



EXTERIOR LIGHTING FOR TRAINS

Teknoware designs and manufactures lighting and interior solutions for trains, trams and metros, with a focus on long-term reliability and operational safety.

Our products are tested and certified according to relevant standards, including full compliance with EN50155 electrical requirements. This ensures consistent performance in demanding operating environments. Our systems are suitable for both new vehicle builds and retrofit projects, offering dependable functionality that supports safe and efficient transport operations. We tailor our products to meet a wide range of customer requirements.

Contact us

Get in touch with our Rail Division experts at rail@teknoware.com to find out how we can help with all your rolling stock needs.

Exterior lights that meet the strictest railway standards and ensure safe passage in all conditions.



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TEKNOWARE VISION

Teknoware Vision is your choice when you need a bright, multifunctional light unit for your modern rail vehicles. Teknoware Vision is a headlight which includes all the external light functions required for use on European railways. The modern and innovative design provides a more homogeneous, highly efficient and supremely reliable light source.

Teknoware Vision fulfills the requirements of the Commission Regulation (EU) No 1302/2014 (TSI LOC & PAS) concerning head, marker and tail lights. The EC certificate is available in the ERADIS database.



KEY FEATURES

Reference Product: TVP21001 (standard version), TVP21501 (heated glass version)

- Innovative design
- Multifunctional—headlight, marker light and tail light modes
- IK08 according to IEC 62262
- IP66 (standard version) IP69 (heated glass version) according to IEC 60529
- Cast aluminium designed to withstand any weather conditions
- Available supply voltages: 24 VDC and 110 VDC

FUNCTIONS

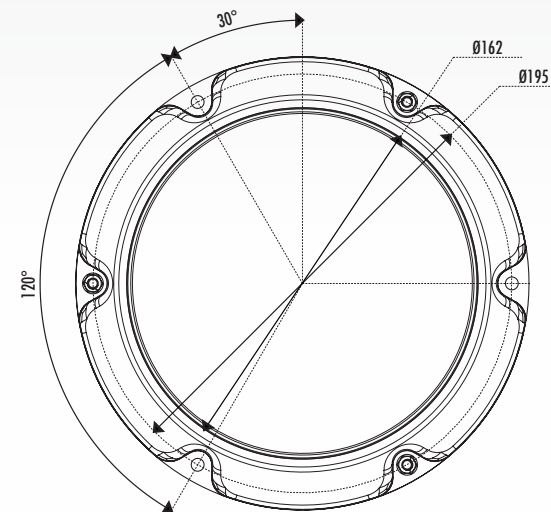
Headlight

Marker light

Tail light



DIMENSIONS [mm]



TEKNOWARE VISION PLUS

Teknoware Vision Plus is a sharp, multifunctional train headlight with a cut-off beam. It includes all the external light functions required for use on European railways. Teknoware Vision Plus is optically the most efficient headlight on the market for trains, and its anti-glare system is fully compliant with EN 15153-1, table 3.

The beam of Teknoware Vision Plus has an intensity peak pointing directly towards the front to ensure that longer sections of track are illuminated and approaching trains can be seen earlier.

All three functions (according to EN 15153-1) are included in the same package and depending on the driving direction, a different function can be used. Teknoware Vision Plus is a compact light unit that ensures clear visibility on the rails in every situation.



KEY FEATURES

Reference Product: TVP71001

- Headlight with a cut-off beam
- Multifunctional—headlight, marker light and tail light modes
- Lifetime expectation 100 000 h
- IP69 according to IEC 60529
- IK08 according to IEC 62262
- Available supply voltage: 110 VDC

FUNCTIONS

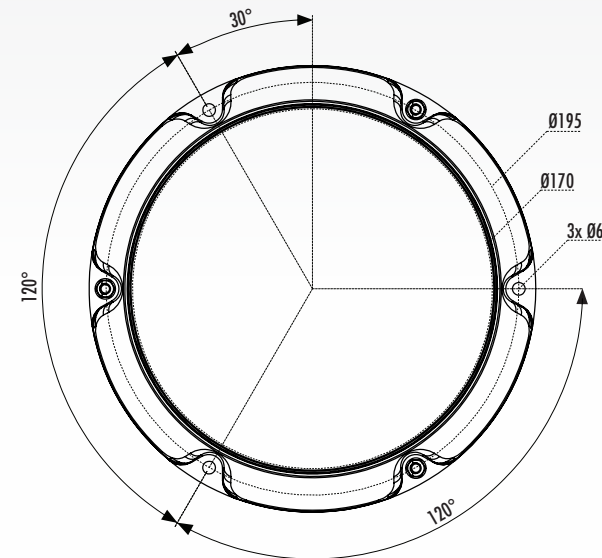
Headlight

Marker light

Tail light



DIMENSIONS [mm]

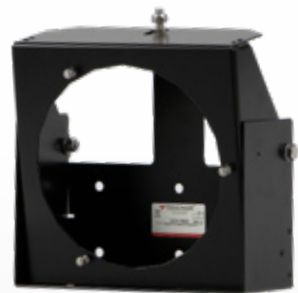


ASSEMBLY COLLARS FOR TEKNOWARE VISION & VISION PLUS

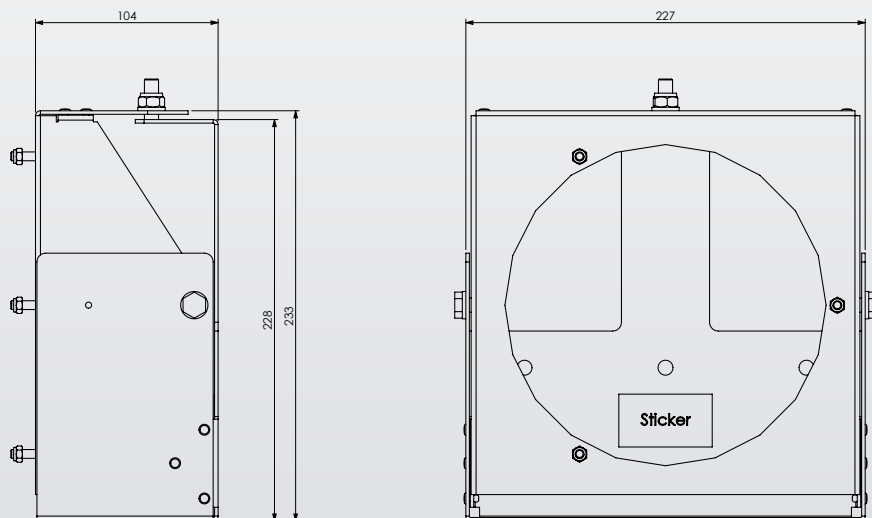
KEY FEATURES

Reference Product: 1005-9868

- Robust design
- Designed for Teknoware Vision multifunctional headlight assembly
- Possible to adjust tilting angle
- Specifically designed for locomotive renovations
- Fixing points easily adjustable if needed



DIMENSIONS [mm]



TEKNOWARE PAR46 TAIL/MARKER LIGHT, EN15153-1

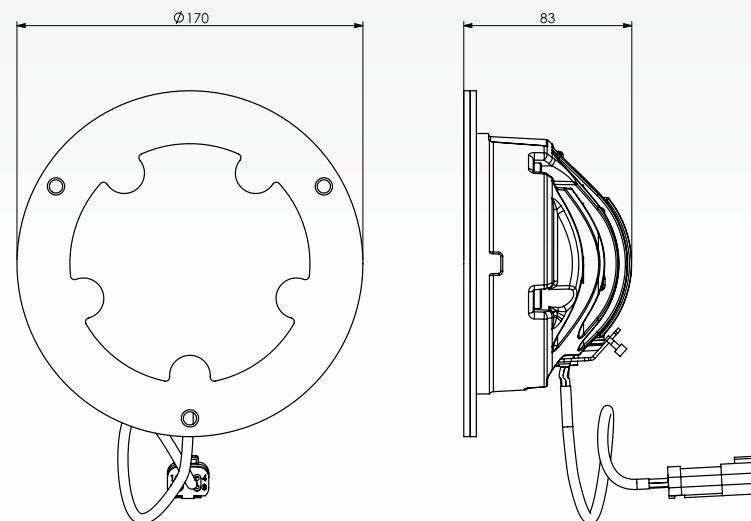
KEY FEATURES

Reference Product: 1002-4090

- Compact design
- Multifunctional marker (white)/tail light (red)
- Fulfills EN15153-1 requirements
- IP65 according to IEC 60529
- Available supply voltages: 24–110 VDC



DIMENSIONS [mm]



TEKNOWARE BEAM

Teknoware Beam is a reliable and efficient PAR56-type LED headlight for modern locomotives, providing a clear view of the railway track regardless of the surrounding weather conditions. It has 13 power LEDs to ensure sufficient light to detect objects from 240 metres away.

Traditional headlamps using halogen bulbs can be replaced with Teknoware Beam. Thanks to its design, Teknoware Beam can be fitted into the same space as the existing halogen headlamps. Teknoware Beam also comes with an option for pigtail wiring. Its durable casing is made of cast aluminium and its LED technology guarantees a lifetime of over 60 000 power-on hours.

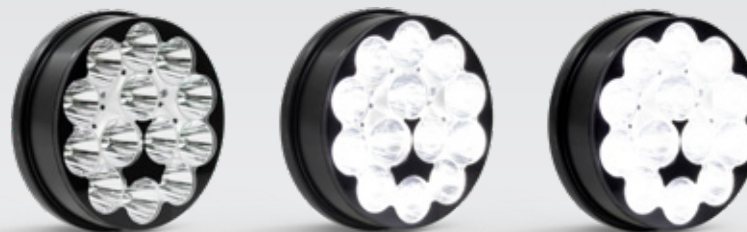


KEY FEATURES

Reference Product: TL-TVN95011 (standard version),
TL-TVN95111 (heated glass version)

- 13 high power LEDs combined with a reflective metallised surface
- Protective front with an optional defrost function
- IP66 for the front glass and IP65 for the back according to IEC 60529
- Rated Cat. 1 Class B according to IEC 61373
- Cast aluminium designed to withstand any weather conditions
- Available supply voltages: 24–110 VDC

FUNCTIONS

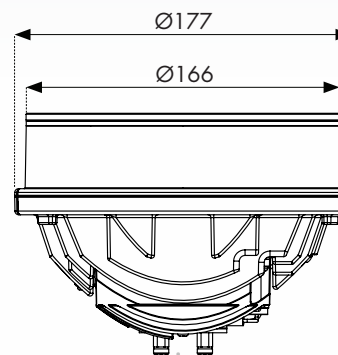
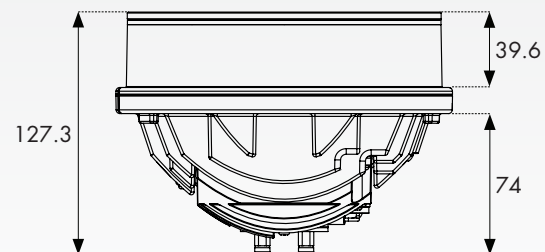


Light off

60 000 candela

200 000 candela

DIMENSIONS [mm]



DOUBLE ASSEMBLY COLLAR FOR TEKNOWARE BEAM

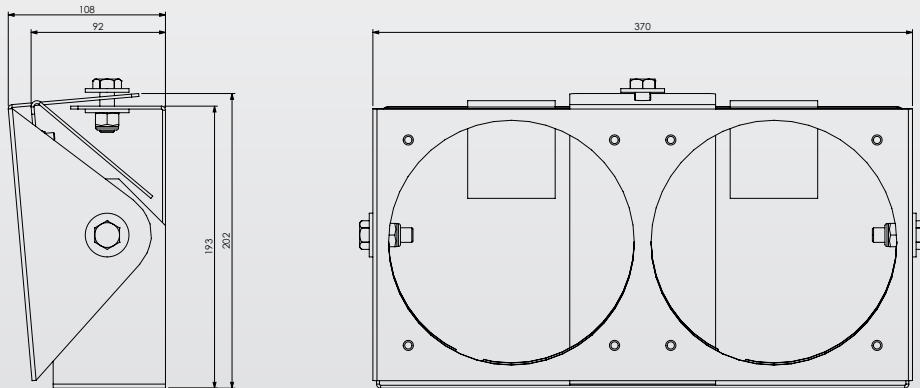


KEY FEATURES

Reference Product: 1003-0975

- Robust design
- Designed for double PAR56 headlight assembly
- Possible to adjust tilting angle
- Specifically designed for locomotive renovations
- Fixing points easily adjustable if needed

DIMENSIONS [mm]



ASSEMBLY COLLAR FOR PAR56

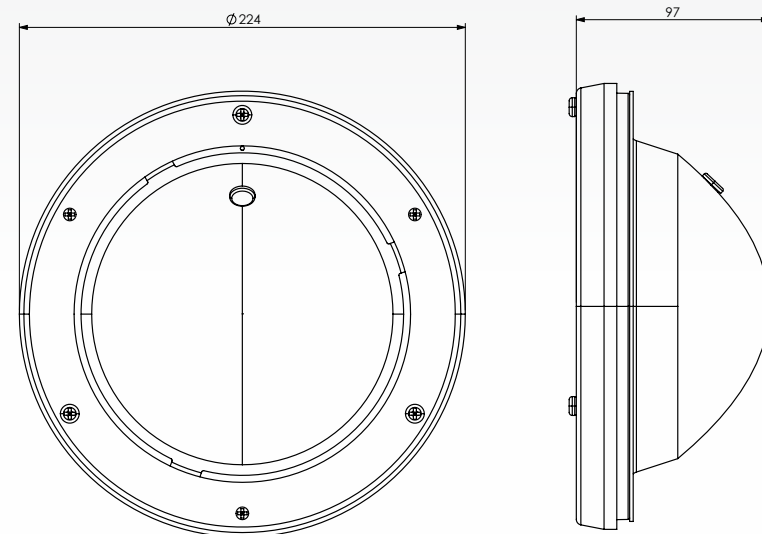


KEY FEATURES

Reference Product: M-5056-22

- Traditional and compact design
- Suitable for PAR56 size headlights
- Includes angle adjustment feature

DIMENSIONS [mm]



ASSEMBLY COLLAR FOR TEKNOWARE BEAM

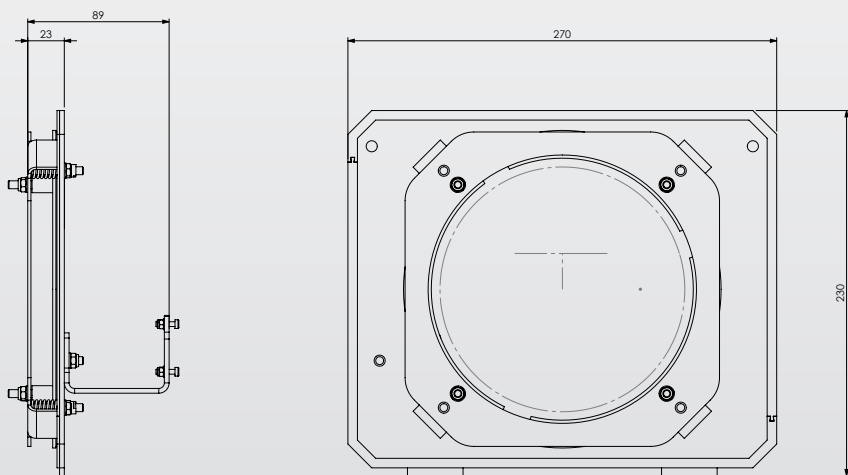


KEY FEATURES

Reference Product: 1004-6637

- Designed for rear assembly
- Includes angle adjustment feature and rearside adjustment
- Assembly plate easily customisable for different sizes and shapes
- Suitable for PAR56 size headlights

DIMENSIONS [mm]



ASSEMBLY COLLAR FOR TEKNOWARE BEAM

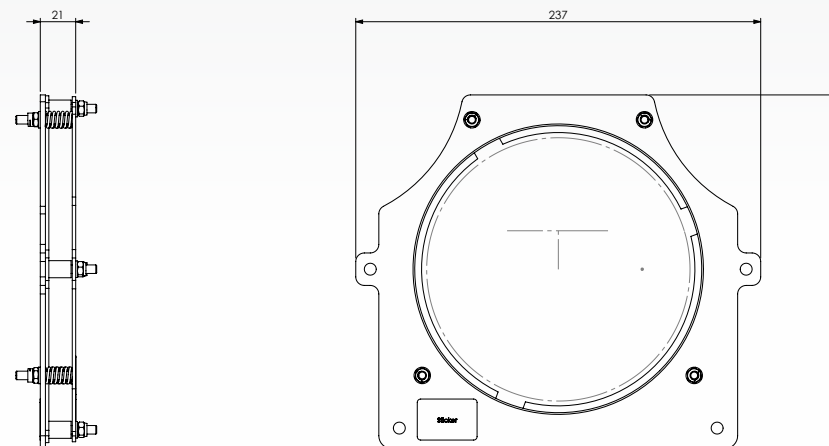


KEY FEATURES

Reference Product: 1004-6770

- Designed for front assembly
- Includes angle adjustment feature and frontside adjustment
- Assembly plate easily customisable for different sizes and shapes
- Suitable for PAR56 size headlights

DIMENSIONS [mm]



ASSEMBLY COLLAR FOR PAR56, Heavy duty

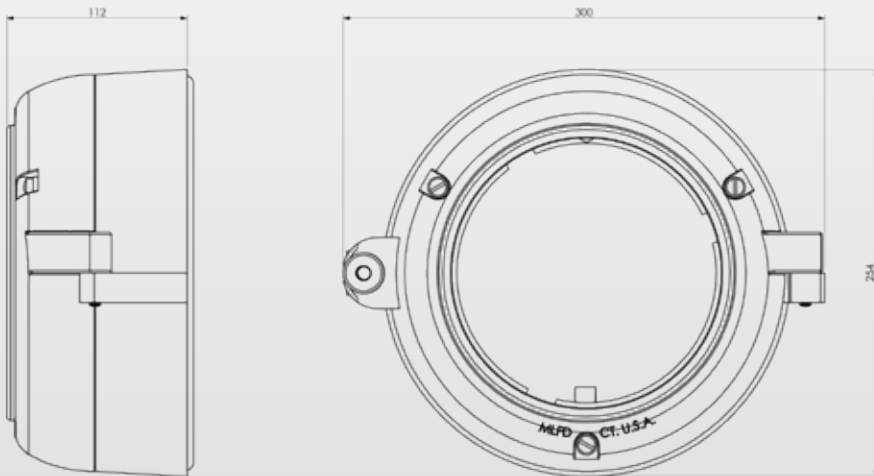
KEY FEATURES

Reference Product: FC-1785-1

- Traditional and robust design
- Extremely well sealed
- Suitable for PAR56 size headlights
- Includes angle adjustment feature



DIMENSIONS [mm]

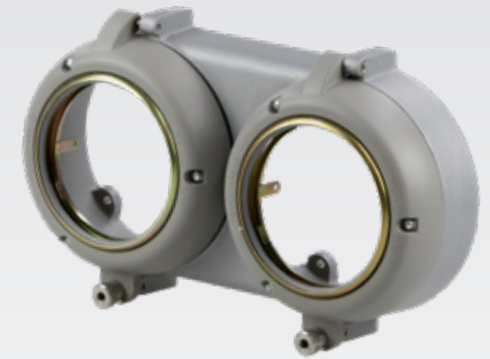


DOUBLE ASSEMBLY COLLAR FOR PAR56, Heavy duty

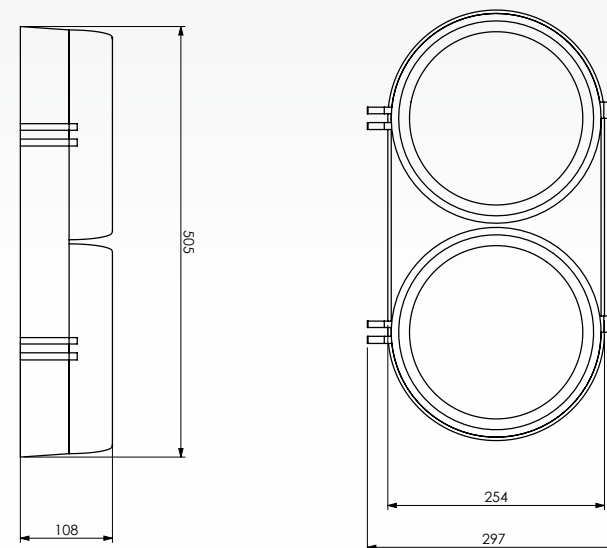
KEY FEATURES

Reference Product: FC-14585-ED

- Traditional and robust design
- Extremely well sealed
- Suitable for PAR56 size headlights
- Includes angle adjustment feature



DIMENSIONS [mm]



TEKNOWARE PAR46 TAIL LIGHT

Teknoware PAR46 Tail Light is a robust and energy-efficient LED lighting solution built to withstand harsh environments. It delivers reliable rear signaling for trains with excellent visibility and long service life. Teknoware PAR46 LED technology offers low power consumption and minimal maintenance.

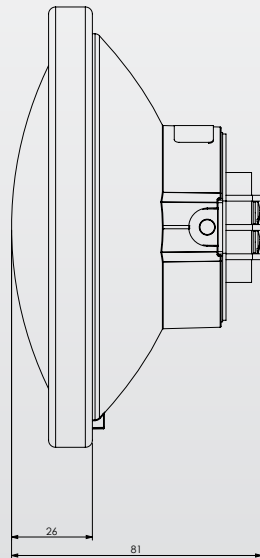
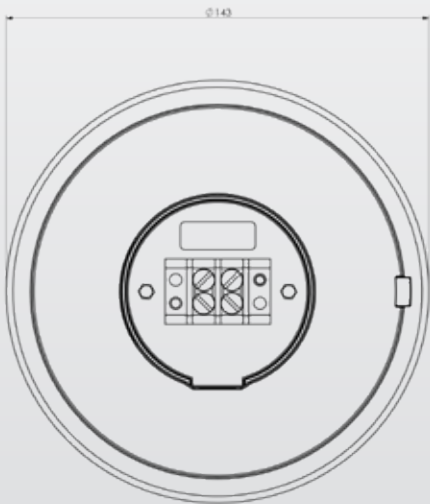
KEY FEATURES

Reference Product: TL-TVN48310

- High-visibility LED in red
- Traditional design
- Fulfills 49 CFR § 221.14 requirements
- FRA Approved
- IP65 according to IEC 60529
- Available supply voltages: 20–90 VDC



DIMENSIONS [mm]



ASSEMBLY COLLAR FOR PAR46

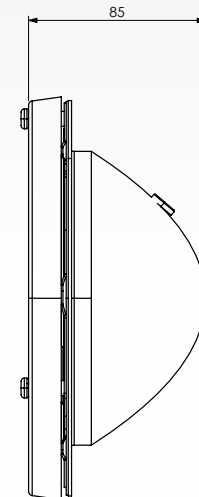
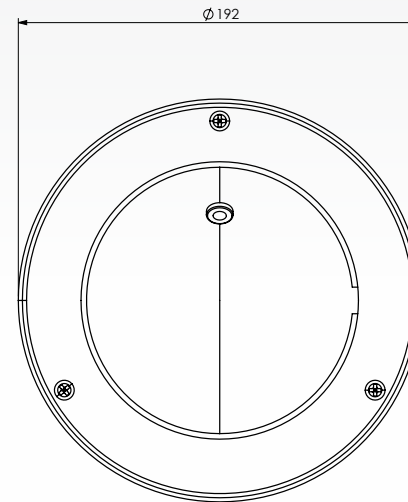
KEY FEATURES

Reference Product: M-5046-19

- Suitable for PAR46 size headlights
- Traditional and compact design



DIMENSIONS [mm]



TEKNOWARE SIDE INDICATOR

Designed for rail transit applications, Teknoware Side Indicator provides high-visibility LED signaling for platform and vehicle integration. Engineered for durability and operational clarity, it supports multiple colour configurations to meet diverse transit signaling requirements. Ideal for integration into existing rail systems requiring reliable, multicolour side indication.

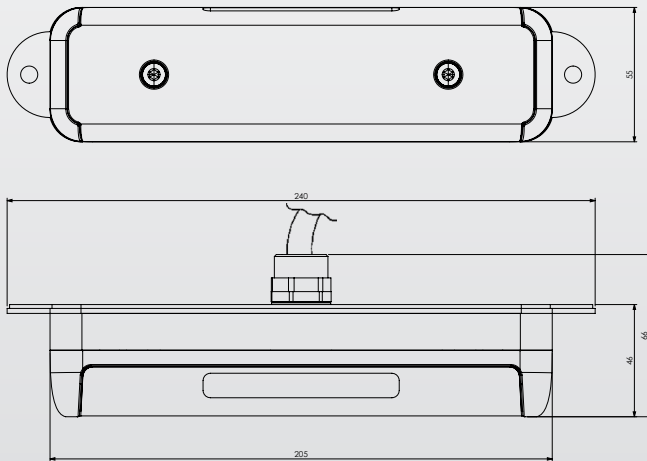
KEY FEATURES

Reference Product: 1003-7467, 1004-0472

- Robust design
- Multiple indication colours available in a single unit
- Platform light downwards available as an option
- Can be used to indicate several functions or system status
- IP66 according to IEC 60529
- Configurable to be a double or triple indicator
- Available supply voltages: 24–110 VDC



DIMENSIONS [mm]



TEKNOWARE LADYBUG

Teknoware Ladybug indicator lights provide visual feedback on door or other system status, safety, and diagnostics. They signal the condition of components like doors, brakes, and power systems, alert operators to faults or warnings, and assist maintenance crews in identifying issues quickly. They can also be used as emergency alerts, and are suitable for both interior and exterior use.

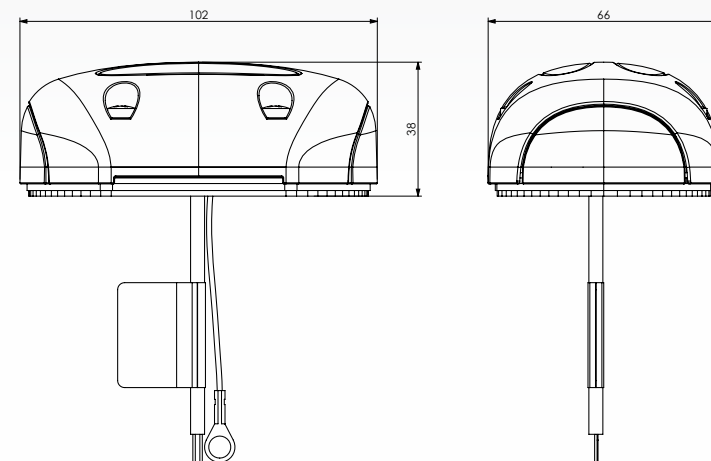
KEY FEATURES

Reference Product: TVP12003

- Compact design
- Indication light in multiple directions
- Multiple colours available
- Can be used to indicate several functions or system status
- IP66 according to IEC 60529 when mounted
- Configurable to be a double or triple indicator
- Available supply voltages: 24–110 VDC



DIMENSIONS [mm]



TEKNOWARE TUBE EXTERIOR SIDE INDICATOR

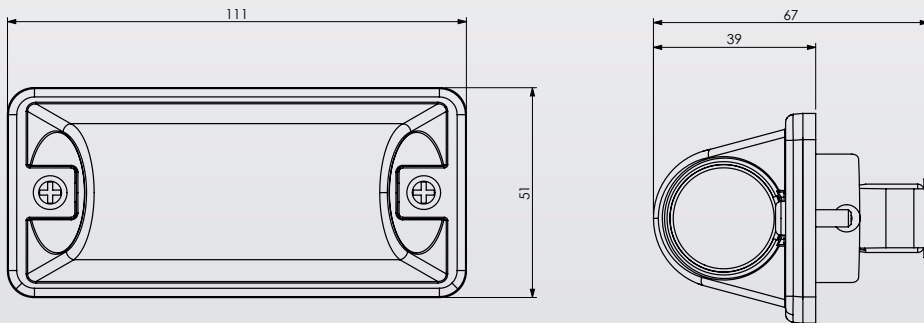


KEY FEATURES

Reference Product: M-9590-A

- Can be used to indicate several functions or system status
- Multiple LED colours available
- Multiple body colours available
- Available supply voltage: 75 VDC

DIMENSIONS [mm]



TEKNOWARE LRV SIDE MARKER LIGHTS

Teknoware LRV Side Marker Lights are designed to enhance the visibility and safety of rail vehicles. These compact LED units provide consistent side illumination, helping to signal the presence and movement of the vehicle to other traffic. They ensure long-lasting performance with minimal maintenance.

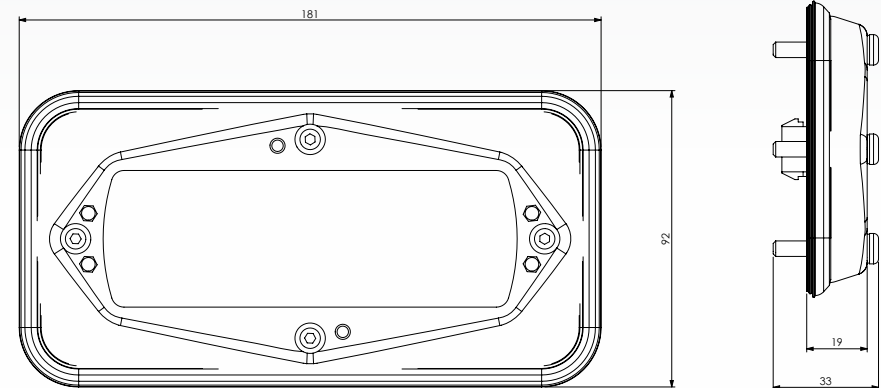
KEY FEATURES

Reference Product: TL-TVN48323

- Slim design
- Amber LED turn signal for LRV
- Also available with Red LED
- Black body colour available
- Available supply voltage: 24 VDC



DIMENSIONS [mm]



TEKNOWARE STEP LIGHT

Teknoware Step Light is a compact, recessed LED luminaire designed to provide low-level emergency illumination for steps and walkways. It is ideal for use in trains, trams and other environments where visibility is critical.

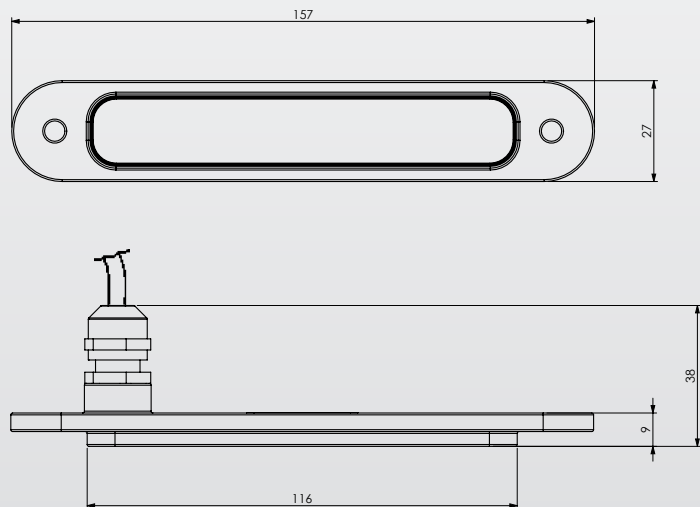


KEY FEATURES

Reference Product: TVP84201

- Compact design
- Specifically designed for use as an exterior step light in trains or locomotives
- Scratch and UV resistant front cover
- Anodized aluminum frame
- Available supply voltage: 24 VDC

DIMENSIONS [mm]



TEKNOWARE PLATFORM LIGHT

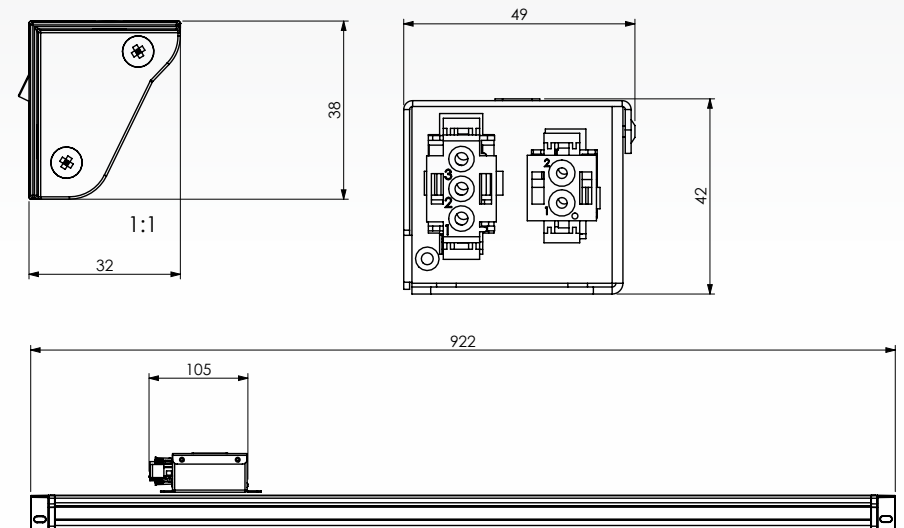


KEY FEATURES

Reference Product: 1000-2621

- Linear light unit to illuminate the platform
- Designed for use above train doors
- Available supply voltage: 74 VDC

DIMENSIONS [mm]



TEKNOWARE EXTREME

Teknoware Extreme has a robust and durable design which makes it an excellent light for extreme conditions. No matter whether it is hot or cold, moist or dry you can always rely on Teknoware Extreme.

Teknoware Extreme is made of aluminium; it is waterproof and designed to withstand shock. It has six super bright CSP LEDs to make sure that there is enough light to work safely and effectively.

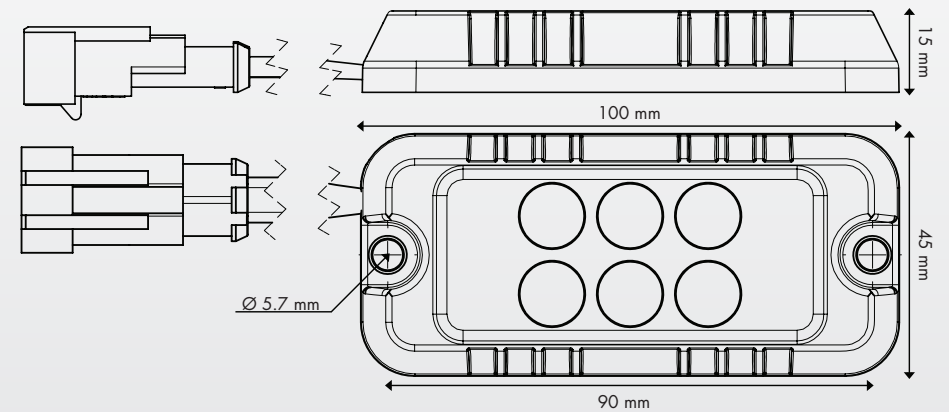


KEY FEATURES

Reference Product: TVP17007

- Output cable can be routed out from the end, side or back
- 6 x CSP LEDs, different colours available
- IP67 according to IEC 60529
- Shockproof: designed to withstand impact
- Aluminium casing: robust and durable design
- Optical silicone lenses, resilient with extremely good light transmission
- Available supply voltages: 24 VDC and 110 VDC

DIMENSIONS [mm]



TEKNOWARE FLASHER LIGHT

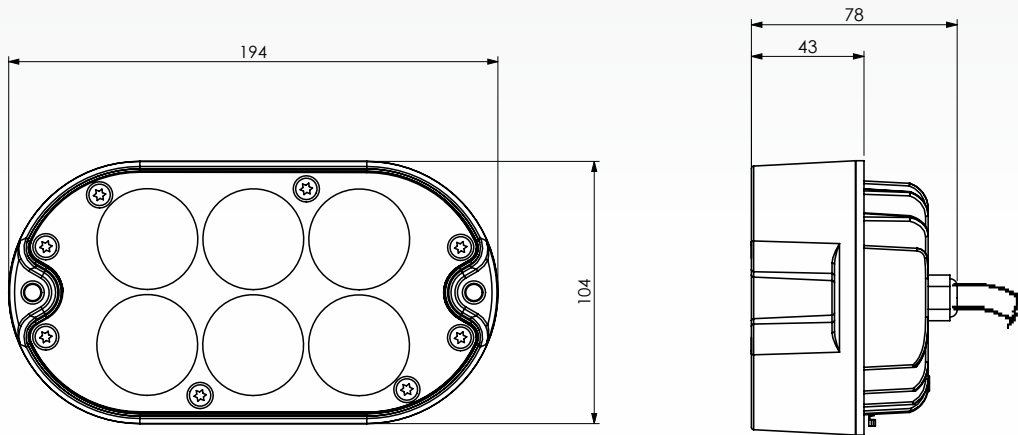
Teknoware Flasher Light is a high-visibility amber LED signaling device designed for railway applications. It provides a strong, pulsing light to alert or warn in critical situations, such as during train movements or emergencies. Engineered for durability and compliance with railway standards, it ensures reliable performance in demanding environments.

KEY FEATURES

Reference Product: TVP48002

- Compact design
- High-visibility LED in amber colour
- IP65 according to IEC 60529
- Specifically designed for the Indian market
- Flashing frequency 1 Hz
- Available supply voltage: 110 VDC

DIMENSIONS [mm]



TEKNOWARE FLOOD LIGHT

Teknoware Flood Light delivers powerful illumination for overhead signs. Utilizing energy-efficient LED technology, it offers excellent brightness, long service life, and resistance to harsh weather conditions.

KEY FEATURES

Reference Product: TVP48003

- High intensity in white colour
- IP65 according to IEC 60529
- Designed to illuminate overhead signs
- Specifically designed for the Indian market
- Available supply voltage: 110 VDC





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