

Lighting up tunnels for optimum safety **FlowBase**

A lighting design that ensures safety and good visibility is a key element in the success of any tunnel project. Philips FlowBase combines compact design, reliability, and affordability in one complete package to bring the perfect lighting solution for any tunnel application.

FlowBase is a tunnel lighting luminaire designed with motorists' safety and comfort in mind. It offers perfect uniformity and minimized glare, and complies with tunnel lighting standards to ensure safety in the tunnel. The perfect LED retrofit alternative to fluorescent and HPS 250W applications, FlowBase is easy to install and maintain, and ensures long lifetime of up to 50,000 hours.

Truly cost-efficient, FlowBase offers maximized energy savings of up to 50% compared to conventional lighting systems. For optimal cost savings and durability, FlowBase is one LED luminaire that offers high system efficacy, optimized thermal design and dedicated tunnel lighting optic to achieve the best W/m² performance in tunnel applications.







Benefits

- Maximized energy savings. Reduces the need to install numerous luminaires to deliver optimized energy savings of up to 50% with the lowest W/m².
- **Optimal safety.** Provides enough illuminance, perfect uniformity and minimized glare, and complies with tunnel lighting norm to ensure protection and complete visibility in the tunnel.
- **Easy installation.** Equipped with mounting brackets that can be adjusted +/60 degrees to fully adapt to different tunnel applications.
- Flexible configurations. Offers four housing configurations to cover lumen packages up to 27,400lm to ensure optimized tunnel lighting design and cost savings.
- **Control interface-enabled**. Supports DALI and 1-10v interface that can be used with Philips TunneLogic solution and other available controls.
- **Superior reliability.** Designed with high-quality components that provide long lifespan.

Features

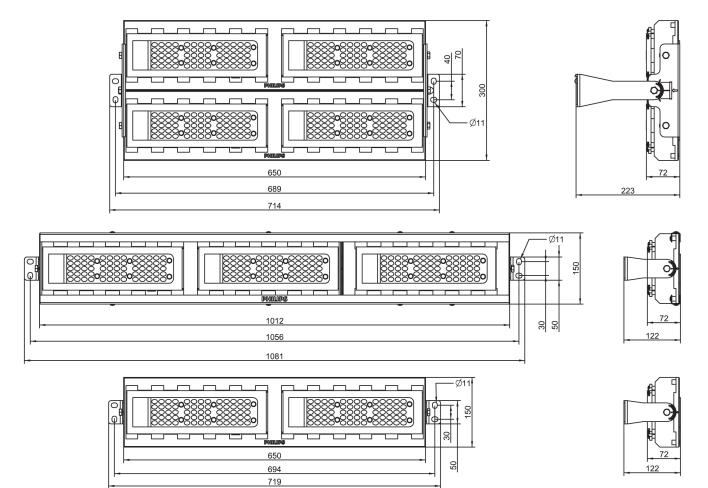
- Design based on the latest construction and lighting technology
- Cost-effective LED alternative to conventional tunnel luminaire.
- Excellent thermal design which has been tested to operate in extreme environments (luminaire can operate at temperature up to 50 °C)
- Sleek and fully sealed luminaire without any screws on the front cover.

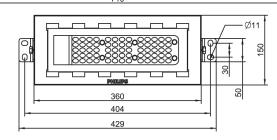
Applications

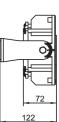
- 2-lane tunnels: 12-14m width, symmetrical or staggered installation, with up to 60-80km/hr speed
- 2- to 3-lane tunnels: 14-15m width, symmetrical installation, with up to 60-80km/hr speed
- 2-lane tunnels: 9-10m width, staggered installation, with up to 60-80km/hr speed

Dimensional drawing

Unit in mm







Product data

General Characteristics

Model	FlowBase – BWP352	Housing Material	High pressure cast aluminum Transparent and weather resistant grade Polycarbonate		
Classifications	IP66; IK08; Class I; RoHS	Optic Material			
Light Technical Cha	racteristics	Product Data			
System Lumen Package	Up to 27,400 lm	Surge protection	10KV (AC version)		
Color Temperature	4000K (NW)	Dimensions	Max 60W (429X150X122) 3.5 KG		
CRI	70 Min	(LxWxH) and Weight	Max 120W (719X150X122) 4.5 KG Max 180W (1081X150X122) 8.5 KG Max 240W (714X300X233) 9.5 KG		
Electrical Characteristics		Certifications	CQC, CB IEC60598, CE		
System Power	25w-240w	Ordering	BWP352 LED31/NW 25W 220-240V DM2 MP1 BWP352 LED33/NW 30W 220-240V DM2 MP1		
Power rating	220-240V 50Hz/60Hz	information	BWP352 LED44/NW 40W 220-240V DM2 MP1		
Power factor	> 0.95 (nominal power)		BWP352 LED69/NW 60W 220-240V DM2 MP1 BWP352 LED87/NW 70W 220-240V DM2 MP1		
Control interface (non customized)	1-10v; Dali		BWP352 LED97/NW 80W 220-240V DM2 MP1 BWP352 LED107/NW 90W 220-240V DM2 MP1 BWP352 LED117/NW 100W 220-240V DM2 MP1		
Environmental Characteristics			BWP352 LED137/NW 120W 220-240V DM2 MP1 BWP352 LED177/NW 150W 220-240V DM2 MP1		
Online	DM2 Tuppel optic		BWP352 LED206/NW 180W 220-240V DM2 MP1 BWP352 LED274/NW 240W 220-240V DM2 MP1		

Mechanical

Optics	DM2 Tunnel optic	BWP35	2 LED274/NW 240W	220-240V DM2 MP1
Operating Temperature	-30 °C to 50 °C	 		
Service lifetime	50,000 hours (70% lumen maintenance @Ta=35 °C)			
Installation	Adjustable ±60° (Wall / Ceiling Mounting)			



www.philips.com/totaltunnel

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