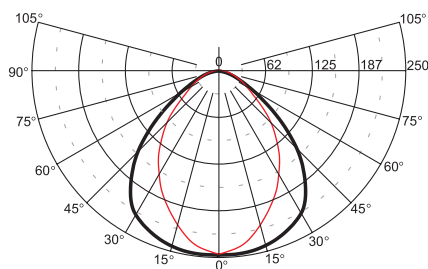
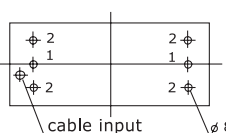
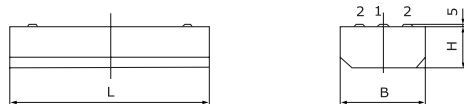


Ceiling and suspended luminaires - separate



12-013/236



Mounting holes:
1 - single lamp luminaires 12-01 and two lamps luminaires 12-04
2 - double and more lamp luminaires 12-01

Material:

- body – a steel sheet finished by powder technology varnishing
- color – white RAL 9003
- louvre – polished or matted Christmas tree louvre; white louvre

Degree of protection: IP 20

Rated voltage: 230V/50Hz

Control gear: standard or electronic ballast, dimmable on request; the luminaires are offered also in emergency version

Mounting: on a ceiling, one and two lamp luminaires are also fit to suspended mounting

Accessories: wire and tube pendants (must be ordered separately)

pendants for one lamp luminaires 12-01 and two lamps luminaires 12-04

length(mm)	without power supply cable	with p. s.c. 3x1,5mm ²	with p. s.c. 5x1,5mm ²
1200 (wires)	99-080/120	99-081/120	99-082/120
400 (tubes)	99-090/040	99-091/040	99-092/040
600 (tubes)	99-090/060	99-091/060	99-092/060
900 (tubes)	99-090/090	99-091/090	99-092/090
1200 (tubes)	99-090/120	99-091/120	99-092/120

pendants for two lamp luminaires 12-01

length(mm)	without power supply cable	with p. s.c. 3x1,5mm ²	with p. s.c. 5x1,5mm ²
1200 (wires)	99-083/120	99-084/120	99-085/120
400 (tubes)	99-093/040	99-094/040	99-095/040
600 (tubes)	99-093/060	99-094/060	99-095/060
900 (tubes)	99-093/090	99-094/090	99-095/090
1200 (tubes)	99-093/120	99-094/120	99-095/120

Application: offices, corridors and stairways, shops, lecture halls

Code	Power	Louvre	Lamp	Cap	LxBxH (mm)	kg
12-013/118/1 2	1x18W	A,D,G,H,J	T8 lamp	G13	654x195x60	2,4
12-013/136/1 2	1x36W	A,D,G,H,J	T8 lamp	G13	1264x195x60	4,0
12-013/158/1 2	1x58W	A,D,G,H,J	T8 lamp	G13	1564x195x60	4,9
12-013/218/1 2	2x18W	A,D,G,H,J	T8 lamp	G13	654x266x60	2,8
12-013/236/1 2	2x36W	A,D,G,H,J	T8 lamp	G13	1264x266x60	5,1
12-013/258/1 2	2x58W	A,D,G,H,J	T8 lamp	G13	1564x266x60	6,9
12-013/318/1 2	3x18W	A,D,G,H,J	T8 lamp	G13	654x362x60	4,4
12-013/336/1 2	3x36W	A,D,G,H,J	T8 lamp	G13	1264x362x60	7,7
12-013/358/1 2	3x58W	A,D,G,H,J	T8 lamp	G13	1564x362x60	8,0
12-013/418/1 2	4x18W	A,D,G,H,J	T8 lamp	G13	654x458x60	4,8
12-013/436/1 2	4x36W	A,D,G,H,J	T8 lamp	G13	1264x458x60	8,8
12-013/458/1 2	4x58W	A,D,G,H,J	T8 lamp	G13	1564x458x60	9,2
12-043/218/1 2	2x18W	A,D,G,H,J	T8 lamp	G13	654x195x60	2,5
12-043/236/1 2	2x36W	A,D,G,H,J	T8 lamp	G13	1264x195x60	4,5
12-043/258/1 2	2x58W	A,D,G,H,J	T8 lamp	G13	1564x195x60	5,7

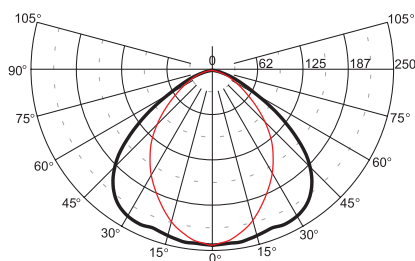
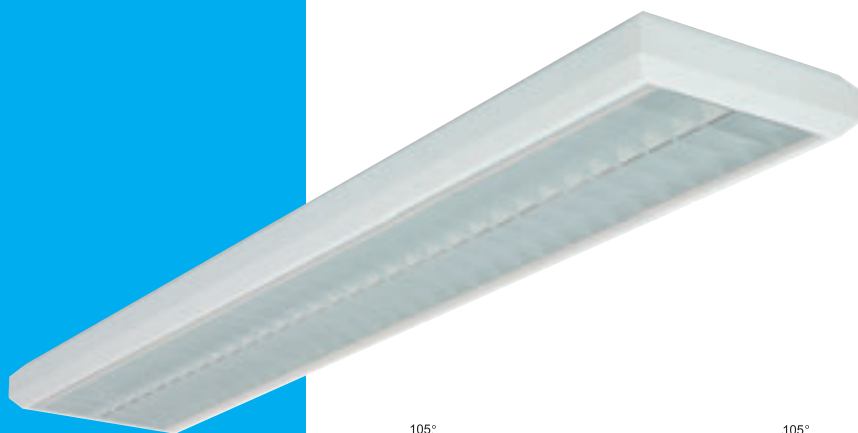
- 1 - B (standard ballast)
- 2 - A (white louvre)
- G (polished Christmas tree louvre, eco)

- C (electronic ballast)
- D (polished Christmas tree louvre)
- H (matted Christmas tree louvre, eco)
- J (matted Christmas tree louvre)

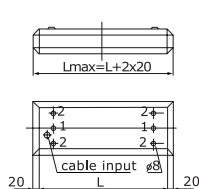


Ceiling and suspended luminaires

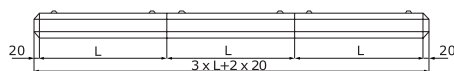
- separate
- coupling in lines
- fit to lighting systems



12-023/158



Mounting holes:
 1 - single lamp luminaires 12-02 and two lamp luminaires 12-05
 2 - double and more lamp luminaires 12-02
 2 - pendants



Material:

- body – a steel sheet finished by powder technology varnishing
- color – white RAL 9003
- louvre – polished or matted Christmas tree louvre; white louvre

Degree of protection: IP 20

Rated voltage: 230V/50Hz

Control gear: standard or electronic ballast, dimmable on request

Mounting: on a ceiling, one and two lamp luminaires are also fit to suspended mounting and coupling in lines and lighting systems

Accessories: (must be ordered separately)

- plastic endings
- 99-107 (single lamp luminaires and 12-05)
- 99-108 (double lamp luminaires) coupling components (see Coupling agents of fluorescent luminaires)

pendants for one lamp luminaires 12-02 and two lamps luminaires 12-05

length(mm)	without power supply cable	with p. s.c. 3x1,5mm ²	with p. s.c. 5x1,5mm ²
1200 (wires)	99-080/120	99-081/120	99-082/120
400 (tubes)	99-090/040	99-091/040	99-092/040
600 (tubes)	99-090/060	99-091/060	99-092/060
900 (tubes)	99-090/090	99-091/090	99-092/090
1200 (tubes)	99-090/120	99-091/120	99-092/120

pendants for two lamp luminaires 12-02

length(mm)	without power supply cable	with p. s.c. 3x1,5mm ²	with p. s.c. 5x1,5mm ²
1200 (wires)	99-083/120	99-084/120	99-085/120
400 (tubes)	99-093/040	99-094/040	99-095/040
600 (tubes)	99-093/060	99-094/060	99-095/060
900 (tubes)	99-093/090	99-094/090	99-095/090
1200 (tubes)	99-093/120	99-094/120	99-095/120

Application:

- offices
- corridors and stairways
- shops
- lecture halls

Code	Power	Louvre	Lamp	Cap	LxBxH (mm)	kg
12-023/118/1 2	1x18W	A,D,G,H,J	T8 lamp	G13	630x195x60	2,4
12-023/136/1 2	1x36W	A,D,G,H,J	T8 lamp	G13	1240x195x60	4,0
12-023/158/1 2	1x58W	A,D,G,H,J	T8 lamp	G13	1540x195x60	4,9
12-023/218/1 2	2x18W	A,D,G,H,J	T8 lamp	G13	630x266x60	2,8
12-023/236/1 2	2x36W	A,D,G,H,J	T8 lamp	G13	1240x266x60	5,1
12-023/258/1 2	2x58W	A,D,G,H,J	T8 lamp	G13	1540x266x60	6,9
12-053/218/1 2	2x18W	A,D,G,H,J	T8 lamp	G13	630x195x60	2,5
12-053/236/1 2	2x36W	A,D,G,H,J	T8 lamp	G13	1240x195x60	4,5
12-053/258/1 2	2x58W	A,D,G,H,J	T8 lamp	G13	1540x195x60	5,7



- 1 - B (standard ballast)
- 2 - A (white louvre)
- C (electronic ballast)
- D (polished Christmas tree louvre)
- G (polished Christmas tree louvre, eco)
- H (matted Christmas tree louvre, eco)
- J (matted Christmas tree louvre)

Suspended luminaires

- direct/indirect
- separate
- coupling in lines
- fit to lighting systems

Material:

- body – a steel sheet finished by powder technology varnishing
- color – white RAL 9003
- louvre – polished or matted Christmas tree louvre; white louvre

Degree of protection: IP 20

Rated voltage: 230V/50Hz

Control gear: standard or electronic ballast, dimmable on request

Mounting: on pendants, fit to coupling in lines and lighting systems
(see Coupling agents of fluorescent luminaires)

Accessories: (must be ordered separately)

- plastic endings
- 99-107 (one lamp luminaires and 12-06)
- 99-108 (two lamp luminaires) wire and tube pendants

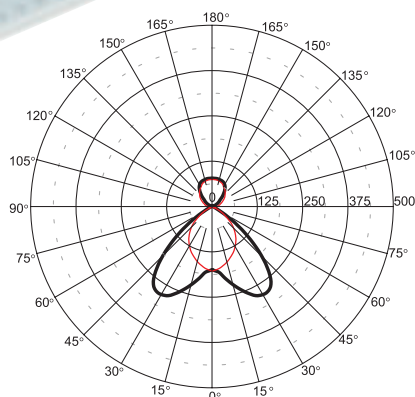
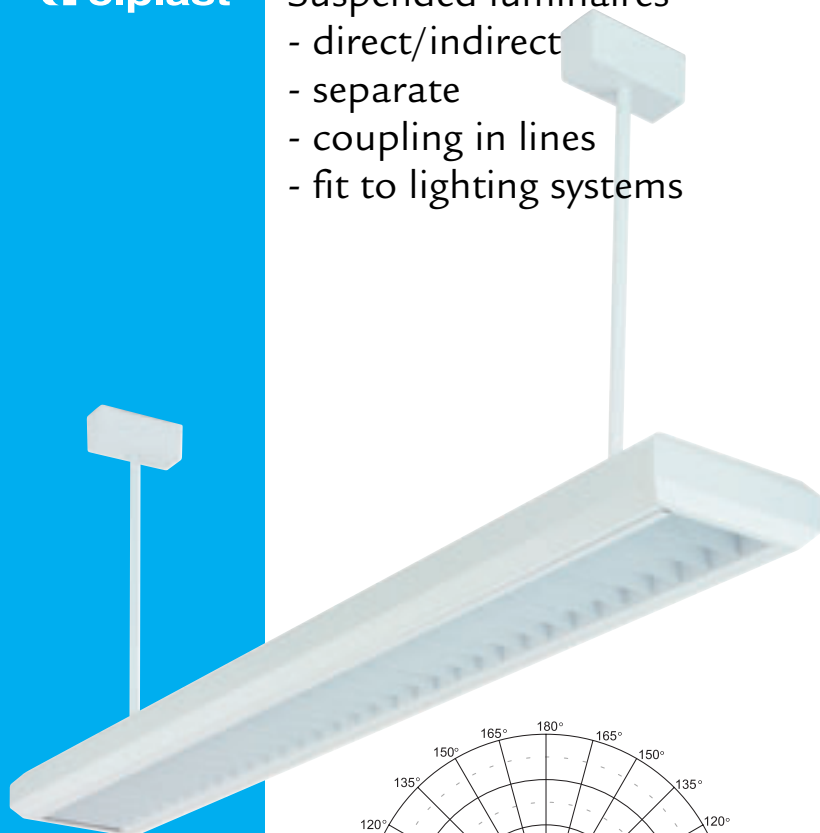
pendants for one lamp luminaires 12-03 and two lamps luminaires 12-065

length(mm)	without power supply cable	with p. s.c. 3x1,5mm ²	with p. s.c. 5x1,5mm ²
1200 (wires)	99-080/120	99-081/120	99-082/120
400 (tubes)	99-090/040	99-091/040	99-092/040
600 (tubes)	99-090/060	99-091/060	99-092/060
900 (tubes)	99-090/090	99-091/090	99-092/090
1200 (tubes)	99-090/120	99-091/120	99-092/120

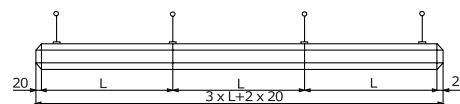
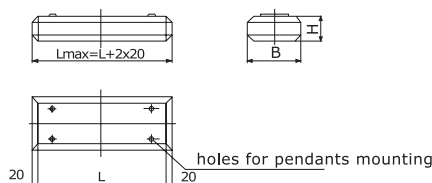
pendants for two lamp luminaires 12-03

length(mm)	without power supply cable	with p. s.c. 3x1,5mm ²	with p. s.c. 5x1,5mm ²
1200 (wires)	99-083/120	99-084/120	99-085/120
400 (tubes)	99-093/040	99-094/040	99-095/040
600 (tubes)	99-093/060	99-094/060	99-095/060
900 (tubes)	99-093/090	99-094/090	99-095/090
1200 (tubes)	99-093/120	99-094/120	99-095/120

Application: offices, corridors and stairways, shops, lecture halls



12-033/258



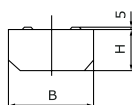
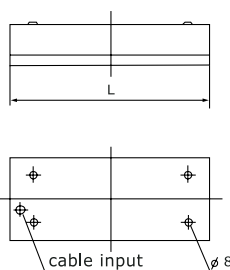
Code	Power	Louvre	Lamp	Cap	LxBxH (mm)	kg
12-033/118/1 2	1x18W	A,D,G,H,J	T8 lamp	G13	630x195x60	2,4
12-033/136/1 2	1x36W	A,D,G,H,J	T8 lamp	G13	1240x195x60	4,0
12-033/158/1 2	1x58W	A,D,G,H,J	T8 lamp	G13	1540x195x60	4,9
12-033/218/1 2	2x18W	A,D,G,H,J	T8 lamp	G13	630x266x60	2,8
12-033/236/1 2	2x36W	A,D,G,H,J	T8 lamp	G13	1240x266x60	5,1
12-033/258/1 2	2x58W	A,D,G,H,J	T8 lamp	G13	1540x266x60	6,9
12-063/218/1 2	2x18W	A,D,G,H,J	T8 lamp	G13	630x195x60	2,5
12-063/236/1 2	2x36W	A,D,G,H,J	T8 lamp	G13	1240x195x60	4,5
12-063/258/1 2	2x58W	A,D,G,H,J	T8 lamp	G13	1540x195x60	5,7

- 1 - B (standard ballast)
- 2 - A (white louvre)
- G (polished Christmas tree louvre, eco)

- C (electronic ballast)
- D (polished Christmas tree louvre)
- H (matted Christmas tree louvre, eco)
- J (matted Christmas tree louvre)



Ceiling and suspended luminaires - separate



Material:

- body – a steel sheet finished by powder technology varnishing
- color – white RAL 9003
- louvre – polished Christmas tree louvre

Degree of protection: IP 20

Rated voltage: 230V/50Hz

Control gear: standard or electronic preheat start ballast Osram

Mounting: on a ceiling, luminaires are also fit to suspended mounting

Accessories: wire and tube pendants (must be ordered separately)

pendants for one lamp luminaires 12-08 and two lamps luminaires 12-09

length(mm)	without power supply cable	with p. s.c. 3x1,5mm ²	with p. s.c. 5x1,5mm ²
1200 (wires)	99-080/120	99-081/120	99-082/120
400 (tubes)	99-090/040	99-091/040	99-092/040
600 (tubes)	99-090/060	99-091/060	99-092/060
900 (tubes)	99-090/090	99-091/090	99-092/090
1200 (tubes)	99-090/120	99-091/120	99-092/120

pendants for two lamp luminaires 12-08

length(mm)	without power supply cable	with p. s.c. 3x1,5mm ²	with p. s.c. 5x1,5mm ²
1200 (wires)	99-083/120	99-084/120	99-085/120
400 (tubes)	99-093/040	99-094/040	99-095/040
600 (tubes)	99-093/060	99-094/060	99-095/060
900 (tubes)	99-093/090	99-094/090	99-095/090
1200 (tubes)	99-093/120	99-094/120	99-095/120

Application:

- offices
- corridors and stairways
- shops
- lecture halls

Code	Power	Louvre	Lamp	Cap	LxBxH (mm)	kg
12-083/236/□DL	2x36W	DL	T8 lamp	G13	1235x266x60	5,1
12-083/258/□DL	2x58W	DL	T8 lamp	G13	1535x266x60	6,9
12-093/236/□DL	2x36W	DL	T8 lamp	G13	1235x195x60	5,1
12-093/258/□DL	2x58W	DL	T8 lamp	G13	1535x195x60	6,9

□ - B (standard ballast - parallel compensation)
- C (electronic ballast)

Louvre: - DL (polished Christmas tree louvre, lower quantity of lamellae)

The luminaires are standard delivered without ignitors.

Industry package of the luminaires is: 2x36W 50pcs per pallet

2x58W 50pcs per pallet



Coupling agents of fluorescent luminaires

series 11, 12, 13



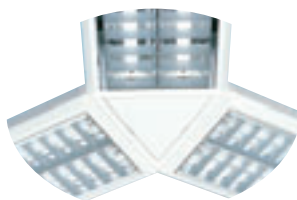
A



B



C



D



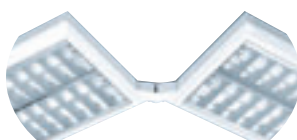
E



F



G



H

Specification:

- fixed or adjustable universal coupling agents of the series 11 Gemma, 12 - Gemini, 13 - Pavo
- mounting both suspended and ceiling
- the couplings are designed to pull through the feeding cables

Couplings:

• fixed:

	GEMMA		GEMINI a PAVO	
	single lamp l.	double lamp l.	single lamp l.	double lamp l.
A - a square coupling for fixed coupling of four luminaires in a cross	99-321	99-331	99-361	99-371
B - a square coupling for fixed coupling of three luminaires in "T" shape	99-322	99-332	99-362	99-372
C - a square coupling for fixed coupling of two luminaires in right angle	99-323	99-333	99-363	99-373
D - a triangle coupling for fixed coupling of three luminaires in the shape of a star	99-325	99-335	99-365	99-375
E - a triangle coupling for fixed coupling of two luminaires in the angle of 120°	99-326	99-336	99-366	99-376

• adjustable:

- a corner coupling adjustable in the range 30-150°
- a discoid coupling adjusting two luminaires in the range: 65-295° one-lamp luminaires of the series 11, 12, 13 90-180° two-lamp luminaires of the series 11 75-285° with the series 12, 13

	GEMMA		GEMINI a PAVO	
	single lamp l.	double lamp l.	single lamp l.	double lamp l.
F - a discoid coupling for revolving coupling of two luminaires	99-421	99-431	99-461	99-471
G - a corner coupling for revolving coupling of three or more luminaires	-	-	99-462	99-472
H - a corner coupling for revolving coupling of two luminaires (30-150°)	-	-	99-463	99-473

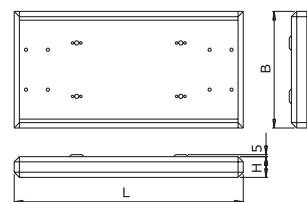


Plain module



F

Emergency module



Plain modules	Code	LxBxH	Code	LxBxH
	11-000/118	630x207x80	12-000/118	630x195x60
	11-000/136	1240x207x80	12-000/136	1240x195x60
	11-000/158	1540x207x80	12-000/158	1540x195x60
	11-000/218	630x336x80	12-000/218	630x266x60
	11-000/236	1240x336x80	12-000/236	1240x266x60
Emergency modules	11-000/258	1540x336x80	12-000/258	1540x266x60
- luminous sign	11-003/118	630x207x80	12-003/118	630x195x60
	11-003/218	630x336x80	12-003/218	630x266x60
- sign module	11-100/118	630x207x80	12-100/118	630x195x60
	11-100/218	630x336x80	12-100/218	630x266x60
- luminous sign with inverter	11-103/118	630x207x80	12-103/118	630x195x60
	11-103/218	630x336x80	12-103/218	630x266x60