Libra

IP 65 (CBT) **IP 66** (CBT) (Option) **IK 08** (Lantern) **IK 09** (Bowl) **Class I** **Class II** ⧈

The elegant Libra range is a dedicated concept for the modern energy efficient compact fluorescent lamps. Combining high performance optics with a unique Lighting Comfort system for major reduction of light pollution and glare. The aluminium body, high IP rating and the Direct Link installation concept minimise installation and maintenance costs. The perfect balance for today's public lighting.

Applications
Consult pages 16-19
Lamps
Compact fluorescent up to 80W

Libra 65
Post top / Side entry

Libra 66
Side entry

Libra 70
Post top / Side entry

Libra 71
Side entry

1 **Housing** die-cast (LM6 quality) aluminium in RAL 9007; cover blocks on integral hinges to prevent dirt accumulation.

2 **Bowl** impact resistant UV stabilized clear polycarbonate, with integrated slots for Lighting Comfort louvres; bowl hinges sideways and is held captive on opening.

3 **Cover plate connection compartment** in white polycarbonate, integrated in and hinging with bowl.

4 **Opening/closing** tool-less access by stainless steel clips (two for Libra 65/66 and three for Libra 70/71), captively integrated in bowl. Clips have plastic rollers to prevent damage to lantern's finish.

5 **Spigot** die-cast (LM 6 quality) aluminium in RAL 9007:
- a Libra 65/70 spigot for post top Ø 60/76mm and side entry. Ø 32/60mm. Column mounting with two stainless steel M10 bolts.
- b Libra 66/71 dedicated spigot for side entry Ø 32/60mm. Column mounting with one stainless steel M10 bolt.
- c For small side entry diameters extra long bolts are available.

6 **Gasket** (silicon) in bowl seals complete lantern to IP 65 (optional IP 66). Controlled Breathing Technology (CBT), through the spigot, prevents build up of condensation.

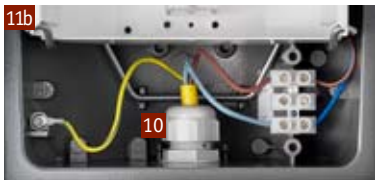
7 **Gear tray** steel plate with white reflection coating, released and hinging downwards through a stainless steel hinge clip, and easy to remove without the use of tools.

8 **Optics** Lighting Comfort System to minimise light pollution, glare and obtrusive light:
- a 2D reflectors of anodised high purity aluminium, precisely positioned within white reflector tray.
- b additional louvre system in black polycarbonate.
- c standard glare classification G3 at 0° and 5° tilt, G1 at 10° tilt.
- d at 10° tilt G2 using 1 louvre and G3 using two louvres.
- e standard two louvres are supplied with the lantern; positioning of louvres is indicated in installation instructions.
- f louvres can be easily and manually mounted in the pre-designed slots in the bowl, also retrofit.
- g complete Lighting Comfort louvre set for further reduction of incidental obtrusive light can be ordered separately.

9 **Gear** standard electronic. Gear is mounted on the back of the gear tray.

10 **Cable connection** M20 gland, cable entry 7-14mm, with strain relief.

11 **Electrical connection**
three options are available:
- a **Direct Link + SMT** (Safe Maintenance Technology): direct to a circuit breaker next to the gear tray.
- b **Direct Link** direct to terminal block next to the gear tray.
- c **Direct** to plug and socket on the back of the gear tray (gear tray has to be hinged down).



Safe and easy installation and maintenance

Hinges covered.

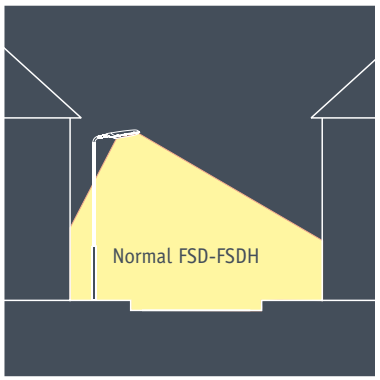
Stainless steel closing clips with plastic rollers.

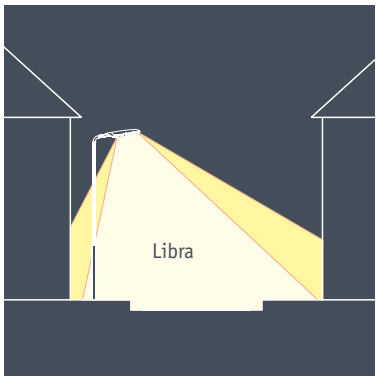
Through stainless steel clip the gear tray can be hinged downwards.

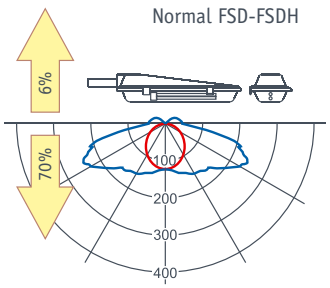
Universal mounting

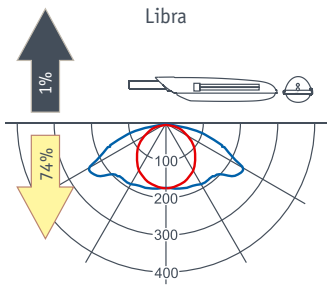
Universal post top and side entry spigot.

Lighting performance









Upward light = light pollution is strongly minimised.

For specific circumstances extra lighting comfort louvres can be mounted (also retrofit) in order to take away obtrusive light.

Cover plate

Cover plate connection department in white polycarbonate, integrated in and hinging with bowl.

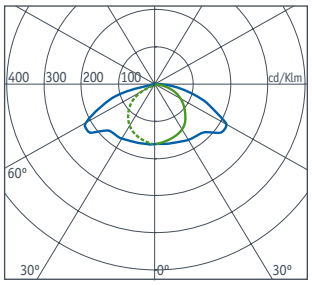
Libra

SETS & BRACKETRY

For a further integration of lantern and column towards a more decorative arrangement, a number of standard brackets is available. Some examples are shown here.

1 Sao Paulo Twin - with Libra 70
2 Sao Paulo Single - with Libra 66
3 Salvador Single - with Libra 70
4 Salvador Twin - with Libra 66

Libra 65/66

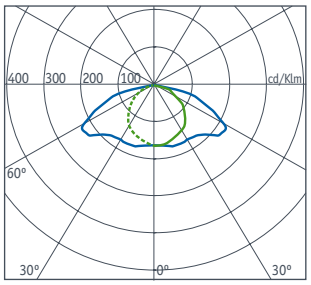


Reflector
Libra-65C

Lamp
FSD-36

Performance
ULOR: 1%
DLOR: 74%

Libra 70/71



Reflector
Libra-70P

Lamp
FSDH-80

Performance
ULOR: 1%
DLOR: 74%

MODEL	TYPE	SHAPE	LAMP HOLDER	REFLECTOR Comfort	REFLECTOR Performer	BOWL	W.a. (m^2)	Kg
Libra 65	FSD-24		2G11	•	•	Polycarbonate	0.10	5.8
	FSD-36		2G11	•	•			
Libra 66	FSD-24		2G11	•	•			5.5
	FSD-36		2G11	•	•			
Libra 70	FSDH-28		2G11		•		0.13	7.0
	FSDH-40		2G11	•	•			
	FSDH-55		2G11	•	•			
	FSDH-80		2G11	•	•			
Libra 71	FSDH-28		2G11		•			6.7
	FSDH-40		2G11	•	•			
	FSDH-55		2G11	•	•			
	FSDH-80		2G11	•	•			

FSD-FSDH (Compact fluorescent)

W.a. (Windage area)
Kg (Weight)

For more information about lamps, consult pages 386-389.

OPTIONS

Ingress Protection IP 66
Including lamp and cable
Class II versions
Wired for cell (WFC), mini Photocell or NEMA socket
Other RAL colours (housing) on request
DIM versions
Compact fluorescent 18W version
Pedestrian crossing optic (Left Hand Drive and Right Hand Drive)
Electrical Connection option: Direct Link + SMT
Direct Link
Direct

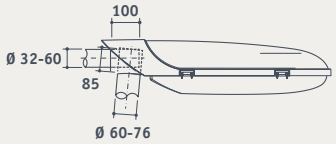
ACCESSORIES

902565000 Complete set of Lighting Comfort louvres (11)

Libra 65

Libra 66

Libra 70

Libra 71

Mounting details