

**Schröder**  
Experts in lightability™

# Tunnel lighting solutions

For safe, pleasant, sustainable and connected tunnel infrastructure



# LUMINAIRE RANGE



# CONTROL SYSTEM





# Your partner in sustainability



Schröder has developed a cohesive, company-wide sustainability strategy called **“Together for our Future”**. This commitment is structured around three axes encompassing the relevant prioritised **UN Sustainable Development Goals** (SDGs).

Sustainability is embedded into our strategy, structure, processes and culture. At Schröder, we collaborate closely with our customers to develop robust and long-term solutions to meet the challenges they face, while adding value with a positive, lasting impact on society and the environment.

## PLANET

Being responsible for the planet by reducing our own and our customers' environmental impact.

## COMMUNITY

Being responsible for the community by having a resolutely positive impact on society through our solutions.



## PEOPLE

Being responsible for our staff members by developing human growth through diversity and respect for human rights.



**SUSTAINABLE  
DEVELOPMENT  
GOALS**

«Our role as market leader motivates us to take part in the global battle against climate change and contribute to respectful economic development. We help communities face their biggest challenges, making the world more sustainable.»

**Werner de Wolf**  
CEO – Schröder

A company  
strongly committed  
to sustainability



EcoVadis evaluates more than 85,000 organisations in over 160 countries and in over 200 industries every year. **Based on 21 criteria, the rating assesses a company's performance** in four categories: Environment, Labour and Human Rights, Ethics and Sustainable Procurement.

The EcoVadis gold rating acknowledges the efforts being made every day by every single Schröder employee to enable a better and more sustainable world.

More information:  
[www.ecovadis.com](http://www.ecovadis.com)



YOUR PARTNER IN SUSTAINABILITY



Being responsible  
for the planet

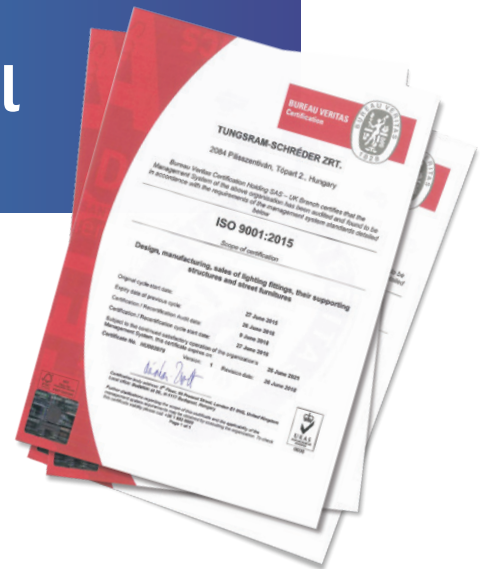
# Manufacturing according to the highest environmental standards

All Schröder factories are certified ISO 14001:2015 which recognises their efforts for their environmental management system.

For each factory, a continuous improvement plan for resource efficiency and waste management is put into action by the quality manager.

More information:

[www.iso.org](http://www.iso.org)

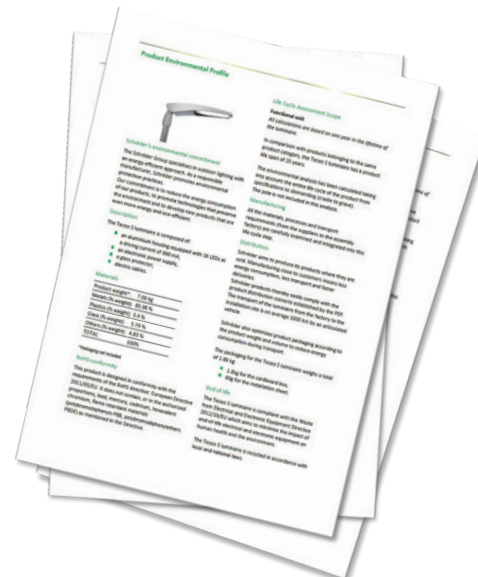


# Transparency throughout the complete product life cycle

To provide our customers with clear information on the environmental impact of each luminaire, Schröder relies on **a product life cycle analysis tool** (Instant LCA), developed in collaboration with an independent agency (in accordance with the principles of ISO 14040:2006). The results are available in the **Product Environmental Profile** (PEP) documents.

They summarise the luminaire's life cycle assessment, by examining its environmental impact throughout its life cycle, from raw material extraction to end of life.

The PEP documents are available upon request to all customers to help them demonstrate their regulatory compliance and commitment to minimising their environmental footprint.



# Building a circular ecosystem



Schröder takes the circular economy into account, right from the outset. From the concept phase, design guidelines not only consider the production and environmental impact of our luminaires. They also facilitate removing components and increasing the standardisation of parts and the materials' separability once their working life is over.

The **Schröder Circle Light Label** designates products that are optimised for a circular economy without compromising on quality.

We assess our luminaires to evaluate their potential circularity through 12 objective criteria in 5 categories:

- ✓ Performance
- ✓ Maintenance
- ✓ Refurbishment
- ✓ Non-destructive disassembly
- ✓ Recycling



The **Schröder Smart Label** allows installers and infrastructure managers to access essential luminaire information by scanning a QR code. It enables project specific details to be added during installation and facilitates communication between installers and city managers. Troubleshooting assistance and spare parts ordering are also available via the Smart Label, ensuring reliable information on luminaires, anytime, anywhere.

- ✓ Provides instant access to luminaire information via QR code scanning (works online and offline)
- ✓ Provides the ability to add key information during installation
- ✓ Facilitates interaction between installers and city managers
- ✓ Provides support for repairs and parts ordering



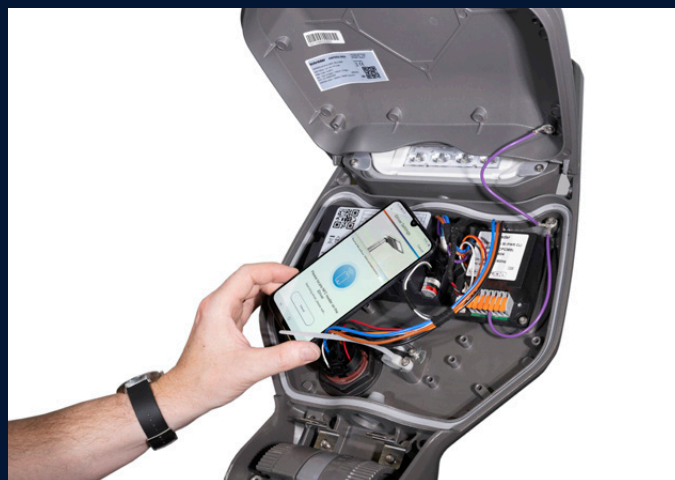


The **Schröder Circle Light App** is the practical tool for on-site programming and quick one-for-one driver replacement, to refurbish installed luminaires and extend their life while maintaining the desired operating mode.



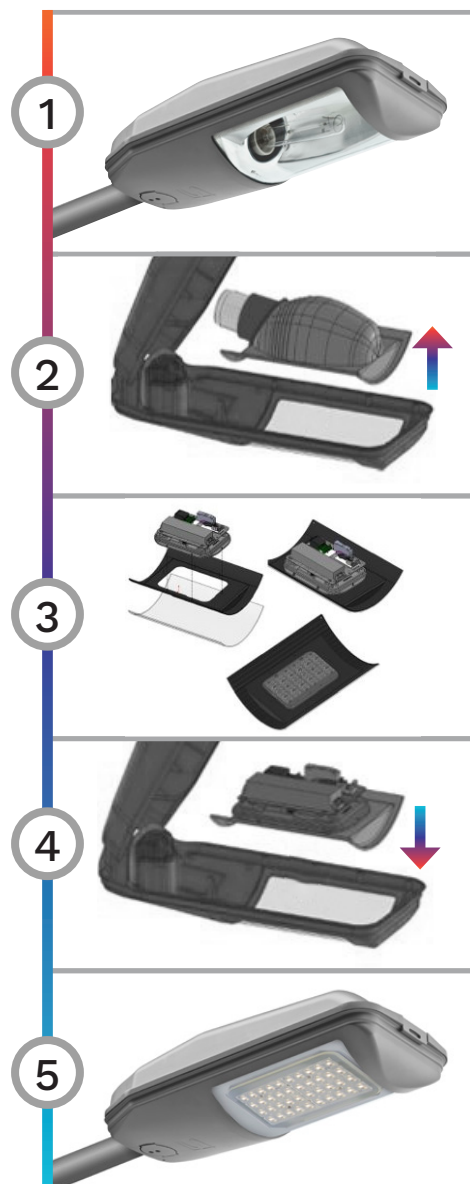
It helps lighting operators and installers to:

- ✓ Access all relevant luminaire information by scanning a QR code
- ✓ Program luminaire settings on site and reduce inventory complexity
- ✓ Capture asset installation data
- ✓ View installed luminaires on a map interface
- ✓ Read diagnostic information and operating history on site
- ✓ Extend luminaire life while preserving existing settings



Easily upgrade your existing installations with the **Schröder CIRCLE LED BASE** retrofit kits, sustainable solutions that extend the life of your luminaires. They help you reduce waste, comply with light pollution regulations, minimise maintenance and save energy. With the CIRCLE LED BASE, you can meet the principles of a circular economy without the need for new wiring or changes to your existing lighting infrastructure.

- ✓ **Easy to upgrade:** adapts to existing luminaire frames for LED conversion or replacement.
- ✓ **Easy installation:** plug-and-play design for quick and convenient installation.
- ✓ **Extended infrastructure life:** replace light sources for improved efficiency, preserving existing infrastructure.
- ✓ **Enhanced performance:** superior features including glare control, flicker control, extended life, light pollution reduction and improved safety.





# Being responsible for the community

## The right light where, when and how it is needed

The art of smart lighting consists of putting the kind of light you request where you need it, and taking it away from where you don't require it and when you don't want it. Schröder is your partner for **maximising the advantages of lighting while taking care of the environment** and improving your operational benefit.

With our modern and versatile technologies enabling a **"Dim It, Aim It, Tone It, Change It"** philosophy, we offers our customers complete flexibility to modulate light according to any environmental challenge.



# A guarantee of the best photometric solution

As pioneers in lighting technology, our lighting solutions deliver the right light in the right place.

We have developed **numerous photometric engines** over the years to provide **the best solution for every project** in terms of performance, comfort, desired outcome and return on investment. We constantly strive to innovate and develop solutions that are as positive for people as they are sustainable for the environment.

We combine our technical and photometrical know-how to **meet the most demanding lighting standards.**

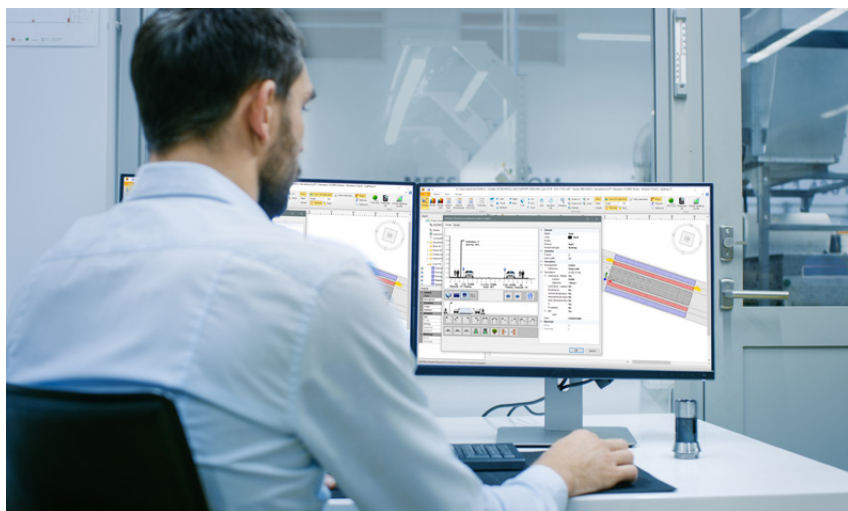
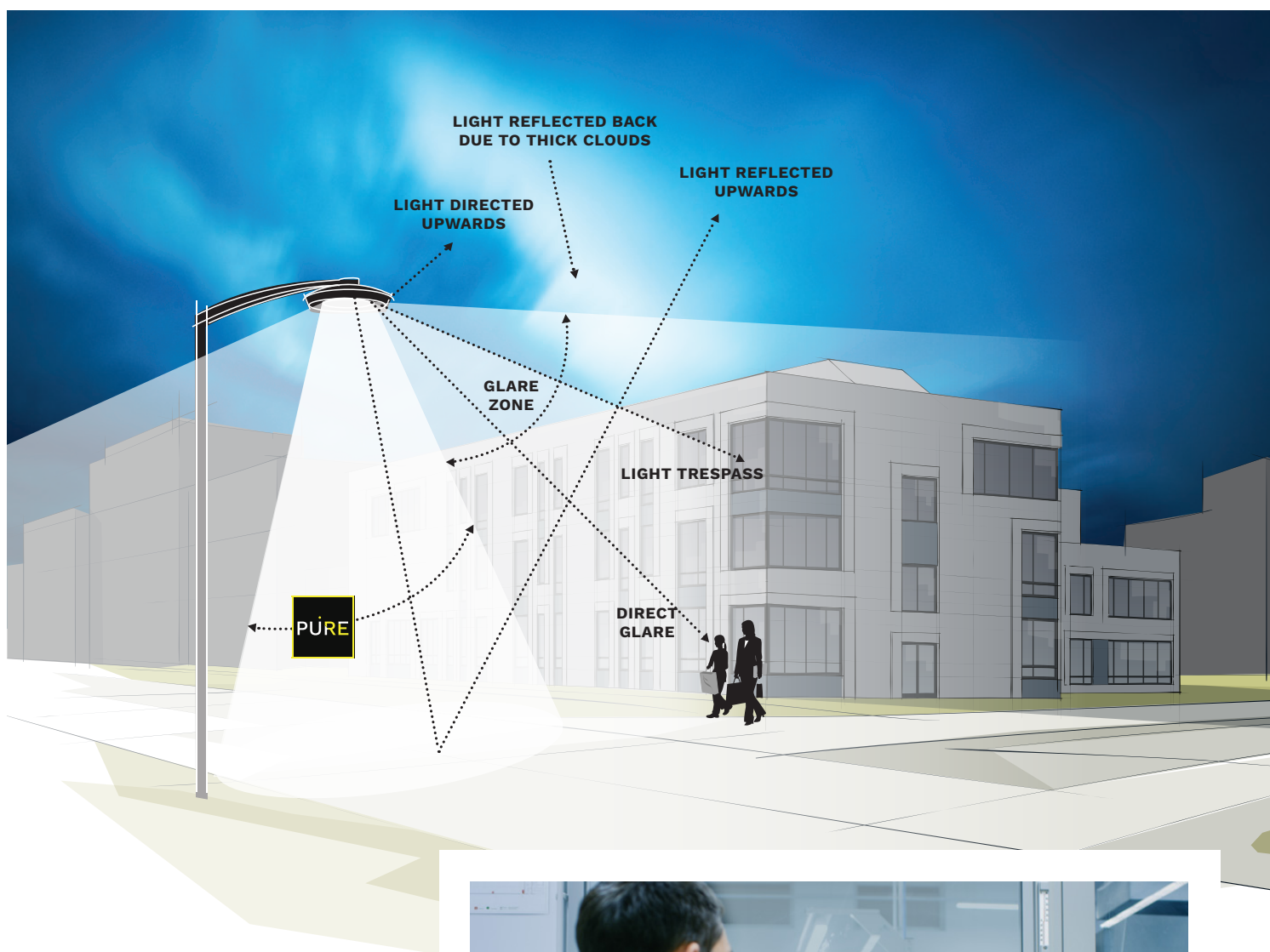


	LENSO FLEX®	MID FLEX™	PRO FLEX™	CONTI FLEX™	BLAST FLEX™	RE FLEXO™
<b>LED type</b>	High-power 2mm <sup>2</sup>	Mid-power 2mm <sup>2</sup>	High-power 2mm <sup>2</sup>	High-power 2mm <sup>2</sup>	High-power 2 or 4mm <sup>2</sup>	High-power 2 or 4mm <sup>2</sup>
<b>Optic</b>	PMMA lenses	PMMA lenses	Polycarbonate lenses	PMMA lenses	PMMA collimators	Aluminium reflectors
<b>Protector</b>	Flat glass or deep protector	Flat glass	Lenses integrated in the PC protector	Flat glass	Flat glass or PC protector	Flat glass or PC protector
<b>Options</b> (depending on luminaire)	Back light control Glare limiter	-	Back light control	-	Back light control Glare limiter	-
<b>Typical applications</b>	All road, urban, tunnel applications and beyond	All road applications and beyond	All road applications and beyond	Continuous line lighting in tunnels	Floodlighting and large areas	Where very asymmetrical beams and visual comfort are both required
<b>Number of optics</b>	77	11	32	4	13	14

# PureNight: dark sky, bright ideas

**PURE**

With its PureNight concept based on high-end lighting designs with state-of-the-art photometrical platforms and aiming accessories, Schröder offers the ultimate solution for bringing the night sky back without switching off cities. With Schröder PureNight solutions, you can **direct the light only where it is wanted and needed**.



# The right colour temperature at any time

**FLEXI  
WHITE**

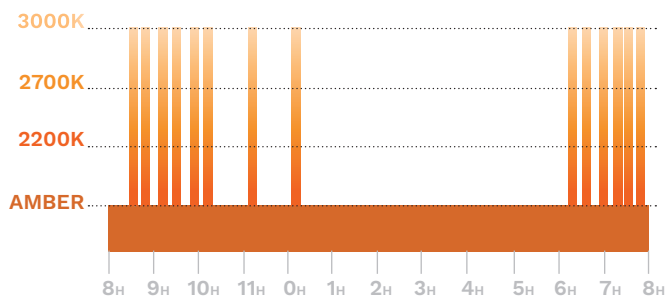
To choose is to forsake. When it comes to deciding which colour temperature you will opt for, it is never a happy moment. You know that a colder white light optimises performance while a warmer one is more preferable to people and animal natural cycles. What if you didn't have to choose? The Schröder FlexiWhite solution offers you the freedom to use the right colour temperature at any time.

Whether it relies on pre-programmed scenarios, works with the our remote control systems, uses sensors or a mix of all three, the FlexiWhite solution offers you the flexibility to provide **the right level with the right colour temperature at the right place and the right time.**

## CASE #1

### Preservation of nature, promotion of active mobility

Environment: Bike/pedestrian path  
FlexiWhite solution: Amber as default, 3000K upon detection.



**AMBER**  
Nature-friendly, minimal safety lighting

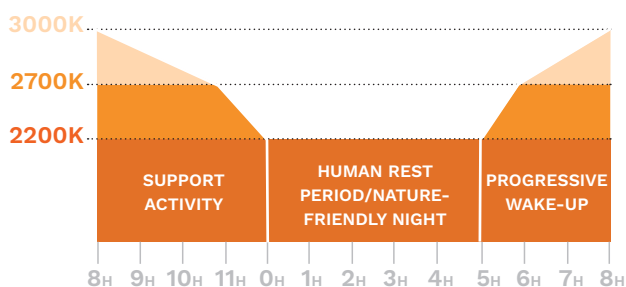


**3000K**  
people detection, maximised safety and comfort (high visibility)

## CASE #2

### Attractiveness, ambiance and circadian rhythm

Environment: City centre  
FlexiWhite solution: 2200K, 3000K and everything in between.



**3000K – 30lux**  
Early evening/early morning  
Stimulating atmosphere



**2700K – 20lux**  
Evening/early night  
Quieter ambiance



**2200K – 5lux**  
Night  
Completely calm mood



# Being responsible with people

## Valuing difference, being inclusive, and embracing diversity

At Schröder, every employee is valued for her or his skill set. We actively look for and choose employees based on their experience and the value they bring to the company. This concept is underlined in our **Code of Conduct**.

The diversity of the staff, in all its forms (skills, experience, age, gender, culture, etc.), is **a source of renewal, innovation and creativity**. In line with the UN's goals, we decided to focus our efforts primarily on gender diversity and equality, as this is still an on-going concern in society as a whole.



## Protecting human rights

Schröder has adopted the Responsible Business Alliance (RBA) Code of Conduct as its standard on human rights. Our goal is to **protect human rights directly and indirectly** by ensuring that Schröder's entities and their supply chain are safe and that workers are treated with respect and dignity.

We require all our suppliers to confirm adherence and compliance with the RBA standard.

More info: [www.responsiblebusiness.org](http://www.responsiblebusiness.org)





## Training and education

Schröder has developed its own internal training academy called SKILL, which stands for Sharing Knowledge in Light and Lighting. SKILL's mission is to **increase Schröder employees' and stakeholders' competencies to successfully face changes** in the lighting market such as smart lighting and new control systems. SKILL also develops e-learning and online courses, both for Schröder employees and customers.

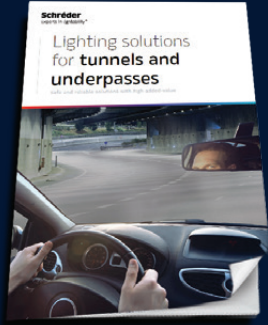


# TUNNEL



“ Solutions providing safe, comfortable lighting for motorists and cyclists, with operational benefits ”





Click for more information



**Schröder**



# The most complete tunnel lighting control system

Jointly developed with Phoenix Contact, the Advanced Tunnel System 4 (ATS 4) is a powerful tunnel lighting control system enabling precise remote dimming and switching of each connected luminaire, based on various tunnel parameter inputs.

This innovative tool can constantly **adapt the lighting levels according to specific tunnel conditions**, such as weather, traffic speed and density, and other sensor inputs such as dirt accumulation, wall reflectance, etc. **It monitors the power consumption and reports any failures.**

As the system integrates the initial tunnel lighting study and uses the industrial BUS for individual auto-addressing, **the ATS speeds up the commissioning process, saving valuable time and resources on-site.**



## KEY ADVANTAGES

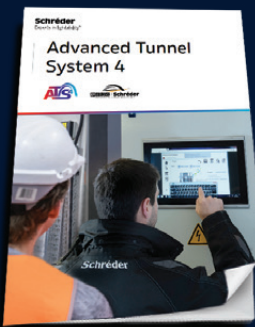
- > **Improve reactivity to any sudden changes in the tunnel**
- > **Maximise energy savings thanks to highly efficient dimming**
- > **Easy to install and configure**
- > **Reduce commissioning time significantly (up to 75%)**
- > **Reduce on-site interventions**
- > **Compliant with the highest cybersecurity standards (NIS EU 2016/1148 - IEC62443)**


1  
CREATE SAFE ENVIRONMENTS FOR USERS

2  
ENABLE MOBILITY

3  
DESIGN SUSTAINABLE TUNNELS

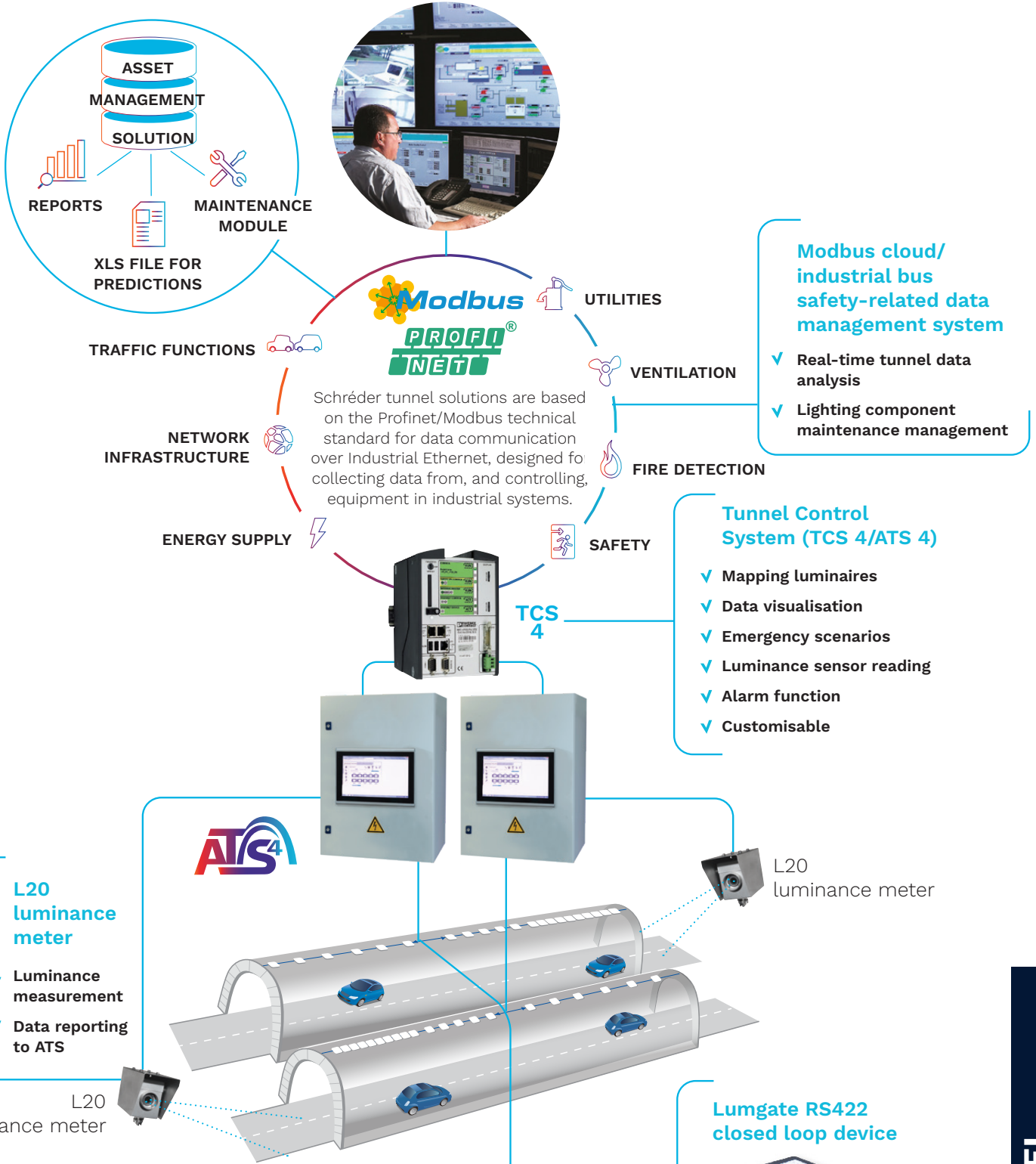
4  
GENERATE SIGNIFICANT TIME AND COST SAVINGS



**Click for more information** 



# Based on Industry 4.0 technologies





## Tunnel lighting control solution over a DALI network protocol

Provides the essential control functions of the ATS 4 in a **lean feature set**.

Enables **coordinated dimming and switching** of groups of luminaires for even more **savings**.



Equipped with a fully featured **powerful lighting control software**. No additional interface is required.

The ideal **solution** for basic tunnels or interior zones of long tunnels.

### ✓ Optimised installation

The ATS 4 DALI cabinet constantly communicates with the ATS 4 DALI boxes. Equipped with multiple DALI outputs (up to 8 DALI masters), the DALI boxes send commands to or receive data from groups of luminaires. This type of system architecture provides an optimised solution for specific tunnel needs.

### ✓ Standard cabling

The ATS 4 DALI benefits from a complete set of toolless standard cables and quick-on connectors, considerably speeding up cabling and saving valuable time on-site.



<b>COMMUNICATION TYPE</b>	DALI network	Industrial bus communication
<b>INSTALLATION TYPE</b>	Luminaires/driver box equipped with DALI drivers	Luminaires/driver boxes equipped with Lumgate
<b>LIGHTING CONTROL</b>	Broadcast command (one order per luminaire segment)	Individual control (one order per luminaire)
<b>MAINTENANCE</b>	Group failure indication	Precise failure location
<b>CABLE TYPE</b>	Standard cables	Bus communication cables
<b>MAX. CIRCUIT CABLE LENGTH</b>	Up to 300m per entire segment	Up to 400m between two devices
<b>INSTALLATION</b>	Toolless plug-and-play system	
<b>SYSTEM CAPACITY</b>	2 to 8 DALI masters per ATS 4 DALI box	240 Lumgates per ATS 4
<b>IDEAL FOR</b>	Basic tunnels or interior zones	Complex tunnel architecture or entrance areas



# TFLEX



## MAIN APPLICATIONS



TUNNELS &  
UNDERPASSES

### The all-rounder powerful tunnel lighting platform

**TFLEX is a revolutionary, modular-based platform for an enhanced road tunnel lighting experience.**

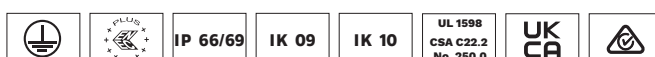
TFLEX provides optimised, energy-efficient solutions for the various typical tunnel zones from entry to exit, taking into account all design factors and traffic conditions that affect safety, notably traffic characteristics, types of user, tunnel length and geometry.

An advanced, fully integrated system with lighting and control, it guarantees the lowest energy consumption while respecting the most stringent tunnel lighting requirements and standards.

With the latest digital and optical technology, TFLEX ensures high visual performance for an improved driving experience.



TFLEX	BASE	MODULE 1 COMBI 1	MODULE 2 COMBI 2	MODULE 3 COMBI 3
Typical luminaire output flux (range)	3,200 to 21,500lm	13,000 to 33,000lm	19,600 to 66,000lm	69,700 to 91,100lm
Power consumption	22.9W to 135W	86W to 254W	128W to 508W	508W to 624W
Colour temperature	Neutral white 740			
Nominal voltage	220-240V / 277V / 347-480V / 50-60Hz			
Surge protection	10 / 20kV			





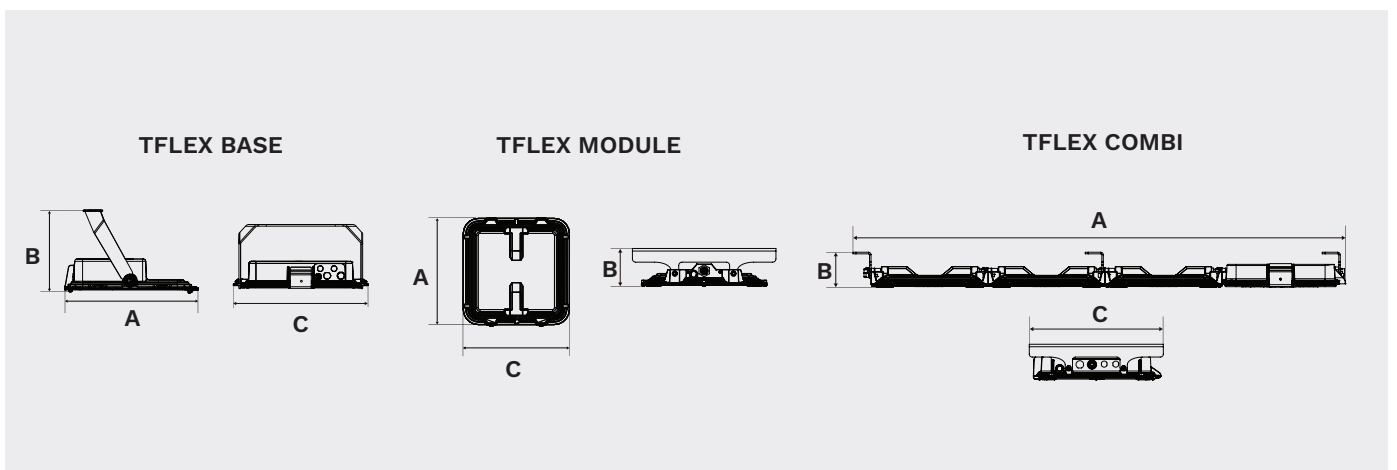
## KEY ADVANTAGES

- > **Flexibility:** modular approach with wide range of lighting distributions
- > **Compact, lightweight and easy to install**
- > **Two electrical circuits** for enhanced dimming possibilities, optimised power factor and longer lifespan
- > **High-power LED solution** to replace HID luminaires in the entrance and interior zones
- > **Separate housings** for gear (DRIVE) and optical units (MODULE/COMBI) for optimised thermal management in high-power applications
- > **Tool-free access** for easy maintenance

## DIMENSIONS

TFLEX	BASE	MODULE 1	MODULE 2	MODULE 3	COMBI 1	COMBI 2	COMBI 3
<b>A</b>	415mm   16.3"	391mm   15.4"	780mm   30.7"	1170mm   46.1"	860mm   33.9"	1247mm   49.1"	1635mm   64.4"
<b>B</b>	244mm   9.6"	116.5mm   4.6"	116.5mm   4.6"	116.5mm   4.6"	117mm   4.6"	117mm   4.6"	117mm   4.6"
<b>C</b>	488mm   19.2"	385mm   15.3"	385mm   15.3"	385mm   15.3"	440mm   17.3"	440mm   17.3"	440mm   17.3"
<b>KG</b>	11kg   24.2lbs	8kg   17.6lbs	15kg   33lbs	23kg   50.6lbs	16kg   35.2lbs	23kg   50.6lbs	32kg   70.4lbs

Weight and dimensions may be different according to the fixation system. Please consult us.



# DESIGN HIGHLIGHTS



The TFLEX platform is built around a tool-free philosophy for opening/closing as well as power, control and internal cabling.



The preassembled tool-free fire-rated cables and connectors used for TFLEX reduce installation time and improve quality and reliability.

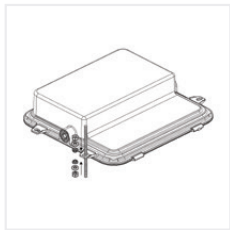


Designed with two electronic circuits, TFLEX enables constant dimming with an optimised power factor.



The TFLEX range offers various mounting options for ceiling or wall mounting with fixed or tiltable fixations.

## MOUNTING OPTIONS



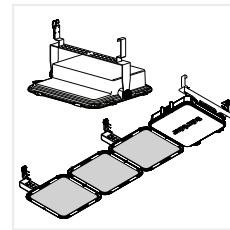
BASE - 4 slots for tie-rod mounting



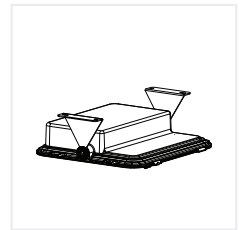
BASE - short bracket



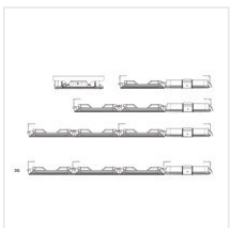
BASE - long bracket



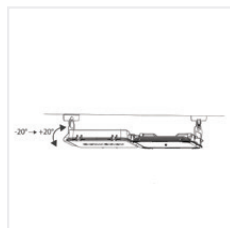
BASE, COMBI & MODULE - Hook fixation



BASE - Adjustable fixation 3G compliant



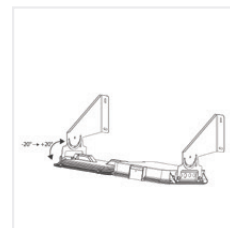
COMBI & MODULE - standard fixed brackets



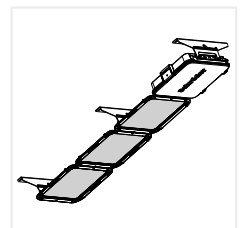
COMBI & MODULE - adjustable swivelling mounting



COMBI & MODULE - pull-out swivelling wall mounting



COMBI & MODULE - adjustable swivelling wall mounting



COMBI - pull-out swivelling suspended mounting





# TFLEX STS

## MAIN APPLICATIONS



TUNNELS & UNDERPASSES

**Modular-based, highly corrosion-resistant tunnel lighting solution**

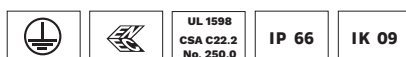
**TFLEX STS is a modular-based lighting solution designed for enhancing and securing the road tunnel driving experience in highly-corrosive environments.**

Made of highly corrosion-resistant stainless steel, TFLEX STS COMBI provides a powerful yet robust solution for tunnels with harsh environments.

TFLEX STS COMBI offers an advanced, fully integrated system with lighting, cabling and control, guaranteeing the lowest energy consumption while respecting the most stringent tunnel lighting requirements and standards.



TFLEX STS	BASE 40	COMBI/MODULE 40	COMBI/MODULE 60	COMBI/MODULE 100
Typical luminaire output flux (range)	3,100 to 19,500lm	13,200 to 28,900lm	26,500 to 57,800lm	63,800 to 86,700lm
Power consumption	23W to 135W	86W to 204W	172W to 408W	472W to 602W
Colour temperature	Neutral white 740			
Nominal voltage	220-240V / 277V / 347-480V 50-60Hz			
Surge protection	10 / 20kV			





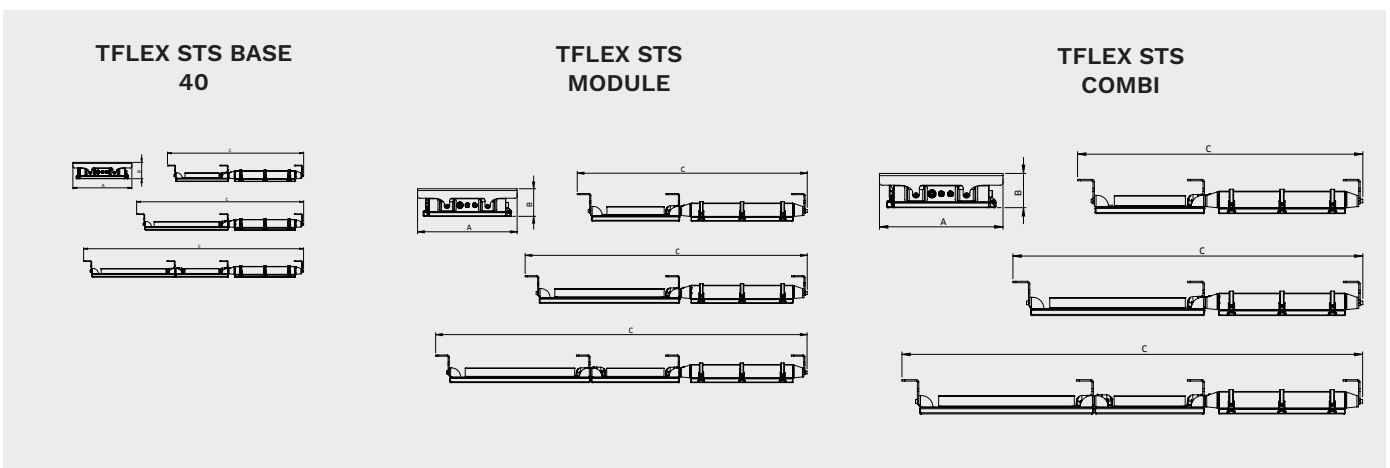
## KEY ADVANTAGES

- > Flexibility: modular approach with wide range of lighting distributions
- > High quality, robust materials
- > Designed for long-lasting performance
- > Tool-free access for easy maintenance
- > Made of high-grade anti-corrosive stainless steel
- > Optimised thermal dissipation that results in higher photometrical performance

## DIMENSIONS

TFLEX STS	BASE HD40	MODULE 40	MODULE 60	MODULE 100	COMBI 40	COMBI 60	COMBI 100
<b>A</b>	444mm   17.5"	440mm   17.32"	440mm   17.32"	440mm   17.32"	440mm   17.32"	440mm   17.32"	440mm   17.32"
<b>B</b>	118mm   4.6"	122mm   4.8"	122mm   4.8"	122mm   4.8"	122mm   4.8"	122mm   4.8"	122mm   4.8"
<b>C</b>	435mm   17.1"	468.4mm   18.4"	698.4mm   27.5"	1093.4mm   43"	1016.4mm   40"	1246.4mm   49"	1641.4mm   65"
<b>KG</b>	10kg   22lbs	12.3 kg   27.1 lbs	16.2 to 17.3kg   37 to 38.1lbs	26.8 to 28kg   59 to 61.6lbs	25kg   55lbs	28.9 to 30kg   63 to 66lbs	39.8 to 41kg   87 to 90.2lbs

Weight and dimensions may vary according to the configuration. Please consult us.



# TFLEX LINE



## MAIN APPLICATIONS



TUNNELS &  
UNDERPASSES

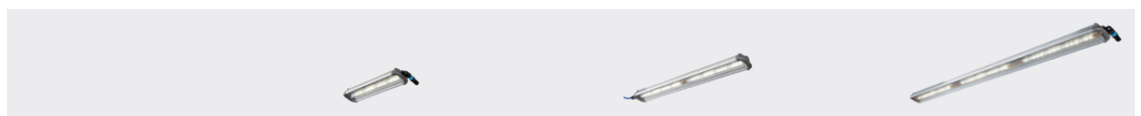
The complete solution for continuous tunnel lighting

**TFLEX LINE has been developed as the continuation of the TFLEX tunnel solution, offering a continuous LED line designed to provide perfect visual guidance in the most complex tunnel zones with maximum efficiency.**

With its slim-line design and linear-shaped light sources, TFLEX LINE is the perfect replacement for fluorescent tubes. Its improved photometric engines lead to unrivalled visual performance, creating perfect light uniformity everywhere in the tunnel while significantly reducing energy consumption.

This continuous LED line is available in various lengths with multiple photometric distributions, making it suitable for any kind of tunnel project.

TFLEX LINE is a complete solution, available with integrated connectors and deliverable with a set of preassembled cables in custom lengths to fit any tunnel length and geometry.



TFLEX LINE	60	120	200
Typical luminaire output flux (range)	700 to 4,600lm	1,400 to 9,300lm	1,400 to 14,100lm
Colour temperature	Neutral white 740		



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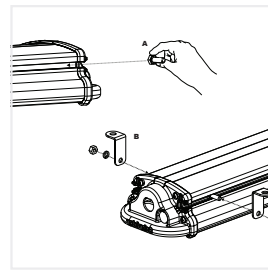


## KEY ADVANTAGES

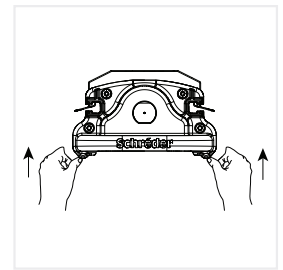
- > High visual comfort through continuous line lighting
- > Various lengths for continuous line installation
- > Excellent uniformity and significant energy savings
- > Two electrical circuits for enhanced dimming possibilities, optimised power factor and longer lifespan
- > Remote gear boxes for versatile mounting
- > Designed for long-lasting performance

## DIMENSIONS | MOUNTING

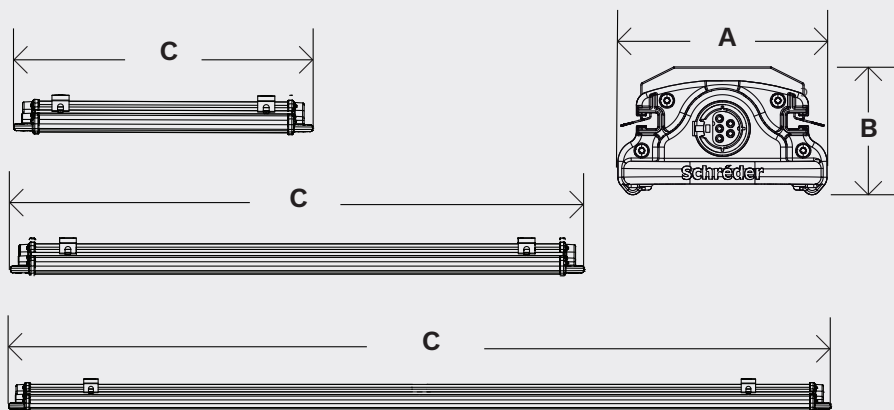
TFLEX LINE	60	120	200
<b>A</b>	130mm   5.1"	130mm   5.1"	130mm   5.1"
<b>B</b>	76.6mm   3.0"	76.6mm   3.0"	76.6mm   3.0"
<b>C</b>	611mm   24.1"	1200mm   47.2"	2000mm   78.7"
<b>KG</b>	3.4kg   7.5lbs	5.9kg   13.0lbs	9.6kg   21.0lbs



L-SHAPED BRACKETS



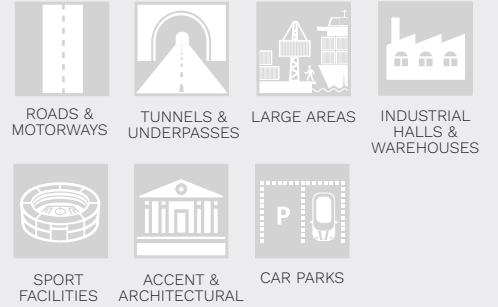
CLIP MOUNTING



# OMNISTAR



## MAIN APPLICATIONS



Designed to bring massive savings and benefits to area lighting

**OMNISTAR provides a beneficial lighting solution in a variety of indoor and outdoor applications such as tunnels, docks, industrial buildings, sport facilities, large car parks and airports.**

This platform has been designed to provide an unrivalled combination of performance and flexibility for lighting areas where high lumen packages are needed with the added advantages of a LED solution: low energy consumption, improved visibility with white light, limited maintenance and longer life.

OMNISTAR can be installed in various configurations (suspended, surface-mounted or post-top) with one to three optical units. OMNISTAR can operate with a large range of outdoor and tunnel control solutions (daylight sensors, dimming, remote management, ATS 4) and a building management system with the DALI protocol to further maximise energy savings by adapting the lighting levels according to the real needs of the place to be lit.



**OMNISTAR**

**1 optical unit**

Typical luminaire output flux (range)

7,800 to 76,000lm

Colour temperature

Warm white (730 and 830), neutral white (740 and 940) or cool white (757 and 957)





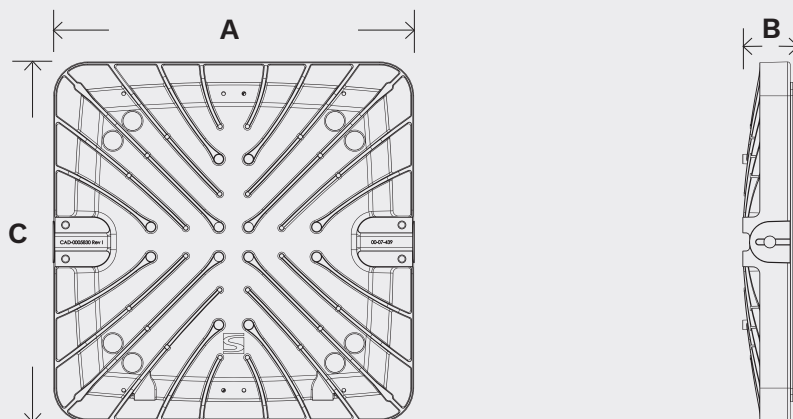
## KEY ADVANTAGES

- > Real beneficial LED alternative to HID floodlights for high-power applications
- > Flexibility: modular approach with wide range of lighting distributions
- > Highly efficient light distributions reduce the quantity of luminaires to be installed
- > Various mounting options and inclination possibilities on-site for optimal photometry
- > Explosion-proof variant for use in industrial environments with a hazardous atmosphere
- > Various control options including remote management systems

## DIMENSIONS | MOUNTING

### OMNISTAR

<b>A</b>	532mm   20.9"
<b>B</b>	80mm   3.1"
<b>C</b>	530mm   20.9"
<b>KG</b>	14kg   30.8lbs



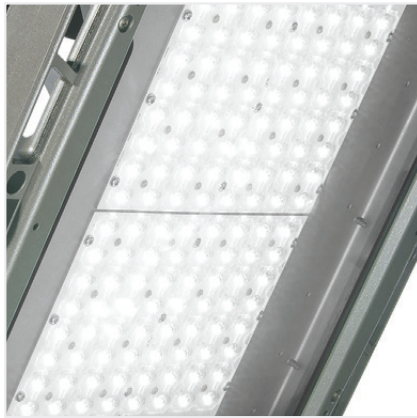
## DESIGN HIGHLIGHTS



The standard brackets enable the luminaire to be angled on-site.



The OMNIBOX is an IP 66 universal remote gear box made of die-cast aluminium for up to 4 optical units.



With up to 240 high-power LEDs, OMNISTAR delivers high lumen packages.



OMNISTAR is delivered with quick connectors for easy installation.





# TAG

## MAIN APPLICATIONS



## Powerful tunnel lighting solution

**TAG takes advantage of the latest innovations to offer a compact, lightweight, easy-to-install, versatile and powerful tunnel lighting solution.**

With TAG, Schröder is exploiting the full potential of the latest digital technology to improve tunnel environments. The flat, compact and robust mechanical design of the TAG minimises mounting constraints and ensures that the optical units occupy little space in the tunnel ceiling.

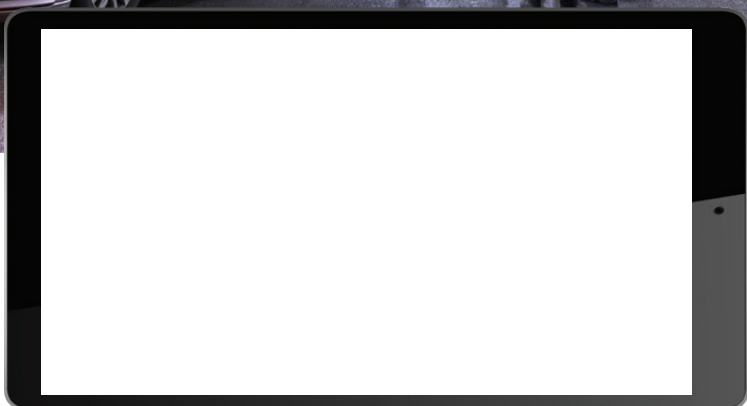
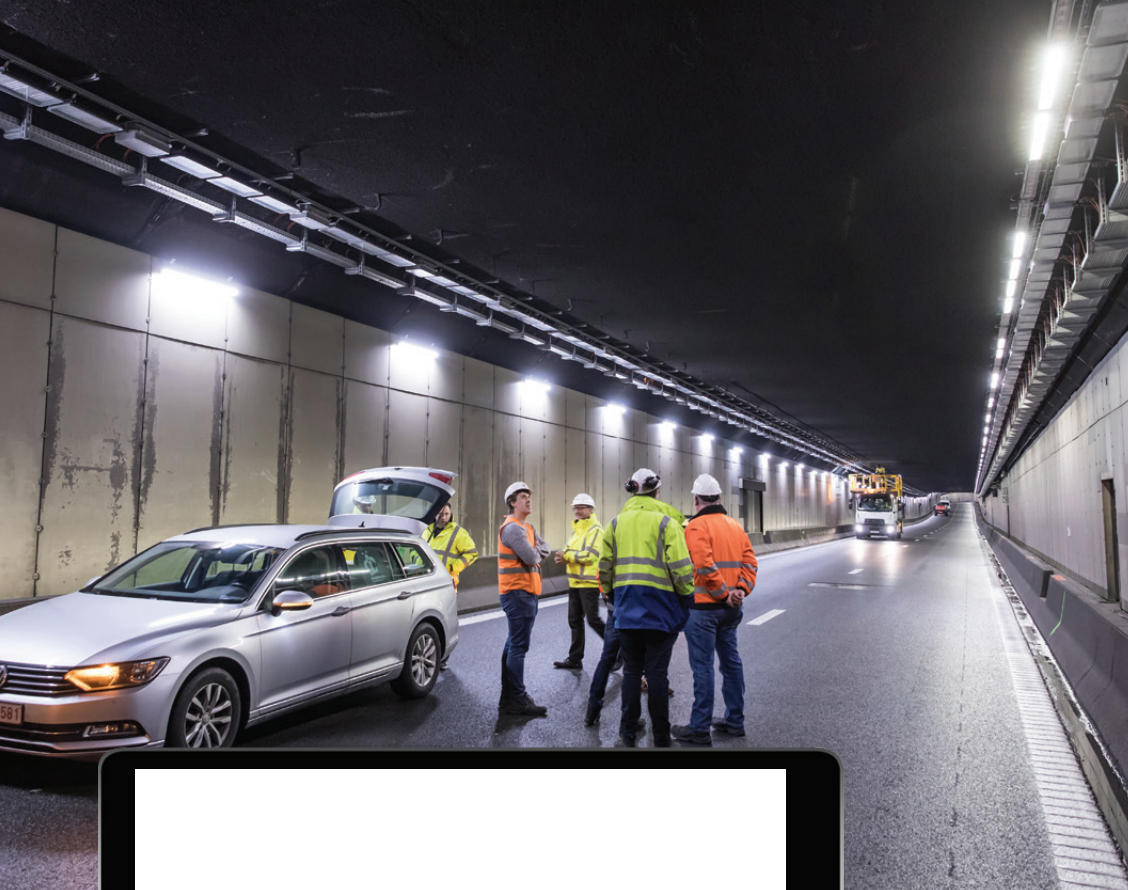
The TAG range is not only designed to reduce investment. It is also optimised to provide state-of-the-art lighting that guarantees a safe and comfortable driving experience for motorists with significant energy and maintenance savings for tunnel operators.

TAG benefits from Schröder's long-standing expertise in tunnel lighting. This new range is fully compliant with the most stringent standards and can be managed by the Advanced Tunnel control System (ATS) from Schröder, to offer the biggest savings while providing an optimal experience for drivers.



TAG	1	2
Recommended installation height	4 to 6m / 13' to 20'	
Typical luminaire output flux (range)	7000 to 26,200lm	16,500 to 56,500lm
Colour temperature	Neutral white 740	



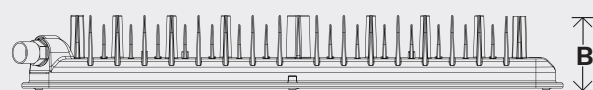
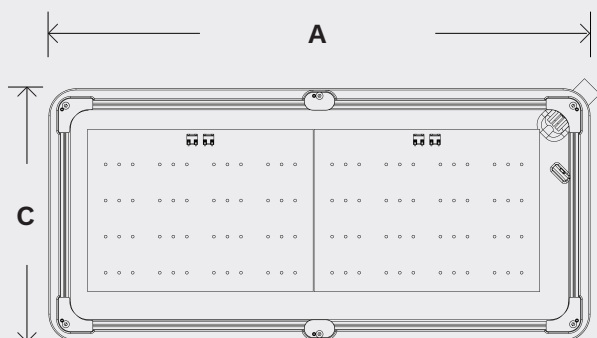


## KEY ADVANTAGES

- High-power LED solution to replace HID luminaires in the entrance and interior zones
- Available in two sizes and in various configurations to cover all tunnel lighting requirements
- Compact, lightweight and easy to install
- Two electrical circuits for enhanced dimming possibilities, optimised power factor and longer lifespan
- Remote gear boxes for versatile mounting (up to 3 TAGs per gear box)
- Wide range of lighting distributions to suit numerous tunnel configurations

## DIMENSIONS | MOUNTING

TAG	1	2	CBL
A	350mm   13.8"	611mm   24.0"	611mm   24.0"
B	80mm   3.1"	80mm   3.1"	103mm   4.1"
C	280mm   11"	280mm   11"	280mm   11"
KG	4.3kg   9.5lbs	7.85kg   17.3lbs	8.4kg   18.5lbs



## DESIGN HIGHLIGHTS



The TAG range includes a new generation of IP 66 gear boxes.



TAG is equipped with quick-on QPD connectors.

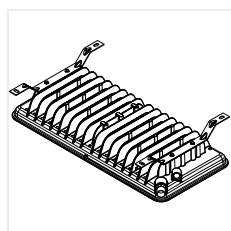


Depending on the configuration, up to 3 TAGs can be powered by the same gear box

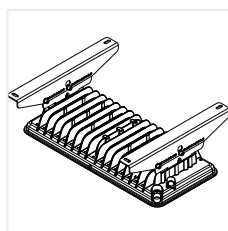


Designed with two electronic circuits, TAG can either be dimmed completely, partially or even have 50% of its LEDs switched off.

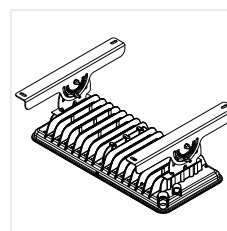
## MOUNTING OPTIONS



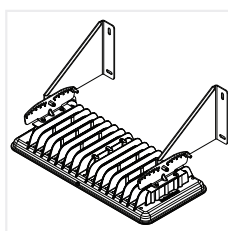
Fixed brackets



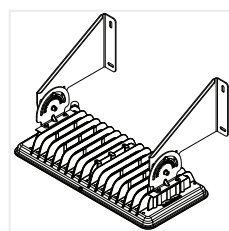
Suspended swivelling pull-out



Suspended swivelling adjustable



Wall swivelling pull-out

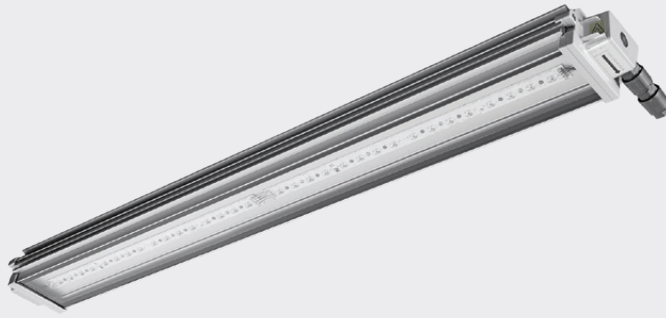


Wall swivelling adjustable



# CONTILED

## MAIN APPLICATIONS



TUNNELS & UNDERPASSES

### Continuous LED line for tunnel lighting

**CONTILED is designed to provide a beneficial alternative to luminaires fitted with fluorescent lamps for continuous line lighting in tunnels and underpasses.**

It not only provides the required lighting levels with significant energy savings but also great visual comfort to guide motorists safely.

CONTILED is an IP 66 sealed optical unit, offering variable combinations of modules equipped with 8 to 64 LEDs and various optics, to be combined with a remote driver box. It has been designed to meet the specific needs of many different tunnel applications.

The LED modules are located on an internal slider, which can be easily removed, allowing replacement at the end of its service life in order to take advantage of future technological improvements.



CONTILED	1	2
Typical luminaire output flux (range)	1,100 to 8,500lm	2,200 to 17,100lm
Colour temperature	Neutral white 740	



## KEY ADVANTAGES

- > High visual comfort through continuous line lighting
- > 2 photometrical concepts: LensoFlex®2 and ContiFlex™
- > Flexible solution: extruded aluminium profile to adjust number of LEDs for tunnel requirements
- > Maximised savings in energy and maintenance costs
- > Remote gear boxes for versatile mounting
- > Control system can be integrated into a tunnel backbone system

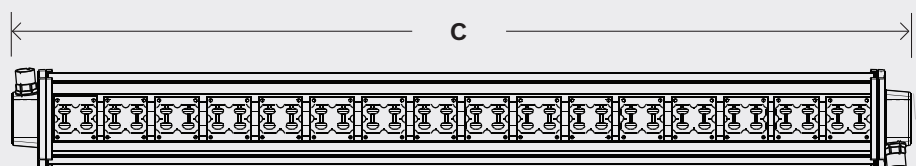
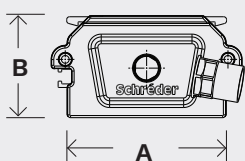


## DIMENSIONS | MOUNTING

CONTILED	1	2
<b>A</b>	133mm   5.2"	133mm   5.2"
<b>B</b>	71mm   2.8"	71mm   2.8"
<b>C</b>	602mm   23.7"	1202mm   47.3"
<b>KG</b>	7kg   15.4lbs	14kg   30.8lbs



CONTILED is designed for surface mounting with dedicated adjustable brackets.



# GL2 COMPACT



## MAIN APPLICATIONS



TUNNELS &  
UNDERPASSES



INDUSTRIAL  
HALLS &  
WAREHOUSES

**Compact,  
powerful and  
efficient LED  
lighting  
solution**

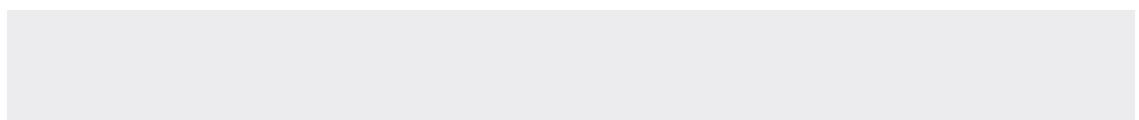
**GL2 COMPACT offers a unique combination of features in a slender housing for lighting the entrance, threshold and interior zones of a tunnel.**

Available in five sizes and with various lumen packages, GL2 COMPACT offers high resistance to water, dust ingress and impacts.

The photometry of GL2 COMPACT can be either symmetrical or asymmetrical to adapt to the tunnel layout. This lighting solution offers uniform lighting and superior visibility in critical areas such as the entrance and exit zones of a tunnel.

GL2 COMPACT offers several mounting possibilities. For example, it can be fixed directly onto a cable rack. The photometry can be adjusted on-site thanks to a tiltable bracket.

GL2 COMPACT guarantees long-lasting performance with minimum maintenance.



GL2 COMPACT	1	2	3	4	5
Typical luminaire output flux (range)	2,300 to 4,700lm	4,600 to 9,400lm	6,900 to 14,100lm	9,200 to 18,800lm	11,500 to 28,200lm
Power consumption	18.1W to 36.3W	35.7W to 72W	52 to 104W	67.5W to 137W	87W to 216W
Colour temperature	Warm white 730 or neutral white 740				
Nominal voltage	220-240V / 120-277V / 347-480V 50-60hz				
Surge protection	4 / 10kV				





## KEY ADVANTAGES

- > Maximised savings in energy and maintenance costs
- > High tightness level and excellent heat dissipation for long lasting performance
- > High level of protection against corrosion, impacts and vibrations
- > LensoFlex®2 technology offering high performance photometry, comfort and safety
- > Two electrical circuits for enhanced dimming possibilities, optimised power factor and longer lifespan
- > On-site adjustment for optimal photometry

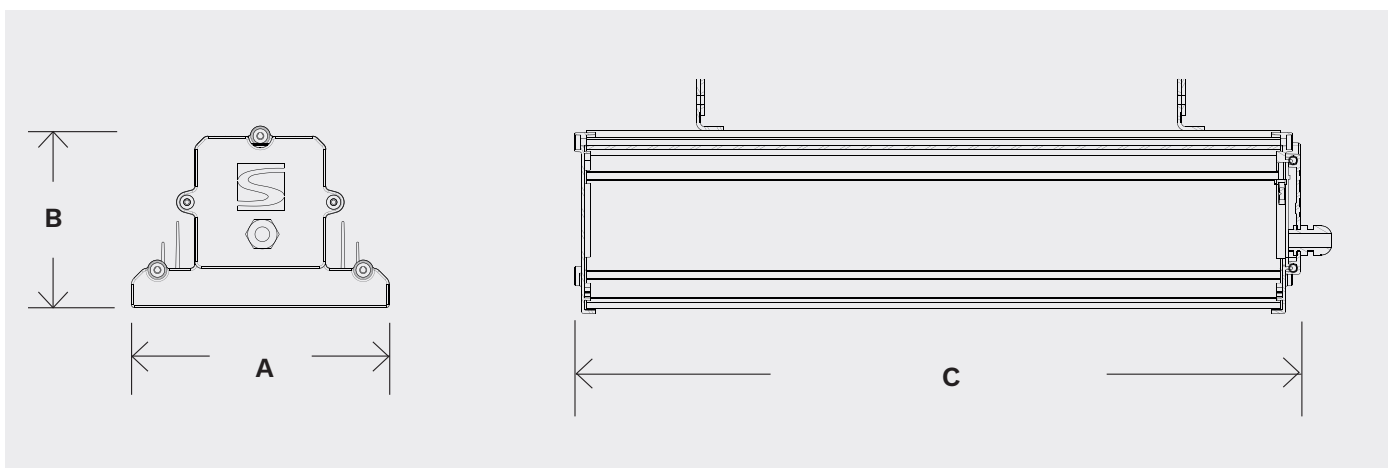


## DIMENSIONS | MOUNTING

GL2 COMPACT	1	2	3	4	5
<b>A</b>	193mm   7.6"	193mm   7.6"	193mm   7.6"	193mm   7.6"	193mm   7.6"
<b>B</b>	137mm   5.4"	137mm   5.4"	137mm   5.4"	137mm   5.4"	137mm   5.4"
<b>C</b>	338mm   13.3"	468mm   18.4"	538mm   21.2"	718mm   28.3"	1058mm   41.7"
<b>KG</b>	4kg   8.8lbs	5.3kg   11.7lbs	6kg   13.2lbs	8kg   17.6lbs	11.5kg   25.3lbs



GL2 COMPACT is proposed with various direct and swivelling mounting options.



# TLI



## MAIN APPLICATIONS



TUNNELS &  
UNDERPASSES

A range  
of tunnel  
luminaires  
made  
entirely of  
stainless steel  
and glass

**TLI is a range of tunnel luminaires designed for performance, flexibility and ease of installation.**

This range of luminaires provides the ideal solution for extremely corrosive environments and in countries where legislation imposes the use of stainless steel housings. Drivers, surge protection and control devices are integrated into a luminaire characterised by a high degree of ingress protection and impact resistance. Available in two sizes (TLI 1 and TLI 4), TLI enables the number of LEDs to be adjusted, starting from 16 up to a maximum of 144 LEDs.

This range is suitable for surface mounting on the ceiling or wall with brackets.



TLI	1	4
Typical luminaire output flux (range)	1,200 to 9,100lm	5,300 to 18,500lm
Power consumption	11W to 74W	43W to 133W
Colour temperature	Neutral white 740	
Nominal voltage	220-240V / 50-60hz	
Surge protection	10kV	



IP 66

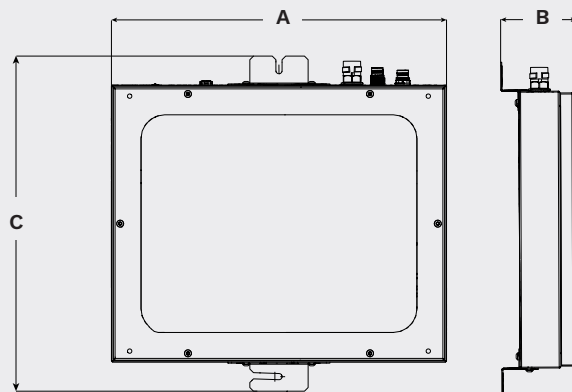
IK 08

## KEY ADVANTAGES

- High-power LED solution to replace HID luminaires in the entrance and interior zones
- Available in two sizes and in various configurations to cover all tunnel lighting requirements
- LensoFlex®2 and ReFlexo™ (counter beam lighting) photometric engines to provide flexible solutions
- Designed for long-lasting performance: high level of protection against corrosion and impacts
- Two electrical circuits for enhanced dimming possibilities, optimised power factor and longer lifespan

## DIMENSIONS | MOUNTING

TLI	1	4
<b>A</b>	460mm   18.1"	560mm   22"
<b>B</b>	104mm   4.1"	104mm   4.1"
<b>C</b>	460mm   18.1"	660mm   26"
<b>KG</b>	9kg   19.5lbs	14.5kg   31.9lbs



# FV32 LED



## MAIN APPLICATIONS



TUNNELS &  
UNDERPASSES

A flexible  
tool to light  
all areas of a  
tunnel

**FV32 LED provides flexible solutions to meet the tunnel lighting requirements for different enclosed areas.**

A wide range of photometric distributions make the FV32 LED range the ideal instrument for lighting town and motorway tunnels or underpasses.

The extruded aluminium profile enables the number of LEDs to be adjusted in multiples of 8, starting from 16 up to a maximum of 240 LEDs.

Drivers and electrical connections are integrated into the luminaire. The protector opens to give tool-free access to the components when the luminaires are installed.



FV32 LED	0	1	2	3
Typical luminaire output flux (range)	3,000 to 7,800lm	4,500 to 15,600lm	9,000 to 31,100lm	16,500 to 47,000lm
Power consumption	21.5W to 62W	31.1W to 120W	62W to 240W	109W to 360W
Colour temperature	Warm white 730 or Neutral white 740			
Nominal voltage	120-277V / 220-240V 50-60hz			
Surge protection	10 / 20kV			



UL 1598  
CSA C22.2  
No. 250.0

IP 66

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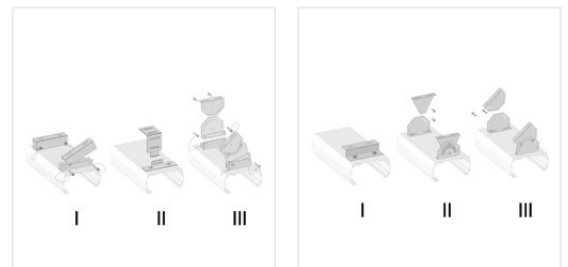


## KEY ADVANTAGES

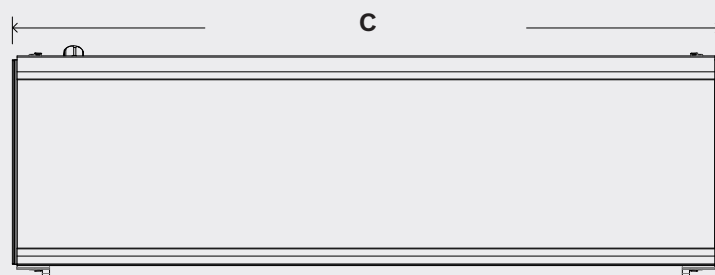
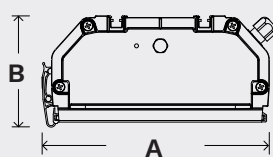
- > Adapted to a wide range of different tunnel applications to provide safety at all times
- > LensoFlex®2 and ReFlexo™ (counter beam lighting) photometric engines to provide flexible solutions
- > High level of protection against corrosion, impacts and vibrations
- > Various inclination possibilities on-site for optimal photometry
- > Control system: can be adapted to customer requirements or integrated into a tunnel backbone system

## DIMENSIONS | MOUNTING

FV32 LED	0	1	2	3
<b>A</b>	285mm   11.2"	285mm   11.2"	285mm   11.2"	285mm   11.2"
<b>B</b>	135mm   5.3"	135mm   5.3"	135mm   5.3"	135mm   5.3"
<b>C</b>	308mm   12.1"	560mm   22.0"	888mm   35.0"	1265mm   49.8"
<b>KG</b>	6kg   13.2lbs	10kg   22.0lbs	17kg   37.4lbs	23kg   50.6lbs



FV32 LED can be mounted using specific brackets that prevent galvanic corrosion: 'Z'-shaped (I), swivelling (II) or swivelling and adjustable brackets (III).



# Schröder

Experts in lightability™



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