Schréder
Experts in lightability™

FLEXIA DP

Designer : iOl Design

LENSO
FLEX™4

The ultimate platform for your unique urban lighting solution

Various designs, many configurations, one single DNA. FLEXIA is the ultimate platform to create your unique urban lighting solution. Focus on creating a unique ambiance for people living and visiting your spaces instead of dealing with non-stop constraints. With no technical limitations, more design consistency and the guarantee of the latest innovations, FLEXIA offers a versatile technological platform with refined aesthetics. FLEXIA incorporates a refined design with an advanced and interchangeable technology compatible with a circular economy. Ideal for large boulevards, city centres, public squares, bike paths and other urban outdoor areas, FLEXIA delivers a high-quality lighting with design consistency and lowers the carbon footprint for towns and cities - creating a safe and attractive environment.

IP 66   IK 09

PLUS 02

ZDi 4

CE   RoHS

UL 1598
CSA C22.2
No. 250.0

005
certification

URBAN & RESIDENTIAL STREETS | BIKE & PEDESTRIAN PATHS | RAILWAY STATIONS & METROS | CAR PARKS | SQUARES & PEDESTRIAN AREAS

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Concept

FLEXIA DP is a versatile suspended decorative luminaire, designed to provide the greatest modularity and easy customisation.

It is composed of an aluminum body sealed with a deep polycarbonate protector.

FLEXIA DP is part of the FLEXIA range and shares the same technical architecture for more consistency and interchangeability. It relies on the new LensoFlex®4 photometrical engine, developed on a concept of performance, dark-sky compliance (PureNight) and versatility, and use the same CR-Kit that regroups the LEDs, lenses, gear and electrical accessories on a tool-free removable unit. This standardisation of internal components enables an easier and more cost-effective management of spare parts. For aesthetic cohesion, FLEXIA DP integrates the same protector as the FLEXIA TOP, creating harmonious urban furniture.

Create remarkable lighting effects with FLEXIA DP accessories like Coppa and Quattro and give your city its own identity.

To simplify installation, FLEXIA DP is delivered pre-cabled. It also uses the patented IzyHub compact connection and connectivity module which is designed for quick, error-proof wiring.

FLEXIA DP offers tool-free access to the gear compartment. For safety reasons, it includes an instant electrical disconnection on opening.

It is available with various connectivity options (NEMA or Zhaga), sensors and the FlexiWhite solution that adapts the colour temperature of the lighting to the need of the space and the moment. Thanks to tool-free access to the optical compartment, Croma coloured filters can be added any time to create a special atmosphere for events.

Built with recyclable materials and with an architecture designed for easy service, FLEXIA DP is a role model for a circular economy.

FLEXIA DP can be personalised with a wide range of accessories to enhance your city identity.

FLEXIA DP is designed for suspended mounting.

FLEXIA DP includes an instant electrical disconnection on opening and a complete tool-free removable LED engine.

To remain as open and interoperable as possible, FLEXIA DP is available with both NEMA or Zhaga sockets and complies with the new ZD4i standard.

TYPES OF APPLICATION

- URBAN & RESIDENTIAL STREETS
- BIKE & PEDESTRIAN PATHS
- RAILWAY STATIONS & METROS
- CAR PARKS
- SQUARES & PEDESTRIAN AREAS

KEY ADVANTAGES

- State-of-the-art LED modular platform that can be endlessly customised
- Design consistency for all urban applications
- Various suspended mounting options
- Tool-free philosophy: opening, cabling and LED engine removal
- PureNight: dark-sky and low-glare lighting distributions
- FlexiWhite option for human-centric and nature-friendly scenarios
- Supplied pre-cabled to facilitate its installation
- Connected-ready for your future Smart city requirements
- Based on open and interoperable standards
- Compatible with the Schréder EXEDRA control platform
- Zhaga-D4i certified

FLEXIA DP | Standard

FLEXIA DP | With Croma filter

FLEXIA DP | With Coppa accessory

FLEXIA DP | With Coppa + Croma filter

FLEXIA DP | With Quattro accessory

Schréder

LensoFlex®4

LensoFlex®4 maximises the heritage of the LensoFlex® concept with a very compact yet powerful photometric engine based upon the addition principle of photometric distribution. The number of LEDs in combination with the driving current determines the intensity level of the light distribution. With optimised light distributions and very high efficiency, this fourth generation enables the products to be downsized to meet application requirements with an optimised solution in terms of investment.

LensoFlex®4 optics can feature backlight control to prevent intrusive lighting, or a glare limiter for high visual comfort.

Back Light control

As an option, the LensoFlex®2 and LensoFlex®4 modules can be equipped with a Back Light control system.

This additional feature minimises light spill from the back of the luminaire to avoid intrusive light towards buildings.
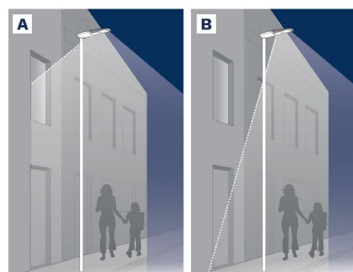
A. Without Back Light control | B. With Back Light control

Custom dimming profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. Up to five combinations of time intervals and light levels are possible. This feature does not require any extra wiring.

The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.
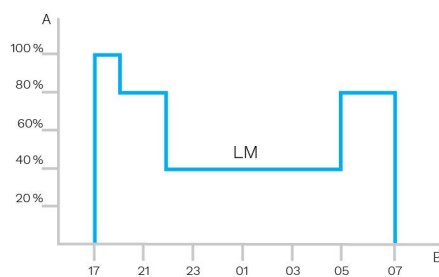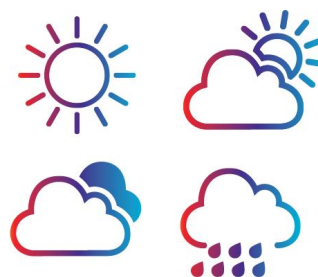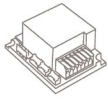
A. Dimming level | B. Time

Daylight sensor / photocell

Photocell or daylight sensors switch the luminaire on as soon natural light falls to a certain level. It can be programmed to switch on during a storm, on a cloudy day (in critical areas) or only at nightfall so as to provide safety and comfort in public spaces.

IzyHub

IzyHub is an innovative device that aims to keep luminaire installation and maintenance hassle-free. This single central connection hub distributes electricity and control information to all parts of the luminaire, ensuring that all components work together and offering reliable, long-term performance.

Its compact size and error-proof connections enable smaller and lighter luminaires that are easier to maintain and upgrade.

Surge Protection

IzyHub features a built-in surge protection device. This prevents electrical surges resulting from lightning strikes and other transient voltages that originate from the mains network from damaging the luminaire, even in the most demanding conditions. The protective device also includes an end-of-life LED warning light, indicating that the luminaire is protected correctly.

User-friendly

Installing a luminaire has never been easier. IzyHub features tool-free connector as the main connection terminal. It enables 30% shorter installation times compared with standard solutions. Lever actuated spring-loaded electrical connectors provide optimal contact throughout the entire life of the product.

Easy maintenance

On the rare occasion that a component needs to be replaced in the luminaire, IzyHub makes sure that operations are carried out quickly and easily. Luminaire component connections are keyed so that mixing up electrical connections is physically impossible. Installers do not need to trace wires individually: plug it in, and it works straight away.
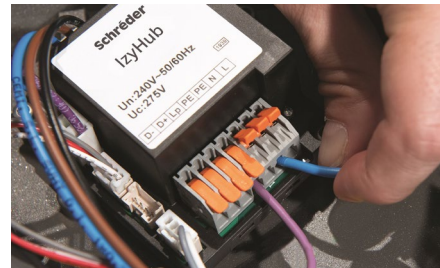
Versions and upgrades

IzyHub has several versions featuring different connectivity options.
IzyHub can include an SPD, can work with external dimming and operate with all type of control sockets. It is also able to provide bi-power control and to include fuse options.

These options provide flexibility for future upgrades by only having to replace the IzyHub to connect the new equipment. No complicated re-wiring needed.
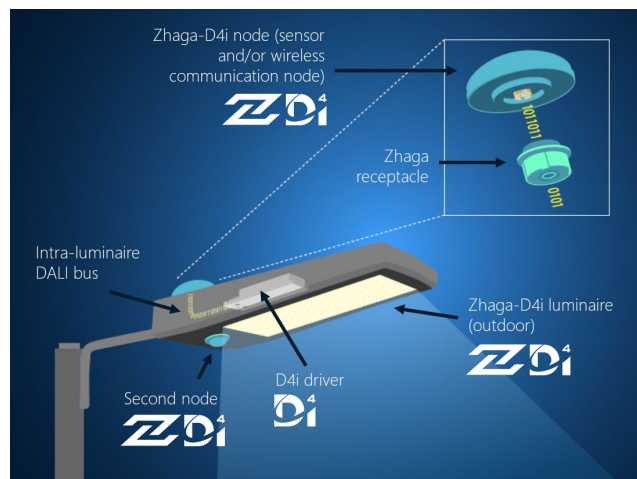
The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.

Standardisation for interoperable ecosystems

As a founding member of the Zhaga consortium, Schréder has participated in the creation of, and therefore supports, the Zhaga-D4i certification program and the initiative of this group to standardise an interoperable ecosystem. The D4i specifications take the best of the standard DALI2 protocol and adapt it to an intra-luminaire environment but it has certain limitations. Only luminaire mounted control devices can be combined with a Zhaga-D4i luminaire. According to the specification, control devices are limited respectively to 2W and 1W average power consumption.

Certification program

The Zhaga-D4i certification covers all the critical features including mechanical fit, digital communication, data reporting and power requirements within a single luminaire, ensuring plug-and-play interoperability of luminaires (drivers) and peripherals such as connectivity nodes.

Cost-effective solution

A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

EXEDRA

Schréder EXEDRA is the most advanced lighting management system on the market for controlling, monitoring and analysing streetlights in a user-friendly way.

Standardisation for interoperable ecosystems

Schréder plays a key role in driving standardisation with alliances and partners such as uCIFI, TALQ or Zhaga. Our joint commitment is to provide solutions designed for vertical and horizontal IoT integration. From the body (hardware) to the language (data model) and the intelligence (algorithms), the complete Schréder EXEDRA system relies on shared and open technologies.

Schréder EXEDRA also relies on Microsoft™ Azure for cloud services, provided with the highest levels of trust, transparency, standards conformance and regulatory compliance.

Breaking the silos

With EXEDRA, Schréder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schréder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:

• control devices (luminaires) from other brands
• manage controllers and to integrate sensors from other brands
• connect with third-party devices and platforms

A plug-and-play solution

As a gateway-less system using the cellular network, an intelligent automated commissioning process recognises, verifies and retrieves luminaire data into the user interface. The self-healing mesh between luminaire controllers enables real-time adaptive lighting to be configured directly via the user interface.

Tailored experience

Schréder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable and includes tools for user management and multi-tenant policy that enables contractors, utilities or big cities to segregate projects.

A powerful tool for efficiency, rationalisation and decision making

Data is gold. Schréder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

Protected on every side

Schréder EXEDRA provides state-of-the-art data security with encryption, hashing, tokenisation, and key management practices that protect data across the whole system and its associated services.

GENERAL INFORMATION

Recommended installation height	4m to 10m | 13' to 33'
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
Driver included	No
CE mark	Yes
CB mark	No
ENEC certified	Yes
ENEC+ certified	Yes
UL certified	Yes
ROHS compliant	Yes
Zhaga-D4i certified	Yes
French law of December 27th 2018 - Compliant with application type(s)	a, b, e
BE 005 certified	Yes

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Polycarbonate
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 09
Access for maintenance	Tool-less access to gear compartment

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +55°C / -22°F up to 131°F with wind effect

· Depending on the luminaire configuration. For more details, please contact us.

ELECTRICAL INFORMATION

Electrical class	Class 1US, Class I EU, Class II EU
Nominal voltage	120-277V – 50-60Hz 220-240V – 50-60Hz
Power factor (at full load)	0.9
Surge protection options (kV)	10 20
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-3-3 / EN 61547
Control protocol(s)	1-10V, DALI
Control options	AmpDim, Bi-power, Custom dimming profile, Remote management
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Schréder EXEDRA

OPTICAL INFORMATION

LED colour temperature	2200K (FW 722) 2200K (WW 722) 2700K (WW 727) 2600K (FW 726) 3000K (FW 730) 3000K (WW 730) 3000K (WW 830) 4000K (NW 740)
Colour rendering index (CRI)	>70 (FW 722) >70 (WW 722) >70 (FW 726) >70 (WW 727) >70 (FW 730) >70 (WW 730) >70 (NW 740) >80 (WW 830)
ULOR	<3%
ULR	<3%

· ULOR may be different according to the configuration. Please consult us.
· ULR may be different according to the configuration. Please consult us.

LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L95

DIMENSIONS AND MOUNTING

AxBxC (mm | inch)	504x682x504	19.8x26.9x19.8
Weight (kg | lbs)	12.63	27.8
Aerodynamic resistance (CxS)	0.04
Mounting possibilities	Side-entry slip-over – Ø60mm
	Side-entry penetrating – Ø48mm
	Suspended mounting
	Surface mounting

· For more information about mounting possibilities, please consult the installation sheet.
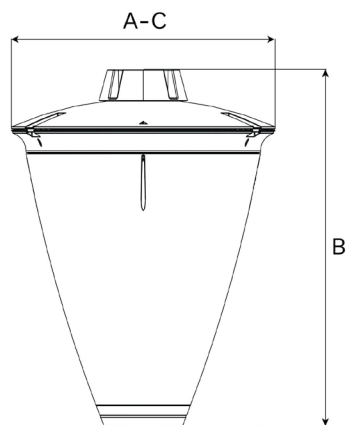
FLEXIA DP | Side-entry enclosing Ø60mm mounting (L2)
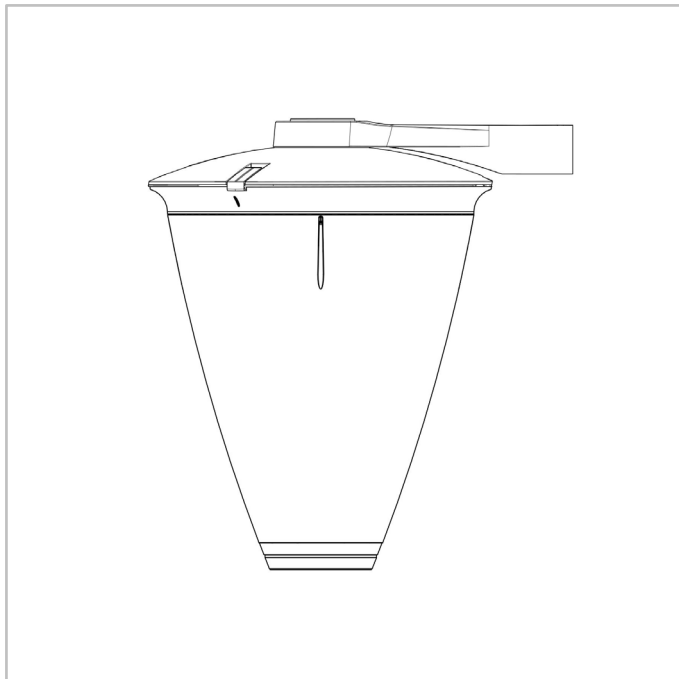
FLEXIA DP | Side-entry penetrating spigot Ø48mm (L3)
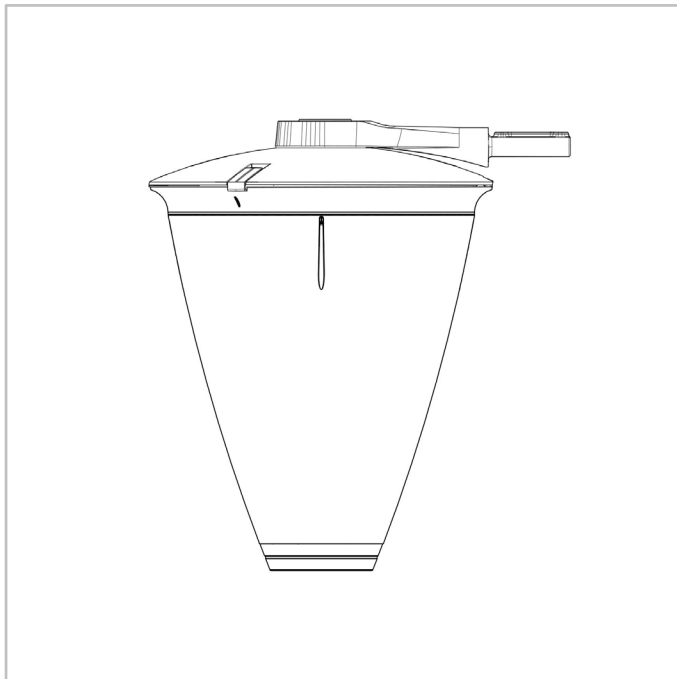
FLEXIA DP | Side-entry 40X40 square direct mounting (E1)
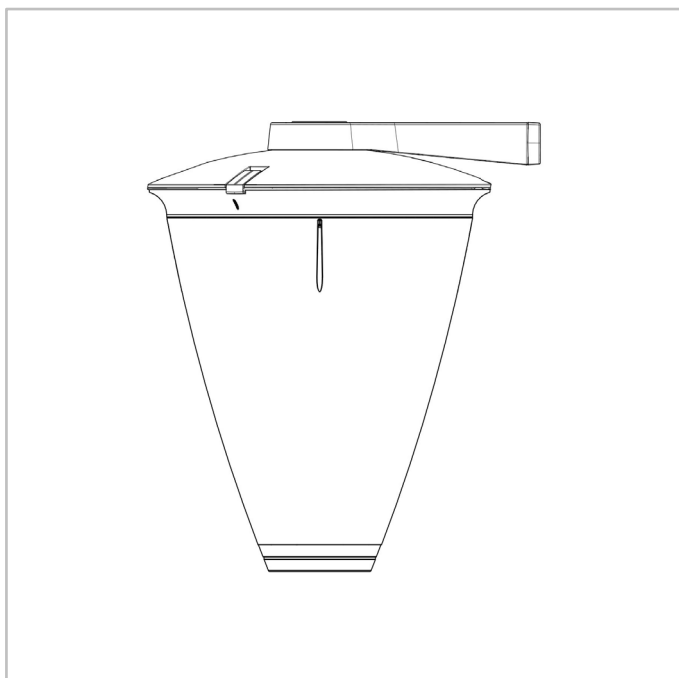
FLEXIA DP | Knuckle joint side-entry enclosing Ø60mm mounting (A6)
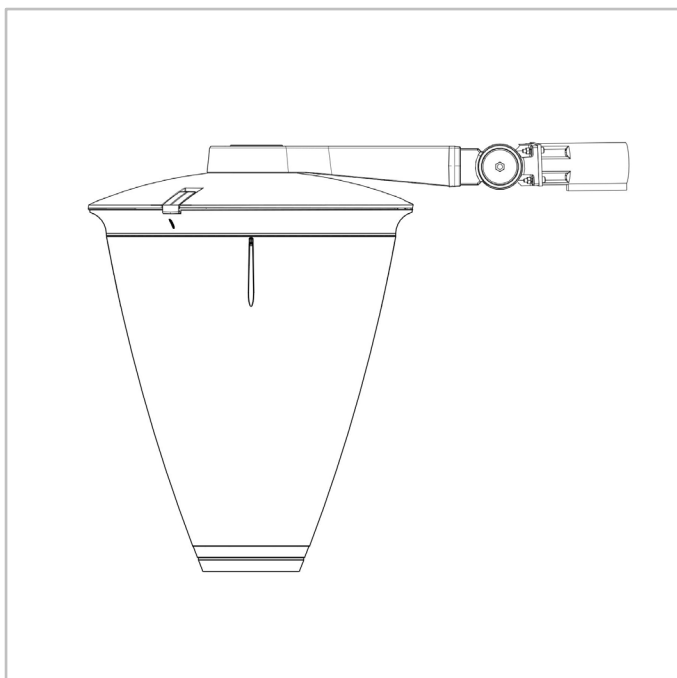
FLEXIA DP | Knuckle joint side-entry penetrating Ø48mm spigot (A5)
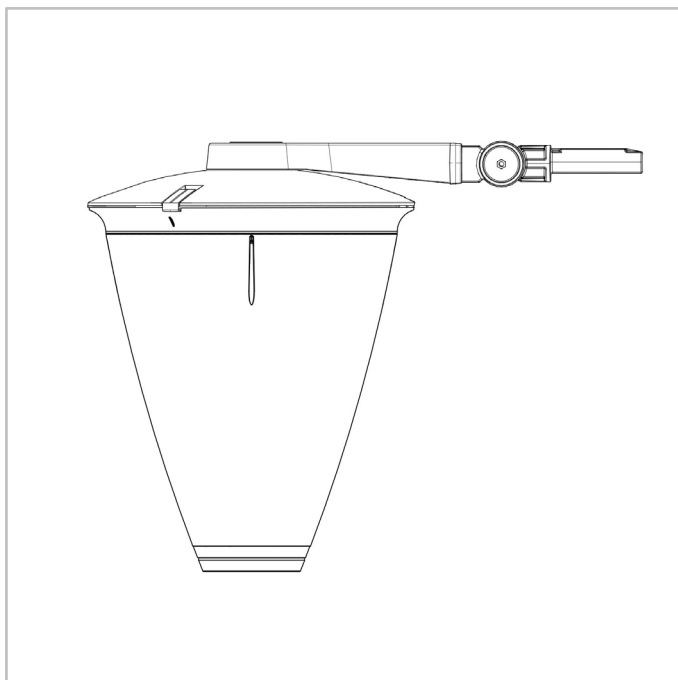
FLEXIA DP | Knuckle joint side-entry 60X50 square mounting (A2)
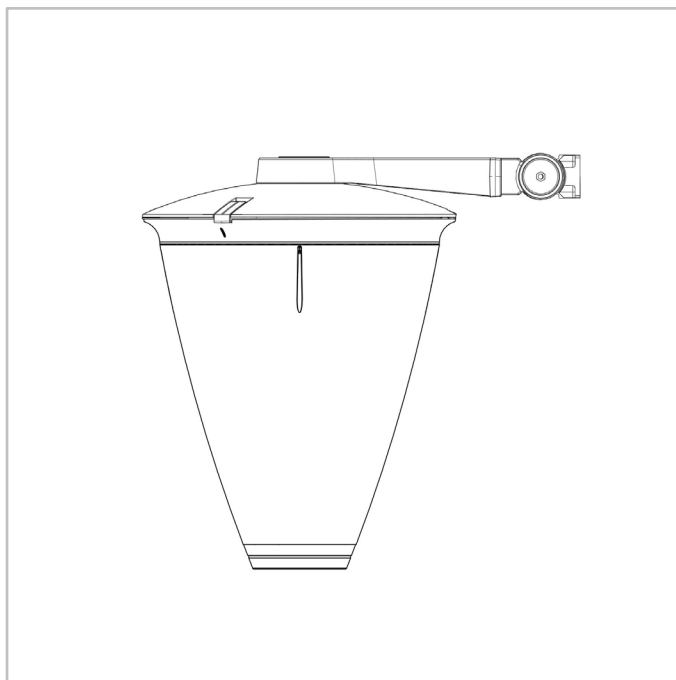
FLEXIA DP | Knuckle joint 1" gas male side entry mounting (A3)
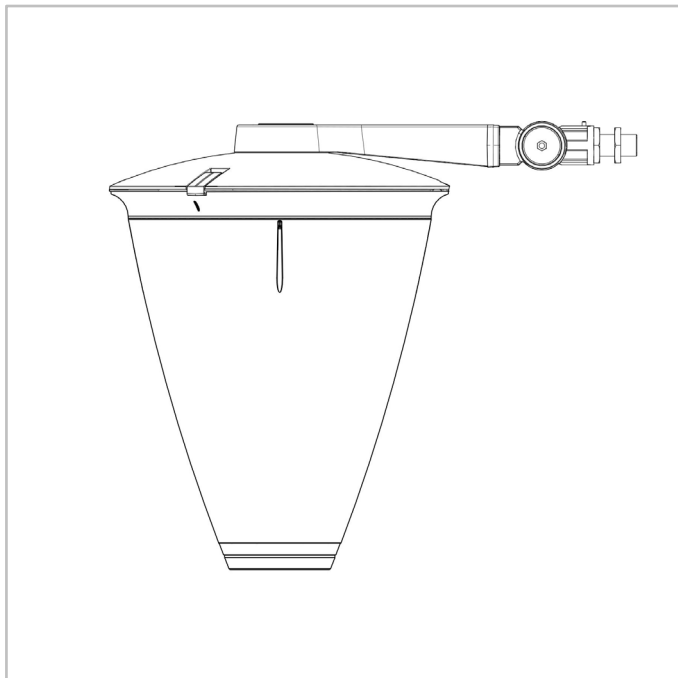
FLEXIA DP | Knuckle joint 1" gas female side entry mounting (A4)
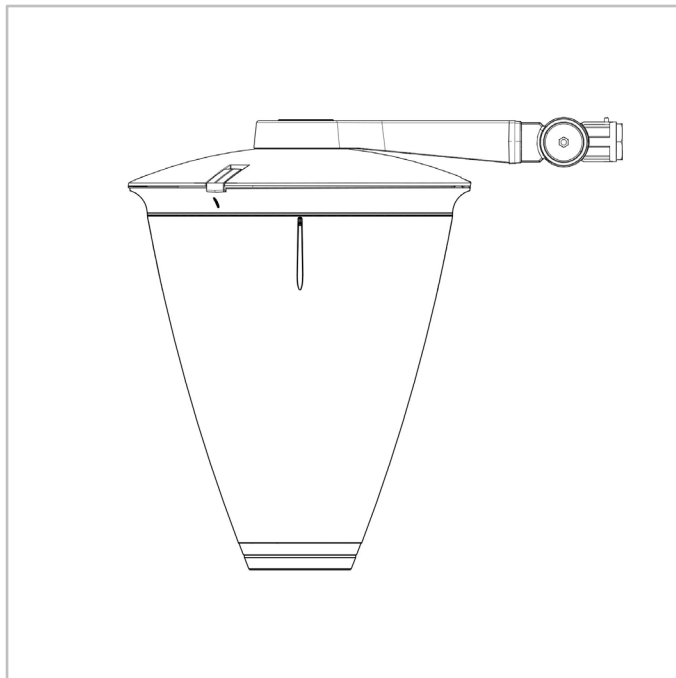
FLEXIA DP | Knuckle joint surface mounting (WB)
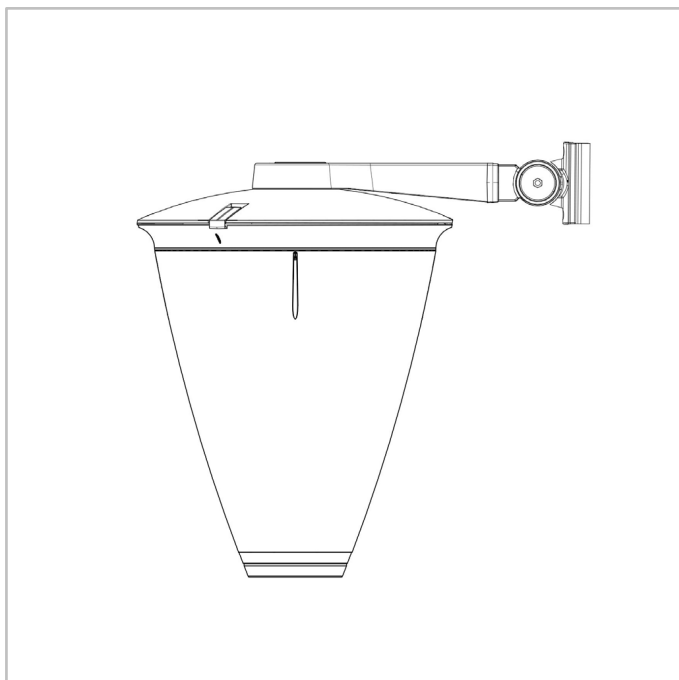
FLEXIA DP | Knuckle joint rear bracket mounting (WM)
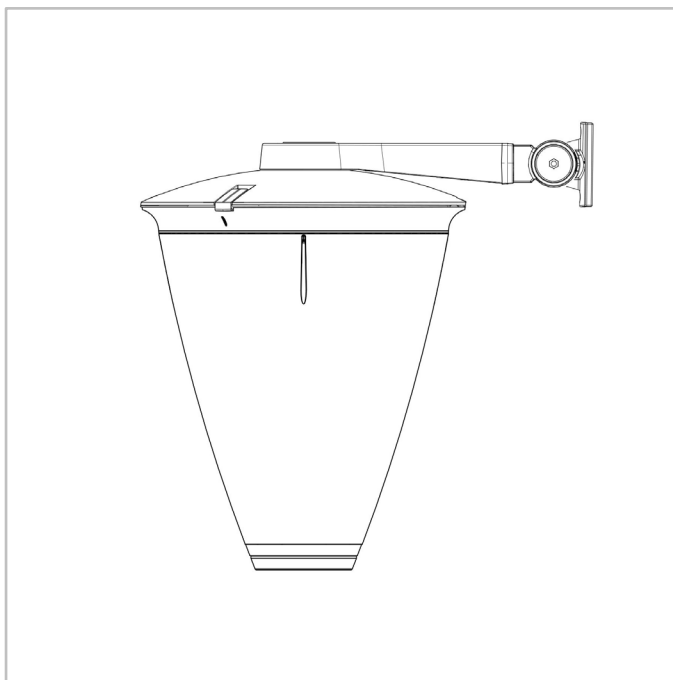
FLEXIA DP | Suspended with fixed 1" gas male mounting (S2)
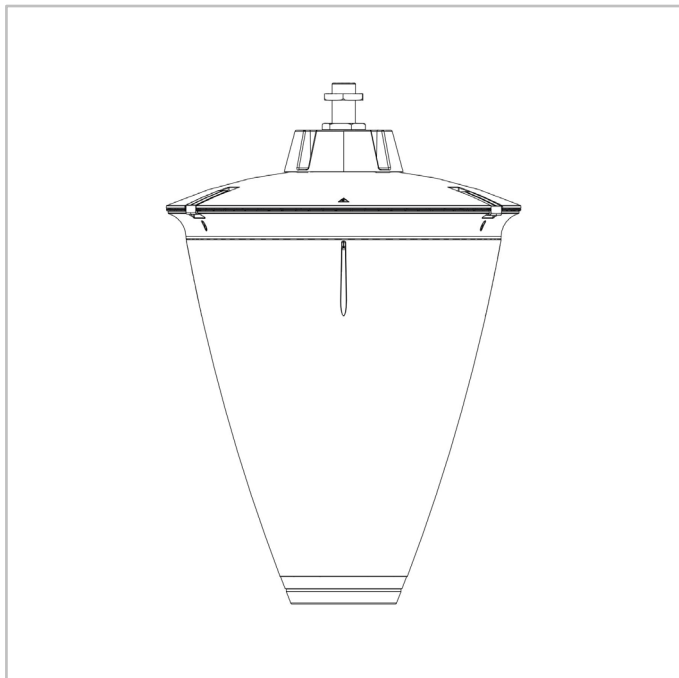
FLEXIA DP | Suspended with fixed 1" gas female enclosing mounting (S3)

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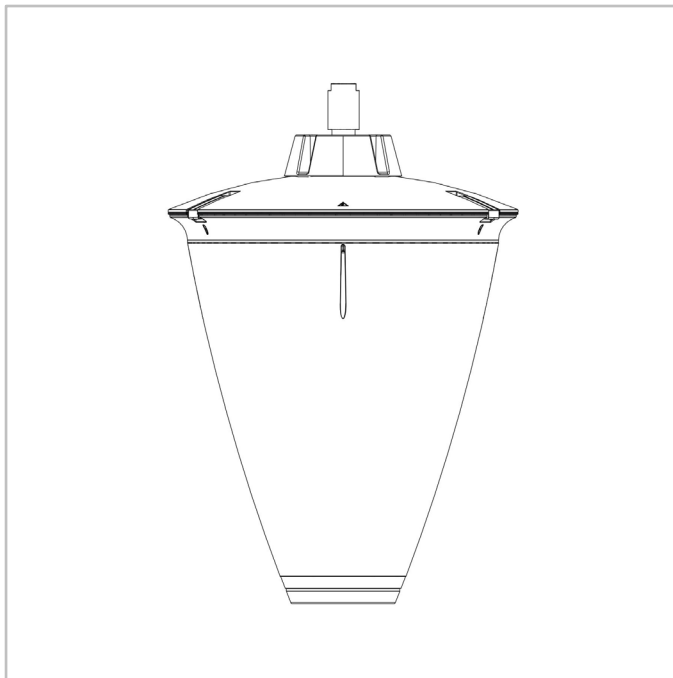
FLEXIA DP | Suspended with knuckle joint 1'' gas male mounting (S4)

FLEXIA DP | Suspended and knuckle joint 1'' gas female enclosing mounting (S5)

FLEXIA DP | SOFIA bracket (F0)

FLEXIA DP | Luminaire opening clearance
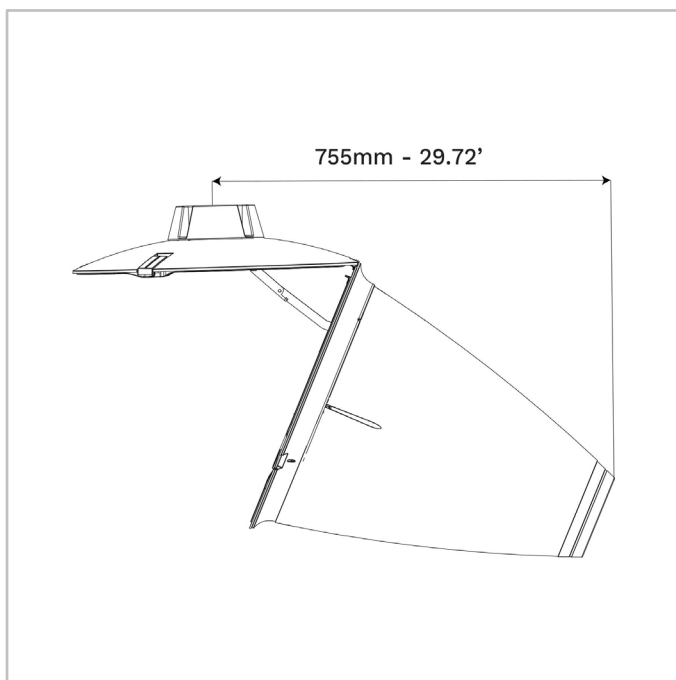
755mm - 29.72'

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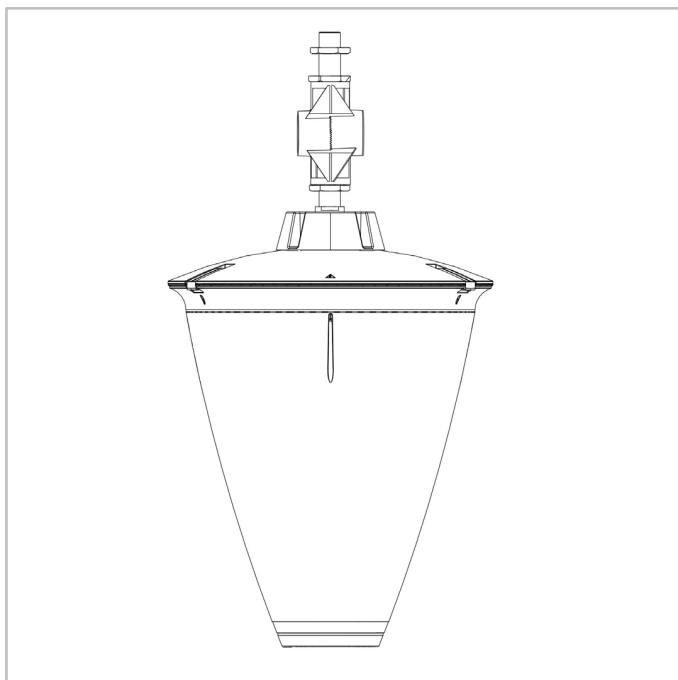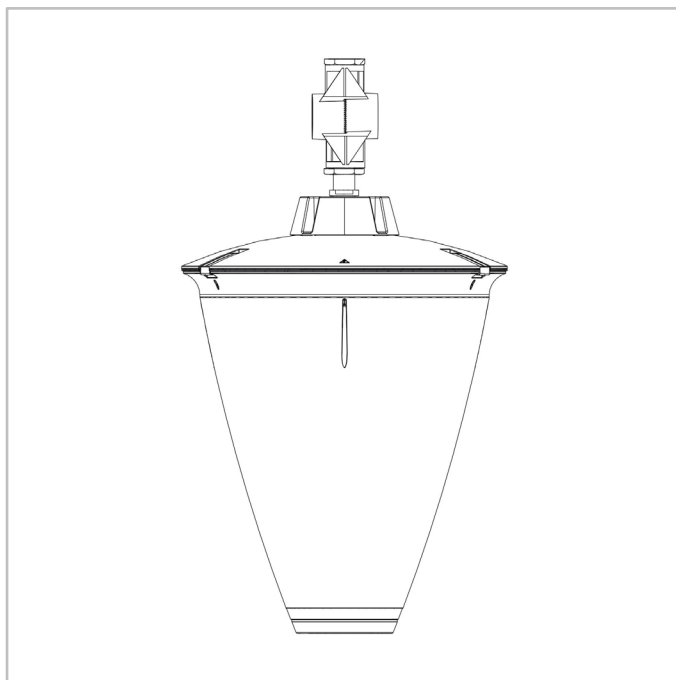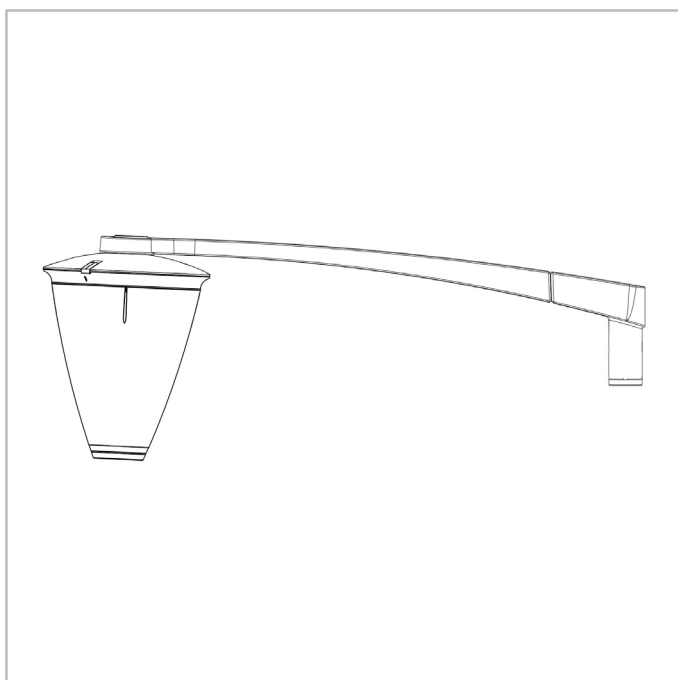| Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 722		Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Neutral White 740		Luminaire output flux (lm) FlexiWhite 730		Luminaire output flux (lm) FlexiWhite 722		Luminaire output flux (lm) FlexiWhite 726		Power consumption (W)	Luminaire efficacy (lm/W) Up to	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max			
FLEXIA DP MIDI	10	200	500	600	600	800	700	900	600	800	700	900	-	-	-	-	-	-	7.8	115	LENSOFLEX⁴
	10	300	800	1000	1000	1200	1100	1300	1000	1200	1100	1400	-	-	-	-	-	-	10.8	130	LENSOFLEX⁴
	10	300	-	-	-	-	-	-	-	-	-	-	1100	1200	900	1000	1000	1100	10.5	114	LENSOFLEX⁴
	10	400	1000	1300	1200	1600	1400	1700	1200	1600	1400	1800	-	-	-	-	-	-	13.8	130	LENSOFLEX⁴
	10	400	-	-	-	-	-	-	-	-	-	-	1400	1600	1200	1300	1300	1500	13.6	118	LENSOFLEX⁴
	10	500	1200	1500	1500	1900	1700	2100	1500	1900	1700	2200	-	-	-	-	-	-	17	129	LENSOFLEX⁴
	10	500	-	-	-	-	-	-	-	-	-	-	1800	1900	1500	1600	1600	1800	17.1	111	LENSOFLEX⁴
	10	600	1400	1800	1800	2200	1900	2400	1800	2200	2000	2500	-	-	-	-	-	-	20.5	122	LENSOFLEX⁴
	10	600	-	-	-	-	-	-	-	-	-	-	2000	2200	1700	1800	1900	2100	20.4	108	LENSOFLEX⁴
	10	650	1500	1900	1900	2400	2100	2600	1900	2400	2100	2700	-	-	-	-	-	-	22.2	122	LENSOFLEX⁴
	10	700	-	-	-	-	-	-	-	-	-	-	2400	2600	2000	2200	2200	2400	23.7	110	LENSOFLEX⁴
	10	730	-	-	-	-	-	-	-	-	-	-	2400	2600	1900	2200	2200	2400	24.7	105	LENSOFLEX⁴
	20	200	1100	1300	1300	1700	1500	1900	1300	1700	1500	1900	-	-	-	-	-	-	13.8	138	LENSOFLEX⁴
	20	200	-	-	-	-	-	-	-	-	-	-	1500	1700	1300	1400	1400	1600	13.3	128	LENSOFLEX⁴
	20	300	1600	2000	2000	2500	2200	2700	2000	2500	2200	2800	-	-	-	-	-	-	19.8	141	LENSOFLEX⁴
	20	300	-	-	-	-	-	-	-	-	-	-	2200	2500	1900	2000	2100	2300	19.3	130	LENSOFLEX⁴
	20	350	1800	2300	2300	2800	2500	3100	2300	2800	2600	3200	-	-	-	-	-	-	22.9	140	LENSOFLEX⁴
	20	370	1900	2400	2400	3000	2600	3300	2400	3000	2700	3400	-	-	-	-	-	-	24.1	141	LENSOFLEX⁴
	20	400	2000	2600	2600	3200	2800	3500	2600	3200	2900	3600	-	-	-	-	-	-	25.9	139	LENSOFLEX⁴

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

FLEXIA DP | PERFORMANCE

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Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 722		Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White		Luminaire output flux (lm) Neutral White 740		Luminaire output flux (lm) FlexiWhite 730		Luminaire output flux (lm) FlexiWhite 722		Luminaire output flux (lm) FlexiWhite 726		Power consumption (W)	Luminaire efficacy (lm/W) Up to	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max			
FLEXIA DP MIDI	20	400	-	-	-	-	-	-	-	-	-	-	2900	3200	2400	2700	2700	3000	25.5	125	LENSO FLEX 4
	20	500	2500	3100	3100	3900	3400	4300	3100	3900	3500	4400	-	-	-	-	-	-	32.3	136	LENSO FLEX 4
	20	500	-	-	-	-	-	-	-	-	-	-	3600	3900	3000	3300	3300	3700	31.9	122	LENSO FLEX 4
	20	600	2900	3600	3600	4600	4000	5000	3600	4600	4100	5200	-	-	-	-	-	-	38.9	134	LENSO FLEX 4
	20	600	-	-	-	-	-	-	-	-	-	-	4200	4600	3500	3800	3900	4300	38.2	120	LENSO FLEX 4
	20	700	-	-	-	-	-	-	-	-	-	-	4800	5300	4000	4400	4400	4900	44	120	LENSO FLEX 4
	20	800	-	-	-	-	-	-	-	-	-	-	5300	5900	4400	4900	5000	5500	50.5	117	LENSO FLEX 4
	20	900	-	-	-	-	-	-	-	-	-	-	5800	6500	4900	5400	5400	6000	57	114	LENSO FLEX 4
	20	1000	-	-	-	-	-	-	-	-	-	-	6300	7000	5300	5800	5900	6500	64	109	LENSO FLEX 4
	40	200	2200	2700	2700	3400	3000	3800	2700	3400	3100	3900	-	-	-	-	-	-	25.9	151	LENSO FLEX 4
	40	220	2400	3000	3000	3800	3300	4100	3000	3800	3400	4200	-	-	-	-	-	-	28.3	148	LENSO FLEX 4
	40	300	3200	4000	4000	5000	4400	5500	4000	5000	4500	5600	-	-	-	-	-	-	37.8	148	LENSO FLEX 4
	40	350	3600	4600	4600	5700	5000	6300	4600	5700	5100	6500	-	-	-	-	-	-	44	148	LENSO FLEX 4
	40	400	4100	5100	5100	6500	5600	7100	5100	6500	5800	7300	-	-	-	-	-	-	50	146	LENSO FLEX 4
	40	500	5000	6200	6200	7800	6800	8600	6200	7800	7000	8800	-	-	-	-	-	-	62	142	LENSO FLEX 4
	40	600	5800	7200	7200	9100	7900	9900	7200	9100	8100	10200	-	-	-	-	-	-	76	134	LENSO FLEX 4
	40	700	6500	8100	8100	10200	8900	11200	8100	10200	9100	11500	-	-	-	-	-	-	88	131	LENSO FLEX 4

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

5300
LENSO FLEX 4

5300 BL
LENSO FLEX 4

5300 GL
LENSO FLEX 4

5300 GL SY
LENSO FLEX 4

5300 LF
LENSO FLEX 4

5300 SY
LENSO FLEX 4

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5302 2 channels GL
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5302 2 channels LF
LENSO FLEX™4

5302 2 channels SY LF
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5303	5303 2 channels LF	5303 2 channels SY

5303 BL	5303 GL	5303 GL SY

5303 LF SY
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5304 Diffuse protector BL
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5304 Diffuse protector LF
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5304 Diffuse protector LF SY
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5304 SY
LENSO FLEX™4

5304 SY GL
LENSO FLEX™4

5305 2 channels
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5305 2 channels GL
LENSO FLEX™ 4

5305 2 channels LF
LENSO FLEX™ 4

5305 2 channels SY
LENSO FLEX™ 4

5305 BL
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5305 GL SY
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5307 2 channels GL SY
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5307 2 channels SY
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5307 BL
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5307 LF SY

5308

5308 2 channels GL SY

5308 2 channels LF

5308 Diffuse protector BL

5308 Diffuse protector GL

5308 SY

5308 SY LF

5345

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5345 SY

5366 BL

5366 Diffuse protector

5366 GL

5366 GL SY

5366 SY

5367

5367 Diffuse protector GL

5367 GL SY

5367 SY

5369 BL ZR

5369 Diffuse protector ZR

5370 ZL

5370 ZL BL

5388 Diffuse protector

5388 Diffuse protector BL

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5388 SY

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