

**BJB**

technology for light

# THE GUARDIANS OF LIGHT.

BRIGHTNESS IN SAFE HANDS.



LEARN MORE  
ABOUT BJB

# INDUSTRIAL SOLUTIONS IN TRUSTED HANDS

THE GUARDIAN OF SUSTAINABILITY

## THE STEWARD



### **The Guardian of Sustainability – The Steward**

represents the balance between technological progress and environmental responsibility.

He thinks in life cycles rather than product generations and makes decisions guided by resource conservation, durability, and reusability.

Under his leadership, components are sustainably designed, responsibly manufactured, and built to last.

THE GUARDIAN OF POSSIBILITIES

## THE CREATOR



### **The Guardian of Possibilities – The Creator**

is a visionary mind who connects ideas and transforms innovation into clear, functional solutions.

She thinks holistically about light, intelligently combines technologies, and drives the development of new generations of lighting.

Her motivation is limitless light — shaped by inventiveness, systematic thinking, and creative energy.

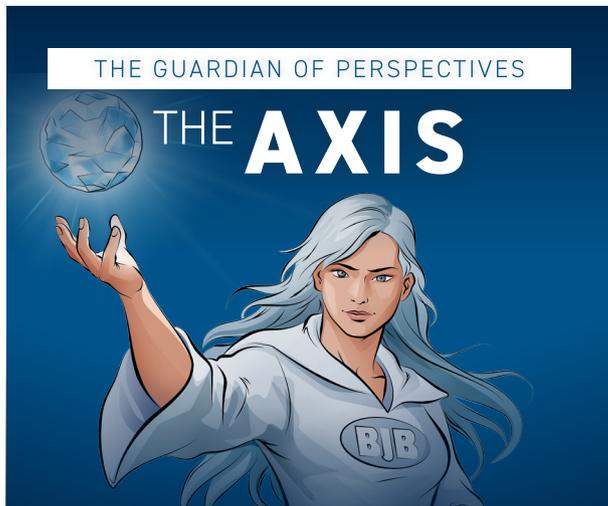


### **The Guardian of Excellence – The Superior**

stands for uncompromising quality, mastering materials, energy, and precision down to the smallest detail.

With absolute control and technical sensitivity, it transforms energy into maximum light output.

Efficiency is not a goal in itself — it is the natural result of perfect precision.



### **The Guardian of Perspectives – The Axis**

is a timeless point of reference that unites experience and vision and guides development in a clear direction.

As the connecting axis between markets, technologies, and applications, it provides orientation and makes global lighting development controllable.

Across borders, it points the way toward sustainable growth and progress.

**Exploded views where every detail lights up innovation**

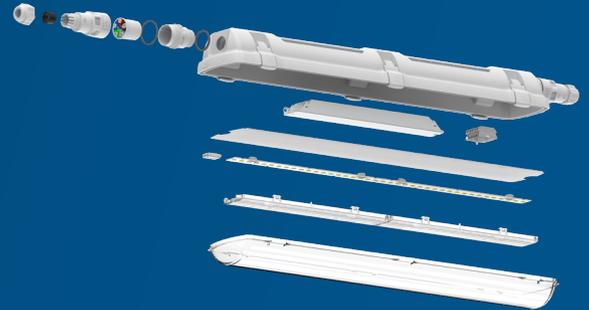


**COMBINE  
EXCHANGEABLE COBS  
WITH HIGHLY EFFICIENT  
OPTICS.**



**FAST, TOOL-FREE  
ASSEMBLY WITH  
HIGH-PERFORMANCE  
EFFICIENCY.**

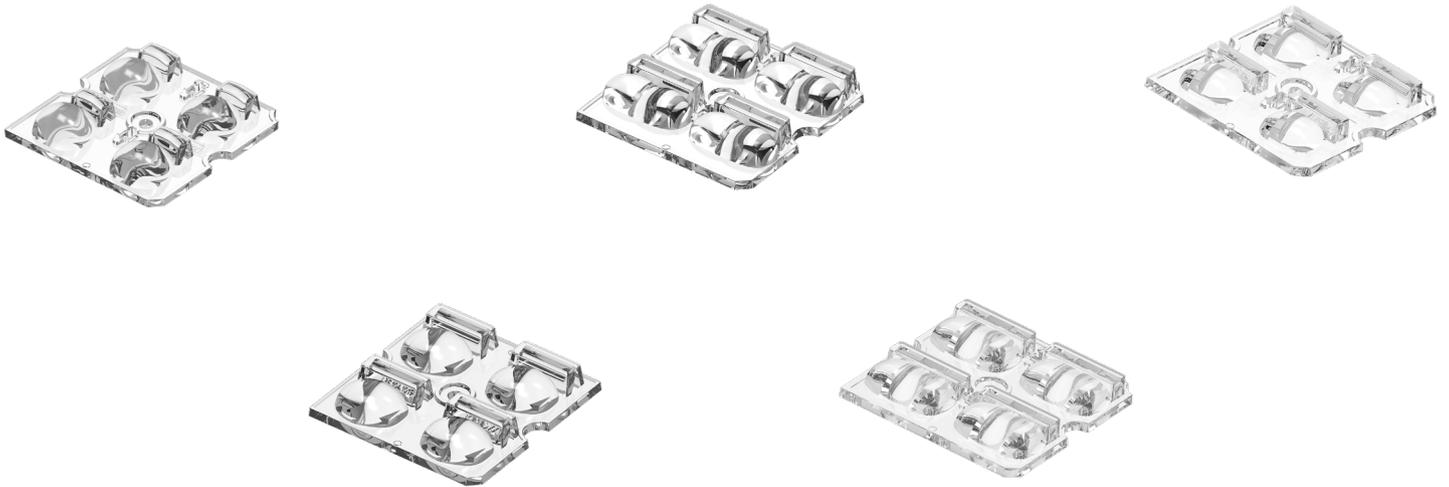
and all components are perfectly aligned



**EFFICIENT OPTICS,  
SECURE CONNECTIONS  
AND FUTURE-PROOF  
EXCHANGEABILITY.**

**ROBUST CONNECTIONS,  
EFFICIENT OPTICS AND  
FUTURE-PROOF  
SERVICEABILITY.**

# OptiSquare 2x2 Optics - More versatility more possibilities



Our **2x2 optics family** is expanding with five new beam angles optimized for 5050 chips, perfectly tailored for a wide range of applications – from cycling infrastructure to stadiums.

With a total of **22 light distributions**, the 2x2 optics family provides the perfect solution for every lighting challenge.

## **Introducing the new 35.104 options:**

- .1018 High masts – Ideal for stadiums and airports.
- .1019 Sports Highlight – High illuminance with minimal shadows, perfect for sports arenas.
- .1020 Safe Bike Paths – Uniform, glare-free lighting for nighttime cycling.
- .1021 Residential-Friendly – Designed for M and P class traffic-calmed zones with minimal spill light.
- .1022 Wide & Open – Optimized illumination for parking lots and industrial areas.

# Optishield - Protect the night, shield it right



The perfect fit for our 2x2 optics! We now have the perfect accessories to complement them. **Our new OptiShields (35.904.A001 & 35.904.A002) for 2x2 optics** make it easy to shield certain areas from light when necessary.

They are **ideal for residential streets**, as the light remains on the road and does not enter nearby windows. The OptiShields are easy to retrofit and install. Depending on the variant, they can simply be **clipped in or mounted with screws**. With the clip version, there is no need to unscrew the optics and LED board.

## **Key benefits:**

- Tool-free installation by clipping or optional screw mounting
- Reduction of stray light and glare
- Improved visual comfort and sustainability

## 25mm COB-Connector - Miniaturized by design, powerful by nature

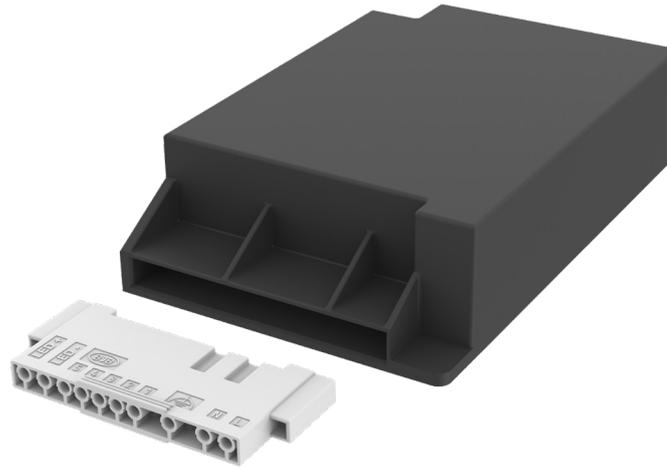


**Our miniaturized COB connector** combines outstanding technical quality with an extremely compact design. Engineered **for modern, space-saving luminaire solutions**, it offers easy installation, reliable electrical performance, and optimal compatibility with today's COBs.

### **The key advantages at a glance:**

- Compact design: Miniaturized COB connector with an outer diameter of just 25 mm - designed to be mechanically Zhaga compliant
- Optimized compatibility: Fits COBs with a package size of 13.5 x 13.5 mm, LES 9 mm and below
- Flat design: Height only 3.5 mm - ideal for ultra-compact luminaire solutions
- Efficient wiring: Lateral cabling entry, with the possibility to directly bend the cable by 90°
- Quick & easy installation: Push-in contacts and COB pre-fixing ensure time-saving assembly
- Reliable electrical connection: Secure and durable connection for maximum operational reliability
- Integrated optics interface: Easy attachment of lenses and reflectors for precise light control
- Certification: VDE and cURus in preparation

# Exchangeable Driver Connector - For an easy replacing



**The interface of the exchangeable driver is integrated directly into the driver PCB.** Its open-ended design allows seamless integration of the connection element. **Thanks to the pre-wiring,** no rewiring is required during replacement, as the connection element remains permanently in the luminaire.

**Simplify the wiring plan of the luminaire** with fewer components, designed with push-in contacts for rigid conductors, avoids crimping, **reduces costs.**

## **The benefits at a glance:**

- Quick and easy replacement of the ECG
- Minimizes downtime and simplifies maintenance processes
- Fewer components to dispose of during replacement
- More sustainable and resource-efficient operation
- Increased operational reliability and easier installation
- Future-proof solution with high compatibility
- Standardization in preparation

# IMD by BJB - Innovation you can see



**BJB develops innovative solutions for components with high design and functional requirements.** With deep expertise in the lighting and household appliance industries, we **create decorative and functional surfaces** tailored to our customers' needs.

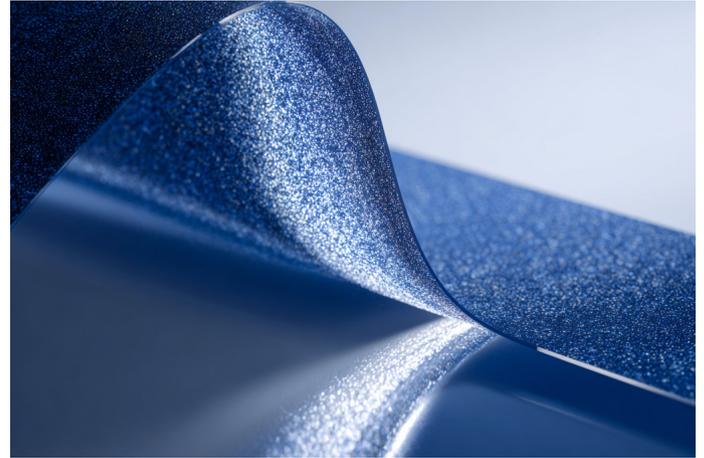
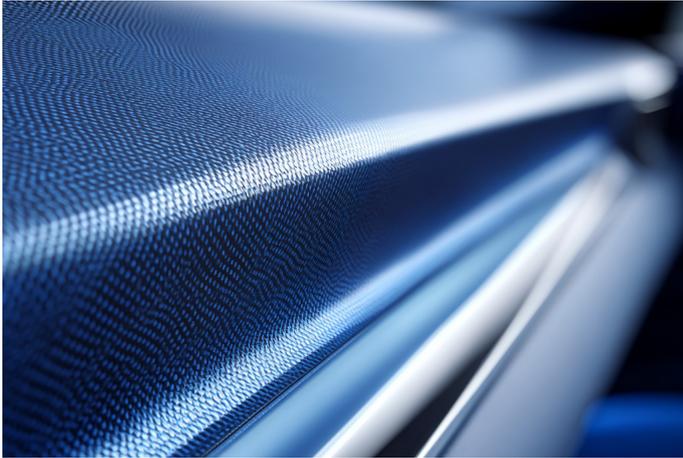
Our **focus is on In-Mold Decoration (IMD) with high-quality, mainly backlit user interfaces.** By combining plastic injection molding, light control, and lighting technology, we deliver efficient, market-ready solutions.

Using machine technology made in Germany and strong partners for decorative and functional films, we ensure the highest quality standards. **Our vertical integration, in-house light laboratory, and cleanroom IMD** processing enable efficient development, precise light control, and reliable series production.

**Our capabilities include:**

IMD plastic processing, light analysis, development services, automated and cost-efficient production, and assembly up to complete systems.

# Surfaces that shape light



Surfaces that shape light. By combining our experience and expertise, **we have developed innovative surfaces and ideas for use in lighting technology** together with our technology partner Leonhard Kurz.

Established **coating processes are combined with innovative reflective, diffuse, and light-directing surface structures** to offer our customers cost- and light-efficient solutions for their applications.

## **Functional surfaces for your lighting technology with:**

- Higher light efficiency
- Better glare control
- Fewer components
- Better handling in luminaire production
- Variable solutions for a wide range of applications
- Innovative microstructures—developed in collaboration with German market leaders

## eCOB and lens - For a sustainable future of light



**Our modular connector system allows late-stage integration or replacement of COBs**, ensuring maximum flexibility during assembly and maintenance. An **exchangeable inner part for COB and TIM** enables fast and easy installation.

The **outer connector with push-in contacts and retaining springs provides a secure mechanical and electrical connection**. Mounted directly on the heat sink, it ensures **optimal thermal performance and delivers a future-proof, maintenance-friendly lighting solution**.

### **The benefits are:**

- Late-stage integration possible - The COB can be added flexibly during final assembly
- Tool-free connection - Easy handling with push-in technology
- Energy-efficient & durable - Optimized thermal management for a long lifespan
- Maintenance-friendly - Quick replacement of defective or outdated modules in the workshop
- Optics Compatibility - Compatible with various BJB reflectors and lenses
- Supports COBs in sizes 13.5 x 13.5 mm, 19 x 19 mm, and 20 x 24 mm.

# OptiLine - One family, various possibilities



BJB **OptiLine** offers a **wide range of possibilities** within a single grid. BJB optics provide **precise light control, optimized light distribution and effective glare reduction** – all tailored to the specific requirements and expectations of our customers.

In developing this comprehensive range of optical systems, particular focus was placed on simplicity: the components can be **easily mounted by using snap-in elements** eliminating the need for screws and allow a **quick and flexible installation in sheet metal or profiles**.

## **Our OptiLine variants at a glance:**

- Flex: Flexible light distribution regardless of LED pitch (5 light distributions)
- Performance: Best ratio of glare reduction to efficiency (8 light distributions)
- Duallens: Max. efficiency with optimized light control, space for up to 2 LEDs (7 light distributions)
- Louvre: Glare elimination with maximum efficiency (5 light distributions)

# ADS Inline Through-Wiring for luminaires

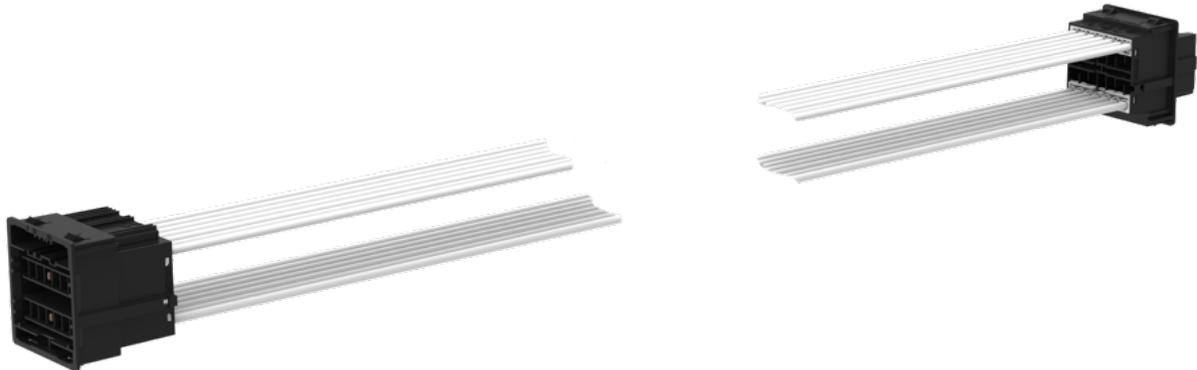


**ADS enables fully automated through-wiring** directly in the luminaire assembly time. No separate harness, no intermediate storage, no additional pre-assembly — **for a faster, leaner and more reliable production process.**

**Efficient today – future-ready tomorrow.** Expandable with ADS wiring, backed by BJB service and spare parts availability.

## **The key advantages at a glance:**

- True inline automation in luminaire assembly time
- No separate harness, no intermediate storage
- No additional pre-assembly steps
- Flexible production concept (inline or separate)
- Series operation since 03/2025 – production-proven & customer-validated
- Reproducible plug quality – no hidden plugging errors



## Technical data:

- Wire lengths: 750 – 4,600 mm
- Cross-sections: 1.5 mm<sup>2</sup> / 2.5 mm<sup>2</sup>
- Continuous wire processing
- Fully automated stripping and plug-in assembly
- Automatic wire change between 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>

## Cycle times:

- 1.5 m: 5 s / wire
- 4.5 m: 9 s / wire
- Auxiliary time: 2 s / harness

## Ready for smart factory:

- Process data capture available
- Interfaces for digitalization
- Scalable for additional product variants

OUR PORTFOLIO

# THE CREATION OF POSSIBILITIES.



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