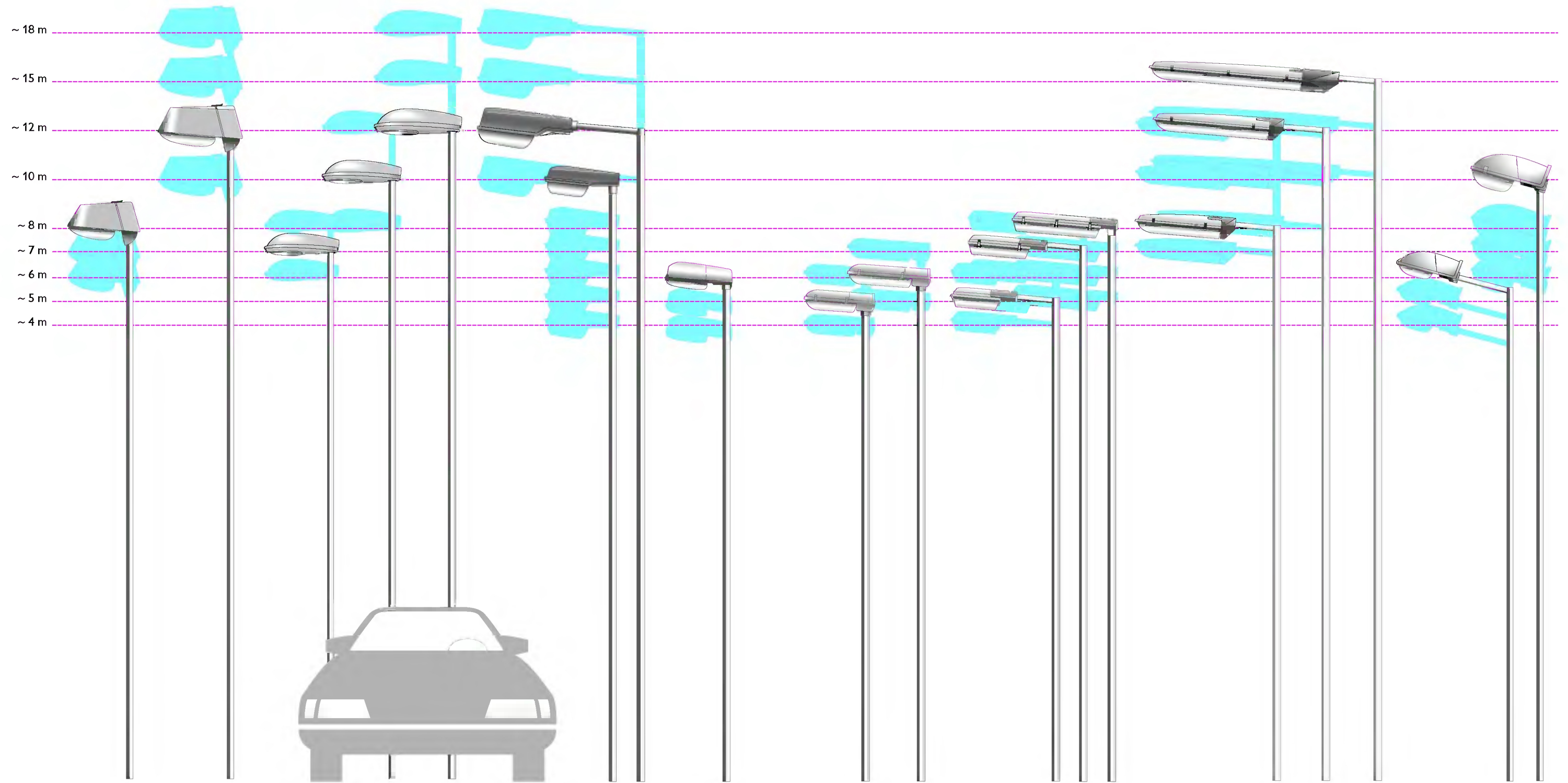




Lighting the road ahead

Philips Lighting understands the issues associated with road lighting and offers the experience and the solutions to create a safe comfortable environment for all road users. Whether those users are drivers, cyclists or pedestrians.

Product review road lighting



	<i>TrafficVision</i>		<i>Iridium</i>						<i>Residium</i>					<i>Malaga</i>				
page:	SGS 305	SGS 306	SGS 252	SGS 253	SGS 254	SGS 203	204	SGS 201	FGS 223	FGS 224	FGS 103	104	105	SRS 201-90W	201-135W	201-180W	SGS 101	SGS 102
	120	120	124	124	124	130	128	132	134	135	136	136	136	137	137	137	138	139

Technical overview road lighting

Luminaire	Page	Colour versions	Dimensions max. H x W x L (mm)	Weight (kg) (average)	IP gear compartment	IP lamp compartment	Isulation class	Standard tilt angle post top	Adjustable tilt angle	Adjustable light distribution
TrafficVision										
SGS 305/405	120	Standard grey & RAL*	355 x 280 x 590	9.0	43	66	II	-	3, 9, 15 post-top 0, 6, 12 side-entry	19 positions
SGS 305/405 FG	120	Standard grey & RAL*	355 x 280 x 590	9.0	43	66	II	-	3, 9, 15 post-top 0, 6, 12 side-entry	19 positions
SGS 306/406	120	Standard grey & RAL*	380 x 320 x 690	12.0	43	66	II	-	3, 9, 15 post-top 0, 6, 12 side-entry	19 positions
SGS 306/406 FG	120	Standard grey & RAL*	380 x 320 x 690	12.0	43	66	II	-	3, 9, 15 post-top 0, 6, 12 side-entry	19 positions
Iridium										
SGS 252	126	Standard grey & RAL*	263 x 332 x 650	8.0	66	66	I + II	5	-	6 positions
SGS 253	126	Standard grey & RAL*	289 x 368 x 753	10.0	66	66	I + II	5	-	7 positions
SGS 254	126	Standard grey & RAL*	288 x 419 x 899	max. 20.0	66	66	I + II	5	-	6 positions
SGS 204										
SGS 204	128	Standard grey & RAL*	311 x 385 x 811	8.0	43	54	I + II	5	-	no
SGS 204 FG	128	Standard grey & RAL*	311 x 385 x 811	8.0	43	54	I + II	5	-	no
SGS 203/403										
SGS 203/403	130	Standard grey & RAL*	250 x 315 x 610	5.4	43	65	I + II	5	-	no
SGS 203/403 FG	130	Standard grey & RAL*	250 x 315 x 610	5.4	43	65	I + II	5	-	no
SGS 201										
SGS 201	132	Standard grey	255 x 295 x 545	5.9	23	54	II	5	-	no
Residium										
FGS 223	134	Standard grey & RAL*	182 x 235 x 659	3.4	43	65	I	-	5 and 15	no
FGS 224	135	Standard grey & RAL*	182 x 235 x 752	3.7	43	65	I	-	5 and 15	no
FGS 103										
FGS 103	136	Standard white	165 x 160 x 555	3.7	43	65	I	5	-	no
FGS 104										
FGS 104	136	Standard white	165 x 180 x 665	4.1	43	65	I	5	-	no
FGS 105										
FGS 105	136	Standard white	165 x 180 x 865	4.8	43	65	I	5	-	no
SRS 201										
90 W version	137	Standard white	180 x 281 x 1066	11.0	43	65	I	5	-	no
135 W version	137	Standard white	180 x 281 x 1411	13.0	43	65	I	5	-	no
180 W version	137	Standard white	180 x 281 x 1594	19.0	43	65	I	5	-	no
Malaga										
SGS 101	138	Standard grey & RAL*	230 x 300 x 520	3.8	43	65	II	15	-	no
SGS 102	139	Standard grey & RAL*	315 x 373 x 635	5.7	43	65	II	15	-	no



Luminaire	Page	Projected surface by side (m ²)	SCx values by side (mm)	Side entry spigot (mm)	Post top spigot	SON-I/E	SON-T	HPL-N	SOX-(E)	PL-L	PL-T	CDM-TT	CDM-T	QL	TL-D
TrafficVision															
SGS 305/405	120	0.16	0.102	42-60	42-60 (76)*	●	●	●	-	-	-	●	-	-	-
SGS 305/405 FG	120	0.14	0.08	42-60	42-60 (76)*	●	●	●	-	-	-	●	-	-	-
SGS 306/406	120	0.20	0.124	42-60	42-60 (76)*	●	●	●	-	-	-	●	-	●	-
SGS 306/406 FG	120	0.17	0.1	42-60	42-60 (76)*	●	●	●	-	-	-	●	-	●	-
Iridium															
SGS 252	126	-	-	34-60	60-76	●	●	●	-	-	●	●	●	-	-
SGS 253	126	0.15	0.063***	34-60	60-76	●	●	●	-	-	●	●	●	●	-
SGS 254	128	-	-	42-60	60-76	●	●	●	-	-	-	-	-	●	-
SGS 204															
SGS 204 FG	130	0.17	0.068	ZGP 34-60**	ZGP 60-76**	●	●	●	-	-	-	-	-	-	-
SGS 203/204															
SGS 203/403 FG	132	0.12	0.042	ZGP 34-60**	ZGP 60-76**	●	●	●	●	-	●	●	●	●	-
SGS 201	134	0.10	0.05	ZGP 34-60**	ZGP 60-76**	●	●	●	●	-	-	●	-	-	-
Residium															
FGS 223	134	0.14	-	(34)* 42-60	42-60 (76)*	-	-	-	●	●	-	-	-	-	-
FGS 224	135	0.16	-	(34)* 42-60	42-60 (76)*	-	-	-	●	●	-	-	-	-	-
FGS 103															
FGS 104	136	0.09	0.03	42-60	60-76	-	-	-	●	●	-	-	-	-	-
FGS 104															
FGS 105	136	0.14	0.05	42-60	60-76	-	-	-	●	●	-	-	-	-	●
SRS 201															
90 W version	137	0.21	0.05	60	no	-	-	-	●	-	-	-	-	-	-
135 W version	137	0.28	0.09	60	no	-	-	-	●	-	-	-	-	-	-
180 W version	137	0.38	0.11	60	no	-	-	-	●	-	-	-	-	-	-
Malaga															
SGS 101	138	0.09	0.06	(34)* 42-60	42-60 (76)*	●	●	●	-	-	-	-	-	-	-
SGS 102	139	0.15	0.04	(34)* 42-60	42-60 (76)*	●	●	●	-	-	-	-	-	-	-

* Available on request
 ** Various ZGPs to be ordered separately
 *** SCx - value with louvres: 0.081

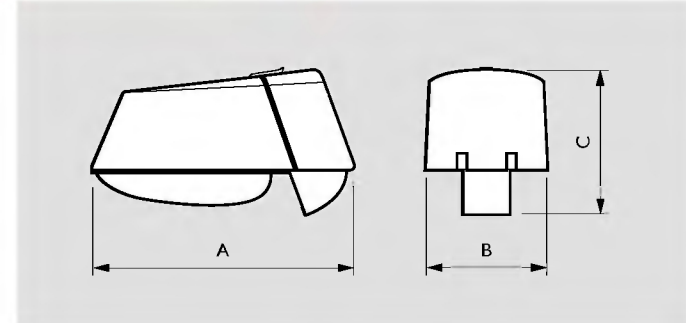


SGS 305/405 with flat glass



SGS 306/406 with acrylic glass

The luminaires are available with either glass-fibre reinforced polyester (305 & 306) or aluminium (405 & 406).



Type description	A	B	C
SGS 305/405	590	280	355
SGS 306/406	690	320	380

SGS 305/306/405/406

Road lighting luminaire for today - and into the next century. Fully adjustable, to deliver light precisely where it is needed, in the quantity needed, for safe and comfortable driving. Stylish but business-like modern design. Traffic Vision's modular concept assures easy installation, fast, safe, minimum maintenance and high resistance to vandalism.

Main applications

- Motorways
- Major roads
- Minor roads
- Roundabouts, crossings
- Industrial areas.

Suitable lamp types

- HPL 50/80/125 W
- SON-T 50/70/100/150 W
- SON-I 50/70 W
- SON-E 50/70/100 W.

Features

- Modern modular design with dedicated faceted optics to optimise beam control and maximise light output
- Graduated reflector adjustment for accurate beam direction
- Three tilt angles, both horizontal and vertical, for optimal installation on masts
- Flexible mounting capability for side-entry or top mounting on mast arms
- Socket for photo-cell switching and dimming gear available on request
- High-strength, completely sealed construction resistant to water and dust (IP 66), for long service life and low repair and maintenance costs
- Easy installation with a single Allen key
- Safe, tool-less maintenance; opening gear compartment breaks electrical circuit
- Electrical insulation Class II.

Materials and finish

Grey glass-fibre reinforced polyester (305/306) or die-cast aluminium (405/406) front and rear canopies. Choice of non-yellowing acrylic bowl or vandal -and UV- stabilised polycarbonate bowl or flat toughened security glass for low wattages. Die-cast aluminium mounting module.

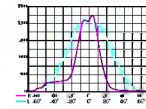
Installation

Fix to any post top or side entry spigot from 42-60 mm (76 mm on request) by two Allen screws.

Accessories

Dimming gear; photocell switch.

- IP 43 gear compartment
- IP 66 lamp compartment
-



Basic programme*

Type description	Weight (kg)	EOC
Luminaires with polyester canopy with gear		
SGS306 E40 400 W/HAL	7.0	26645900
SGS306 E40 400 W/HAL FG	7.5	26643500
SGS306 SON-T 150W 230 ST II	11.0	23126600
SGS306 SON-T 250W 230 ST II	12.0	23127300
SGS306 SON-T 400W 230 ST II	13.8	23128000
SGS306 HPLN 250W 230 II	-	22617000
SGS306 HPLN 250W 230 FG II	-	22618700
Luminaires with polyester canopy with gear		
SGS305 E27	-	22585200
SGS305 E27 FG	-	22587600
SGS305 E40	-	22586900
SGS305 E40 FG	-	22588300
SGS305 SON-T 70W 230 ST	8.7	23123500
SGS305 SON-T 100W 230 ST	9.0	23124200
SGS305 SON-T 150W 230 ST	9.3	23125900
SGS305 HPLN 80/125W 220	-	22593700

All versions are equipped with 230 V/50 Hz and gear and, if present, self-stopping ignitors. Other voltages, NEMA photocell socket, dimming gear are available. Painted luminaires (colour specified with RAL colour code) are available on request. * The most demanded configurations are listed. However if your required configuration is not included, please use the separate choice sheet brochure to specify your desired configuration.



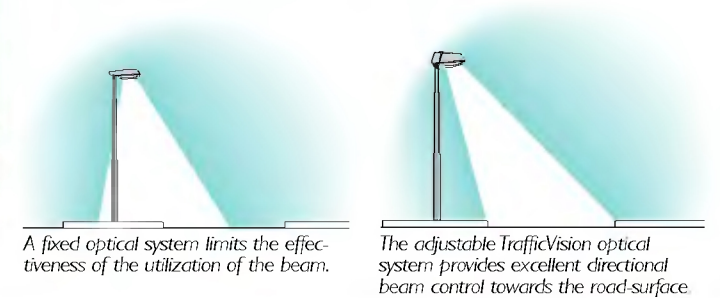
Removing the gear unit.



Removing the lamp.



Motorway A58, Breda, the Netherlands



SGS305/150T P.9 X
L.O.R. = 0.82

1 x SON-TP150W
1 x 16500 lm

Polar intensity diagram

Graph of beam spread vs distance: $\Delta \text{plank CIE R3, Q}_s = 0.08$









H	S	E _v	U ₀	SR	I	U ₀	U ₁	TI	I	U ₀	U ₁	TI	I	U ₀	U ₁	TI
10	30	24	0.38	0.54	1.7	0.61	0.81	6.8	1.5	0.64	0.81	7.7	1.6	0.56	0.70	7.9
10	35	20	0.32	0.54	1.4	0.61	0.82	7.6	1.3	0.63	0.82	8.4	1.4	0.54	0.62	8.7
10	40	18	0.28	0.54	1.3	0.60	0.75	8.2	1.1	0.63	0.75	9.3	1.2	0.43	0.56	9.3
10	45	16	0.26	0.54	1.1	0.51	0.60	9.0	1.0	0.60	0.60	9.9	1.1	0.39	0.48	10.0
10	50	14	0.23	0.53	1.0	0.42	0.48	9.7	0.9	0.53	0.48	10.7	1.0	0.32	0.37	10.8

MIR3436000

Note: These pages show only a selection of the photometric data. For the full range of data please refer to your Philips Lighting Outdoor CD Rom.

TrafficVision

Range overview TrafficVision SGS 305/405*

Housing	Covers	Lamps	Gears	Controls
<p>Polyester*</p> 	<p>PMMA bowl</p> 	<p>Fitting</p> <p>E27 E40</p>	<p>Ballast</p> <p>Conventional</p>	<p>Photocell</p> <p>NEMA Minicell 14 mm hole 20 mm hole</p>
<p>Aluminium**</p> 	<p>Polycarbonate bowl</p> 	<p>SON-I</p>  <p>SON-I 50 W SON-I 70 W SON-I 50/70 W</p>	<p>Ignitor</p> <p>Semi-parallel Semi-parallel self-stopping Series Series self-stopping</p>	<p>Light regulation</p> <p>Dimming EC01/03/11 Chronosense Switch</p>
<p>Colours</p> <p>* Grey or RAL ** Grey</p>	<p>Flat glass</p> 	<p>SON-T</p>  <p>SON-T 50 W SON-T 70 W SON-T 100 W SON-T 150 W</p>	<p>Mains</p> <p>220 V/60 Hz 230 V/50 Hz 240 V/50 Hz</p>	
		<p>SON-E</p>  <p>SON-E 50 W SON-E 70 W SON-E 100 W</p>	<p>Capacitor</p> <p>Yes No</p>	
		<p>HPL-N</p>  <p>HPL-N 50 W HPL-N 80 W HPL-N 125 W</p>	<p>Fuse</p> <p>Yes No</p>	
			<p>Class</p> <p>Cl. II</p>	

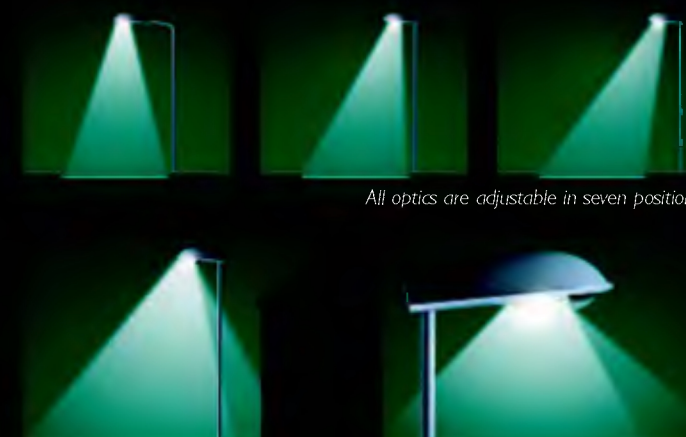
*This range overview shows you at-a-glance the configuration possibilities and options. For ordering and specifying refer to the specific choice sheet as included in the Outdoor Lighting Catalogue CD-Rom.



Motorway A5 - the Netherlands



The new balance in road lighting



All optics are adjustable in seven positions

Simple-to-install front and back louvres prevent light shining onto the facades of people's houses



Three bowl covers for different purposes

The future of road lighting

The Iridium family of advanced road lighting luminaires is the result of an intense study into the future needs of road lighting. This identified and confirmed several increasingly important needs in today's road lighting systems:

- Maximised safety and comfort
- More efficiency and less light pollution
- Improved energy management
- A higher level of design perception for the total light point.

Iridium can answer these needs since it offers the widest choice of optical, electrical and mechanical combinations. Iridium brings, due



to its modularity, an exceptional flexibility so that all customer needs are fully accommodated. The Iridium family offers three sizes of models (for a wide range of light sources up to 400 W), all of which offer the same stylish organic design to ensure visual consistency and physical harmony.

Hence, an entire city can now be lit with just three models of the Iridium family. And a dedicated mast program for Iridium emphasizes the visual appearance by day.

Iridium offers a new optic which delivers outstanding performance and is the first to do so with CDM-T/T as well as SON-T. The optics together with the wide choice of lamps, the bowl covers, the louvres and the electrical options like dimming by Chronosense ensures that the right amount of light is directed to exactly the right place, at precisely the right time. And as you would expect from such an advanced luminaire, Iridium is easy to install and toolless to maintain.

Maintenance is minimised by its high protection IP 66, including the gear tray which allows to integrate future electronic components. And Iridium respects environmental demands with solutions for energy saving, light pollution and disassembly at the end of life.

Iridium is the future of road lighting.



Two basic construction concepts within the luminaire for different maintenance philosophies: opti-C and opti-O

The Iridium family consists of 3 products

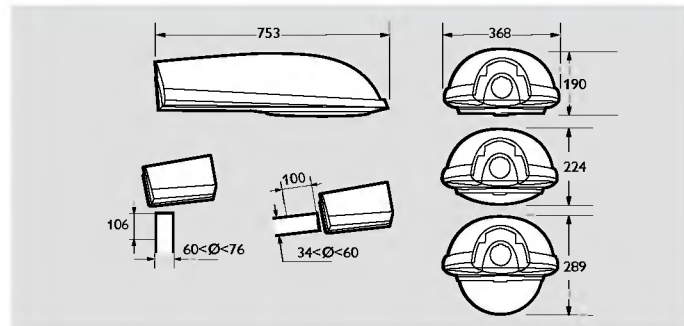
- SGS 252**
 SON-E/T 50, 70 (100)
 SON-I 50, 70
 CDM-T 35, 70 150
 CDM-TT/ET 70
 HPL 50, 80, 125
 PL-T 32, 42

- SGS 253**
 SON-E/T 50, 70, 100, 150 (250)
 SON-I 50, 70
 CDM-T/TT 70 150
 HPL 50, 80, 125
 PL-T 32, 42
 QL 55, 85

- SGS 254**
 SON-E/T 150, 250, 400
 HPL 250
 QL 85, 165



SGS 253



Basic programme*

Type description	Weight (kg)	EOC
Plastic canopy, opti-O CT-POT (PC bowl, class II)		
SGS253 HPL80V125 230 CFPD1GR	9.4	24949000
SGS253 SON70 230 CFPD1GR	9.5	24952000
SGS253 SON100 230 CFPD1GR	10.0	24957500
SGS253 SON150 230 CFPD1GR	10.3	24962900
Alu canopy, opti-O CT-POT (PC bowl, class I)		
SGS253 HPL80V125 230 CFPD1GR	11.5	24950600
SGS253 SON70 230 CFPD1GR	11.5	24955100
SGS253 SON100 230 CFPD1GR	6.4	24960500
SGS253 SON150 230 CFPD1GR	6.6	24964300
Plastic canopy, opti-C CT-POT (PC bowl, class II)		
SGS253 SON70 230 CFPD1GR	9.5	24280400
SGS253 SON100 230 CFPD1GR	10.1	24290300
SGS253 SON150 230 CFPD1GR	10.3	24296900
Plastic canopy, opti-C CT-POT (Glass bowl, class II)		
SGS253 SON100 230 CFPD1GR	10.7	24449500
SGS253 SON150 230 CFPD1GR	10.9	24450100
SGS253 CDH170 230 CFPD1GR	8.1	24444000
SGS253 CDH170 230 CFPD1GR	8.1	24445700
Plastic canopy, opti-C CT-POT (Chronosense, PC bowl, class I series selfstopping ignitor)		
SGS253 SON70 230 CFPD1GR	9.7	24303000
SGS253 SON100 230 CFPD1GR	10.1	24306100
SGS253 SON150 230 CFPD1GR	10.8	24308500
Alu canopy, opti-C CT-POT (PC bowl, class I)		
SGS253 SON70 230 CFPD1GR	11.5	24283500
SGS253 SON100 230 CFPD1GR	12.1	24313900
SGS253 SON150 230 CFPD1GR	12.3	24301600

All units are equipped with capacitors, semi-parallel-self-stopping ignitors for 230 V/50 Hz. Other voltages, versions with photocells, dimming gear, filter coil, fuse, knife connector can be found in the choice sheet.

SGS 253/453

A family of modular road-lighting luminaires with wide choices for optical, electrical and mechanical combinations. Offering low cost of ownership thanks to its superior optics and low maintenance and installation costs.

Main applications

- Motorways
- Major roads
- Minor roads
- Rural roads
- Industrial areas
- Crossings, roundabouts.

Suitable lamp types:

- SON-E/T 50/70/100/150/250 W
- SON-I 50/70 W
- HPL 50/80/125 W
- CDM-T/TT 70/150 W
- QL 55/85 W
- PL-T 32/42 W.

Timeless

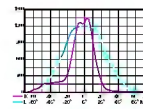
- A timeless luminaire with an elegant, gently rounded form.
- Two concepts within one luminaire:
 - opti-C, where the reflector forms one unit with the bowl for minimising maintenance due to its double protection
 - opti-O, where the reflector is attached to the canopy for facilitating maintenance by ease of accessibility
- A future-proofed luminaire:
 - IP 66 for the whole luminaire including gear tray for giving a high protection for future electronic components
 - double protection for opti-C giving maximum assurance that no dust and water can penetrate throughout its life

- Two faceted optics:
 - Innovative CT-POT delivering outstanding performances with CDM-T/TT as well as SON-T
 - The well-known T-POT

- The optics are adjustable in seven positions allowing precise control of the beam
- Choice of two materials for the canopy:
 - aluminium, painted
 - glass fibre-reinforced polyester with a protective layer to prevent glass fibres becoming exposed (In-Mould-Coating)
- Choice of different bowls:
 - standard, vandal-resistant polycarbonate bowl
 - shallow glass bowl reducing light pollution and contributing to the design
 - a flat glass avoiding glare and light pollution
- An integrated spigot "flexi-fit" for a simple change between side entry and post-top
- Wide variety of choices in the electrical circuit: tapped ballast, electronic switch, knife connector, photocell, fuses, filter coils, series and semi-parallel ignitors
- Standard Philips dimming system
- Advanced dimming system with Chronosense which does not require a pilot cable
- A green luminaire:
 - energy saving by dimming
 - reduction of light pollution by the right choice of the bowl
 - designed for full disassembly at the end of life. Plastic parts are coded for facilitating recycling
- Accessories: front and back louvres available in order to cut beams when necessary
- Maintenance from above in an ergonomic good position. Exchange of lamp, gear-unit and bowl toolless. Plug and socket-connectors, toolless disconnection.

Installation

Integrated spigot, flexible for side entry 34 - 60 mm and post top 60 - 76 mm.



Accessories

Front and back louvres, attachable from outside the luminaire.

- IP 66 lamp compartment
- IP 66 gear compartment
- luminaire

Brackets

To complete the Iridium family, a set of brackets in line with the Iridium design is proposed. Brackets are available in single or double version for mounting on top of the mast in standard lengths of 1 m and 1.5 m or as a wallmounting version in a standard length of 1 m. All RAL colours available.

In preparation:

A full family will be available with the same stylish design and internal architecture for different application heights. In preparation are (features as for SGS 253):

- SGS 252 for smaller wattages SON-I/E/T 50, 70, (100) CDM-T 35, 70, 150 CDM-TT/ET 70 PL-T 32, 42 HPL 50, 80, 125
- SGS 254 for higher wattages SON-E/T 150, 250, 400 HPL 250 QL 85, 165

Range overview Iridium SGS 253*

Housing	Covers	Lamps	Optics	Gears	Controls
<p>Polyester</p>	<p>Polycarbonate bowl</p>	<p>Fitting</p> <p>E27</p> <p>E40</p> <p>SON-I</p> <p>SON-I 50 W</p> <p>SON-I 70 W</p> <p>SON-T</p> <p>SON-T 50 W</p> <p>SON-T 70 W</p> <p>SON-T 100 W</p> <p>SON-T 150 W</p> <p>SON-T 250 W</p> <p>SON-E</p> <p>SON-E 50 W</p> <p>SON-E 70 W</p> <p>SON-E 100 W</p> <p>SON-E 150 W</p> <p>HPL-N</p> <p>HPL-N 50 W</p> <p>HPL-N 80 W</p> <p>HPL-N 125 W</p> <p>CDM-T/TT</p> <p>CDM-T/TT 70 W</p> <p>CDM-T/TT 150 W</p> <p>PL-T</p> <p>PL-T 32 W</p> <p>PL-T 42 W</p> <p>QL</p> <p>QL 55 W</p> <p>QL 85 W</p>	<p>opti-O T-POT (open)</p> <p>opti-O CT-POT (open)</p> <p>opti-C CT-POT (closed)</p>	<p>Ballast</p> <p>Electronic</p> <p>Conventional</p> <p>Ignitor</p> <p>Semi-parallel</p> <p>Semi-parallel self-stopping</p> <p>Series</p> <p>Series self-stopping</p> <p>Mains</p> <p>220 V/60 Hz</p> <p>230 V/50 Hz</p> <p>240 V/50 Hz</p> <p>Capacitor</p> <p>Yes</p> <p>No</p> <p>Filter coil</p> <p>Yes</p> <p>No</p> <p>Fuse</p> <p>Yes</p> <p>No</p> <p>Class</p> <p>Cl. I</p> <p>Cl. II</p> <p>Knife connector</p> <p>Yes</p> <p>No</p>	<p>Photocell</p> <p>NEMA</p> <p>Minicell</p> <p>Light regulation</p> <p>Dimming EC01/11</p> <p>Chronosense</p> <p>Switch</p>

*This range overview shows you at-a-glance the configuration possibilities and options. For ordering and specifying refer to the specific choice sheet as included in the Outdoor Lighting Catalogue CD-Rom.

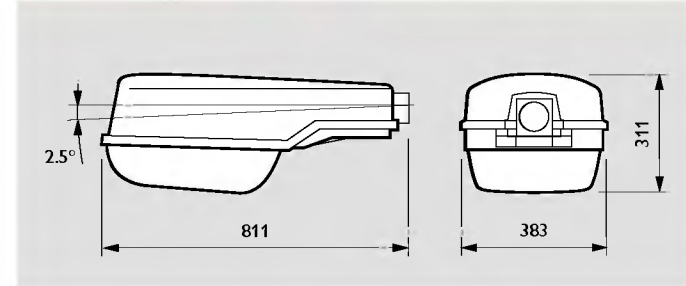


SGS 204



SGS 204, with flat glass

SGS 204, side-entry mounting



Type description	Weight (kg)	EOC
Luminaires with gear		
SGS204 E40 250W H.A.C.T. EMPTY UNIT II	8.1	25708200
SGS204 HPL 250W 230 3P PC II	8.1	25786000
SGS204 SON-T 250W 230 T SP II	10.1	25672600
SGS204 SON-T 250W 230 T ST II	10.8	25674000
SGS204 SON-T 250W 230 T ST FG II	10.6	25686300
SGS204 SON-T 250W 230 T SP D II	10.8	26180500
SGS204 SON-T 400W 230 T ST FG II	11.0	25692400
Mounting brackets (to be ordered separately)		
ZGP34 SPIGOT	0.3	93104399
ZGP42/48 SPIGOT	0.3	59950699
ZGP60 SPIGOT	0.3	21663299
ZGP76 SPIGOT	0.5	21664999
WALL-B.BRACKET 45MM	0.8	22100700

All units are equipped with 230 V/50 Hz gear. Other voltages, frequencies, versions with NEMA socket, dimming gear and/or self-stopping ignitors are available on request.

SGS 204

Modular road lighting luminaire in contemporary style. Lighting quality for safe and comfortable driving, with low energy and maintenance costs.

Main applications

- Motorways
- Major roads
- Industrial areas
- Roundabouts, Crossings.

Suitable lamp types

- HPL-N 250 W
- SON-E or SON-T 250 W
- SON-T 400 W (with flat glass only).

Features

- Dedicated optics optimize beam control and maximize light output. Light distribution designed to take full advantage of the luminance concept
- Choice of vandal- and UV-resistant polycarbonate bowl or minimal-glare flat glass
- The hinged bowl allows lamp replacement from below; thus reducing the required lifting range of the platform truck
- Self-stopping ignitor, photocell switching or dimming available
- High-strength construction resistant to water and dust. Class II insulation provides extra safety (Class I on request)
- Fast, easy installation and maintenance due to hinged housing and bowl with stainless steel clip
- Models available with gear and with lampholder without gear.

Materials and finish

Frame in non-corrosive diecast aluminium; canopy in neutral grey glass-fibre reinforced. UV-stabilized polyester; polycarbonate bowl or toughened flat glass; reflector in high-purity aluminium.

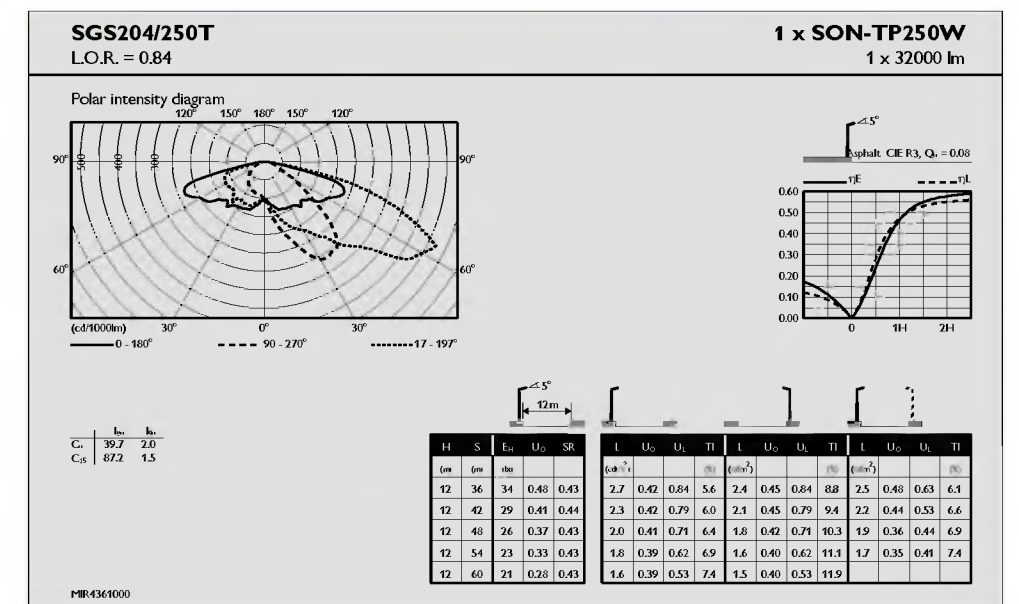
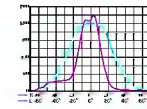
Installation

Flexible spigot for side entry from 42 to 60 mm. or post top 60 or 76 mm (to be ordered separately). When the luminaire is mounted at 0° side entry the bowl/flat glass will have a -2.5° inclination.

- lamp compartment
- gear compartment
- luminaire
- (on request)



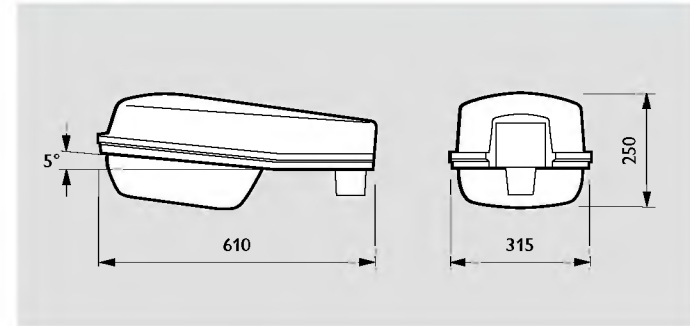
ZGP mounting bracket



Note: These pages show only a selection of the photometric data. For the full range of data please refer to your Philips Lighting Outdoor CD ROM.



SGS 203/403



Basic programme*

Type description	Weight (kg)	EOC
Luminaires with polyester canopy with gear		
SGS203 SON-T 70W 230 ST	26835400	
SGS203 SON-T 100W 230 ST	27368600	
SGS203 SON-T 150W 230 ST	26822400	
SGS203 HPL-N 80W125W 230	26966500	
SGS203 SON-T 70W 230 ST D	53106900	
SGS203 SON-T 100W 230 ST D	27273300	
SGS203 SON-T 150W 230 ST D	53107600	
SGS203 SON-T 70W 230 II ST	23276800	
SGS203 SON-T 100W 230 II ST	21889200	
SGS203 SON-T 150W 230 II ST	53119900	
SGS203 HPL-N 80W125W 230 II	53256100	
Luminaires with aluminium canopy with gear		
SGS403 SON-T 70W 230 ST	21806900	
SGS403 SON-T 100W 230 ST	21811300	
SGS403 SON-T 150W 230 ST	15083200	
SGS403 HPL-N 80W125W 230	15056700	
Mounting brackets (to be ordered separately)		
ZGP34 SPISOT	0.3	93104399
ZGP42/48 SPISOT	0.3	59950699
ZGP60 SPISOT	0.3	21663299
ZGP76 SPISOT	0.5	21664999
WALL-BRACKET 45MM	0.8	22100700

*The most demanded configurations are listed. However if your required configuration is not included, please use the separate choice sheet brochure to specify your desired configuration.

SGS 203/403

Low-power, modular luminaire in contemporary style for safe and comfortable driving and for area illumination with low energy and maintenance costs. Grey glass-fibre reinforced polyester (203) or high-pressure diecast aluminium (403) canopy, choice of high impact resistant UV stabilized polycarbonate bowl or minimal-glare flat security glass.

Main applications

- Major roads
- Minor roads
- Residential areas
- Industrial areas
- Roundabouts, crossings.

Suitable lamp types

- HPL-N 50/80/125 W
- SON E/T 50/70/100/150/250 W
- SON-I 50/70 W
- CDM-T/TT 70/150 W
- SOX-E 18/26 W, SOX 35 W
- PL-T 32/42 W
- QL 55 W.

Features

- Dedicated optics optimize beam control and maximize light output. Light distribution designed to take full advantage of the luminance concept. Five different reflector positions allow precise control of beam direction
- Choice of vandal- and UV-stabilised polycarbonate bowl or minimal-glare flat glass
- Choices with self-stopping and standard ignitor, NEMA socket for photocell switching, fuses, filter coils, semi-parallel and series ignitors, tabbed ballast with electronic switch
- Dimming with Chronosense as stand-alone system, (no pilot cable required) or with second ballast for energy saving

- High-strength construction, resistant to water and dust (IP 65), for low maintenance costs. Class I or Class II insulation
- Fast installation and easy maintenance from above by opening the housing with a single quick-release clip. Gear tray plugs in to allow fast replacement.

Materials and finish

Racket frame in non-corrosive diecast aluminium; canopy in grey, glass-fibre reinforced UV-stabilized polyester or non-corrosive diecast aluminium; vandal-resistant polycarbonate bowl or toughened flat glass; reflector in metalized high-purity aluminium.

Installation

Flexible spigot for side entry from 34 to 60 mm, or post top 60, 76 mm. (to be ordered separately).

- lamp compartment
- gear compartment
- luminaire



ZGP mounting bracket

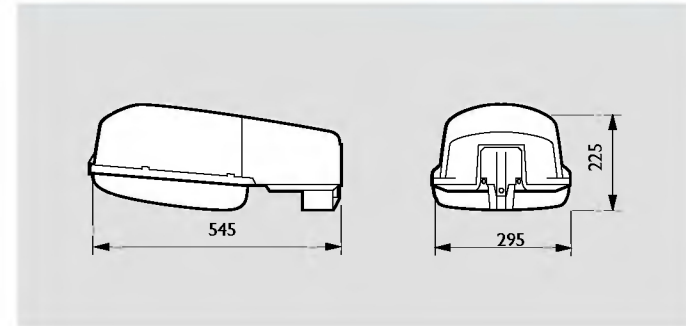
Range overview SGS 203/403*

Housing	Covers	Lamps	Gears	Controls
<p>Polyester</p>	<p>Polycarbonate bowl</p>	<p>Fitting</p> <p>E27</p> <p>E40</p> <p>SON-I</p> <p>SON-I 50 W</p> <p>SON-I 70 W</p> <p>SON-T</p> <p>SON-T 50 W</p> <p>SON-T 70 W</p> <p>SON-T 100 W</p> <p>SON-T 150 W</p> <p>SON-T 250 W</p> <p>SON-E</p> <p>SON-E 50 W</p> <p>SON-E 70 W</p> <p>SON-E 100 W</p> <p>SON-E 150 W</p> <p>SOX</p> <p>SOX 35 W</p> <p>SOX-E</p> <p>SOX-E 18 W</p> <p>SOX-E 36 W</p> <p>HPL-N</p> <p>HPL-N 50 W</p> <p>HPL-N 80 W</p> <p>HPL-N 125 W</p> <p>CDM-T/TT</p> <p>CDM-T/TT 70 W</p> <p>CDM-T/TT 150 W</p> <p>PL-T</p> <p>PL-T 32 W</p> <p>PL-T 42 W</p> <p>QL</p> <p>QL 55 W</p>	<p>Ballast</p> <p>Electronic</p> <p>Conventional</p> <p>Ignitor</p> <p>Semi-parallel</p> <p>Semi-parallel self-stopping</p> <p>Series</p> <p>Series self-stopping</p> <p>Mains</p> <p>220 V/60 Hz</p> <p>230 V/50 Hz</p> <p>240 V/50 Hz</p> <p>Capacitor</p> <p>Yes</p> <p>No</p> <p>Fuse</p> <p>Yes</p> <p>No</p> <p>Filter coil</p> <p>Yes</p> <p>No</p> <p>Class</p> <p>CI. I</p> <p>CI. II</p>	<p>Photocell</p> <p>NEMA</p> <p>Light regulation</p> <p>Dimming EC01/03/11</p> <p>Chronosense</p> <p>Switch</p>
<p>Aluminium</p>	<p>Flat glass</p>			
<p>Colours</p> <p>Grey or RAL</p>				

*This range overview shows you at-a-glance the configuration possibilities and options. For ordering and specifying refer to the specific choice sheet as included in the Outdoor Lighting Catalogue CD-Rom.



SGS 201



Type description	Weight (kg)	EOC
Kombipack		
SGS201 HFLN 80W 230 OP KOMBI II	7.0	25736500
Luminaires with gear		
SGS201 HFLN 80/125W 230 OP II	5.9	25422700
SGS201 SONI 50W 230 OP II	5.9	25420300
SGS201 SONI 70W 230 OP II	5.9	25410400
SGS201 SON 100W 230 OP SP II	6.0	25772500
SGS201 SONT 70W 230T SP II	5.9	25740200
SGS201 SONT 100W 230T SP II	6.0	25770900
SGS201 SOX 18W 230 OP II	5.9	25406700
SGS201 SOX 26W 230 OP II	6.0	25408100
SGS201 SOX 35W 230W 230 OP II	6.0	25802700
Mounting brackets (to be ordered separately)		
ZGP34 SPIGOT	0.3	93104399
ZGP42/48 SPIGOT	0.3	59950699
ZGP60 SPIGOT	0.3	21663299
ZGP76 SPIGOT	0.5	21664999
WALL-B BRACKET 45 MH	0.8	22100700

SGS 201

Versatile, low-wattage road lighting luminaires in contemporary style. Quality lighting for safe and comfortable driving, with low energy costs. Vandal-resistant.

Main applications

- Residential areas
- Minor roads
- Industrial areas, car parks
- Roundabouts.

Suitable lamp types

- HPL-N 80/125 W
- HPL Comfort 80/125 W
- SON-E/T 50/70/100 W
- SOX 18/26/35 W.

Features

- Dedicated optics optimize beam control and maximize light output. Adjustable reflector position allows fine control of beam direction
- Choice of vandal- and UV-resistant polycarbonate bowl or minimal-glare flat glass
- High-strength construction resistant to water and dust, for long service life and low maintenance costs. Class II insulation for extra safety
- Easy installation and maintenance due to detachable cover to gear compartment and hinged bowl with single quick-release clip. Gear/lampholder unit plugs in to allow fast replacement.

Materials and finish

Housing, gear/lampholder unit and cover in grey, glass-fibre reinforced, UV-stabilized polyester; polycarbonate bowl or toughened flat glass; high-purity aluminium reflector.

Installation

Flexible spigot for side entry 34, 42-48, 60 mm or post top 60, 76 mm. (to be ordered separately).

- IP54 lamp compartment
- IP23 gear compartment
- luminaire



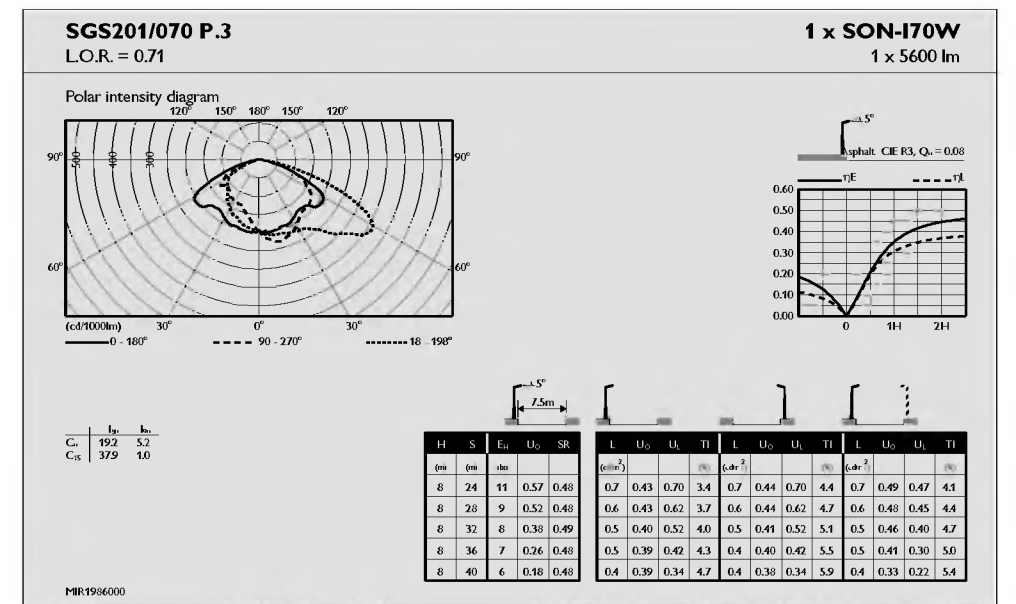
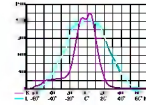
Easy relamping from below.



Kombipack SGS 201/080 K.



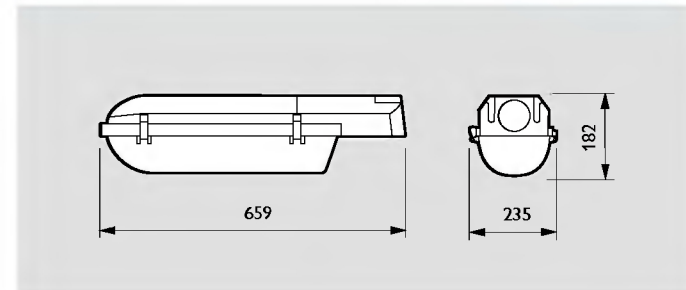
ZGP mounting bracket



Note: These pages show only a selection of the photometric data. For the full range of data please refer to your Philips Lighting Outdoor CD Rom.



FGS 223



Type description	Weight (kg)	EOC
FGS223 1 x PL-L 24W HF	3.20	15018500
FGS223 1 x SOX 35W HF	3.20	15022200
GGP76 Spigot 76 mm		27363100

Version with NEMA-socket available on request



Residium streetlighting, Utrecht, the Netherlands

FGS 223

Economical, easy to service, general-purpose road lighting luminaire for PL-L and SOX-lamps, offering low energy and maintenance costs.

Main applications

- Residential areas
- Secondary roads
- Cycle ways
- Industrial areas.

Suitable lamp types

- PL-L 24 W
- SOX 35 W.

Features

- A well shaped and balanced design
- Vandal-resistant polycarbonate bowl
- Innovative mirror optics for optimal light distribution, minimal light pollution
- Two tilt angles (5° and 15°)
- Easy installation: flexible mounting capability; hinged bowl with quick-release clips allows quick and safe maintenance; easily-removed gear-tray
- Easy maintenance: lamp replacement by opening the bowl (bowl is suspended vertically) with easy access to the lamp from all sides
- High strength, sealed construction, resistant to water and dust for long service life and low repair and maintenance costs.
- Use of high frequency ballasts for all lamp choices, saving energy and prolonging lifetime of lamps.

Materials and finish

- Canopy: UV stabilised, glass-fibre reinforced polypropylene
- Frame: glass fibre reinforced polycarbonate
- Bowl: UV stabilised, vandal-resistant polycarbonate
- Clips: UV stabilised, glass fibre reinforced polypropylene
- Front hinge: polycarbonate with steel wire
- Reflector plate: lacquered steel
- Side mirrors: highly reflective, anodised aluminium
- Spigot: diecast aluminium.

Installation

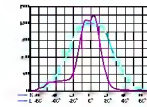
Flexible spigot (42-60 mm) for post top and side entry. Extra spigot available for 76 mm post top. Dustproof and jetproof to IP 65. No internal cleaning required.

IP 65 lamp/gear compartment

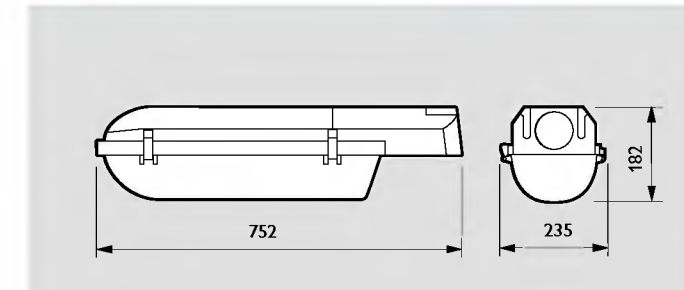
IP 43 rear compartment



220-240 V / 50 Hz



FGS 224



Type description	Weight (kg)	EOC
FGS224 1 x PL-L 36W HF	3.50	15024600
FGS224 1 x PL-L 36W HF E*	3.55	15025300
XGS224 1 x SOX-E36W HF	3.60	15028400
XGS224 1 x SOX-E55W HF	3.60	15030700
GGP76 Spigot 76 mm		27363100

Version with NEMA-socket available on request

FGS 224

Economical, easy to service, general-purpose road lighting luminaire for PL-L and SOX-lamps, offering low energy and maintenance costs.

Main applications

- Residential areas
- Secondary roads
- Cycle ways
- Industrial areas.

Suitable lamp types

- PL-L 36 W
- SOX-E 36 W
- SOX-E 55 W.

Features

- A well shaped and balanced design
- Vandal-resistant polycarbonate bowl
- Innovative mirror optics for optimal light distribution, minimal light pollution
- Two tilt angles (5° and 15°)
- easy installation: flexible mounting capability; hinged bowl with quick-release clips allows quick and safe maintenance; easily-removed gear-tray
- Easy maintenance: lamp replacement by opening the bowl (bowl is suspended vertically) with easy access to the lamp from all sides
- High strength, sealed construction, resistant to water and dust for long service life and low repair and maintenance costs
- Use of high frequency ballasts for all lamp choices, saving energy and prolonging lifetime of lamps
- Diming with PL-L 36.

Materials and finish

- Canopy: UV stabilised, glass-fibre reinforced polypropylene
- Frame: glass fibre reinforced polycarbonate
- Bowl: UV stabilised, vandal-resistant polycarbonate
- Clips: UV stabilised, glass fibre reinforced polypropylene
- Front hinge: polycarbonate with steel wire
- Reflector plate: lacquered steel
- Side mirrors: highly reflective, anodised aluminium
- Spigot: diecast aluminium.

Installation

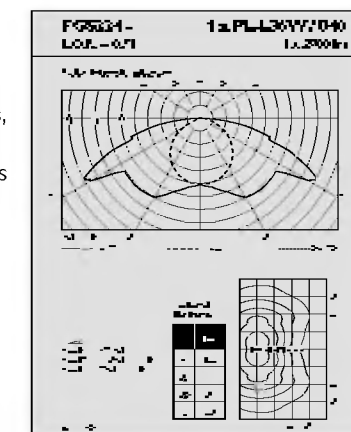
Flexible spigot (42-60 mm) for post top and side entry. Extra spigot available for 76 mm post top. Dustproof and jetproof to IP 65. No internal cleaning required.

IP 65 lamp/gear compartment

IP 43 rear compartment

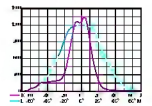


220-240 V / 50 Hz



Note: These pages show only a selection of the photometric data. For the full range of data please refer to your Philips Lighting Outdoor CD Rom.

FGS 103/104/105



FGS 103/104/105

The F/XGS 103/104/105 are three general-purpose road lighting luminaires, available in lengths of 550 mm, 650 mm and 865 mm respectively. They are economical and service-friendly with low energy and maintenance costs. Vandal-resistant.

- NEMA socket for photocell switching, on request
- High-strength construction, resistant to water and dust for low maintenance costs
- Easy installation. Hinged bowl with quick-release clips allows swift, safe maintenance. Easily-removed gear tray.

Main applications

- Industrial areas
- Residential areas
- Local roads
- Car parks.

Materials and finish

Canopy in white, glass-fibre reinforced, UV-stabilised polyester; polycarbonate bowl with stainless-steel clips; mounting module in non-corrosive, diecast aluminium; white lacquered gear plate.

Suitable lamp types

- SOX(-E) 18 - 66 W
- PL-L 18 - 55 W
- TL-D 18 W.

Installation

Fix to 42-60 mm side entry spigot or 60 mm top mounting spigot.

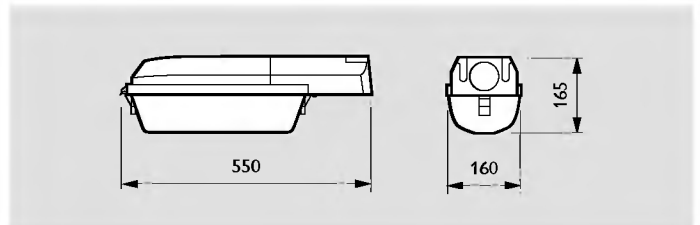
Features

- Flexible mounting: side-mounting on 42-60 mm spigots; or a special version for top-mounting on 76 mm spigots
- UV-resistant polycarbonate refractor bowl for efficient, uniform lighting

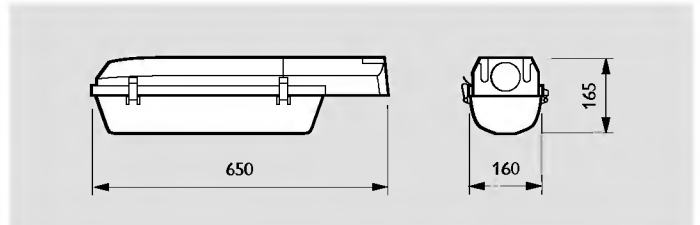


FGS 103

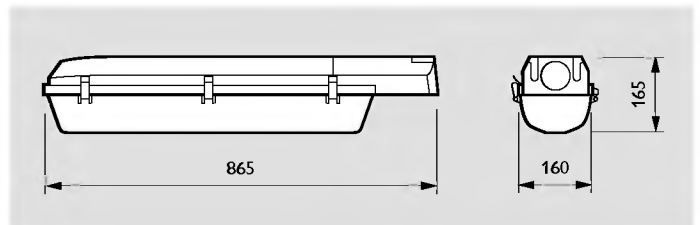
Type description	Lamp	Weight (kg)	EOC
F/XGS103			
XFS103/018G	SOX 18W	3.3	92332600
XFS103/026G	SOX-E 26W	3.7	92333300
XFS103/035G	SOX 35W	3.7	92334000
FGS103/024G	PL-L/4P 18/24W	3.4	92335700
FGS103/024 HF	PL-L/4P 24W	3.4	92336400
XFS103/026G-76	SOX-E 26W	3.7	92338800
XFS103/035G-76	SOX 35W	3.7	92339500
FGS103/024G-76	PL-L/4P 18/24W	3.4	92340100
FGS103/024 HF-76	PL-L/4P 24W	3.4	92341800
Kombipacks			
XFC103/026K	SOX-E 26W	3.7	92349900
FRC103/024K	PL-L/4P 24W	3.7	92353600
Kombipacks with photocell			
XFC103/026KP	SOX-E 26W	3.8	92351200
FRC103/024KP	PL-L/4P 24W	3.8	92355000
F/XGS 104			
XFS104/036G HF	SOX-E 36W	3.9	93008800
XFS104/036G	SOX-E 36W	5.1	92342500
XFS104/055G HF	SOX 55W	3.9	93181400
XFS104/055G	SOX 55W	5.1	92343200
FGS104/036G	PL-L/4P 36W	3.7	92344900
FGS104/036 HF	PL-L/4P 36W	3.7	92346300
XFS104/036G-76	SOX-E 36W	5.1	92347000
XFS104/055G-76	SOX 55W	5.1	92348700
FGS104/036G-76	PL-L/4P 36W	3.7	92349400
FGS104/036G HF-76	PL-L/4P 36W	3.7	92351700
F/XGS 105			
FGS105/040 HF	PL-L/4P 40W	4.8	92352400
FGS105/055 HF	PL-L/4P 55W	4.8	92353100
TFS105/018G	TL-D 18W	4.6	92355500
TFS105/218G	2xTL-D 18W	5.2	92356200
XFS105/066G HF	SOX-E 66W	4.8	93037400
FGS105/040 HF-76	PL-L/4P 40W	4.8	92357900
FGS105/055 HF-76	PL-L/4P 55W	4.8	92358600
TFS105/018G-76	TL-D 18W	4.8	92360900
TFS105/218G-76	2xTL-D 18W	4.6	92361600



FGS 103

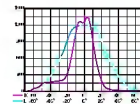


FGS 104

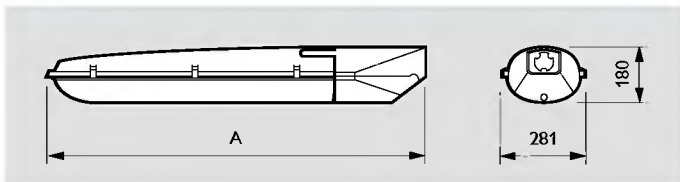


FGS 105

SRS 201



SRS 201



Type description	A
SRS201-90W version	819
SRS201-135W version	1066
SRS201-180W version	1411

Type description	Lamp	Weight (kg)	EOC
Luminaires without gear			
SRS201/036-066	SOX-E 36, SOX-E 66W		
	SOX 55W or SOX 90W	6.1	92317800
SRS201/091	SOX-E 91W or SOX 135W	7.5	92327700
SRS201/131	SOX-E 131 or SOX 180W	9.4	92339000
Luminaires with gear			
SRS201/036G	SOX-E 36W	9.5	92313000
SRS201/055G	SOX 55W	9.5	92315400
SRS201/066G	SOX-E 66W	11.0	92321500
SRS201/090G	SOX 90W	11.0	92325300
SRS201/091G	SOX-E 91W	13.0	92335200
SRS201/135G	SOX 135W	13.0	92337600
SRS201/036G HF	SOX-E 36W	7.5	93028300
SRS201/055G HF	SOX 55W	7.5	93030500
SRS201/066G HF	SOX-E 66W	9.0	93029900
SRS201/091G HF	SOX-E 91W	11.0	93027500
Luminaires with gear shoe			
SRS201/131G	SOX-E 131W	11.9	92341300
Gear shoe 131		7.5	92296600
SRS 201/180G	SOX 180W	11.9	92341300
Gear shoe 180		7.5	92294200

All 'G' units are with 230 V / 50 Hz control gear; the HF versions are suitable for 200-240 V / 50-60 Hz. Other voltages are available on request

SRS 201

Sturdy, economical, slender road lighting luminaires for low-pressure sodium lamps. Low energy costs.

Main applications

- Motorways
- Major roads
- Secondary roads
- Local roads
- Roundabouts.

Suitable lamp types

- SOX 35 - 180 W
- SOX-E 36 - 131 W.

Features

- Three different luminaire sizes, all with UV-resistant methacrylate refractor bowl for optimal light distribution conforming to CIE regulations
- Lightweight, high-strength, construction resistant to water and dust, for low maintenance costs

- Special versions with extremely efficient high frequency gear for SOX-E 36 to 91 and SOX-35 to 55 W
- The slender line of the luminaires results a low wind resistance
- Easy installation and maintenance due to hinged bowl with quick-release clips and easily-removable gear tray.

Materials and finish

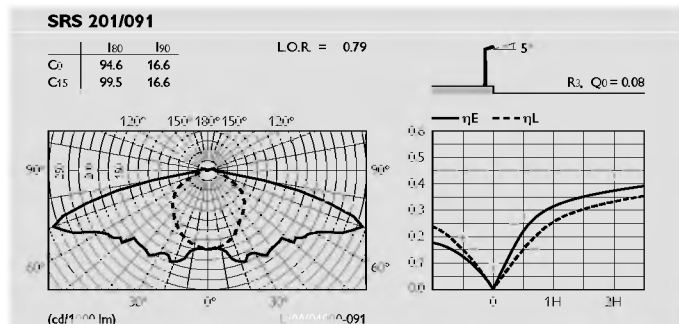
Housing in white, glass-fibre reinforced, UV-stabilized, air-pollution resistant polyester; methacrylate bowl.

Installation

Fix to 60 mm side entry spigot. Dustproof and jetproof to IP 65. No internal cleaning required.

Accessories

Photocell.



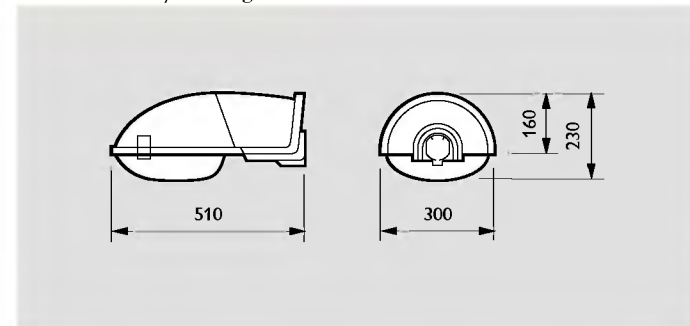
Note: These pages show only a selection of the photometric data. For the full range of data please refer to your Philips Lighting Outdoor CD Rom.



SGS 101 post top mounting



SGS 101 side entry mounting



SGS 101

Versatile road lighting luminaires in modern style. Quality lighting for safe and comfortable driving, and for area illumination, with low investment and maintenance costs. Vandal-resistant.

Main applications

- Industrial areas
- Residential areas
- Rural roads
- Minor roads
- Car parks.

Suitable lamp types

- SON-I 50/70 W
- SON-T 50/70 W
- SON-E 50/70 W
- HPL-N 80/125 W.

Features

- Optical system designed for good beam control and light output. Optimal illuminance and good uniformity when the mounting height approximately equals the road width and the mast spacing is approximately 3.5 times the road width
- Flexible mounting capability, with side entry or post top mounting with 42-60 mm spigots; 32-42 mm and 76 mm mounting units and a wall-mounting bracket are also available

- Vandal-resistant polycarbonate bowl
- Models with self-stopping ignitor and/or NEMA socket for photocell switching available on request
- Sturdy construction resistant to water and dust. Class II insulation provides extra safety and requires only a 2-wire cable for the electrical connection
- Easy installation. Hinged bowl with quick-release clips, and removable rear canopy allow swift, safe maintenance.

Materials and finish

Canopy in glass-fibre reinforced UV-stabilized polypropylene in restful light grey; polycarbonate bowl; mounting module in non-corrosive, diecast aluminium; gear carrier in glass-fibre reinforced polycarbonate.

Installation

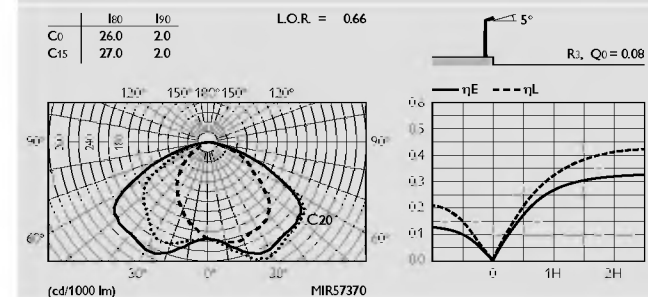
Post top or side entry spigot from 42 to 60 mm (32-42 mm and 76 mm mounting units are also available).

- IP 65 lamp compartment
- IP 43 gear compartment
- luminaire

Type description	Weight (kg)	EOC
SGS101 HPLN 80/125W 230 II	3.9	26738000
SGS101 SON-T 50W 230 SP II	3.9	23510300
SGS101 SON-T 70W 230 SP II	3.9	26915300
SGS101 SON-I 70W 230 II	3.8	26917700

All versions are equipped with 230 V 150 Hz control gear and mounting unit for 42-60 mm; other voltages, mounting unit for 34-42 mm side entry, or 76 mm post top mounting, NEMA photocell socket and/or self-stopping ignitors are available on request

SGS 101/070



1 x SON 70W I

1 x 5,600 lm

H	S	E _h	U _o	SR	L	U _o	UI	TI	L	U _o	UI	TI	L	U _o	UI	TI
(m)	(m)	(lx)	(lx)	(%)	(lm)	(lx)	(%)	(%)	(lm)	(lx)	(%)	(%)	(lm)	(lx)	(%)	(%)
6	18	17	0.51	0.50	1.0	0.47	0.76	37	1.0	0.49	0.76	54	1.0	0.54	0.54	41
9	21	15	0.42	0.50	0.9	0.46	0.62	40	0.9	0.47	0.62	58	0.9	0.52	0.43	42
12	24	13	0.37	0.50	0.8	0.44	0.51	42	0.7	0.43	0.50	62	0.3	0.45	0.34	45
15	27	12	0.31	0.50	0.7	0.36	0.38	44	0.7	0.37	0.38	67	0.7	0.37	0.25	48
18	30	10	0.15	0.50	0.6	0.31	0.27	47	0.6	0.31	0.27	72	0.6	0.38	0.20	51

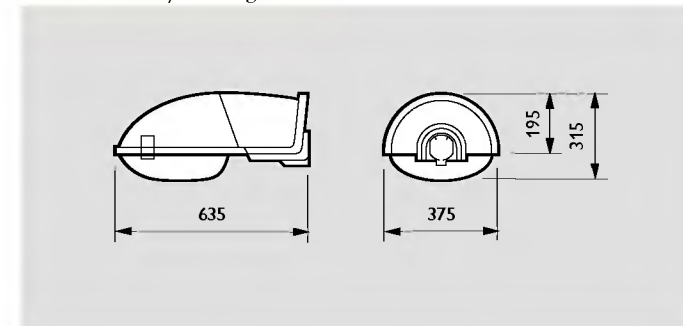
Note: These pages show only a selection of the photometric data. For the full range of data please refer to your Philips Lighting Outdoor CD Rom.



SGS 102 post top mounting



SGS 102 side entry mounting



SGS 102

Versatile road lighting luminaires in modern style. Quality lighting for safe and comfortable driving, and for area illumination, with low investment and maintenance costs. Vandal-resistant.

Main applications

- Industrial areas
- Secondary roads
- Rural roads
- Car parks
- Roundabouts.

Suitable lamp types

- HPL-N 250 W
- SON-T 100/150 W
- SON-E 100/150 W
- SON-T 250 W.

Features

- Optical system designed for good beam control and light output. Optimal illuminance and good uniformity when the mounting height approximately equals the road width and the mast spacing is approximately 3.5 times the road width
- Flexible mounting capability, with side entry or post top mounting with 42-60 mm spigots; a wall mounting bracket is also available

- UV-resistant polycarbonate bowl, vandal-resistant
- Models with self-stopping ignitor and/or NEMA socket for photocell switching available on request
- Sturdy construction resistant to water and dust. Class II insulation provides extra safety and requires only a 2-wire cable for the electrical connection
- Easy installation. Hinged bowl with quick-release clips, and removable rear canopy allow swift, safe maintenance.

Materials and finish

Canopy in glass-fibre reinforced UV-stabilized polypropylene in restful light grey, or lively orange, red or blue; polycarbonate bowl; mounting module in non-corrosive, diecast aluminium; gear carrier in glass-fibre reinforced polycarbonate.

Installation

Post top or side entry spigot from 42 to 60 mm (32-42 mm and 76 mm mounting units are also available)

- IP 65 lamp compartment
- IP 43 gear compartment
- luminaire

Type description	Weight (kg)	EOC
SGS102 HPLN 250W 230 II	5.7	27100100
SGS102 SON-T 100W 230 SP II	5.4	27101900
SGS102 SON-T 150W 230 SP II	5.7	27102600
SGS102 SON-T 250W 230 SP II	6.7	27103300

All versions are equipped with 230 V 150 Hz control gear and mounting unit for 42-60 mm; other voltages, mounting unit for 34-42 mm side entry, or 76 mm post top mounting, NEMA photocell socket and/or self-stopping ignitors are available on request

Chronosense timer



Chronosense

Electronic timer* without pilot cable

The Chronosense is a bi-power stand-alone electronic timer for step dimming SON-T high-pressure sodium or HPL high-pressure mercury lamps. It is designed to work in combination with an external ignitor and standard electromagnetic ballast coupled with an additional dim coil of copper/iron, or tapped ballast.

Main applications

- Chronosense can be used in any lighting installation where dimming is beneficial. For example, road and street lighting, residential and industrial areas, sports areas, and tunnel lighting
- Used anywhere a pilot cable is not available
- Ideal for applications where specific dimming periods must be set in different places.

Features

- Applicable with additional dim coil or tapped ballasts.
- Nominal light level can be reduced according the dim coil rate
- Individual sequences of dim down/up settings by dip-switches
- Integrated ignition lamp run-up time to 100 % first. Then dimming level according the settings

- In-built diagnostics
Green LED: mains presence.
Yellow LED: dim relay is active.

Performance:

- Network independent.
- Up to 35 % of energy savings
- Dimming duration independent of the night-time variation
- All relevant standards compliance.

Intelligence:

- Chronosense "learns" night-time duration (memory) and checks measurements
- Detects unusually large deviations of night-time duration
- Dimming cycle independent of night duration.
- Applies dim settings.

Flexibility:

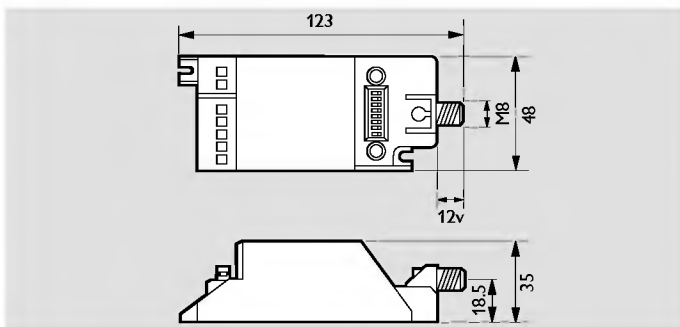
- No additional equipment on the network needed
- Stand-alone system
- Adaptable individual setting per luminaire.

Specifications

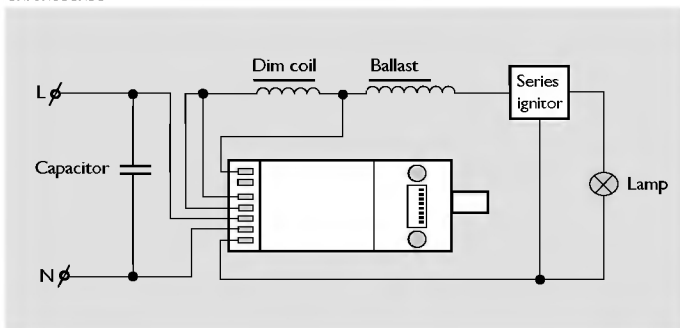
- Suitable for semi-parallel and serial ignition
- Lamp power range up to 400 W
- Relay output contact: Max continuous load 6.5 A. RC suppressing circuit.



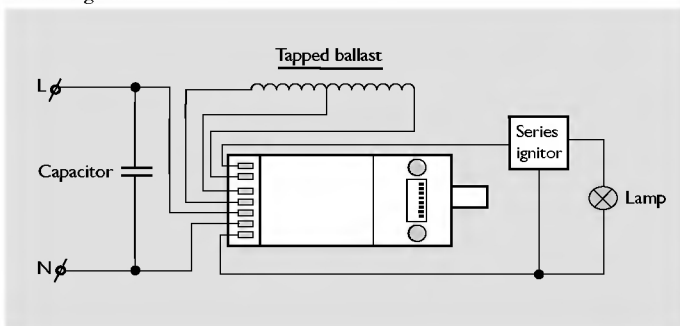
*Chronosense is not sold as an individual component, but as part of a luminaire



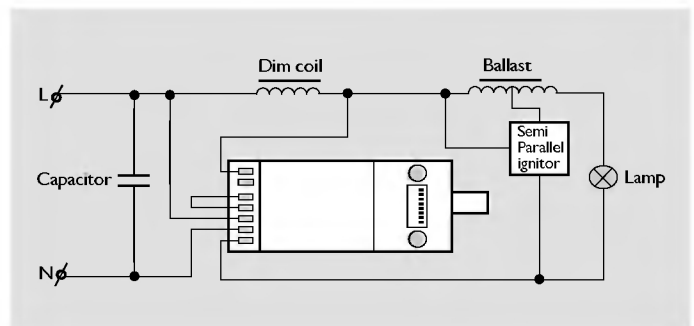
Chronosense



Circuit diagram A



Circuit diagram B



Circuit diagram C

Switch EC 01/03/11



Circuit breaker

Electronic Switch* without pilot cable

The EC 01/03/11 is a bi-power electronic switch for SON-T high-pressure sodium lamps. It is controlled by pilot cable for step dimming applications, and is designed to work in combination with an external ignitor, standard electromagnetic ballast, and additional dimming coil of copper/iron.

Main applications

- The EC 01/03/11 can be used in any lighting installations where a pilot cable is installed and where dimming is beneficial. For example, road and street lighting residential and industrial areas, sports areas, and tunnel lighting
- Whenever dimming periods must be controlled.

Features

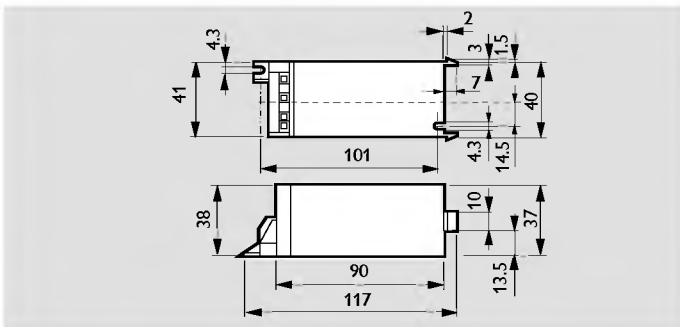
- Coupled with an additional dim coil
- Pilot cable enables dimming periods to be monitored
- Ignition/re-ignition of lamp run-up time to 100 % integrated. Dimmed lighting level is then adopted after 3 minutes, if selected
- Nominal light level can be reduced according the dim coil rate.

Specifications

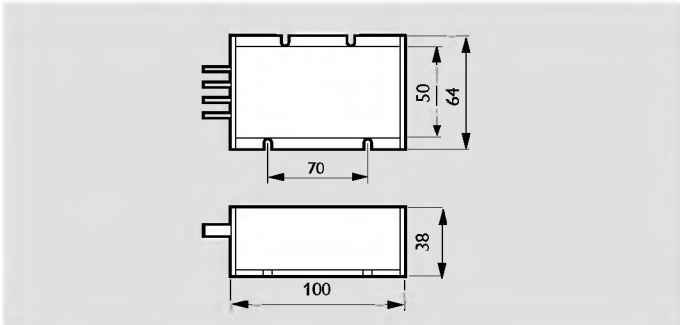
- Applicable for serial or semi-parallel ignition
- Suitable for lamps: SON-T 70 W to SON-T 400 W
- Control signal: DC: 100 – 250 V AC: 198–264 V /50 Hz
- Control signal can be in different phase than mains (for three-phase supplies)
- Separate earth terminal incorporated
- Ballast required.



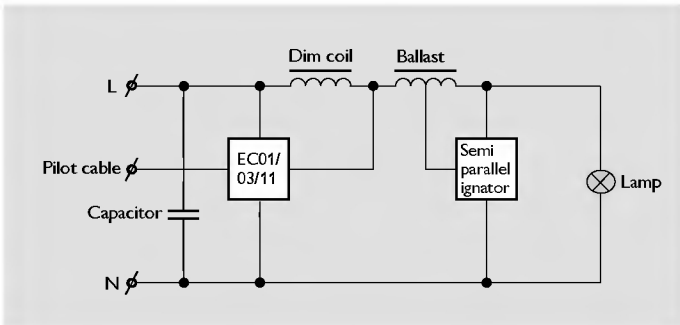
*The EC 01/03/11 is not sold as an individual component but as part of a luminaire



Circuit breaker EC 01/11



Circuit breaker EC 03



Circuit diagram