



lighting fittings



CATALOGUE

2006





TREVOS

joint-stock company

Czech company situated in north-east Bohemia

Since the foundation in 1990 TREVOS company orientates itself to a serial production of fluorescent lighting fittings



Production basis is situated in production premises „Valdštejnsko“ in Mašov near Turnov and is concentrated on production of plastic and metal components – main parts of lighting fittings.

Production of components fully provides the own assembly of lighting fittings which are distributed under mark TREVOS on the Czech market. Production follows EN ISO 9001 standards.

Complete lighting fittings and sets of components for own assembly are distributed to customers in 30 countries all over the world.





INDUSTRIAL WATERPROOF, DUSTPROOF
AND IMPACT RESISTANT
Fluorescent lighting fittings

PROFI

IP65

5-8



WITH ELECTRONIC BALLAST T5

PROFI-T5

9



FOR USING IN AMBIENT
WITH HIGHER TEMPERATURE

PROFI - ta60

10



FOR USING IN AMBIENT WITH
A DANGER OF EXPLOSION

PROFI - Ex

11-12



for connection to light distribution
system CANALIS KBA
SCHNEIDER ELECTRIC

PROFI - KBA

14-16



INDUSTRIAL WATERPROOF,
DUSTPROOF
Fluorescent lighting fittings

PER

19-21



INDUSTRIAL
WATERPROOF,
DUSTPROOF
Fluorescent lighting fittings

STANDARD

23-25



INDOOR - OFFICE
fluorescent lighting fittings

SM

IP40

25-28



INDOOR - OFFICE
fluorescent lighting fittings

SM NOVA

29-30



INDOOR - CIRCULAR
fluorescent lighting fittings

SMO

31-32



INDOOR - CIRCULAR
fluorescent lighting fittings
for compact lamps

SK

IP54

33



INDOOR - LINEAR
fluorescent lighting fittings
with a switch

SB, SB - T5

35-37

IP20



INDOOR LIGHTING FITTINGS
for PL lamps

RPK kompakt

38



INDOOR MODULAR
fluorescent lighting fittings
tube 65 mm

RPK

39-42



INDOOR MODULAR
fluorescent lighting fittings
tube 85 mm

TS

43-46



INDOOR MODULAR
fluorescent lighting fittings
oval 165 x 70 mm

OS

47-50



INDOOR MODULAR
fluorescent lighting fittings
ellipse 130 x 65 mm

MO

51-53



BATTEN
fluorescent lighting fittings

ST

55-57



RECESSED
fluorescent lighting fittings

PSV

58-59



SURFACE MOUNTED
fluorescent lighting fittings

PSP

60



EMERGENCY
lighting fittings

HELIOS

61-64

IP42



HEATERS
with the infrared Philips HeLeN lamp

SOLAMAGIC

65-67

Marks and symbols used

	Declaration of Conformity mark indicates that the conformity of a product with all the regulations of EU has been approved		Suitable for industrial areas, production and agricultural plants, storage halls, garages		- linear fluorescent tubes T8 d 26 mm, G13 lampholders
	Licence mark symbolizing the conformity of the properties of a given product with the european standards for electrical safety		Suitable for interiors of offices, schools or hospitals		- linear fluorescent tubes T5 d 16 mm, G5 lampholders
	Registered mark of CENELEC as a czech mark indicating a permanent conformity with the standards for electrical safety		Suitable for shops and shopping centers		- circular fluorescent tubes d 26 mm, G10q lampholders
	Internationally acknowledged certificate. The certification according to IEC standards		Suitable for corridors, stairs and entrance halls		- compact fluorescent tubes PL, G23 lampholders
	Mark for electromagnetic compatibility, indicating the conformity of a product with the requirements of EMC standards		Suitable for restaurants, dining halls or public areas		for connection of three wires into a screwless terminal block 2.5 mm²
	(Ingress Protection) The code determining the level of safety against water, dust or solid objects penetration		Suitable for car-washes or wet environments		for connection of three wires into a screw terminal block 2.5 mm²
	Protected against dust		Suitable for sports halls and sports facilities		Use of heat resistant supply cables, connecting cables or external supply
	Dustproof		Suitable for kitchen units		Electric equipment: with electromagnetic ballast
	Protected against splashing water		suitable for using in ambient with a danger of explosion of flammable gas and vapour		Electric equipment: with electronic ballast
	Protected against jetting water		suitable for using in garages and store rooms		Electric equipment: with dimmable electronic ballast
	Rated values of a voltage system				Electric equipment: with maintained emergency source
	Luminaires suitable for direct mounting on a normally inflammable surfaces				Level of impact resistance (Joules)
	Luminaires of the class I. - basic insulation plus earthing terminal				Glow wire test at 650 °C PMMA - diffuser
	Rated highest ambient temperature				Glow wire test at 850 °C PC - diffuser
	luminaires for using in ambient with a danger of explosion				1 phase throughwiring
					3 phase throughwiring



PROFI

INDUSTRIAL WATERPROOF, DUSTPROOF
AND IMPACT RESISTANT

Fluorescent lighting fittings



IP65



230 V
50 Hz



Use:

Industrial indoor and outdoor areas, workshops, agricultural buildings, garages, warehouses and laboratories without danger of explosion. Lighting fittings are resistant to dust, damp and jetting water. In corrosive environment it is necessary to have respect to possible fumes which reduce the applicability of plastics.

Description, optics:

The **body** is made by injection of impact and heat resistant polycarbonate of grey colour. The body is fitted with clips for fixing of the diffuser. The clips are made of ABS and Polyamid.

Optionally the stainless steel clips are possible.

The fitting's **reflector** is produced of a steel sheet powder coated with white colour in automatic spraying line.

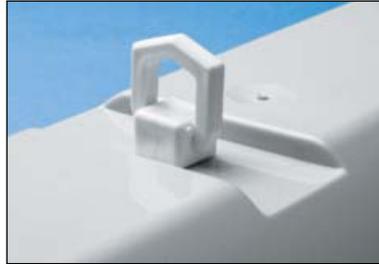
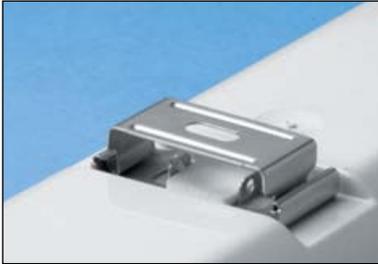
The **diffuser** is made by injection of plastics in two options:

- of transparent methacrylate (PMMA) – marked **AC** – 100% UV stable with a better optic characteristics
- of transparent polycarbonate – marked **PC**, UV stabilized with very high impact resistance





Modifications with plastic or stainless steel clips.



The way of fitting's suspension:

- directly on a surface (also inflammable) using metal self-locking clips.
- using steel or plastic eyes



The polycarbonate diffuser has very big impact resistance.

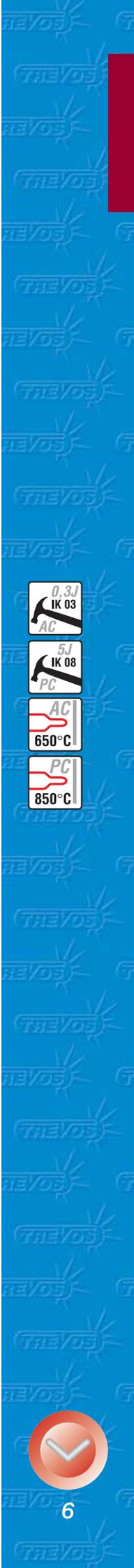


The reflector is provided with two plastic suspensions preventing the fall of the reflector during installation and repair.

Modifications:

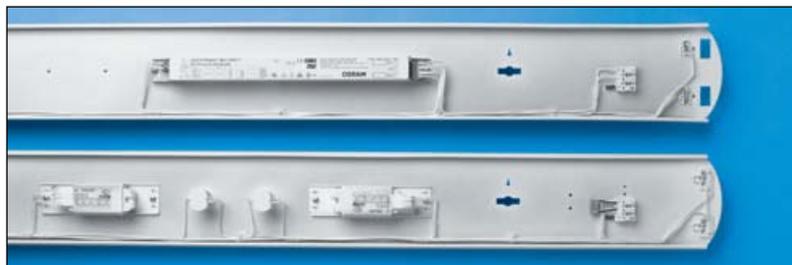
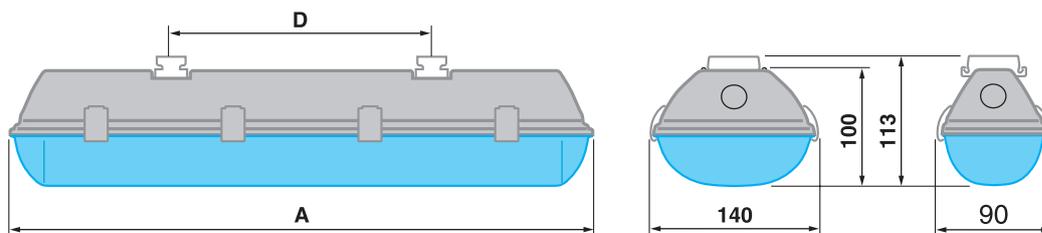
- (code 10xx0) The **basic type** is LPF wired, equipped with a radio-interference capacitor, starters, a screwless three-pole terminal block, 2 pcs of metal suspension clips, 2 pcs of plastic suspension eyes and two bushings.
- (code 10xx1) **HPF wired** – the lighting fitting is compensated with parallel compensating capacitor
- (code 10xx2) **Through wired** – for installation of the lighting fittings into rows. Three-phases wiring and two five-poles terminal blocks at both ends of the fitting are included. (18W lighting fittings are not produced in this modification).
- (code 10xx3) **Through wired and compensated.**
- (code 10xx5) **With electronic ballast for T8 lamps** suitable for installation at the places where the fittings are permanently on
- (code 10xx6) **Through wired with electronic ballast for T8 lamps**
- (code 10xx7) **With dimmable electronic ballast** – the fitting is equipped and adapted for using of an automatic dimming control.
- (code 10xx8) **Maintained emergency lighting fitting** with an independent emergency source is running under usual conditions as other fittings. After power interruption it starts emergency mode. Only one tube is working with double-tube fitting then.
- (code 10xx9) **Non-maintained emergency lighting fitting** is working only after power interruption.

Delivery of plastic and metal components for customers' own assembly is possible.

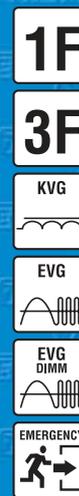
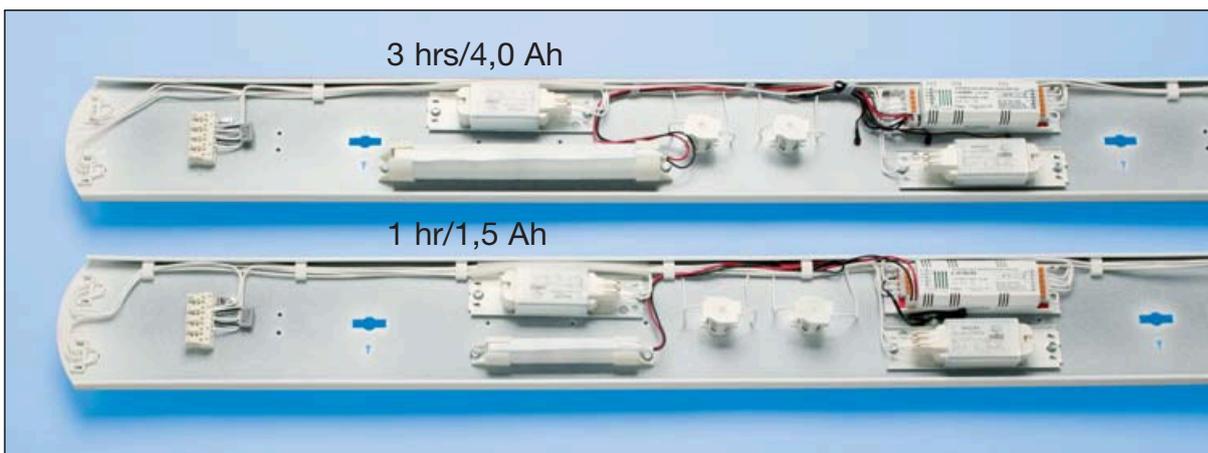


Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]	Net weight [kg]	Dimensions [mm]	
							A	D
<i>basic LPF wired type</i>					AC	(PC)		
10110	PROFI 118 AC	1x18W	0,36	25	87 (86)	1,2	670	350
10120	PROFI 136 AC	1x36W	0,42	40	91 (90)	2,1	1280	700
10130	PROFI 158 AC	1x58W	0,60	60	86 (85)	2,8	1580	900
10140	PROFI 218 AC	2x18W	0,38	45	84 (82)	1,9	670	350
10150	PROFI 236 AC	2x36W	0,82	85	80 (78)	3,4	1280	700
10160	PROFI 258 AC	2x58W	1,22	130	82 (79)	4,6	1580	900
<i>with electronic ballast for T8 lamps</i>								
10115	PROFI 118 AC E	1x18W	0,08	15	87 (86)	0,9	670	350
10125	PROFI 136 AC E	1x36W	0,16	30	91 (90)	1,7	1280	700
10135	PROFI 158 AC E	1x58W	0,24	50	86 (85)	2,2	1580	900
10145	PROFI 218 AC E	2x18W	0,19	35	84 (82)	1,6	670	350
10155	PROFI 236 AC E	2x36W	0,33	70	80 (78)	2,6	1280	700
10165	PROFI 258 AC E	2x58W	0,49	110	82 (79)	3,1	1580	900

- 101xx modification AC - diffuser of PMMA
- 102xx modification AC c - diffuser of PMMA with stainless steel clips
- 103xx modification PC - diffuser of polycarbonate
- 104xx modification PC c - diffuser of polycarbonate with stainless steel clips



Maintained emergency lighting fitting



White reflector

Polished parabolic reflector PAR



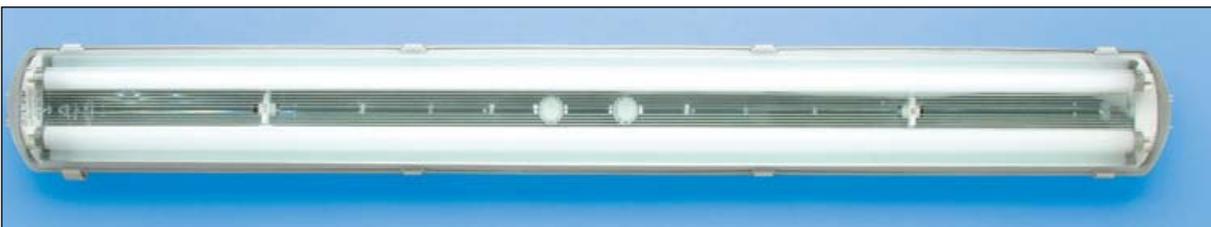
Accessories for PROFI

Order code	Type	
11921	PAR 2.1	polished aluminium parabolic reflector for PROFI 236
11922	PAR 2.2	polished aluminium parabolic reflector for PROFI 258
11923	PAR 2.3	polished aluminium parabolic reflector for PROFI 136
11924	PAR 2.4	polished aluminium parabolic reflector for PROFI 158
11931	PAR 3.1	polished aluminium parabolic reflector for PROFI 236 T5
11932	PAR 3.2	polished aluminium parabolic reflector for PROFI 258 T5
11933	PAR 3.3	polished aluminium parabolic reflector for PROFI 136 T5
11934	PAR 3.4	polished aluminium parabolic reflector for PROFI 158 T5

PAR 3.1, 3.3



PAR 2.1



PROFI - T5



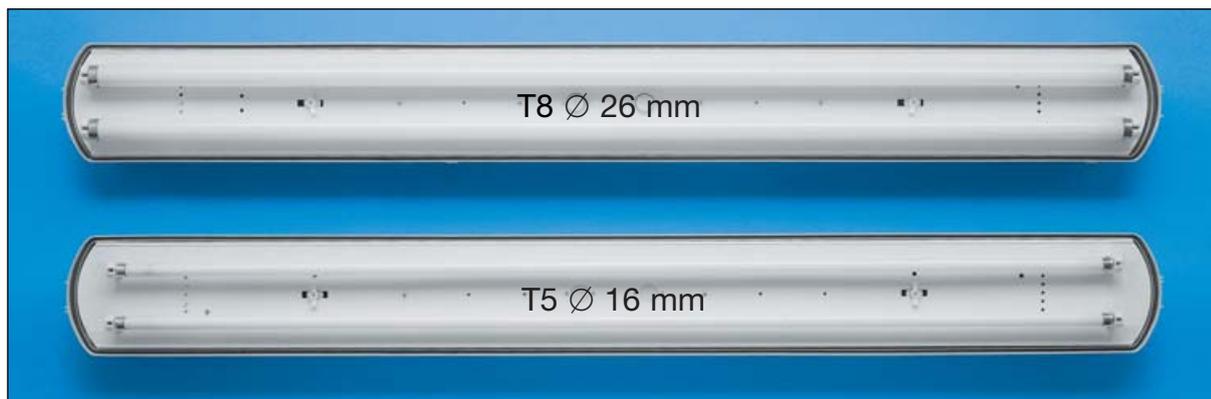
Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]	Net weight [kg]	Dimensions [mm]	
							A	D
with electronic ballast T5 - FH (TL5-HE)				AC	(PC)			
10510	PROFI 114 AC ET5	1x14W	0,08	10	90 (89)	0,9	670	350
10520	PROFI 128 AC ET5	1x28W	0,15	25	92 (91)	1,7	1280	700
10530	PROFI 135 AC ET5	1x35W	0,18	35	91 (90)	2,2	1580	900
10540	PROFI 214 AC ET5	2x14W	0,15	25	87 (85)	1,6	670	350
10550	PROFI 228 AC ET5	2x28W	0,28	55	86 (84)	2,6	1280	700
10560	PROFI 235 AC ET5	2x35W	0,35	70	87 (85)	3,1	1580	900
with electronic ballast T5 - FQ (TL5-HO)								
10515	PROFI 124 AC ET5	1x24W	0,12	20	91 (90)	0,9	670	350
10525	PROFI 154 AC ET5	1x54W	0,26	50	93 (92)	1,7	1280	700
10535	PROFI 180 AC ET5	1x80W	0,36	76	92 (91)	2,2	1580	900
10545	PROFI 224 AC ET5	2x24W	0,23	45	88 (86)	1,6	670	350
10555	PROFI 254 AC ET5	2x54W	0,50	105	87 (85)	2,6	1280	700
10565	PROFI 280 AC ET5	2x80W	0,72	155	87 (85)	3,6	1580	900

105xx modification T5 AC - diffuser of PMMA

106xx modificarion T5 AC c - diffuser of PMMA with stainless steel clips

107xx modification T5 PC - diffuser of polycarbonate

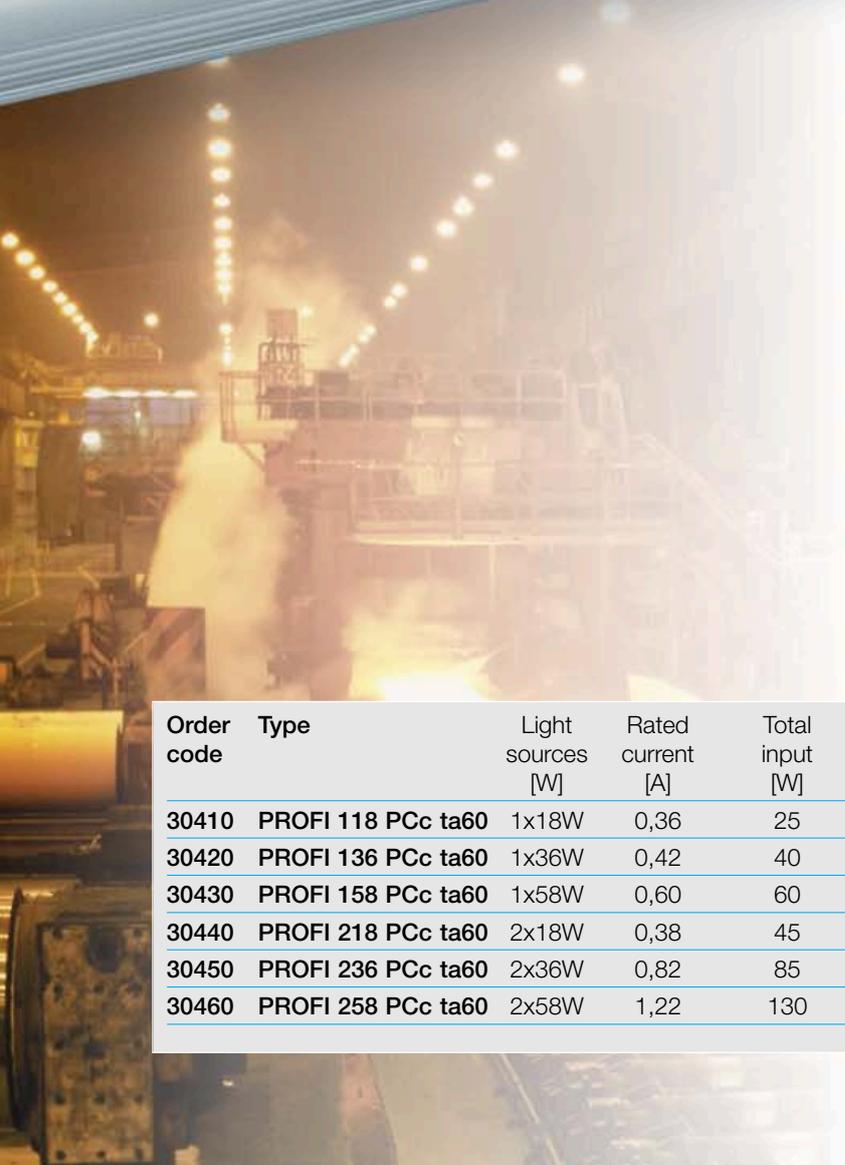
108xx modification T5 PC c - diffuser of polycarbonate with stainless steel clips



PROFI ta60

INDUSTRIAL WATERPROOF, DUSTPROOF
AND IMPACT RESISTANT

fluorescent lighting fittings for *higher ambient temperature* t_a 60 °C



Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]	Net weight [kg]	Dimensions [mm]	
							A	D
30410	PROFI 118 PCc ta60	1x18W	0,36	25	86	1,2	670	350
30420	PROFI 136 PCc ta60	1x36W	0,42	40	90	2,1	1280	700
30430	PROFI 158 PCc ta60	1x58W	0,60	60	85	2,8	1580	900
30440	PROFI 218 PCc ta60	2x18W	0,38	45	82	1,9	670	350
30450	PROFI 236 PCc ta60	2x36W	0,82	85	78	3,4	1280	700
30460	PROFI 258 PCc ta60	2x58W	1,22	130	79	4,6	1580	900



PROFI-Ex

INDUSTRIAL WATERPROOF, DUSTPROOF AND
IMPACT RESISTANT

fluorescent lighting fittings suitable *for ambient with a danger of explosion*



FTZÚ 05
ATEX 0279



IP65



230 V
50 Hz



Use:

PROFI...PCc Ex industrial waterproof and dustproof lighting fittings with higher impact resistance are suitable for illumination of areas with a danger of flammable dust, gas and vapour explosion . The above mentioned ambient corresponds to European Union directive No.: 94/9/EC (NV 23/2003 Sb.): Ex II 3GD Ex nA II T4 T78 °C. .

Lighting fittings are assigned for ambient temperature from – 20 °C to 40 °C

Lighting fittings are approved by FTZÚ Ostrava – Radvanice Certificate No.: FTZÚ 05 ATEX 0279

Description, optics:

The body is made by injection of impact and heat resistant Polycarbonate of grey color.

There are two 20,5mm holes for PG – 13,5 IP 68 cable bushing in the body. Fixing of the body with diffuser is solved with stainless steel clips. The luminaire is provided with a foamed Polyurethane sealing injected directly to the body.

The diffuser is made by injection of transparent stabilized Polycarbonate (PC) with very high impact resistance.

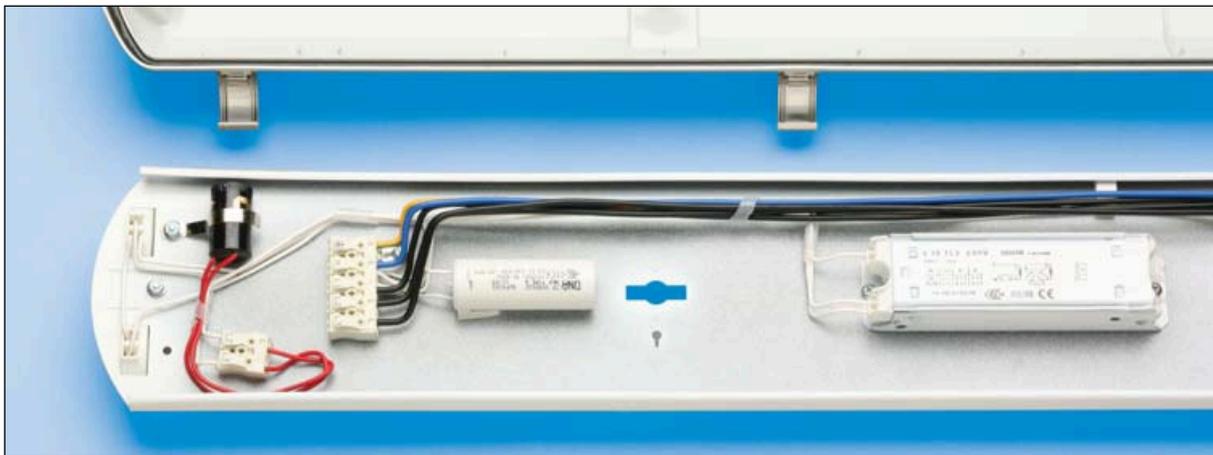
The reflector is made of the steel sheet, powder coated by white colour. Electric equipment of the lighting fittings is fitted on the reflector.

Polished aluminium parabolic reflector (PAR) can be delivered on demand.

The way of fitting's suspension:

- directly on a surface (also inflammable) using metal self-locking clips
- using steel or plastic eyes





Electric equipment of the lighting fittings for ambient with danger of explosion:

- On the reflector there are mounted B1 class HELVAR magnetic ballasts and 3 pole terminal block TRIDONIC SLK3/3E (ST) ENL 1 for a connection of the supply cable with a wire up to 2,5mm² diameter. The reflector is also provided with shake resistant lampholders VS 46100. Using a metal holder an electronic starter is fixed to the reflector in modification for ambient of danger of explosion type PULSESSTARTER EFS 600P (EFS 120 P for 1x18W and 2x18W). The lighting fitting is compensated with DNA capacitor. The plastic wire holders provides for wire fixation in safe distance from the ballasts. Connection of electric parts is accomplished with halogen free wire with temperature resistance from -30 °C to + 100 °C.

The lighting fittings can be 1 phase or 3 phase through wired.



Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]	Net weight [kg]	Dimensions [mm]	
							A	D
30010	PROFI 118 PCc Ex	1x18W	0,36	25	86	1,3	670	350
30020	PROFI 136 PCc Ex	1x36W	0,42	40	90	2,2	1280	700
30030	PROFI 158 PCc Ex	1x58W	0,60	60	85	2,9	1580	900
30040	PROFI 218 PCc Ex	2x18W	0,38	45	82	2,0	670	350
30050	PROFI 236 PCc Ex	2x36W	0,82	85	78	3,5	1280	700
30060	PROFI 258 PCc Ex	2x58W	1,22	130	79	4,7	1580	900



Through wired modification

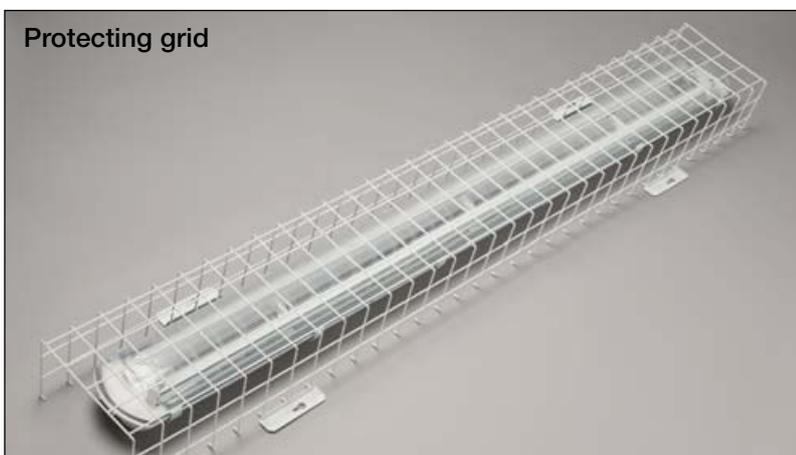


Accessories for PROFI

Order code Type

11991	1F - 36 (pm)	1phase through wiring set for 1x36W, 2x36W types with 3 pole terminal block
11992	1F - 58 (pm)	1phase through wiring set for 1x58W, 2x58W types with 3 pole terminal block
11993	3F - 36 (pm3)	3phase through wiring set for 1x36W, 2x36W types with 5 pole terminal block
11994	3F - 58 (pm3)	3phase through wiring set for 1x58W, 2x58W types with 5 pole terminal block

Protecting grid



Parallel capacitor

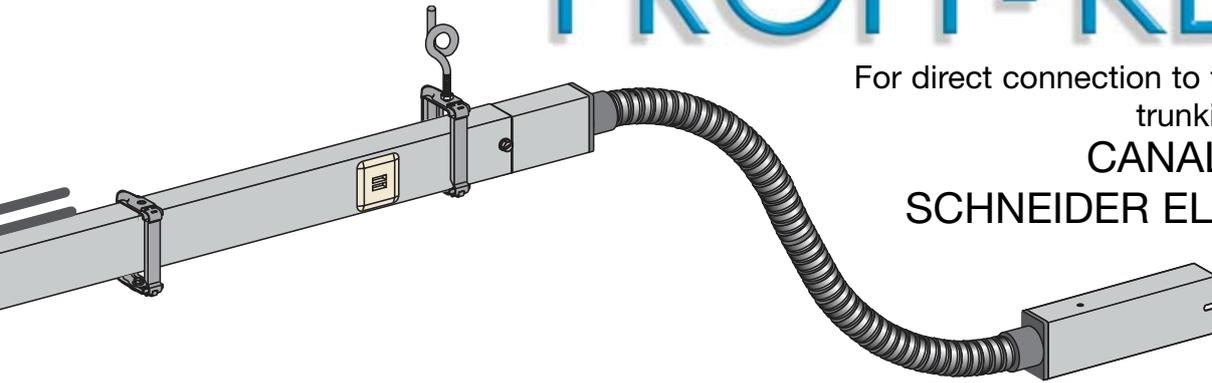


Mod. for quick connection of the luminaires through external terminal block Wieland



PROFI - KBA

For direct connection to the busbar
trunking system
CANALIS KBA
SCHNEIDER ELECTRIC

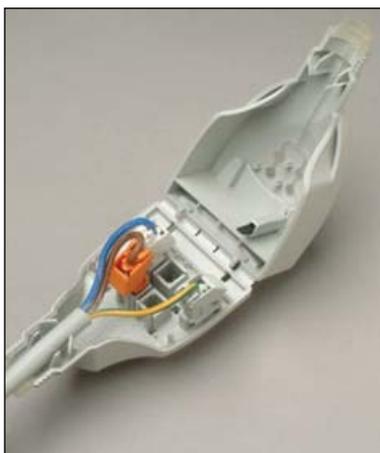


Straight trunking parts creates the frame of the busbar. The connection of live wires including protecting wire (PE) is provided with a plug and socket. A mechanical connection guide secures the strength and has a safety pin against a spontaneous release.

On demand the lighting fittings type PROFI - KBA can be modified with accessory that enables their direct connection into the busbar trunking system CANALIS - KBB or KDP and 10 A KBC connectors can be replaced with 16 A KBC ones in 3 or 5 pole modification.(according to the catalogue of Schneider Electric).



PROFI KBA lighting fittings are provided with two special holders which enables direct fixing of the fitting on the busbar trunking system CANALIS KBA. The luminaires are delivered including fluorescent tubes (spectrum 840), 10 A KBC 10CC211 connector and supply cable H05VVF 3x1,5mm² of 1 m length. It provides an immediate installation of the lighting fitting without any preparation.



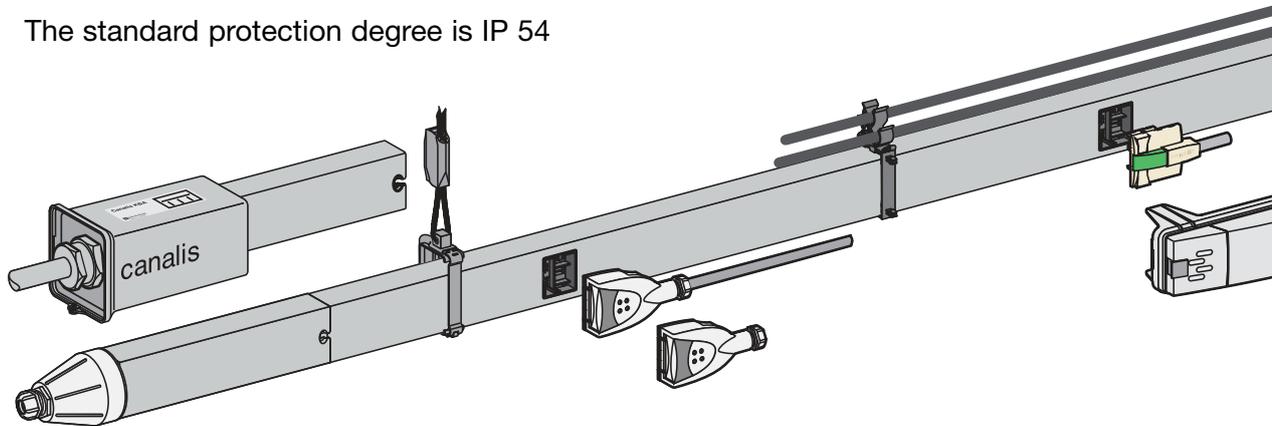
10 A KBC 10CC211 connector with an optional set of polarity.
The set of polarity is visible through transparent contact covers at the connector. Two exchangeable contacts enable setting for a particular phase (L+N+PE). For special purposes also the setting between phases (L+L+PE) is possible.



The busbar trunking CANALIS for lighting distribution 25 - 40 A in industrial and commercial areas.

It is built up of straight 3 m (or 2 m) elements where maximum distance between fixing points is 3 m.

The standard protection degree is IP 54



The distance between plug-in points is 1 m or 1,5 m.

Plugs 10A KBC 10CC211 may be inserted or removed whilst the busbar is live.

The interconnection of protecting circuit (PE) is provided with special construction of protection contact which is plugged before the connecting of working contacts.



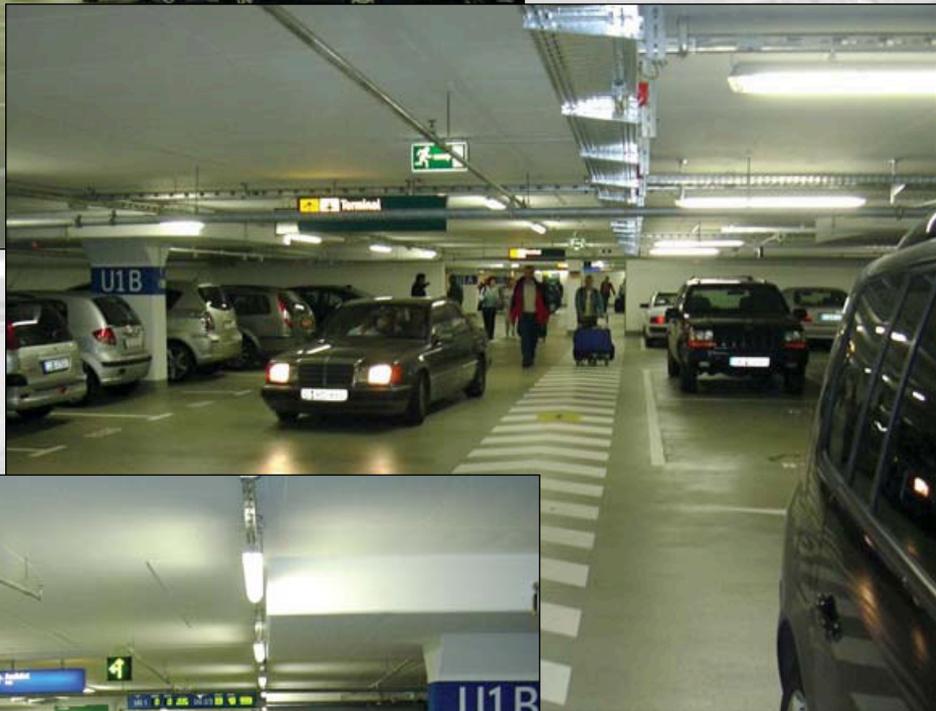
The way of the busbar fixing on a building construction. The busbar can be fixed directly on the ceiling through holders or through a threaded bar. It can be also suspended on a steel wire or a chain. For the easier fixing also another elements can be used: opened and closed hook or closed eye. The recommended distance between holders is 3 m. Example: the way of the busbar fixing on a building construction at the pictures.



Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]		Net weight [kg]	Dimensions [mm]		
					AC	(PC)		A	D	
<i>basic LPF wired type</i>					AC	(PC)				
70110	PROFI 118 AC KBA	1x18W	0,36	25	87	(86)	1,3	670	350	
70120	PROFI 136 AC KBA	1x36W	0,42	40	91	(90)	2,2	1280	700	
70130	PROFI 158 AC KBA	1x58W	0,60	60	86	(85)	2,9	1580	900	
70140	PROFI 218 AC KBA	2x18W	0,38	45	84	(82)	2,0	670	350	
70150	PROFI 236 AC KBA	2x36W	0,82	85	80	(78)	3,5	1280	700	
70160	PROFI 258 AC KBA	2x58W	1,22	130	82	(79)	4,7	1580	900	
<i>with electronic ballast for T8 lamps</i>										
70115	PROFI 118 AC E KBA	1x18W	0,08	15	87	(86)	1,0	670	350	
70125	PROFI 136 AC E KBA	1x36W	0,16	30	91	(90)	1,8	1280	700	
70135	PROFI 158 AC E KBA	1x58W	0,24	50	86	(85)	2,3	1580	900	
70145	PROFI 218 AC E KBA	2x18W	0,19	35	84	(82)	1,7	670	350	
70155	PROFI 236 AC E KBA	2x36W	0,33	70	80	(78)	2,7	1280	700	
70165	PROFI 258 AC E KBA	2x58W	0,49	110	82	(79)	3,2	1580	900	
701xx	modification AC - diffuser of PMMA									
702xx	modificarion AC c - diffuser of PMMA with stainless steel clips									
703xx	modification PC - diffuser of polycarbonate									
704xx	modification PC c - diffuser of polycarbonate with stainless steel clips									

Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]		Net weight [kg]	Dimensions [mm]		
					AC	(PC)		A	D	
<i>with electronic ballast T5 - FH (TL5-HE)</i>					AC	(PC)				
70510	PROFI 114 AC ET5 KBA	1x14W	0,08	10	90	(89)	1,0	670	350	
70520	PROFI 128 AC ET5 KBA	1x28W	0,15	25	92	(91)	1,8	1280	700	
70530	PROFI 135 AC ET5 KBA	1x35W	0,18	35	91	(90)	2,3	1580	900	
70540	PROFI 214 AC ET5 KBA	2x14W	0,15	25	87	(85)	1,7	670	350	
70550	PROFI 228 AC ET5 KBA	2x28W	0,28	55	86	(84)	2,7	1280	700	
70560	PROFI 235 AC ET5 KBA	2x35W	0,35	70	87	(85)	3,2	1580	900	
<i>with electronic ballast T5 - FQ (TL5-HO)</i>										
70515	PROFI 124 AC ET5 KBA	1x24W	0,12	20	91	(90)	1,0	670	350	
70525	PROFI 154 AC ET5 KBA	1x54W	0,26	50	93	(92)	1,8	1280	700	
70535	PROFI 180 AC ET5 KBA	1x80W	0,36	76	92	(91)	2,3	1580	900	
70545	PROFI 224 AC ET5 KBA	2x24W	0,23	45	88	(86)	1,7	670	350	
70555	PROFI 254 AC ET5 KBA	2x54W	0,50	105	87	(85)	2,7	1280	700	
70555	PROFI 280 AC ET5 KBA	2x80W	0,72	150	88	(86)	3,2	1580	900	
705xx	modification T5 AC - diffuser of PMMA									
706xx	modificarion T5 AC c - diffuser of PMMA with stainless steel clips									
707xx	modification T5 PC - diffuser of polycarbonate									
708xx	modification T5 PC c - diffuser of polycarbonate with stainless steel clip									







PER

INDUSTRIAL WATERPROOF, DUSTPROOF
Fluorescent lighting fittings



Use:

Industrial indoor or outdoor areas, workshops, agricultural buildings, garages, warehouses and laboratories without danger of explosion. Fittings are resistant to damp, jetting water and are entirely dustproof. In corrosive environment it is necessary to have respect to possible fumes which reduce the applicability of plastics.

Description, optics:

The **body** is made of tough polystyren (PSH) of grey colour (RAL 7035)

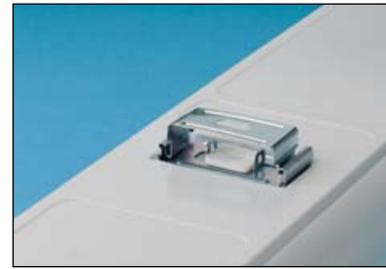
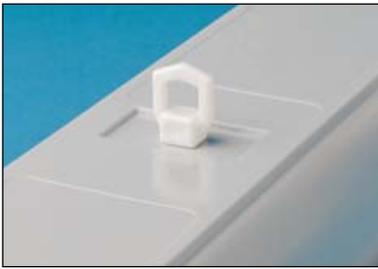
The luminaire is provided with a foamed polyurethan sealing injected directly to the body.

Tough clips are made of ABS and Polyamid. Stainless steel clips are optionally possible.

The fitting's **reflector** is produced of a steel sheet powder coated with white colour in automatic spraying line.

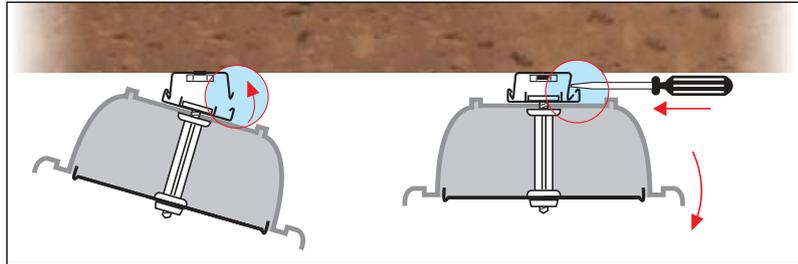
The **diffuser** is made of transparent methacrylate (PMMA), UV stabilized. A modern diffuser's shape ensures higher mechanical solidity, optimum luminous flux and refraction with high working efficiency.





The way of fitting's suspension:

- using steel or plastic eyes
- directly on a surface (also inflammable) using metal self-locking elastic clips.



The reflector is provided with two plastic suspensions preventing the fall of the reflector during installation and repair.



Modification with stainless steel clips



Modifications:

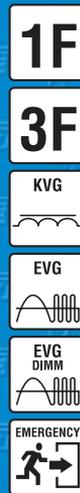
- (code 112x0) The **basic type** is LPF wired, equipped with a radio-interference capacitor, starters, a screwless three-pole terminal block, 2 pcs of metal suspension clips, 2 pcs of plastic suspension eyes and two bushings.
 - (code 112x1) **HPF wired** – the lighting fitting is compensated with parallel compensating capacitor
 - (code 112x2) **Through wired** – for installation of the lighting fittings into rows. Three-phases wiring and two five-poles terminal blocks at both ends of the fitting are included. (18W lighting fittings are not produced in this modification).
 - (code 112x3) **Through wired and compensated.**
 - (code 112x5) **With electronic ballast for T8 lamps** suitable for installation at the places where the fittings are permanently on
 - (code 112x6) **Through wired with electronic ballast for T8 lamps**
 - (code 112x7) **With dimmable electronic ballast** – the fitting is equipped and adapted for using of an automatic dimming control.
 - (code 112x8) **Maintained emergency lighting fitting** with an independent emergency source is running under usual conditions as other fittings. After power interruption it starts emergency mode. Only one tube is working with double-tube fitting then.
 - (code 112x9) **Non-maintained emergency lighting** fitting is working only after power interruption.
- Delivery of plastic and metal components for customers' own assembly is possible.



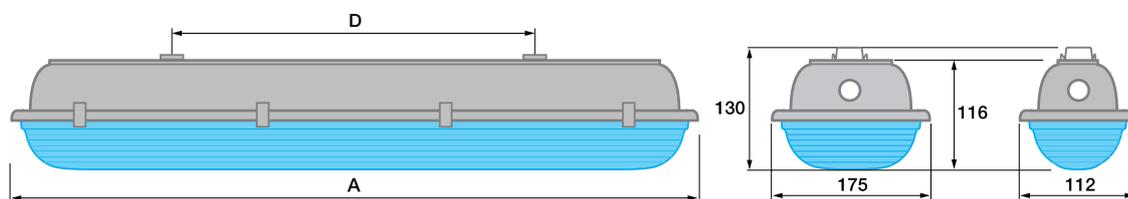
Packing possibilities:

- commercial (completely assembled)
- industrial - partially disassembled





Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]	Net weight [kg]	Dimensions [mm]	
							A	D
<i>basic LPF wired type</i>								
11210	PER 118	1x18W	0,36	25	81	1,4	680	360
11220	PER 136	1x36W	0,42	40	82	2,2	1285	650
11230	PER 158	1x58W	0,60	60	78	3,0	1585	950
11240	PER 218	2x18W	0,38	45	77	2,0	680	360
11250	PER 236	2x36W	0,82	85	76	3,7	1285	650
11260	PER 258	2x58W	1,22	130	73	4,9	1585	950
<i>with electronic ballast for T8 lamps</i>								
11215	PER 118 E	1x18W	0,08	15	81	1,1	680	360
11225	PER 136 E	1x36W	0,16	30	82	1,9	1285	650
11235	PER 158 E	1x58W	0,24	50	78	2,4	1585	950
11245	PER 218 E	2x18W	0,19	35	77	1,7	680	360
11255	PER 236 E	2x36W	0,33	70	76	2,9	1285	650
11265	PER 258 E	2x58W	0,49	110	73	3,4	1585	950
114xx modification c - with stainless steel clips								



Special modification of PER-S lighting fitting - in lower protection - IP 40

- or installation in lift shafts with limited space for mounting



Accessories for PROFI, PER, PE, SM and SM NOVA

Order code	Type	
11901	C 1.1	parallel compensating capacitor 4,5 μ F for 1x18, 2x18 and 1x36 W types
11902	C 1.2	parallel compensating capacitor 8 μ F for 1x58, 2x36 and 4x18 W types
11903	C 1.3	parallel compensating capacitor 12 μ F for 2x58 and 3x36 W types



Chemical resistance of lighting fittings made of thermoplasts

Environment	maximum concentration	polycarbonate/PC resistant			acrylate/(PMMA) resistant			polystyrol/PS H resistant			ABS (Forsan) resistant		
		yes	partially	no	yes	partially	no	yes	partially	no	yes	partially	no
Aceton (ketones)				•			•			•			•
Aniline			•				•			•			•
Am onia	5%			•	•				•			•	
Benzene and Benzaldehyde				•			•			•			•
Diethylether (ethers)				•		•				•			•
Potassium nitrate		•			•					•			•
Ethanol (alcohols)	50%	•				•			•			•	
Ethylacetate (esters)				•			•			•			•
Ethyl alcohol		•				•			•			•	
Phenol				•			•			•			•
Glycerine			•		•					•			•
Heptane						•			•				•
Ammonium hydroxide	25%								•			•	
Sodium hydroxide -base	60%			•	•				•			•	
Sodium chloride -salt solution	15%	•			•				•			•	
Sulphur chloride and Calcium chloride		•			•					•			•
Carbon tetrachloride and Chloric ether				•			•			•			•
Iron dichloride			•		•					•			•
Arsenic acid and Oleic acid		•			•				•			•	
Citric acid	20%	•			•				•			•	
Nitric acid	20%		•			•			•			•	
Nitric acid	50%			•			•			•			•
Hydrochlorid acid	5%	•			•				•			•	
Hydrochlorid acid	35%			•			•			•			•
Chromic acid	40%		•			•			•			•	
Formic acid	30%			•		•				•			•
Acetic acid	10%	•			•				•			•	
Sulphuric acid	30%	•			•				•			•	
Methanol				•			•			•			•
Fuel oil			•			•				•			•
Mineral oil		•			•				•			•	
Vegetable oil		•			•				•			•	
Rape oil			•		•				•			•	
Lamp oil			•			•			•			•	
Hydroge peroxide	30%						•			•			•
Ammonium sulphate	15%	•			•				•			•	
Toluene				•			•			•			•
Turpentine oil									•				•
Trichlorethylene				•			•			•			•
Sodium carbonate	20%	•			•				•			•	
Aliphatic hydrocarbons		•			•					•		•	
Aromatic hydrocarbons				•			•			•			•
Alkali				•	•				•			•	

Luminosity comparison of TREVOS diffusers

type	diffuser modification	luminosity	advantages / drawbacks
PROFI 236 AC	transparent PMMA	80%	the highest luminosity
PROFI 236 PC	transparent PC	78%	high impact resistance/lowered luminosity
PER 236	transparent PMMA	76%	high luminosity
STANDARD 236	transparent PMMA	75%	high luminosity
SM 236 OP	opal PMMA	62%	adverse glare suppressed/lower efficiency
SM 236 KR	transparent PMMA	72%	higher luminosity/adverse glare
SM 236 NOVA	opalised PMMA	67%	adverse glare suppressed while retaining higher efficiency
Higher luminosity can be achieved through using T5 fluorescent tubes			
PROFI 228 ET5 AC	transparent PMMA	86%	
SM 228 NOVA ET5	opalised PMMA	73%	



STANDARD

INDUSTRIAL WATERPROOF, DUSTPROOF
fluorescent lighting fittings



Use:

Industrial indoor or outdoor areas, workshops, agricultural buildings, garages, warehouses etc..

Fittings are resistant to damp, splashing water and are dustproof (IP65) In corrosive environment it is necessary to have respect to possible fumes which reduce the applicability of plastics.

Description, optics:

The **body** is made of ABS of grey colour and is provided with clips (made of ABS and polyamid) to be firmly fixed with the diffuser.

The **diffuser** is made of transparent SAN, UV stabilized.

The fitting's diffuser is provided with a **sealing** made of softened PVC.

The fitting's **reflector** is produced of a steel sheet powder coated with white colour in automatic spraying line and is provided with two plastic suspensions for easy handling during installation and repair.

The way of fitting's suspension:

- using steel or plastic eyes
- directly on a surface (also inflammable) using metal self-locking elastic clips.



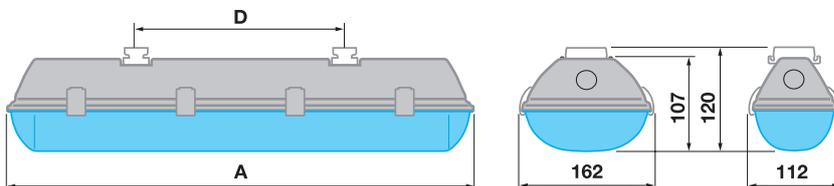


Modifications:

- (code 117x0) The **basic type** is LPF wired, equipped with a radio-interference capacitor, starters, a screw three-pole terminal block, 2 pcs of metal suspension clips, 2 pcs of plastic suspension eyes and two bushings.
- (code 117x1) **HPF wired** – the lighting fitting is compensated with parallel compensating capacitor
- (code 117x2) **Through wired** – for installation of the lighting fittings into rows. One-phase wiring and two five-poles terminal blocks at both ends of the fitting are included. 3-phase wiring possible on demand. (18W lighting fittings are not produced in this modification).
- (code 117x3) **Through wired and compensated.**
- (code 117x5) **With electronic ballast for T8 lamps** suitable for installation at the places where the fittings are permanently on
- (code 117x6) **Through wired with electronic ballast for T8 lamps**



Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]	Net weight [kg]	Dimensions [mm]	
							A	D
<i>basic LPF wired type</i>								
11710	STANDARD 118	1x18W	0,36	25	79	1,4	695	350
11720	STANDARD 136	1x36W	0,42	40	80	2,2	1305	700
11730	STANDARD 158	1x58W	0,60	60	77	2,9	1605	900
11740	STANDARD 218	2x18W	0,38	45	76	1,7	695	350
11750	STANDARD 236	2x36W	0,82	85	75	3,2	1305	700
11760	STANDARD 258	2x58W	1,22	130	74	4,5	1605	900
<i>with electronic ballast for T8 lamps</i>								
11715	STANDARD 118 E	1x18W	0,08	15	79	1,1	695	350
11725	STANDARD 136 E	1x36W	0,16	30	80	1,9	1305	700
11735	STANDARD 158 E	1x58W	0,24	50	77	2,3	1605	900
11745	STANDARD 218 E	2x18W	0,19	35	76	1,4	695	350
11755	STANDARD 236 E	2x36W	0,33	70	75	2,4	1305	700
11765	STANDARD 258 E	2x58W	0,49	110	74	3,0	1605	900



SM

INDOOR - OFFICE
fluorescent lighting fittings



Use:

Offices, hospitals, schools and other public rooms, kitchens, corridors etc.

Description, optics:

The reflector (the body of the fitting) is produced of a white painted steel sheet.

The diffuser is moulded of one plastic part. Used material is acrylic which is stabilized against UV rays.

The diffuser is fixed to the reflector with plastic clips, which secure the diffuser from falling and can be used for hanging of the diffuser during repair.

Modifications of diffuser:

- **OPAL (OP)** plain white
- **PRISMATIC (KR)** transparent with lens pattern
- **PATTERNED OPAL (VROP)** (the production is possible only after agreement on demand) white with lens pattern

The way of fitting's suspension:

- directly on a surface (also flammable) using four wood screws in prepared holes.

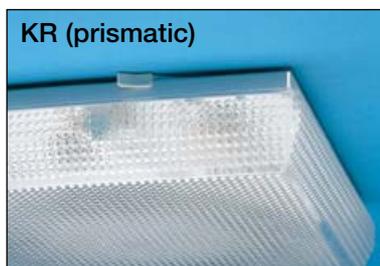
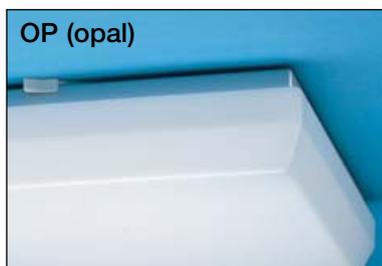
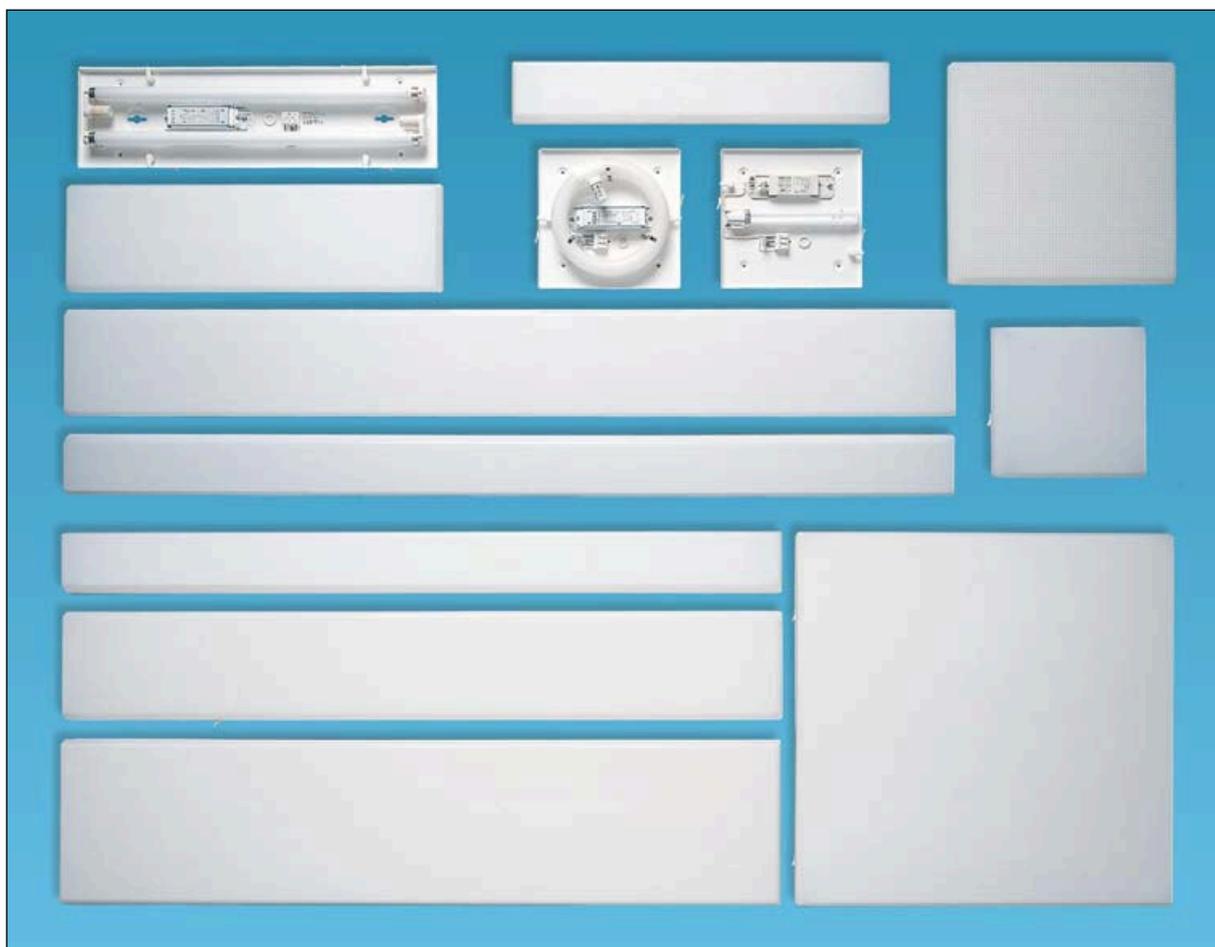
Modifications:

- **Basic type** is LPF wired, equipped with three-pole screwless terminal block, radio-interference capacitor and starters. The fitting can be additionally compensated with parallel capacitor.
- **HPF wired** – the lighting fitting is compensated with parallel compensating capacitor
- **with an electronic ballast.**
- **with dimmable electronic ballast**
- **maintained emergency lighting fitting** with an independent emergency source. It is running as other fittings under usual conditions. After power interruption one tube starts emergency mode automatically.

Delivery of plastic and metal components for customers' own assembly is possible.



-  KVG
-  EVG
-  EVG DIMM
-  EMERGENCY



Modifications of diffuser:

- **OPAL (OP)** plain white - luminous efficiency 65%, advantage – lower glare
- **PRISMATIC (KR)** transparent with lens pattern, advantage – higher efficiency 70%
- **PATTERNED OPAL (VROP)** (the production is possible only after agreement on demand) white with lens pattern



Possibilities of various light sources

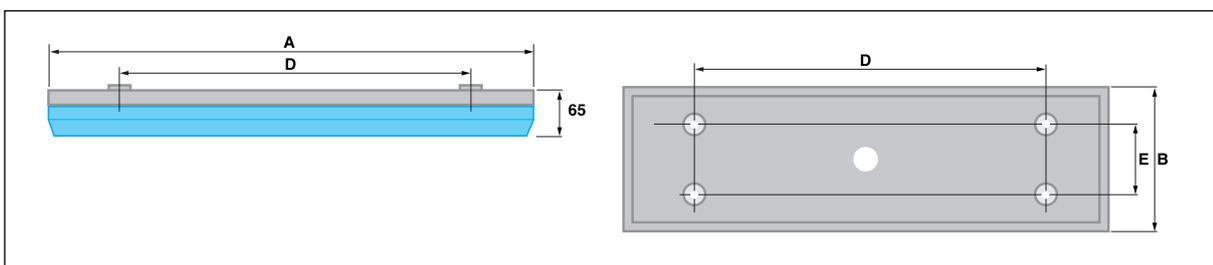




SM 436 OP K M



Order code	Type	Light sources [W]	Rated current		Total input [W]	Net weight [kg]	Dimensions [mm]			
			[A]	(,)			A	B	D	E
basic LPF wired type			(HPF wired)							
12010	SM 118 OP	1x18	0,36	(0,15)	25	1,2	665	110	450	
12020	SM 136 OP	1x36	0,42	(0,23)	40	2,0	1270	110	750	
12030	SM 158 OP	1x58	0,60	(0,29)	60	2,7	1570	110	900	
12040	SM 218 OP	2x18	0,38	(0,23)	45	1,7	665	195	510	130
12050	SM 236 OP	2x36	0,82	(0,45)	85	3,3	1270	195	810	130
12060	SM 258 OP	2x58	1,22	(0,62)	130	4,5	1570	195	960	130
12080	SM 336 OP	3x36	1,26	(0,68)	125	5,1	1270	295	900	200
12090	SM 436 OP	4x36	1,68	(0,90)	165	5,6	1270	295	900	200
12070	SM 418 OP	4x18	0,80	(0,47)	85	4,7	665	665	385	410
12011	SM 118 KR	1x18	0,36	(0,15)	25	1,2	665	110	450	
12021	SM 136 KR	1x36	0,42	(0,23)	40	2,0	1270	110	750	
12031	SM 158 KR	1x58	0,60	(0,29)	60	2,7	1570	110	900	
12041	SM 218 KR	2x18	0,38	(0,23)	45	1,7	665	195	510	130
12051	SM 236 KR	2x36	0,82	(0,45)	85	3,3	1270	195	810	130
12061	SM 258 KR	2x58	1,22	(0,62)	130	4,5	1570	195	960	130
12081	SM 336 KR	3x36	1,26	(0,68)	125	5,1	1270	295	900	200
12091	SM 436 KR	4x36	1,68	(0,90)	165	5,6	1270	295	900	200
12071	SM 418 KR	4x18	0,80	(0,47)	85	4,7	665	665	385	410
with electronic ballast										
12015	SM 118 OP E	1x18	0,08		25	0,9	665	110	450	
12025	SM 136 OP E	1x36	0,16		40	1,7	1270	110	750	
12035	SM 158 OP E	1x58	0,24		60	2,4	1570	110	900	
12045	SM 218 OP E	2x18	0,19		45	1,3	665	195	510	130
12055	SM 236 OP E	2x36	0,33		70	2,5	1270	195	810	130
12065	SM 258 OP E	2x58	0,49		110	3,0	1570	195	960	130
12085	SM 336 OP E	3x36	0,49		125	4,1	1270	295	900	200
12095	SM 436 OP E	4x36	0,64		165	4,1	1270	295	900	200
12075	SM 418 OP E	4x18	0,32		70	3,9	665	665	385	410



Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Net weight [kg]	Dimensions [mm]			
						A	B	D	E
delivered including circular fluorescent tube									
12110	SM 122 OP	1x22	0,41	30	1,3	275	275	170	170
12120	SM 132 OP	1x32	0,42	40	2,2	400	400	240	240
12111	SM 122 KR	1x22	0,41	30	1,3	275	275	170	170
12121	SM 132 KR	1x32	0,42	40	2,2	400	400	240	240
with PL lamps									
12140	SM 111 OP	1x11	0,19	22	1,3	275	275	170	170
with electronic ballast									
12115	SM 122 OP E	1x22	0,09	18	1,0	275	275	170	170
12125	SM 132 OP E	1x32	0,13	25	1,8	400	400	240	240
12116	SM 122 KR E	1x22	0,09	18	1,0	275	275	170	170
12126	SM 132 KR E	1x32	0,13	25	1,8	400	400	240	240
with electronic ballast for T5 lamps									
12530	SM 155 OP ET5	1x55	0,27	55	1,8	400	400	240	240
12540	SM 162 OP ET5	40+22	0,32	65	1,8	400	400	240	240



Modifications with T5 lamps



SM NOVA

INDOOR - OFFICE
fluorescent lighting fittings



Use:

Offices, hospitals, schools and other public rooms, kitchens, corridors etc.

Description, optics:

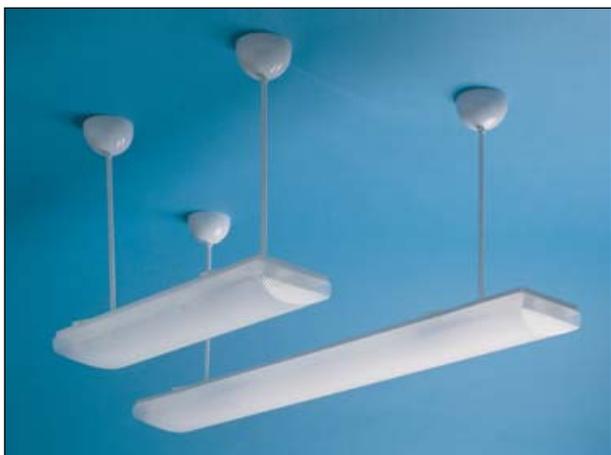
The reflector (the body of the fitting) is produced of white painted steel sheet.

The diffuser is moulded of one plastic part. Used material is opalized PMMA which is stabilized against UV rays. The diffuser is fixed to the reflector with plastic clips, which secure the diffuser from falling.

- **Basic type** is LPF wired, equipped with three-pole screwless terminal block, radio-interference capacitor and starters.
- **HPF wired** – the lighting fitting is compensated with parallel compensating capacitor
- For places where the fittings are permanently on we recommend to equip them with an **electronic ballast**.
- **With electronic ballast and T5 tubes**
 - another saving of electric energy - lower input by 7%
 - lower fluorescent tubes' diameter (16mm), change of max. luminous flux temperature from 25 °C to 35 °C.
 - higher efficiency by 10 % to 14 %
- **With dimmable electronic ballast** - the fitting is equipped and adapted for using of an automatic dimming control.

Delivery of plastic and metal **components** for customers' own assembly is possible.



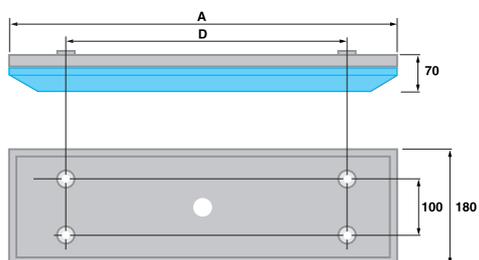


The way of fitting's suspension:

- directly on a surface (also inflammable) using four wood screws in prepared holes.
- on fixed bar suspensions (length 20 – 100 cm)

Order code	Type	Length [mm]	Net weight [kg]
12901	TZ 1	200	0,1
12902	TZ 2	400	0,2
12903	TZ 3	600	0,3
12904	TZ 4	800	0,4
12905	TZ 5	1 000	0,5

Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]	Net weight [kg]	Dimensions [mm]	
							A	D
basic LPF wired type								
12840	SM 218 NOVA	2x18	0,38	45	67	1,6	640	460
12850	SM 236 NOVA	2x36	0,82	85	67	3,2	1250	885
12860	SM 258 NOVA	2x58	1,22	130	70	4,4	1550	1140
with electronic ballast								
12845	SM 218 E NOVA	2x18	0,19	35	67	1,3	640	460
12855	SM 236 E NOVA	2x36	0,33	70	67	2,4	1250	885
12865	SM 258 E NOVA	2x58	0,49	110	70	2,9	1550	1140
with electronic ballast T5 - FH (TL5-HE)								
12940	SM 214 ET5 NOVA	2x14	0,15	25	73	1,3	640	460
12950	SM 228 ET5 NOVA	2x28	0,28	55	73	2,4	1250	885
12960	SM 235 ET5 NOVA	2x35	0,35	70	75	2,9	1550	1140
with electronic ballast T5 - FQ (TL5-HO)								
12945	SM 224 ET5 NOVA	2x24	0,23	45	74	1,3	640	460
12955	SM 254 ET5 NOVA	2x54	0,50	105	76	2,4	1250	885
12965	SM 280 ET5 NOVA	2x80	0,78	160	74	2,9	1550	1140
12975	SM 249 ET5 NOVA	2x49	0,45	98	76	2,9	1550	1140



SMO

INDOOR - CIRCULAR
fluorescent lighting fittings



Use:

Flats, corridors, public rooms, WC, bathrooms (limit - class I, type SMO 22E - class II)

Description, optics:

The **body** of the lighting fitting is produced of polycarbonate and it is used for fixing of electrocomponents including circular fluorescent tubes. The **diffuser** is moulded of polymethylmethacrylate (PMMA), it is fastened to the body with bayonet lock.

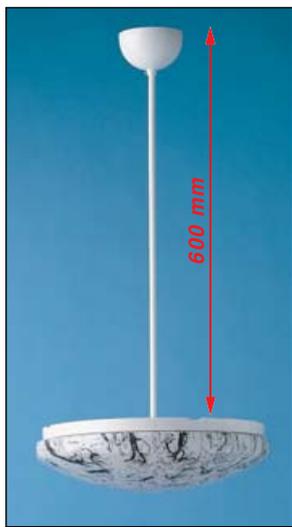
Several types of diffusers can be chosen:

/OP - opal (plain white)

/RA - white with various printed patterns

Delivery of plastic **components** for customers' own assembly is possible.





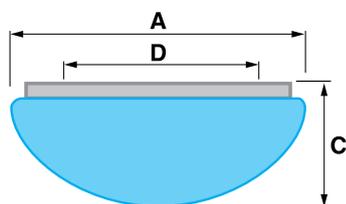
The way of fitting's suspension:

- directly on a surface (also inflammable) using four wood screws in prepared holes.
- on fixed bar suspensions (length 20 – 100 cm)

Order code	Type	Length [mm]	Weight [kg]
12901	TZ 1	200	0,1
12902	TZ 2	400	0,2
12903	TZ 3	600	0,3
12904	TZ 4	800	0,4
12905	TZ 5	1 000	0,5

Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]	Net weight [kg]	Dimensions [mm]		
							A	C	D
basic LPF wired type				OPAL					
12150	SMO 22	1x22	0,41	30	57	1,1	275	105	120
12160	SMO 32	1x32	0,42	40	66	1,5	375	115	120
12170	SMO 40	1x40	0,36	45	64	1,9	475	125	175
12180	SMO 40+32	1x40+1x32	0,78	85	59	2,8	475	125	175
with electronic ballast for T8 lamps									
12155	SMO 22 E 	1x22	0,09	18	57	0,6	275	105	120
12165	SMO 32 E	1x32	0,13	25	66	1,0	375	115	120
12175	SMO 40 E	1x40	0,18	35	59	1,5	475	125	175

 in class II SMO 22E type only



Modifications:

- **Basic type** is delivered including a circular fluorescent lamp, starter and radio-interference capacitor.
- with **electronic ballast**.
 - energy saving by 25%
 - prolonging light sources' life by 50%
 - starting without blinking etc.
 - constant luminous flux in wide spectrum without stroboscopic effect



SK

INDOOR - CIRCULAR fluorescent lighting fittings for compact lamps



Use:

Flats, corridors, public rooms, WC and bathrooms

Description, optics:

The body of the fitting is made of Polycarbonate (PC), of PP with DISCUS type.

Type FANTA is designed for two PL lamps 9W, type SKY for one PL lamp 9W and DISCUS type for 2D lamp 21W with electronic ballast.

The diffuser is made of transparent Polycarbonate (type FANTA, SKY) or opalized PMMA. There is a sealing between body and diffuser.

The way of fitting's suspension:

- directly on ceiling or wall using two screws in prepared holes.



Order code	Type	Light sources	Total input [W]	Net weight [kg]	Dimensions [mm]		
					A	C	D
12610	SK 109 SKY	1x9 W	9	0,8	260 x 85	70	230
12620	SK 209 FANTA	2x9 W	18	1,4	250	80	150
12655	SK 2D21 DISCUS	21W2D	21	0,5	255	80	175



IP54



230 V
50 Hz



2,5 mm²

t_a
30°C



Correct choice of lamp spectrum	Shot light 79	Warm white					Neutral white				Daylight			Hortcul light 54 2A
		29 3	827 1B	927 1A	830 1B	930 1A	25 2A	33 2B	840 1B	940 1A	950 1A	865 1B	965 1A	
Groceries					●			●						
Shops with meat	●							●						
Shops with textile, leather				●	●			●						
Cosmetics, hairdressing				●	●			●						
Workshops								●			●			
Printing, graphical trades								●		●	●	●		
Stores								●						
Paint shops								●			●	●		
Colour testing											●	●	●	
Plant growers													●	
Dwellings, restaurants			●	●										
Offices, schools					●			●						
Museums						●			●					
Hospital wards				●	●									
Treatment rooms									●					
Sport areas					●			●						
Exterior lighting		●						●					●	

Recommended ● Suitable

Comparison table of light sources' efficiency in Trevos lighting fittings						
Light sources [W]	Rated current [A]		System power input [W]	Source's luminous flux [lm]	System efficiency [lm / W]	
a) modification with standard ballast:						
	without compensation	with compensation				
1x18	0,36	0,15	25	1350	54	
1x36	0,42	0,23	40	3350	84	
1x58	0,60	0,29	60	5200	87	
2x18	0,38	0,23	45	2700	60	
2x36	0,82	0,45	85	6700	79	
2x58	1,22	0,62	130	10400	80	
3x36	1,26	0,68	125	10050	80	
4x18	0,80	0,47	85	5400	64	
1x22	0,41	0,20	30	1250	42	
1x32	0,42	0,23	40	2050	51	
32+40	0,78	0,38	85	4950	58	
b) modification with electronic ballast T8 (TLD):						
1x18		0,08	15	1350	90	
1x36		0,16	30	3350	112	
1x58		0,24	50	5200	104	
2x18		0,19	35	2700	77	
2x36		0,33	70	6700	96	
2x58		0,49	110	10400	95	
4x18		0,32	70	10050	77	
1x22		0,09	18	1250	71	
1x32		0,13	25	2050	82	
1x40		0,18	35	2900	83	
c) modification with electronic ballast T5-FH (TL5-HE):						
1x14		0,08	10	1350	135	
1x21		0,11	20	2100	105	
1x28		0,15	25	2900	116	
1x35		0,18	35	3650	104	
2x14		0,15	25	2700	108	
2x28		0,28	55	5800	106	
2x35		0,35	70	7300	104	
modification with electronic ballast T5-FQ (TL5-HO):						
1x24		0,12	20	2000	100	
1x54		0,26	50	5000	100	
2x24		0,23	45	4000	89	
2x54		0,50	105	10000	95	
modification with electronic ballast T5-FC (TL5-Circular lamps):						
1x22		0,11	15	1800	120	
22+40		0,32	65	5000	77	
1x55		0,27	55	4200	76	



SB

INDOOR - LINEAR
fluorescent lighting fittings
with a switch



Use:

Flats, offices, corridors, kitchens, in a furniture, wardrobes, shop-windows etc.

Description, optics:

The **body** of the lighting fitting is made of aluminium profile, powder coated with comaxit. End plastic caps are delivered in the same colour - white, black and red. The **diffuser** is made of polymethylmethacrylate (PMMA) and it is fixed directly on fluorescent tube. The **switch** is built in the end cap.

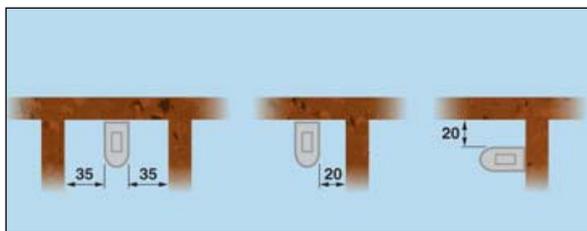
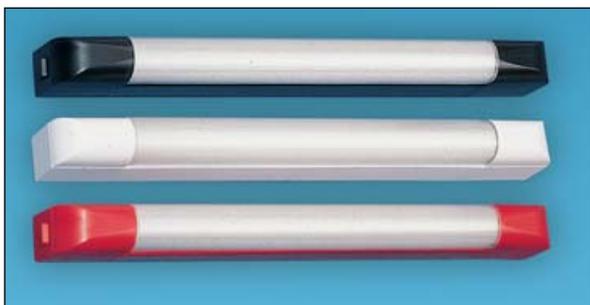
Fixing of the fitting on a surface

- using two wood screws in prepared holes with distance washers.

Modifications:

- **Basic type** is delivered including linear fluorescent lamp and starter.
- **With electronic ballast**
 - energy saving by 25%
 - prolonging light sources' life by 50%
 - automatic switching-off when the fluorescent tube is defected
 - starting without blinking etc.
 - constant luminous flux in wide spectrum without stroboscopical effect.
- **With dimmable electronic ballast**



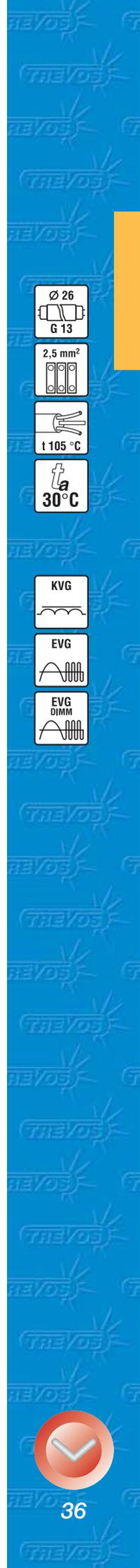
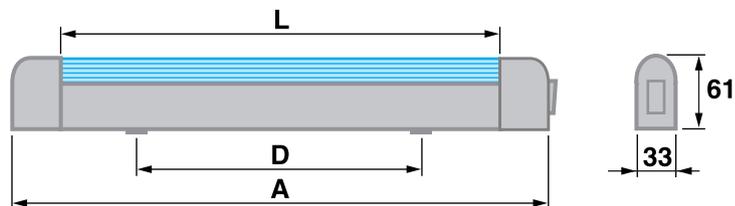


Limits for installation

Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Net weight [kg]	Dimensions [mm]		
						A	D	L
<i>basic LPF wired type</i>		<i>(HPF wired)</i>						
12210	SB 110	1x10	0,21	15	0,7	410	215	300
12220	SB 115	1x15	0,33	25	1,0	520	260	405
12230	SB 118	1x18	0,38 (0,18)	28	1,1	670	405	560
12240	SB 130	1x30	0,35 (0,19)	38	1,3	975	710	865
12250	SB 136	1x36	0,45 (0,26)	40	1,5	1280	1015	1170
12260	SB 158	1x58	0,60 (0,30)	65	1,9	1580	1310	1470
<i>with electronic ballast</i>								
12215	SB 110 E	1x10	0,05	8	0,4	410	215	300
12225	SB 115 E	1x15	0,08	15	0,7	520	260	405
12235	SB 118 E	1x18	0,08	15	0,8	670	405	560
12245	SB 130 E	1x30	0,16	30	1,0	975	710	865
12255	SB 136 E	1x36	0,16	30	1,2	1280	1015	1170
12265	SB 158 E	1x58	0,24	50	1,6	1580	1310	1470

Colour codes: xxxx 1 = white, xxxx 3 = black, xxxx 4 = red.

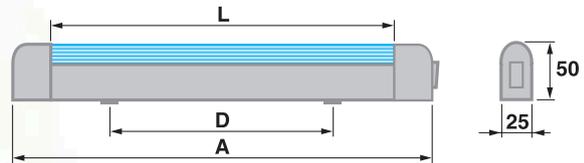
Luminous efficiency with SB 136 type = 70 %



SB - T5

INDOOR - LINEAR

fluorescent lighting fittings with a switch



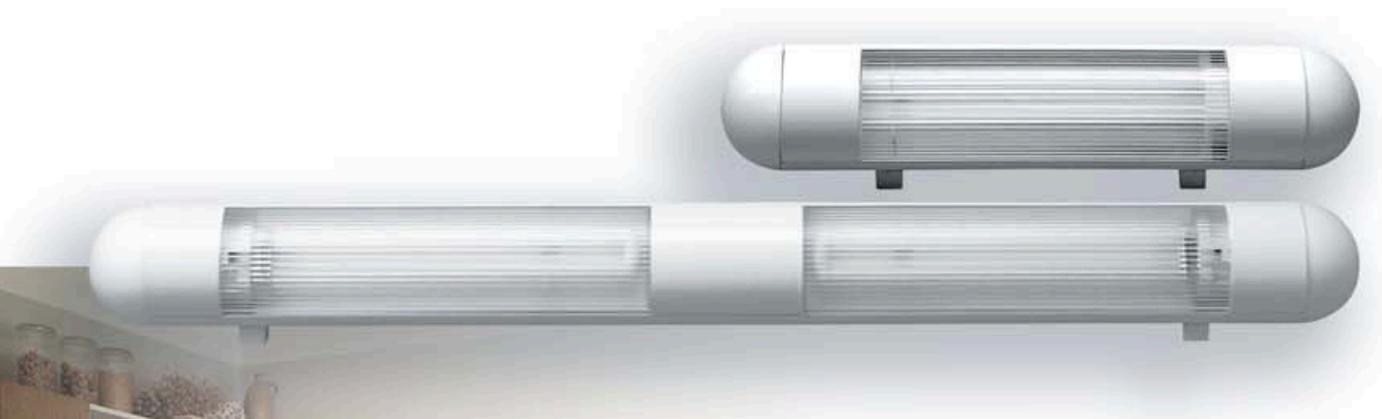
Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Net weight [kg]	Dimensions [mm]		
						A	D	L
with electronic ballast for T5 lamps -FH (TL5-HE)								
12410	SBK 114 ET5	1x14	0,08	10	0,4	630	350	520
12420	SBK 121 ET5	1x21	0,11	20	0,6	930	650	820
with electronic ballast for T5 lamps -FQ (TL5-HO)								
12415	SBK 124 ET5	1x24	0,12	20	0,4	630	350	520

Luminous efficiency with SB 124 ET5 type = 75 %



RPK kompakt

INDOOR LIGHTING FITTINGS
for PL lamps



Use:

Luminaires are used to illuminate wardrobes, mirrors, dressing tables, corridors, kitchens working desks etc.

Description:

The **body** of the lighting fitting is identical with RPK system aluminium profile (d = 65mm). End caps are plastic. The body is equipped with polished aluminium reflector which increases the light efficiency of the fitting. The **diffuser** is made of an extruded acrylic profile which fits into the body.

Fixing of the fitting: After fixing holders on the surface the fitting can be adjusted in various angles.

Modifications:

This economic lighting fitting is designed for one PL lamp 7-11W or two lamps in twin modification.

Colour possibilities: white, black, red and other colours according to RAL scale.

End caps are only white or black.



Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Luminous efficiency [%]	Net weight [kg]	Dimensions [mm]	
							A	D
13210	RPK 111	1x11	0,19	22	62	0,8	385	160
13220	RPK 211	2x11	0,37	42	62	1,6	685	585

Colour codes: xxxx 1 = white, xxxx 3 = black, xxxx 4 = red, xxxx 6 = ochre, xxxx 9 = brown

RPK

INDOOR MODULAR
fluorescent lighting fittings
tube 65 mm



Use:

Various shapes can be achieved by an installation of several RPK lighting fittings. Then they are used to illuminate representative interiors, offices, administrative buildings, exhibition halls and sales rooms etc.

Separately installed fitting with rise and fall suspension is suitable for illumination of working desks with a possibility to adapt the luminous intensity to an individual need. Lighting fitting can be also individually fixed on a wall using adjustable side holders

Description:

The **tube** of the lighting fitting is made of circular aluminium profile (d = 65mm). The tube consist of two parts, the bottom cover can be removed during installation to enable the access to terminal block and connection with joints. An empty tube of different length can be also used to connect the fittings into various configurations.

The tube is powder coated.

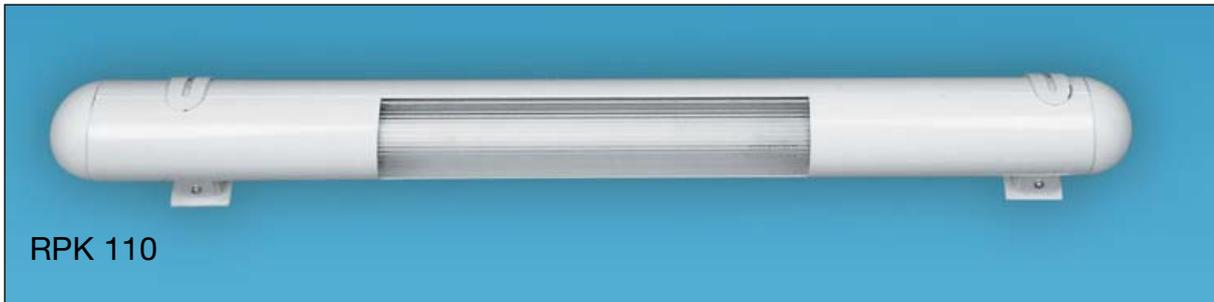
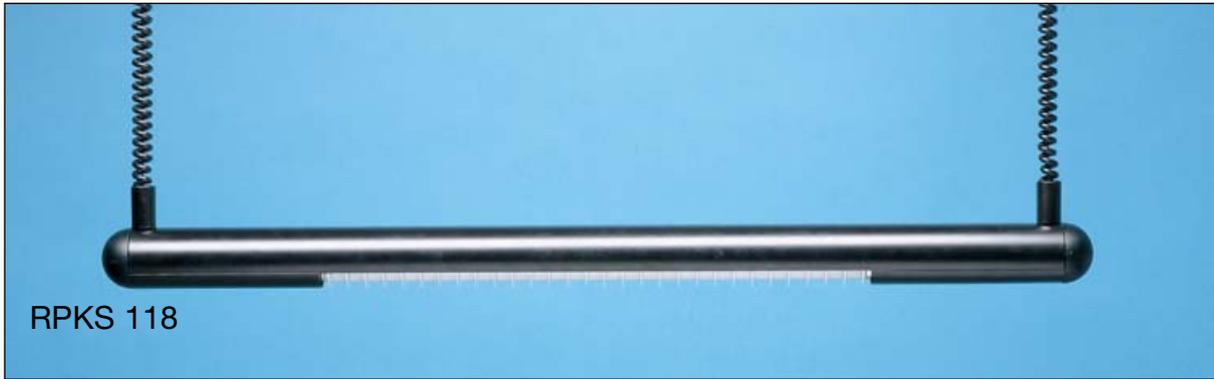
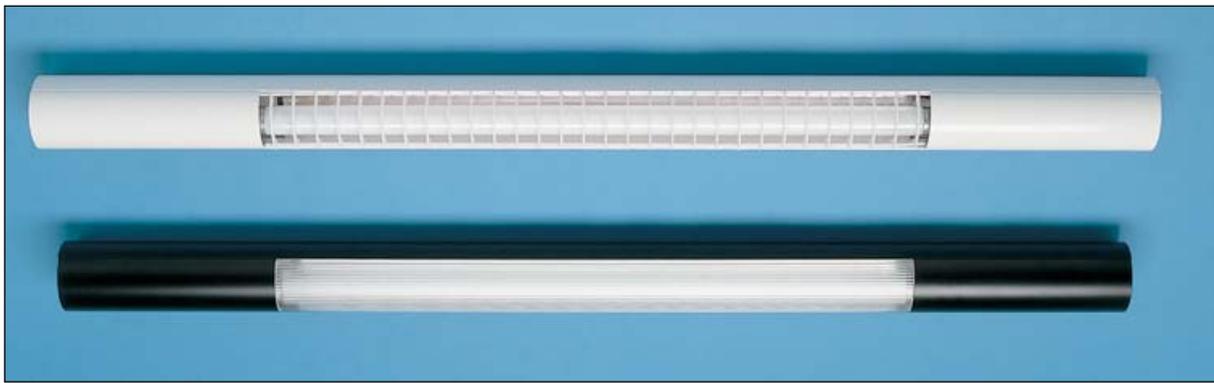
The **parabolic reflector** inside the tube made of polished aluminium increases luminous intensity so the fittings can be also installed in higher level to keep a required luminous efficiency.

The fitting is provided with an opened white **plastic louvre** (code 130xx) or it can be delivered as transparent **acrylic diffuser** (code 133xx) on demand.

Modifications:

- **Basic type** - Three-phases through wiring and two four-poles terminal blocks at both ends of the fitting are included.
- With **electronic ballast** providing advantages of saving energy, longer light sources' life, constant luminous flux, immediate start etc.





The way of fitting's suspension:

- Standard suspension on a ceiling into various configurations.
- Individual fitting with rise and fall suspension.
- With side holders for fixing on a wall.

Colour possibilities: white, black and red.

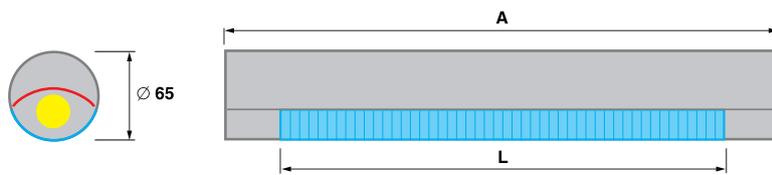
Other colours according to RAL scale can be agreed.

The plastic louvre can be only white. On demand also chrome-plated louvre can be delivered.

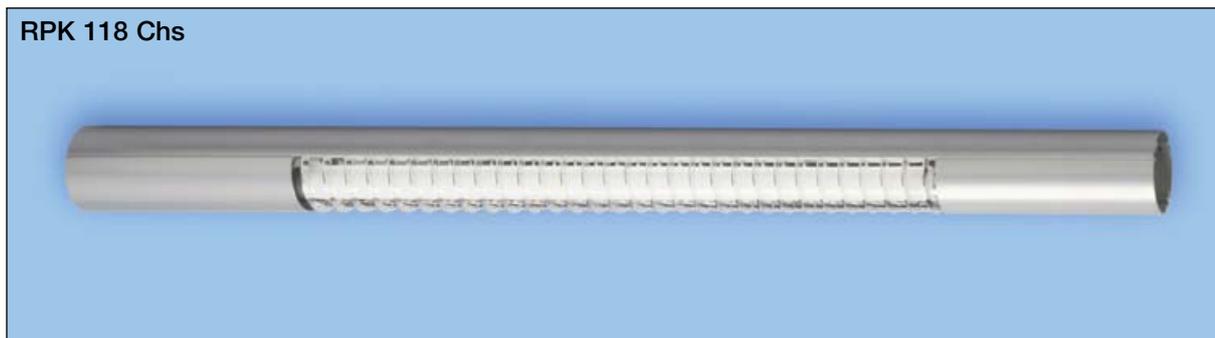


Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Net weight [kg]	Dimensions [mm]	
						A	L
13010	RPK 118	1x18	0,36	25	1,6	975	575
13020	RPK 136	1x36	0,42	40	2,3	1575	1150
13030	RPK 158	1x58	0,60	60	3,1	1975	1440
<i>with electronic ballast</i>							
13015	RPK 118 E	1x18	0,08	15	1,3	975	575
13025	RPK 136 E	1x36	0,16	30	2,0	1575	1150
13035	RPK 158 E	1x58	0,24	50	2,7	1975	1440
<i>with rise and fall suspension</i>							
13050	RPKS 118	1x18	0,36	25	2,2	1040	575
13060	RPKS 136	1x36	0,42	40	2,7	1640	1150
13070	RPKS 158	1x58	0,60	60	3,5	2040	1440
<i>with side holders and switch</i>							
13380	RPK 110	1x10	0,21	15	1,6	740	440

Order code 130xx - plastic louvre
133xx - acrylic diffuser
Luminous efficiency with: - RPK 136 with louvre = 72 %
- RPK 136 AC with acrylic I diffuser = 66 %
Colour codes: xxxx 1 = white, xxxx 2 = silver, xxxx 3 = black, xxxx 4 = red



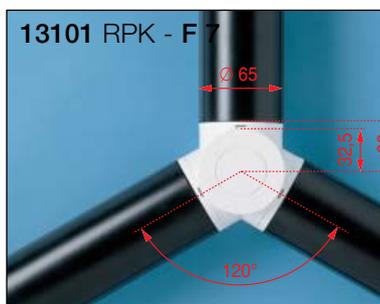
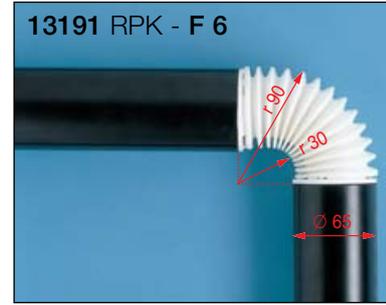
Example of an application of spot-lights



Joins and suspensions

Plastic joints in cube or knee shape are used to connect fittings or empty tubes into designed configurations. Joints are marked **F1 - F7** and are packed in PVC bags together with set of screws, washers, nuts, metal carrying part and also steel wire and ceiling suspension cover. Suspension wire and plastic end cap can be ordered separately. Two fittings can be connected directly without joint using two metal disks, marked **F 02**. Connecting empty tube is delivered in required length and colour, maximum length is 2000 mm. Colours of joints and suspension parts can be white or black only.

Fluorescent lighting fittings RPKS equipped with two rise and fall suspensions are completely assembled in our factory, one suspension is provided with a terminal block.



TS

INDOOR MODULAR fluorescent lighting fittings tube 85 mm



Use:

TS fluorescent lighting fittings can be installed individually or in various configurations. The required shape can be achieved using joints of the same profile. Half of the fitting's profile can be also built into a lower ceiling.

The configurations with TS lightings are suitable for illumination of representative interiors, offices, administrative buildings, department stores, libraries, exhibition halls and sales rooms etc.

Lighting fittings can be combined with spot-lights which are fixed on empty profile.

Description:

The **tube** of the lighting fitting and joints are made of circular aluminium profile (d = 85mm). The tube consist of two parts, the bottom cover can be removed during installation to enable the access to terminal block and connection with joints. An empty tube of different length can be also used to connect the fittings into various configurations or for fixing of spot-lights.

The tube and joints are powder coated.

The **parabolic reflector** inside the tube made of polished aluminium increases luminous intensity so the fittings can be also installed in higher level to keep a required luminous efficiency.

The lighting fitting is provided with aluminium **louvre** of white colour.

Modifications:

- **Basic type** - single or double tube - two-phases through wiring and two screwless terminal blocks at both ends of the fitting are included.
- With **electronic ballast** providing advantages of saving energy, longer light sources' life, constant luminous flux, immediate start etc.
- With **electronic ballast** for **T5** fluorescent lamps (d=16 mm) - this modification brings another saving of energy and achieves even higher light efficiency.
- With **dimnable electronic ballast** (ER)
- With **dimnable electronic ballast and T5 lamps** (ER T5)



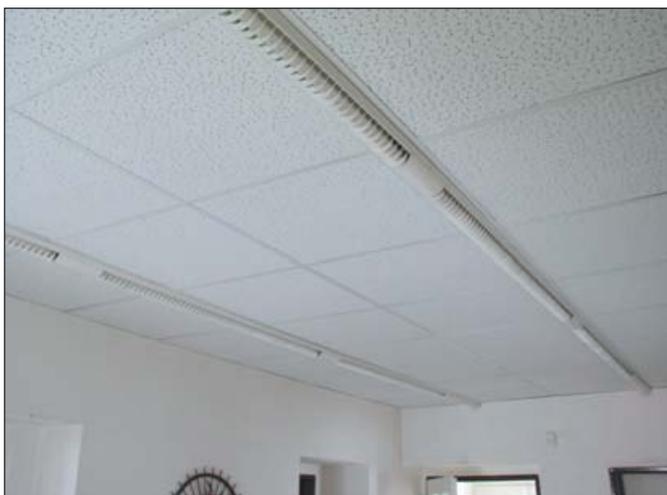


Colour possibilities: - Lighting fittings and joints are produced in white, red and black colour.
 - Other colours according to RAL scale can be agreed.

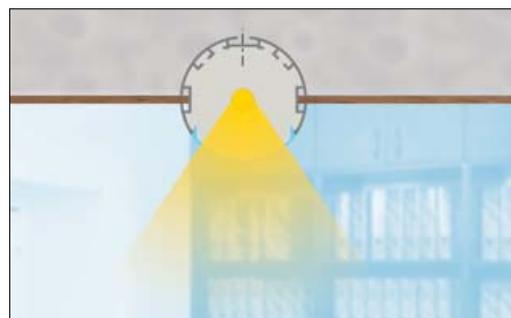
Example of a combination with spot-lights

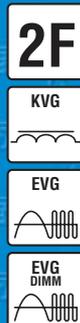
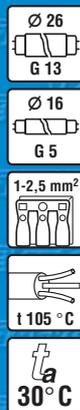


Installation into a lower-ceiling



Svítlidla je možno z časti (polovinu profilu) zapustit do podhledu. Prostor pro instalaci svítidla (75 - 80 mm) je třeba vymezit při konstrukci podhledu.

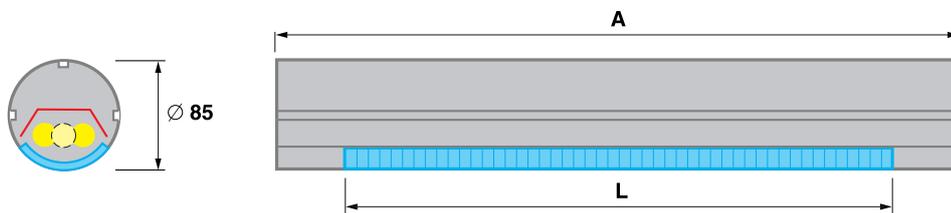




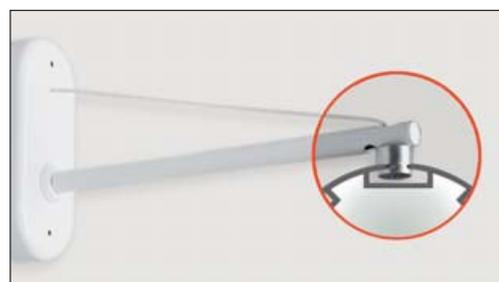
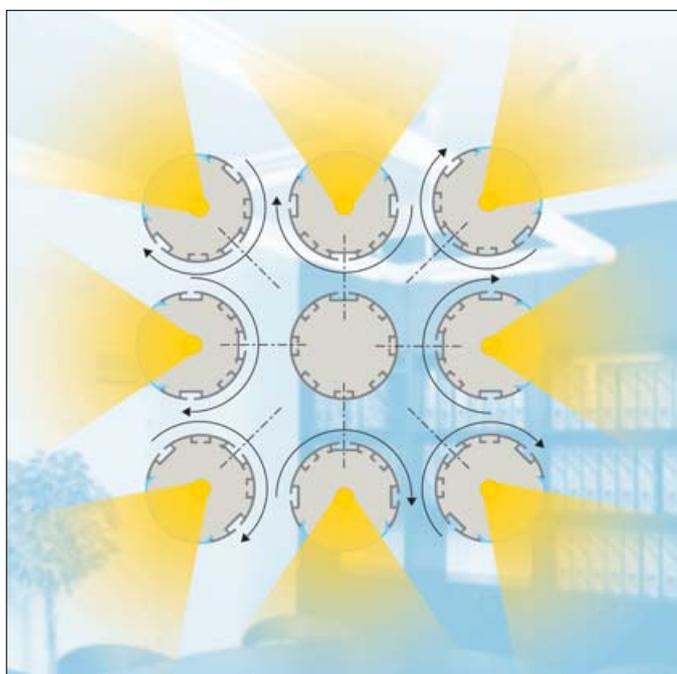
Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Net weight [kg]	Dimensions [mm]	
						A	L
14010	TS 118	1x18	0,36	25	1,8	760	560
14020	TS 136	1x36	0,42	40	2,7	1 370	1170
14030	TS 158	1x58	0,60	60	3,5	1 670	1470
14040	TS 218	2x18	0,38	45	1,9	760	560
14050	TS 236	2x36	0,82	85	3,3	1 370	1170
14060	TS 258	2x58	1,22	130	4,4	1 670	1470
with electronic ballast							
14015	TS 118 E	1x18	0,08	15	1,5	760	560
14025	TS 136 E	1x36	0,16	30	2,4	1 370	1170
14035	TS 158 E	1x58	0,24	50	3,0	1 670	1470
14045	TS 218 E	2x18	0,19	35	1,6	760	560
14055	TS 236 E	2x36	0,33	70	2,5	1 370	1170
14065	TS 258 E	2x58	0,49	110	3,1	1 670	1470
with electronic ballast and T5 lamps							
14510	TS 114 ET5	1x14	0,08	10	1,5	760	555
14520	TS 128 ET5	1x28	0,15	25	2,4	1 370	1165
14530	TS 135 ET5	1x35	0,18	35	3,0	1 670	1465
14540	TS 214 ET5	2x14	0,15	25	1,6	760	555
14550	TS 228 ET5	2x28	0,28	55	2,5	1 370	1165
14560	TS 235 ET5	2x35	0,35	70	3,1	1 670	1465

Colour codes: xxxx 1 = white, xxxx2 = silver, xxxx 3 = black, xxxx 4 = red

Luminous efficiency with: - TS 136 = 72 %, TS 236 = 58 % (T8 lamps)
- TS 135 = 70 %, TS 235 = 60 % (T5 lamps)



Installation possibilities



Installation of the lighting fitting on the wall suspension.

Variability of luminous flux can be achieved by turning of the lighting fitting in joints or empty tubes (min 45°).



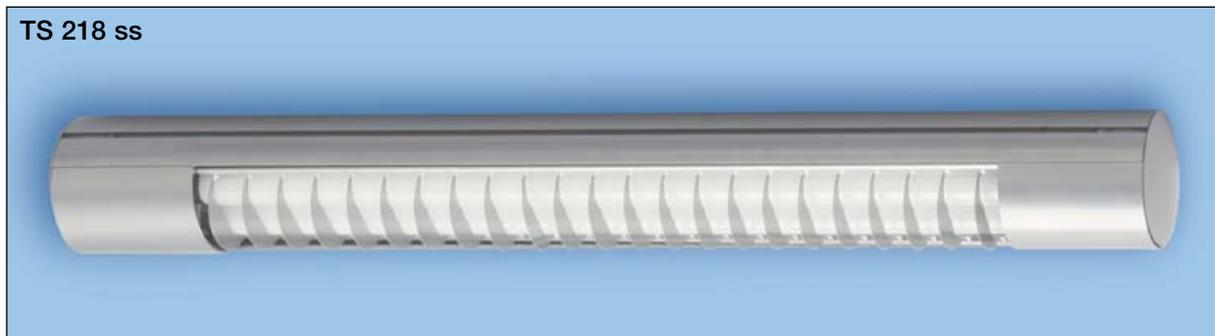
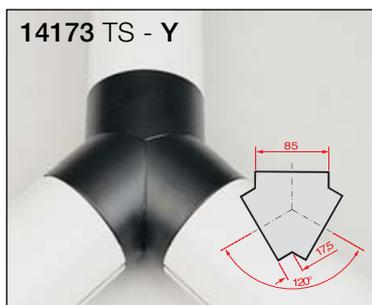
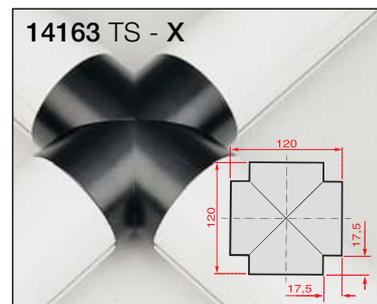
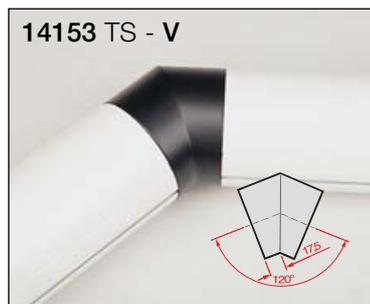
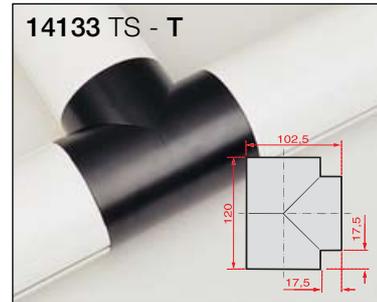
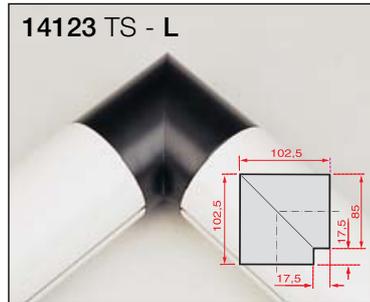
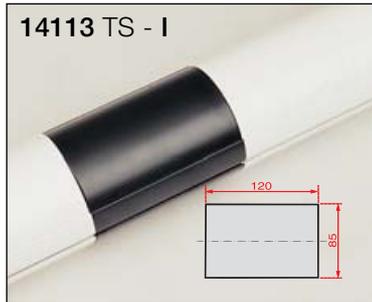
Joins and suspensions

Standard **I, L, T, X, Y joints** are used to connect fittings or empty tubes into designed configurations. The variability is completed with **V joint** 91 °-175 ° and **U joint** 45 °-89 °, delivered on demand. The joints are delivered together with metal connecting parts, screws and washers which are also used for a direct connection of two lighting fittings (marked OS-O). An empty tube of a different length is available as **I joint**.

The **ceiling suspension (Z1)** is delivered with 1,10 m long steel wire (other length on demand), wire clamps and a plastic ceiling cover in white or black colour. Twisted connection cords for power supply are possible.

Metal **wall suspensions** are produced in length of 200 mm (**Z2**) and 700 mm (**Z3**), in white or black colour. The end of the tube without the joint can be closed with a metal end cap in the same colour as the tube (marked OS-K).

Colour possibilities of joints and end caps: the same as fitting's body.



OS

ZÁŘIVKOVÁ SVÍTIDLA INTERIÉROVÁ ZÁVĚSNÁ

modulový systém - ovál 165 x 70 mm



Use:

OS fluorescent lighting fittings can be installed individually or in various configurations. The required shape can be achieved by using joints of the same profile. The configurations with OS luminaires are suitable for an illumination of representative interiors, offices, administrative buildings, department stores, libraries, exhibition halls and sales rooms etc.

Lighting fittings can be combined with spot-lights which are fixed on a profile.

Description:

The **tube** of the lighting fitting and joints are made of **oval aluminium profile (165 x 70 mm)**. The tube consists of two parts, the bottom cover can be removed during an installation to enable an access to the terminal block and a connection with joints. An empty tube of a different length can be also used to connect the fittings into various configurations or for fixing of spot-lights. The tube and joints are powder coated.

Inside the tube there is the **parabolic reflector** made of polished aluminium. It increases a luminous intensity so the fittings can be also installed in a higher level to keep a required luminous efficiency. The lighting fitting is provided with an aluminium **louvre** of white colour.

- **Basic type** - single or double tube - two-phases through wiring and two screwless terminal blocks at both ends of the fitting are included.
- With **electronic ballast** providing advantages of saving energy, longer light sources' life, constant luminous flux, immediate start etc.
- With **electronic ballast** for **T5** fluorescent lamps (d=16mm) - this modification brings another saving of energy and achieve even higher light efficiency.
- **with dimmable electronic ballast (ER)**
- **with dimmable electronic ballast and T5 lamps (ER T5)**





Colour possibilities: - Lighting fittings and joints are produced in white and black colour.
 - Other colours according to RAL scale can be agreed.

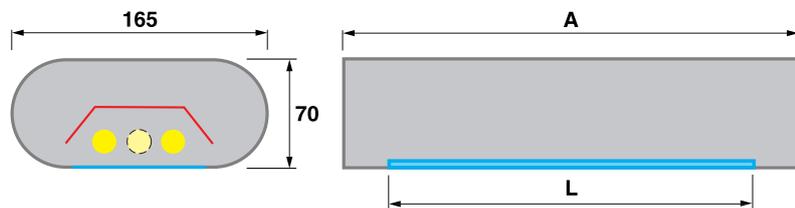
Possibilities of a combination with spot-lights





Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Net weight [kg]	Dimensions [mm]	
						A	L
15010	OS 118	1x18	0,36	25	2,7	730	550
15020	OS 136	1x36	0,42	40	4,5	1 340	1160
15030	OS 158	1x58	0,60	60	5,5	1 640	1460
15040	OS 218	2x18	0,38	45	2,9	730	550
15050	OS 236	2x36	0,82	85	4,8	1 340	1160
15060	OS 258	2x58	1,22	130	6,0	1 640	1460
<i>with electronic ballast</i>							
15015	OS 118 E	1x18	0,08	15	2,4	730	550
15025	OS 136 E	1x36	0,16	30	4,2	1 340	1160
15035	OS 158 E	1x58	0,24	50	5,0	1 640	1460
15045	OS 218 E	2x18	0,19	35	2,5	730	550
15055	OS 236 E	2x36	0,33	70	4,3	1 340	1160
15065	OS 258 E	2x58	0,49	110	5,1	1 640	1460
<i>with electronic ballast and T5 lamps</i>							
15510	OS 114 ET5	1x14	0,08	10	2,4	730	545
15520	OS 128 ET5	1x28	0,15	25	4,2	1 340	1155
15530	OS 135 ET5	1x35	0,18	35	5,0	1 640	1455
15540	OS 214 ET5	2x14	0,15	25	2,5	730	545
15550	OS 228 ET5	2x28	0,28	55	4,3	1 340	1155
15560	OS 235 ET5	2x35	0,35	70	5,1	1 640	1455

Colour codes: xxxx 1 = white, xxxx2 = silver, xxxx 3 = black, xxxx 4 = red



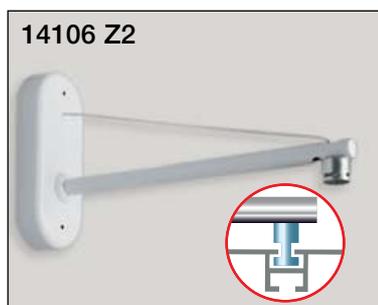
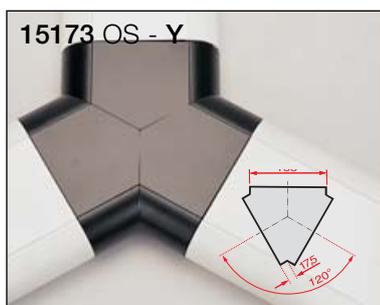
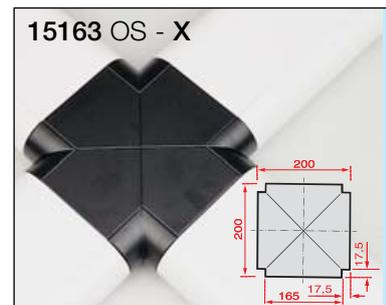
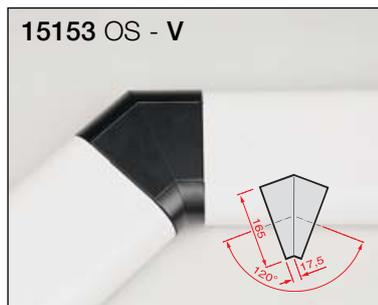
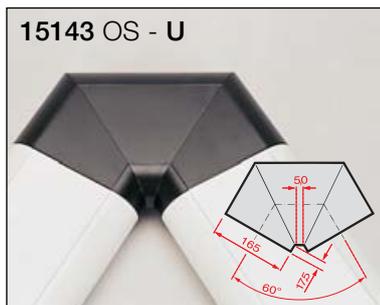
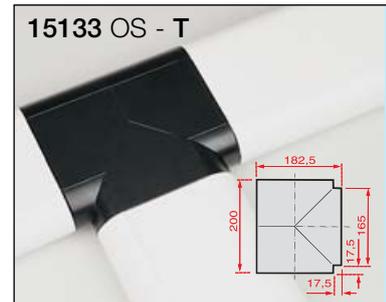
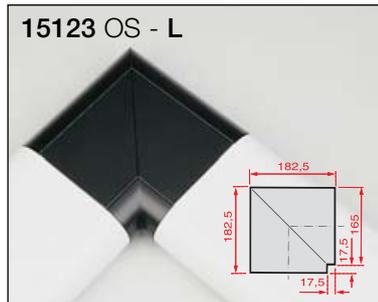
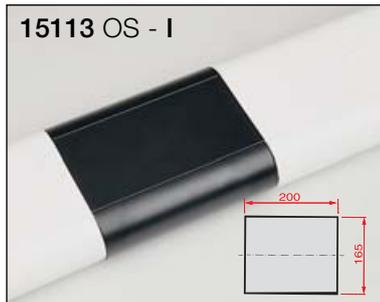
Joins and suspensions

Standard **I, L, T, X, Y joints** are used to connect fittings or empty tubes into designed configurations. The variability is completed with **V joint** 91°-175° and **U joint** 45°-89°, delivered on demand. The joints are delivered together with metal connecting parts, screws and washers which are also used for a direct connection of two lighting fittings (marked OS-O). An empty tube of a different length is available as **I joint**.

The **ceiling suspension (Z1)** is delivered with 1,10 m long steel wire (other length on demand), wire clamps and a plastic ceiling cover in white or black colour. Twisted connection cords for power supply are possible.

Metal **wall suspensions** are produced in length of 200 mm (**Z2**) and 700 mm (**Z3**), in white or black colour. The end of the tube without the joint can be closed with a metal end cap in the same colour as the tube (marked OS-K).

Colour possibilities of joints and end caps: the same as fitting's body.



standard **Z1** ceiling suspension

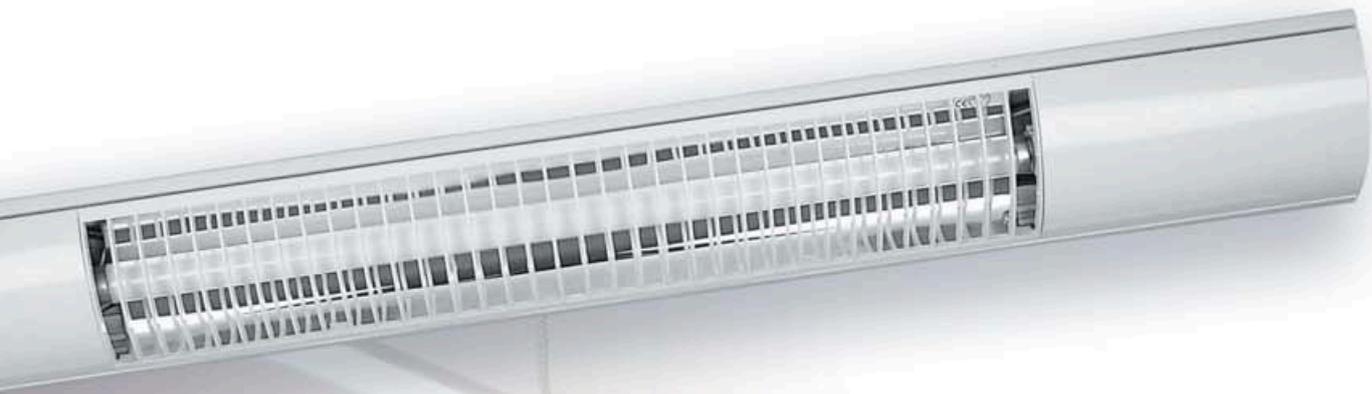


MO

INDOOR MODULAR

fluorescent lighting fittings

ellipse 130 x 65 mm



Use:

MO fluorescent lighting fittings can be installed individually or in various configurations. Required shape can be achieved using joints of the same profile. The configurations with MO lightings are suitable for illumination of representative interiors, offices, administrative buildings, exhibition halls and sales rooms etc.

Description:

Tube of the lighting fitting and joints are made of ellipse aluminium profile (130 x 65 mm). The tube consist of two parts, the bottom cover can be removed during installation to enable the access to terminal block and connection with joints. An empty tube of different length can be also used to connect the fittings into various configurations or for fixing of spot-lights. The tube and joints are powder coated.

Parabolic reflector inside the tube made of polished aluminium increases luminous intensity so the fittings can be also installed in higher level to keep a required luminous efficiency.

The lighting fitting is provided with plastic **louvre** of white colour. On demand also chrome-plated louvre can be delivered.

Modifications:

- **Basic type** - Three-phases through wiring and two four-poles terminal blocks at both ends of the fitting are included.
- **With electronic ballast**
- **With electronic ballast for T5 fluorescent lamps.**





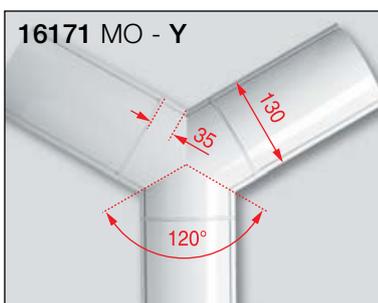
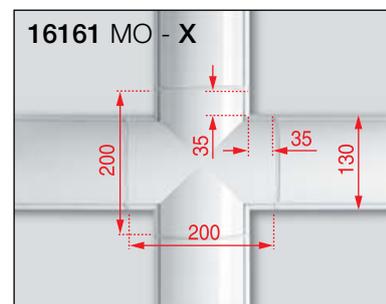
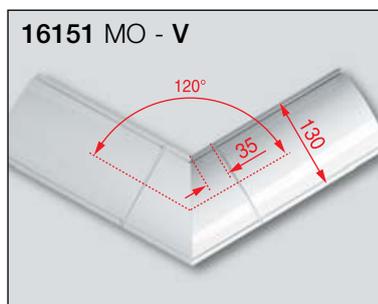
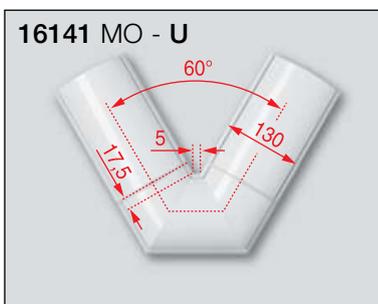
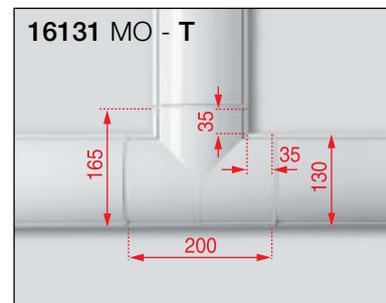
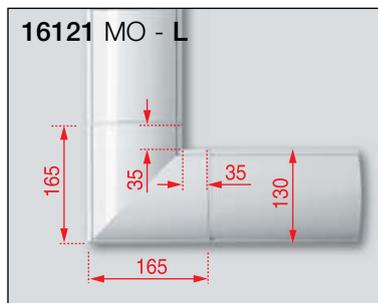
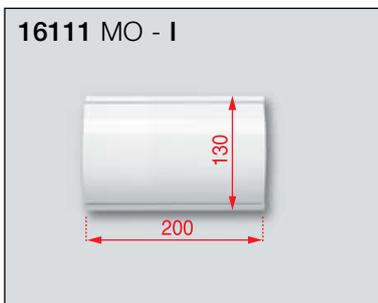
Colour possibilities: - Lighting fittings and joints are produced in white colour.
 - Other colours according to RAL scale can be agreed.

Joins and suspensions

Standard **I, L, T, X, Y joints** are used to connect the fittings or the empty tubes into designed configurations. Also **V** and **U** joints are delivered on demand. The joints are delivered together with metal connecting parts and a distance plastic washer, which are used also for a direct connection (marked **MO-S**). An empty tube in different length is available as **I** joint.

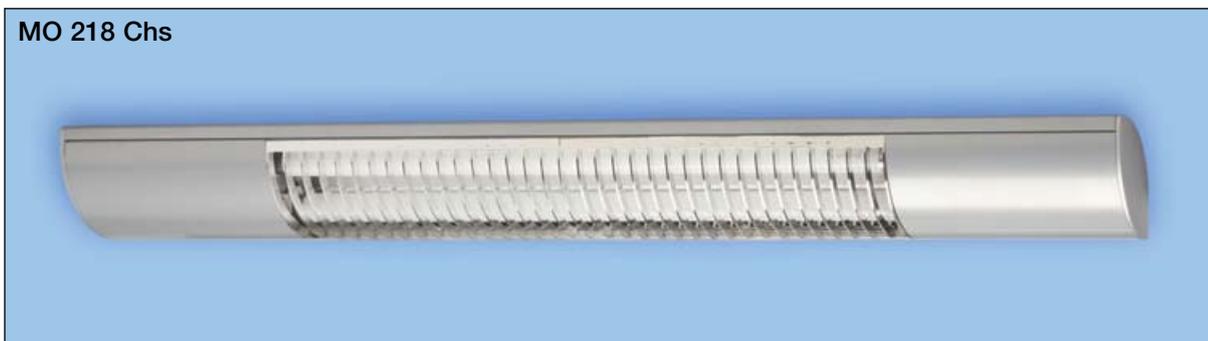
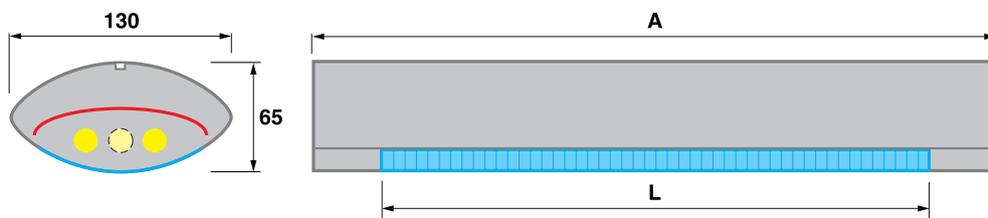
The **ceiling suspension (Z4)** is delivered with 1,10 m long steel wire (other length on demand), wire clamps and a plastic ceiling cover of white or black colour.

The end of the tube without the joint can be closed with a plastic end cap of white or black colour (**MO-K**).



Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Net weight [kg]	Dimensions [mm]	
						A	L
16010	MO 118	1x18	0,36	25	2,6	1000	685
16020	MO 136	1x36	0,42	40	3,5	1600	1185
16030	MO 158	1x58	0,60	60	4,8	2000	1485
16040	MO 218	2x18	0,38	45	3,3	1000	685
16050	MO 236	2x36	0,82	85	4,4	1600	1185
16060	MO 258	2x58	1,22	130	5,8	2000	1485
<i>with electronic ballast</i>							
16015	MO 118 E	1x18	0,08	15	2,3	1000	685
16025	MO 136 E	1x36	0,16	30	3,2	1600	1185
16035	MO 158 E	1x58	0,24	50	4,3	2000	1485
16045	MO 218 E	2x18	0,19	35	2,9	1000	685
16055	MO 236 E	2x36	0,33	70	3,4	1600	1185
16065	MO 258 E	2x58	0,49	110	4,6	2000	1485

Colour codes: xxxx 1 = white, xxxx2 = silver, xxxx 3 = black, xxxx 4 = red
Luminous efficiency with:: - MO 236 = 53 %, MO 258 = 57 % (T8 lamps)





ST

BATTEN

fluorescent lighting fittings



IP20

230 V
50 Hz



Use:

ST fluorescent lighting fittings are used to illuminate production halls, stocks, supermarkets, corridors and other areas where it is suitable to create a long line of fittings.

Description:

The body of the lighting fitting is made of both sides painted steel sheet. The construction of the fitting follows the requirement of an easy and quick mounting. The body can be equipped with the outside terminal blocks type Wieland built in both ends of the fitting (modification ST S). Fittings can be connected with Wieland GST 18i connection clamp or with connection cables according to the distance between individual luminaires.

Modifications:

ST fittings are delivered in single or double tube modification, LPF or HPF wired.

1) Basic modification suitable for installation of individual fittings

- a) ST xxx - without reflector - with plastic end caps
- b) ST xxx R - with reflector - with plastic end caps

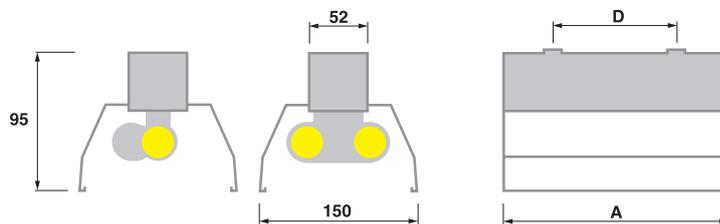
2) For installation into long lines

- a) ST xxx S - without reflector - with built in outside terminal blocks Wieland
- b) ST xxx SR - with reflector - with built in outside terminal blocks Wieland

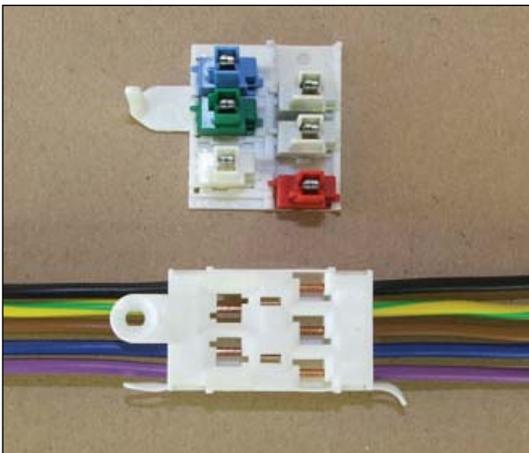
Colour possibilities: White powder colour RAL 9001, which meets all requirements for a colour durability and a mechanical resistance.



Order code	Type	Light sources [W]	Dimensions [mm]		Net weight [kg]	Order code	Type	Reflector's weight [kg]
			A	D				
basic modification - without reflector					with reflector (R)			
17010	ST 118	1x18	640	450	1,5	17110	ST 118 R	0,5
17020	ST 136	1x36	1250	600	2,1	17120	ST 136 R	1,2
17030	ST 158	1x58	1550	900	3,0	17130	ST 158 R	1,5
17040	ST 218	2x18	640	450	1,6	17140	ST 218 R	0,5
17050	ST 236	2x36	1250	600	3,0	17150	ST 236 R	1,2
17060	ST 258	2x58	1550	900	4,1	17160	ST 258 R	1,5
pmodification with outside terminal blocks Wieland - quick installation (S)								
17210	ST 118 S	1x18	640	450	1,5	17310	ST 118 SR	0,5
17220	ST 136 S	1x36	1250	600	2,1	17320	ST 136 SR	1,2
17230	ST 158 S	1x58	1550	900	3,0	17330	ST 158 SR	1,5
17240	ST 218 S	2x18	640	450	1,6	17340	ST 218 SR	0,5
17250	ST 236 S	2x36	1250	600	3,0	17350	ST 236 SR	1,2
17260	ST 258 S	2x58	1550	900	4,1	17360	ST 258 SR	1,5



Module "Bodybuilder" with system of connection in the body
modification with electronic ballast



Order code	Type	Light sources [W]	Length A [mm]	Weight [kg]	Order code	Type	Weight with reflector [kg]
lighting fitting unit with body cover - without reflector				with reflector and louvre (RL)			
17520	STB 136 E	1x36	1242	1,2	17720	STB 136 RL E	2,4
17530	STB 158 E	1x58	1542	1,7	17730	STB 158 RL E	3,2
17540	STB 236 E	2x26	1242	1,2	17740	STB 236 RL E	2,4
17560	STB 258 E	2x58	1542	1,7	17750	STB 258 RL E	3,2
body				through wiring set			
17502	STB 2484		2484	1,4	17922	3F STB 2484	0,1
17503	STB 3084		3084	2,0	17932	3F STB 3084	0,1
body cover							
17512	STB 1242		1242	0,3			
17513	STB 1542		1542	0,4			



Mod. for quick connection of the fittings through external terminal block

GST 18 - compact connection system by Wieland company

- enables a quick and easy installation without a previous disassembly
- enables to realize the connection of lighting fittings in a small space
- enables the change of length of the connection
- all the connections have a pawl not to be plucked out according to EN 60320, IEC 320

Technical parametres

250 V, 16 A, IP 20, three poles 3

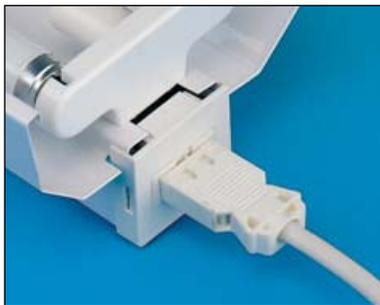
- permanent permissible warming of wire - 70 °C

- heat wire insulation - 100 °C

Load of wire parametres

- supply cable - $3 \times 1,5 \text{mm}^2 = 0,16 \text{ kWh} + 0,4 \text{ kWh/m}$

- connection cable - $3 \times 1,5 \text{mm}^2 = 0,08 \text{ kWh} + 0,4 \text{ kWh/m}$



Basic informations about Wieland GST 18 connection system

Order code	Type	Modification	Délka [m]
17401	GST 18i - S1	3-pole connection terminal block	
17421	GST 18 - S 21	connection cable 3x1,5mm ² (plug/plug)	1
17422	GST 18 - S 22	connection cable 3x1,5mm ² (plug/plug)	2
17423	GST 18 - S 23	connection cable 3x1,5mm ² (plug/plug)	3
17424-8	GST 18 - S 24-28	connection cable 3x1,5mm ² (plug/plug)	4-8
17431	GST 18 - S 31	connection cable 3x1,5mm ² (plug/free end)	1
17432	GST 18 - S 32	connection cable 3x1,5mm ² (plug/free end)	2
17433	GST 18 - S 33	connection cable 3x1,5mm ² (plug/free end))	3
17434-8	GST 18 - S 34-38	connection cable 3x1,5mm ² (plug/free end)	4-8

Longer cables than 8 m can be delivered on demand.



PSV

RECESSED
fluorescent lighting fittings



Use:

PSV fluorescent lighting fittings are constructed to be **recessed to standard lower ceiling systems 600 x 600 mm**. A suspended lower ceiling system with recessed PSV fittings is very aesthetic, makes an effective sound insulation and enables to cover electrical, telephone, air and other installations. The lighting fittings can be used either in production halls, in offices or in department stores.

Description:

The body of the lighting fitting is formed of a bended and welded steel sheet. It is powder coated with white colour.

The optics of the fitting depends on a chosen shape and a modification of an aluminium louvre.

The body can be also covered with a plastic diffuser - made of transparent or opal acrylic.

Types of louvre:

- **LA** - polished aluminium louvre
- **PAR** - parabolic high polished aluminium louvre
- **OPAL** - acrylic diffuser

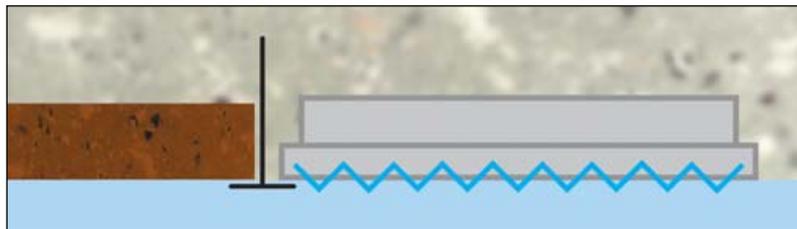
Modifications:

- **basic modification** - HPF wired, equipped with a screwless terminal block, a radio-interference capacitor and starters
- **with electronic ballast** - providing advantages of saving energy, longer light sources' life, constant luminous flux, immediate start etc.
- **with dimmable electronic ballast**

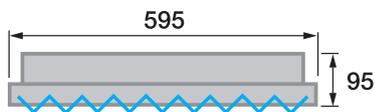




Order code	Type svítidla	Light sources [W]	Rated current [A]	Total input [W]	Net weight [kg]	Dimensions [mm]
<i>basic HPF wired type</i>						
18010	PSV 418 LA	4x18	0,47	85	4,6	595 x 595
18040	PSV 418 PAR	4x18	0,47	85	4,6	595 x 595
18030	PSV 418 OPAL	4x18	0,47	85	4,6	595 x 595
18110	PSV 236 LA	2x36	0,45	85	4,8	295 x 1185
18140	PSV 236 PAR	2x36	0,45	85	4,8	295 x 1185
18130	PSV 236 OPAL	2x36	0,45	85	4,8	295 x 1185
18210	PSV 218 LA	2x18	0,23	45	2,6	295 x 595
18240	PSV 218 PAR	2x18	0,23	45	2,6	295 x 595
18230	PSV 218 OPAL	2x18	0,23	45	2,6	295 x 595
<i>with electronic ballast</i>						
18015	PSV 418 LA E	4x18	0,32	70	3,8	595 x 595
18045	PSV 418 PAR E	4x18	0,32	70	3,8	595 x 595
18035	PSV 418 OPAL E	4x18	0,32	70	3,8	595 x 595
18115	PSV 236 LA E	2x36	0,33	70	4,0	295 x 1185
18145	PSV 236 PAR E	2x36	0,33	70	4,0	295 x 1185
18135	PSV 236 OPAL E	2x36	0,33	70	4,0	295 x 1185
18215	PSV 218 LA E	2x18	0,19	35	2,2	295 x 595
18245	PSV 218 PAR E	2x18	0,19	35	2,2	295 x 595
18235	PSV 218 OPAL E	2x18	0,19	35	2,2	295 x 595

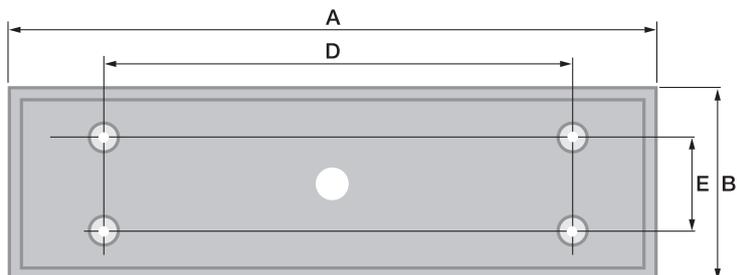


PSV



PSP

height 90 mm



PSP

SURFACE MOUNTED fluorescent lighting fittings



Order code	Type	Light sources [W]	Rated current [A]	Total input [W]	Net weight [kg]	Dimensions [mm]			
						A	B	D	E
<i>basic HPF wired type</i>									
19010	PSP 418 LA	4x18	0,47	85	4,8	615	615	415	415
19040	PSP 418 PAR	4x18	0,47	85	4,8	615	615	415	415
19110	PSP 236 LA	2x36	0,45	85	5,0	1225	340	1020	130
19140	PSP 236 PAR	2x36	0,45	85	5,0	1225	340	1020	130
19210	PSP 218 LA	2x18	0,23	45	2,6	615	305	415	130
19240	PSP 218 PAR	2x18	0,23	45	2,6	615	305	415	130
19310	PSP 258 LA	2x58	0,62	130	6,2	1525	340	1320	130
19340	PSP 258 PAR	2x58	0,62	130	6,2	1525	340	1320	130
19510	PSP 136 LA	1x36	0,23	40	2,8	1225	170	1020	75
19561	PSP 136 AS Monza	1x36	0,23	40	2,8	1230	195	1030	75
<i>with electronic ballast</i>									
19015	PSP 418 LA E	4x18	0,32	70	4,0	615	615	415	415
19045	PSP 418 PAR E	4x18	0,32	70	4,0	615	615	415	415
19115	PSP 236 LA E	2x36	0,33	70	4,2	1225	340	1020	130
19145	PSP 236 PAR E	2x36	0,33	70	4,2	1225	340	1020	130
19215	PSP 218 LA E	2x18	0,19	35	2,2	615	305	415	130
19245	PSP 218 PAR E	2x18	0,19	35	2,2	615	305	415	130
19315	PSP 258 LA E	2x58	0,49	110	5,0	1525	340	1320	130
19315	PSP 258 PAR E	2x58	0,49	110	5,0	1525	340	1320	130
19515	PSP 136 LA E	1x36	0,16	30	2,4	1225	170	1020	75

19xx1 type - Monza with asymmetrical reflector - dimension B increased by 35 mm



HELIOS

PLASTIC FLUORESCENT EMERGENCY LIGHTING FITTINGS



Use:

HELIOS and HELIOS DS are universal emergency fluorescent lighting fittings for using as non-maintained or maintained emergency illumination of an area with ambient temperature from 0 °C to +40 °C. Class protection II. Emergency operation time is 1 hour or 3 hours.

Description, optics:

The body is made by injection of impact and heat resistant Polycarbonate of white color.

The electronic equipment of the lighting fixture is fitted in the body. Connection of the body and the diffuser is ensured by two screws and foamed Polyurethan sealing in the body.

The diffuser is made by injection of plastics.

- **type HELIOS** – one sided - made of transparent stabilized Polycarbonate (PC)
- **type HELIOS DS** – two sided - made of opalized Polycarbonate (PC)

The way of fitting's suspension:

- type HELIOS – directly on wall or ceiling using two screws in prepared holes.
- type HELIOS – DS directly on ceiling using two screws in prepared holes.



IP42

IP65

230 V
50 Hz



Modifications:

- **basic type** is equipped with the built-in inverter for non-maintained emergency operation (NM) or maintained emergency operation (M).
The lighting fixture is equipped with the **T5 8W** fluorescent source , electronic ballast and high-temperature Ni-Cd battery - operation time is 1 hour or 3 hours.
The LED indicator signals the battery charging and the mains supply.
The lighting fixture has electronic protection against complete battery discharge.
Charging time of the battery is 24 hours.
On demand it is possible to equip the fitting with the manual test button.
- **with Autotest (AT)** the lighting fixture is equipped with the electronic ballast and additionally with the signal unit ensuring automatic tests of right function according to the option.
 - test A – automatic test every 7 days
 - test B – automatic test every 90 days

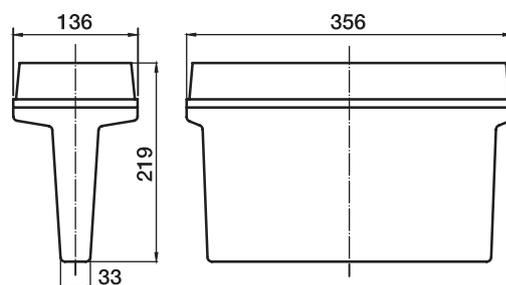
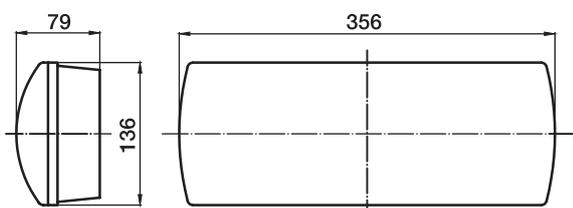
LED colour	Signalling	Symbolizing
green	no signal	no charging of battery package
	continuous	regular battery package charging with 230 VAC
yellow	no signal	no charging of battery package
	1 flash	ready for running Auto test
	2 flashes	Auto test countdown
	3 flashes	emergency lighting enforced by 230 VAC power cut
	4 flashes	runnin test A with 230 VAC power
red	5 flashes	runnin test B with 230 VAC power
	no signal	regular unit operation
	1 flash	no lamp or defective lamp for emergency lighting while 230 VAC power cut
	2 flashes	no lamp or defective lamp for emergency lighting while running test A or incomplete test A period
	3 flashes	no lamp or defective lamp for emergency lighting while running test B or incomplete test B period
	4 flashes	reset of Auto test procedure or disconnected battery package



HELIOS



HELIOS DS



Order code	Type	Inverter	Light sources [W]	Battery sources [Ah]	Net weight [kg]	Protection
modification for non-maintained emergency illumination						
43019	HELIOS 108 NM1h	SE	8 W	1 hr/1,0 Ah	1,0 kg	IP 42
43029	HELIOS 108 NM2h	SE	8 W	2 hr/1,5 Ah	1,1 kg	IP 42
43039	HELIOS 108 NM3h	SE	8 W	3 hr/2,5 Ah	1,3 kg	IP 42
43119	HELIOS 108 P NM1h	SE	8 W	1 hr/1,0 Ah	1,0 kg	IP 65
43129	HELIOS 108 P NM2h	SE	8 W	2 hr/1,5 Ah	1,1 kg	IP 65
43139	HELIOS 108 P NM3h	SE	8 W	3 hr/2,5 Ah	1,3 kg	IP 65
modification for maintained emergency illumination						
43018	HELIOS 108 M1h	SA	8 W	1 hr/1,0 Ah	1,3 kg	IP 42
43028	HELIOS 108 M2h	SA	8 W	2 hr/1,5Ah	1,4 kg	IP 42
43038	HELIOS 108 M3h	SA	8 W	3 hr/2,5Ah	1,6 kg	IP 42
43118	HELIOS 108 P M1h	SA	8 W	1 hr/1,0 Ah	1,3 kg	IP 65
43128	HELIOS 108 P M2h	SA	8 W	2 hr/1,5Ah	1,4 kg	IP 65
43138	HELIOS 108 P M3h	SA	8 W	3 hr/2,5Ah	1,6 kg	IP 65
modification with inverter with autotest AT-SE/SA for all above types						
modification with emergency supply from central battery						
43070	HELIOS 108 N		8 W		0,4 kg	IP 42
43170	HELIOS 108 P N		8 W		0,4 kg	IP 65
modification for mains supply						
43080	HELIOS 108		8 W		0,7 kg	IP 42
43180	HELIOS 108 P		8 W		0,7 kg	IP 65
HELIOS DS						
modification for non-maintained emergency illumination						
43219	HELIOS DS 108 NM1h	SE	8 W	1 hr/1,0 Ah	1,3 kg	IP 42
43229	HELIOS DS 108 NM2h	SE	8 W	2 hr/1,5 Ah	1,4 kg	IP 42
43239	HELIOS DS 108 NM3h	SE	8 W	3 hr/2,5 Ah	1,6 kg	IP 42
43319	HELIOS DS 108 P NM1h	SE	8 W	1 hr/1,0 Ah	1,3 kg	IP 65
43329	HELIOS DS 108 P NM2h	SE	8 W	2 hr/1,5 Ah	1,4 kg	IP 65
43339	HELIOS DS 108 P NM3h	SE	8 W	3 hr/2,5 Ah	1,6 kg	IP 65
modification for maintained emergency illumination						
43218	HELIOS DS 108 M1h	SA	8 W	1 hr/1,0 Ah	1,6 kg	IP 42
43228	HELIOS DS 108 M2h	SA	8 W	2 hr/1,5Ah	1,7 kg	IP 42
43238	HELIOS DS 108 M3h	SA	8 W	3 hr/2,5Ah	1,9 kg	IP 42
43318	HELIOS DS 108 P M1h	SA	8 W	1 hr/1,0 Ah	1,6 kg	IP 65
43328	HELIOS DS 108 P M2h	SA	8 W	2 hr/1,5Ah	1,7 kg	IP 65
43338	HELIOS DS 108 P M3h	SA	8 W	3 hr/2,5Ah	1,9 kg	IP 65
modification with inverter with autotest AT-SE/SA for all above types						
modification with emergency supply from central battery						
43270	HELIOS DS 108 N		8 W		0,7 kg	IP 42
43370	HELIOS DS 108 P N		8 W		0,7 kg	IP 65



Pictographs



01



02



04



05



06



07



08



09



10



11



12



13



14



15



SOLAMAGIC

HEATERS with "Golden Philips HeLeN lamp"



Use:

SOLAMAGIC heaters with the infrared lamp Philips HeLeN can be used in: bathrooms, conservatories, indoor swimming pools and health centres, terraces and patios, parasols, awnings and wind-protection systems, garages, halls and hobby rooms, camping sites, unheated warehouses and loading bays, railway stations and bus stops, lobbies and hotel drives, churches, gymnasiums and changing rooms, market stalls and market halls, building sites, workshops and many other places.

Thanks to Solamagic's new technology you can feel the warmth immediately after switching the heater on. In comparison with other heaters, SOLAMAGIC does not heat the air as such, instead the warmth has direct effect on people and objects. This can be compared to solar radiation: where it is cooler in the shade than when directly exposed to the sunlight. Operating SOLAMAGIC does not dazzle and cause any environmental damages. A special insulation cools down the casing, so that you cannot suffer burns when touching it.

SOLAMAGIC heater can be used through all the year. In the right operating position SOLAMAGIC is protected against rain and water splashes. Average life time of the Philips HeLeN lamp is up to 5.000 hours. With an average frequency of use the lamp has a life time up to 15 years of constant heating output. Average life time of the cheaper AmbiGlow lamp is up to 1.000 hours.

Description:

The body of the heater is made of the aluminium profile. Surface is provided with titan or white color.

The infrared heat is radiated in the required direction with the help of the **polished parabolic reflector**.

The stainless steel grille on the front protects against any tampering with the lamp.

Connection: cable with the 230 V plug.

Fixation of the heater:

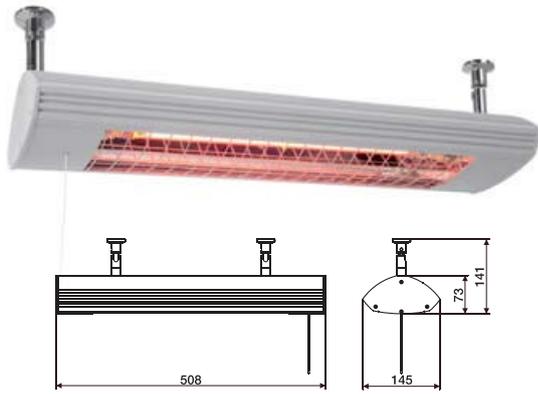
- using of the position adjustable holders which are part of appliance on the walls, ceilings and tripods
- using of the clamp attachments on the round and angular profile, on the pillars with diameter from 45 to 85 mm
- using of the additional ceiling frame to the lower ceilings
- with using of the additional special wall holders (WH) it is possible to make bigger unit of the heaters, up to 6 pcs – power supply is 3 phase then

Modification of the appliance depends on the output of the heater and built-in control possibilities

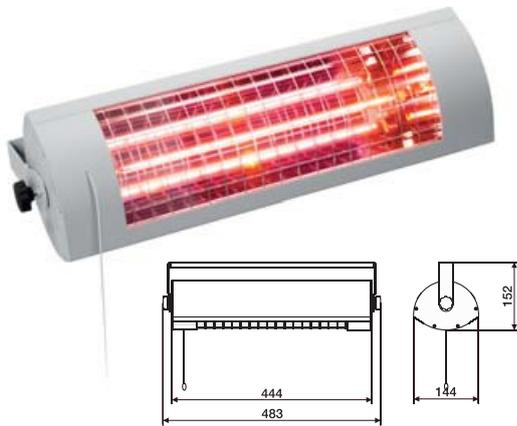
- basic without switch
- with toggle switch (PV)
- with cord-operated switch (TV)



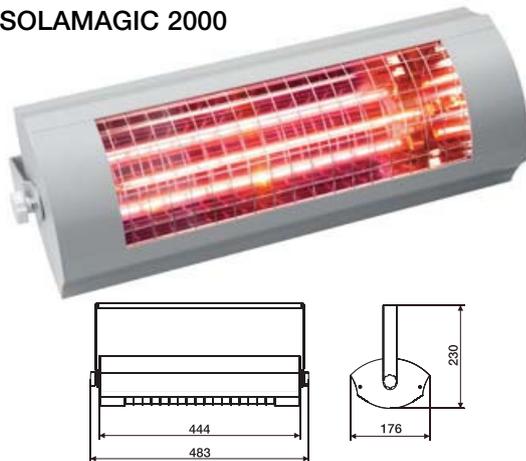
SOLAMAGIC 1000



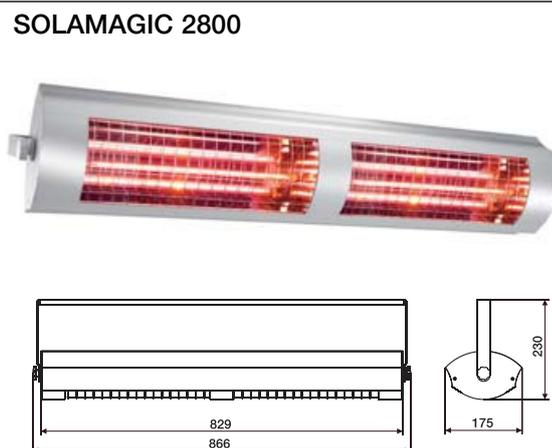
SOLAMAGIC 1400 with cord-operated switch



SOLAMAGIC 2000



SOLAMAGIC 2800



Order code	Type (titan color)		Output	Source	Efficiency	Dimensions length [mm]
44117	SOLAMAGIC	500	1x500 W	HeLeN	4 m ²	388
44118	SOLAMAGIC	500 set	2x500 W	HeLeN	8 m ²	2x388
44011	SOLAMAGIC	1000 TV	1x1000 W	AmbiGlow	7 m ²	508
44002	SOLAMAGIC	1400	1x1400 W	HeLeN	12 m ²	483
44003	SOLAMAGIC	1400 PV	1x1400 W	HeLeN	12 m ²	483
44015	SOLAMAGIC	1400 TV	1x1400 W	HeLeN	12 m ²	483
44101	SOLAMAGIC	2000	1x2000 W	HeLeN	16 m ²	483
44112	SOLAMAGIC	2800	2x1400 W	HeLeN	20 m ²	866
44104	SOLAMAGIC	4000	2x2000 W	HeLeN	30 m ²	866
44106	SOLAMAGIC	6000 WH	3x2000 W	HeLeN	depending on assembly	525x685
44111	SOLAMAGIC	8000 WH	4x2000 W	HeLeN	depending on assembly	1024x480
44114	SOLAMAGIC	12000 WH	6x2000 W	HeLeN	depending on assembly	1024x681

Set marked type = set of 2 pcs with connection cable to 2500 mm

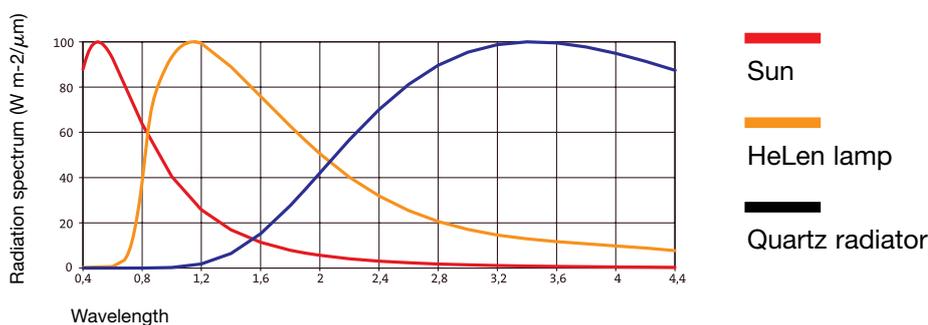
SOLAMAGIC EFFICIENCY depending on the installation height

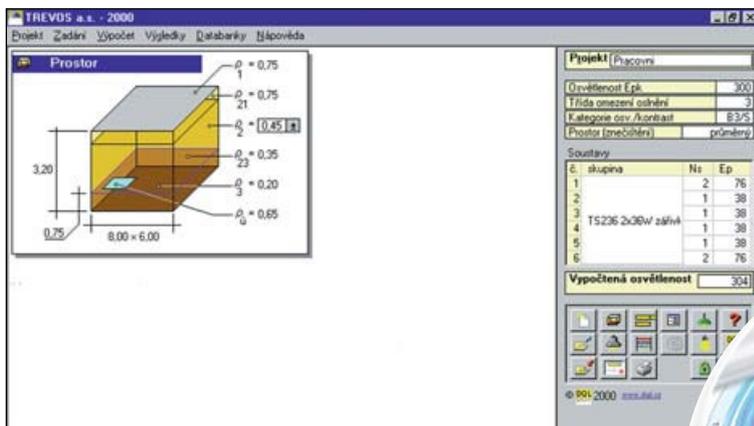
Installation	SOLAMAGIC	1000	1400	2000	2800	4000
Ceiling-mount.	height in mm	2250	2250	2500	2500	2500
	No wind (0,2 m/s)	100 %	100 %	100 %	100 %	100 %
	Slight wind (2 m/s)	interiér	65 %	89 %	65 %	89 %
	Strong wind (4 m/s)	interiér	37 %	54 %	37 %	54 %
nástěnná	height in mm	1900	2250	2500	2500	2500
	installation in angle (°)	15	20	20	20	20
	No wind (0,2 m/s)	100 %	100 %	100 %	100 %	100 %
	Slight wind (2 m/s)	interiér	69 %	78 %	69 %	78 %
	Strong wind (4 m/s)	interiér	44 %	51 %	44 %	51 %

Comparative table

	SOLAMAGIC	Quartz heater	Hot air blower	Gas heating
Operating costs based on 0,20 €/kWh	approx. 0,30 €/hr Solamagic 1400	approx. 0,40 €/hr disregarding pre-heated time	approx. 0,60 €/hr disregarding pre-heated time	approx. 1,0 €/hr consumption of 1 kg gas/hr
Efficiency	92 % of the energy consumed will be used as direct heat radiation	approx. 70% of the energy consumed is used	approx. 50% of the energy consumed is used	approx. 30% of the energy consumed is used
Evening warmth	the reddish glow creates a pleasant atmosphere	bright dazzling light effect	unsuitable due to the draught and noise generated	although a pleasant atmosphere is created, the use of gas creates a high a high risk potential
Heating method	warms people directly so that no heat is wasted in a draught	the air will be heated similar to a stove heating	warm air is discharged so it will be lost when the room is ventilated	the air will be heated while the wind blows the heat away
Immediate heat effect	the warm is felt immediately	requires a warming up phase	the room warms up gradually	requires a warming up phase
Safety	the energy source is the safety socket	the energy source is the safety socket	the energy source is the safety socket	generates naked light and the gas cylinders are pressurized.
Water resistance	it is protected against water splashes	it is not protected against water	it is not protected against water	it is waterproof and can remain mounted all the year
Installation options	to walls, ceiling or on a tripod indoors and outdoors	to walls, ceiling or on a tripod only indoors	placed on the ground and indoors only	on a floor stand with positioning being restricted

Comparative diagram Sun - HeLeN lamp - Quartz radiator





Company's calculation program for projecting of illumination by luminous flux and point method includes also program for quick dimensioning of lighting systems.



Headquarters
TREVOS, a. s.
Mašov 34
511 01 Turnov
Czech Republic

Phone.: +420 481 629 510-7
 625 245-8
 Fax: +420 481 624 681
 624 112
 e-mail: trevos@trevos.cz
www.trevos.cz

