

#### LIGHTFLOW Compatible with TITUS HVAC FlowBar-10, Border 22

#### Description

Introducing Apure's groundbreaking Minus Lighting Module designed exclusively for seamless integration within Titus' FL-10 Border 22 Architectural Diffuser. Upgrade your space with this cutting-edge LED Module, specifically engineered for seamless integration within the Titus FL-10 FlowBar product and experience a harmonious blend of style and functionality as this innovative product takes architectural lighting to new heights, effortlessly merging the patented and award-winning functionality and aesthetics of the Minus lighting series.

#### Construction

- · Extruded aluminum profile
- · Black powder coated finish
- Includes connection hardware and Minus Two LED Fixture

#### **Lighting Fixture Specifications**

- Class 2 Fixture, Remote Powered up to 45m (150ft) max driver specific
- 19mm (3/4") recess depth required
- 12W Cree LED
- Up to 1000lm from source (IES files available upon request)
- Available in Warm White (2700K) and Soft White (3000K)
- Color Rendering Index ≥90
- 2-step SDCM ellipse for accurate color consistency between fixtures
- Full dimming range (0.1% to 100%) via remote power supply
- Type IC Rated, Plenum Rated, Airtight Rated
- Patented Product
- · Engineered and made in Germany

## Listings

- UL Listed, CE Conform
- · Lighting fixture suitable for dry and damp locations

Scan QR Code or visit at apurelighting.com/resources/



Compatible exclusively with Titus FlowBar FL-10 Border 22 Diffusers



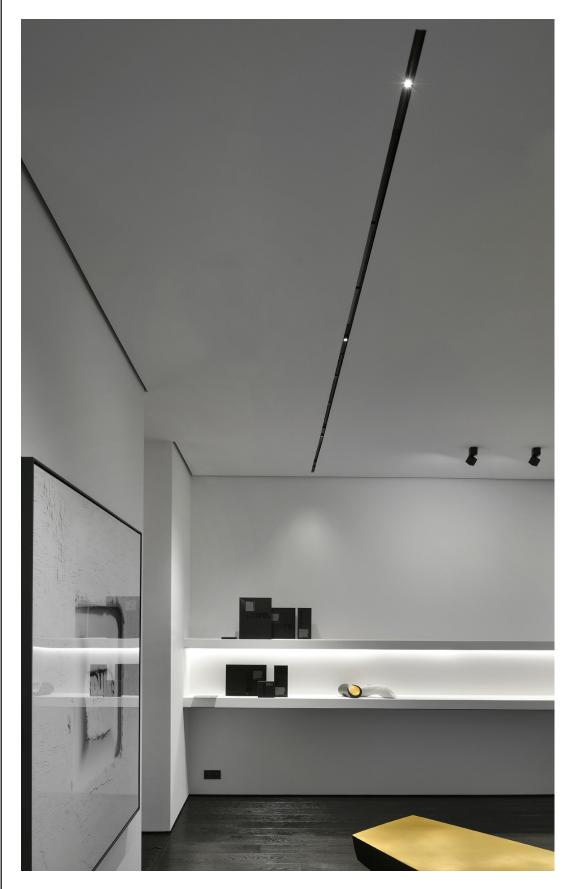






# apure.

Titus FL-10 FlowBar Diffuser with Apure LIGHTFLOW Modules





Introducing a groundbreaking collaboration between Titus-HVAC and cutting-edge lighting technology by Apure. This revolutionary product seamlessly integrates lighting modules into air diffuser channels, redefining the concept of dual functionality. With the LIGHTFLOW System, you can elevate your space by combining Apure's award-winning and patented lighting modules and efficient air distribution.

#### Construction

- Extruded aluminum fixture body, featuring Apure's signature louver designed by Studio F-A-Porsche
- 50,000 hours LED lifetime
- Approximate fixture weight: 720g (1.58lbs)
- Operating Temperature: 10°C to 50°C

#### **Fixture Size**

- · Visible Aperture: 25mm x 25mm (1" x 1")
- Recess Depth: 19mm (3/4")
- Heat Sink: 120mm x 120mm (4 3/4" x 4 3/4")

#### **Light Output**

- · High performance Cree LED, available in various color temperatures
- 1000lm source light output
- · 2-step SDCM ellipse
- · Color rendering index (CRI) min. 90
- · Integral microprocessor controlled thermal protection

#### **Electrical Specifications**

24V DC Constant Voltage Input (Class 2, 12W Power Consumption)

- 96W 24V DC Power Supply Required (powers up to 4 fixtures)
- · Magnetic Low Voltage (MLV) Dimming (or) 3-Wire Lutron Hi-Lume dimming protocols
- Recommended wire, min. 16 AWG plenum rated (CMP, when required) up to 150ft from remote transformer

Constant Current 1000mA 12V DC Input (Class 2, 12W Power Consumption)

- Remote 1000mA Constant Current Driver Required
- 0-10V 0.1% Dimming (or) 1-10V/Push/DALI (or) Phase Dimming drivers available
- · Recommended wire, min. 16 AWG plenum rated (CMP, when required) up to 82ft from remote transformer

#### Listings

- UL Listed, CE Conform
- Type IC Rated, Plenum Rated, Airtight Rated





#### **ORDERING INFORMATION - LIGHTING MODULE**

SERIES	MODEL	FLOWBAR TYPE	ORIENTATION
AT - Minus HVAC Module	☐2 - Minus Two	☐ <b>1 -</b> FL10-LED	☐ <b>F</b> - Fixed
TEMPERATURE (CCT)  ☐ 27 - Warm White (2700K) ☐ 30 - Soft White (3000K)	COLOR RENDERING INDEX  □ 90 - ≥90	(	
OPTICS (DEGREE)  ☐ S - Spot (20°)  ☐ F - Flood (40°)	DIMMING PROTOCOL  ☐ A - Magnetic Low Voltage (MLV) (24V)* ☐ L - Lutron 3-Wire Hi-Lume 0.1% (24V)*		
*remote power supply required  **Also cataloged as "EU"	CC** - 0-10V / DALI / Pha	ase Dim (1000mA Constar	nt Current, 12VDC)*
ORDERING EXAMPLE	AT21F3090FCC		

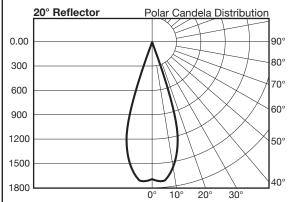
#### **ORDERING INFORMATION - TITUS FLOWBAR**

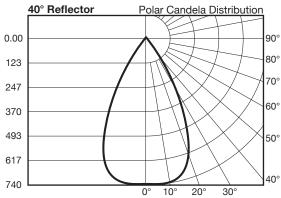
The MINUS TWO MODULE is only compatible with the HVAC FL-10 Border 22 Series. The compatible Titus HVAC Linear Diffusers can be ordered from Authorized Titus Reps worldwide. Please can the QR code to locate a rep near vou.



## apure.

#### **LED Photometrics**





Remote Power Supply for MLV Variant - [A] Magnitude Power Supply (96W 24VDC)

Remote Power Supply for Lutron Variant - [L] Lutron 3-wire Hi-Lume Premier Eco Driver Lutron 3-wire HomeWorks Digital Control

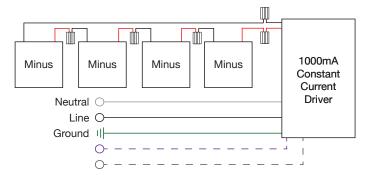
Remote Power Supply for CC or EU Variant - [CC] Magnitude AFLEX Power Supply (1000mA 60W)\* Magnitude AFLEX JBZN Series (1000mA 60W)\*\* Apure Phase Dimmable (1000mA 29W) Apure Phase Dimmable (1000mA 30-65W) Apure DALI, Push, 1-10V (1000mA 30-65W)\*

Part Number	Input Voltage	<b>Listings</b>
AA3096M	120Vac	ETL
<b>Part Number</b>	Input Voltage	<b>Listings</b>
L3D0-96W24V-U	120-277V	UL
LHD0-96W24V-U	120-277V	UL
Part Number AA3010M AA3010MJBXX AA32202DEU AA32205DEU	Input Voltage 120-277Vac 120-277Vac 220-240Vac 220-240Vac	Listings UL Listed UL Listed CE CE
AA3DALIDEU	110-240Vac	CF

<sup>\*</sup>Driver enclosure required where applicable.

<sup>\*\*</sup>Refer to reseller for more information.

### Wiring Diagram for Constant Current Minus products - [CC]



#### **Fixture Leads** Red (+) Black (-)

Warning: failure to wire correctly may cause fixture to fail.

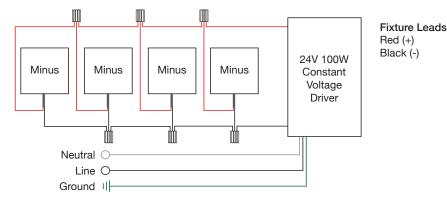
#### **Additional Considerations**

The above wiring diagram applies only to Constant Current Minus products with product ordering codes ending with "CC". The diagram above shows the typical wiring schematic, however the total number of fixtures per driver is driver specific.

Magnitude AFLEX Power Supply (1000mA 60W) 1-4 Minus 16AWG - 82ft (25m) Apure Phase Dimmable (1000mA 29W) 16AWG - 82ft (25m) 1-2 Minus Apure Phase Dimmable (1000mA 30-65W) 3-5 Minus 16AWG - 82ft (25m) Apure DALI, Push, 1-10V (1000mA 30-65W) 1-4 Minus 16AWG - 82ft (25m)

WARNING: The power supply must operate within the range of minimum to maximum fixtures. Operation with less or more fixtures from the specified amount will result in damage to the power supply and/or lighting fixture. Incorrectly wiring the Constant Current lighting fixture may cause luminaire to fail.

#### Wiring Diagram for 24V Minus Products - [A] MLV or [L] Lutron



## **Additional Considerations**

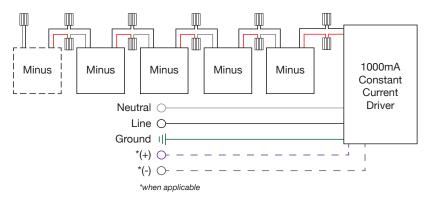
The above wiring diagram applies only to 24V Minus products with product ordering codes ending with "A" or "L". The diagram above shows the typical wiring schematic, however the total number of fixtures per driver is driver specific.

•	Magnitude Constant Voltage Driver (96W 24VDC)	1-4 Minus	≤16AWG - 150ft (45m)
•	Lutron Hi-Lume Constant Voltage Driver (96W 24VDC)	1-4 Minus	≤16AWG - 150ft (45m)
•	Lutron HomeWorks Constant Voltage Driver (96W 24VDC)	1-4 Minus	<16AWG - 150ft (45m)

WARNING: The power supply must operate within the range of minimum to maximum fixtures. Operation with less or more fixtures from the specified amount will result in damage to the power supply and/or lighting fixture.

## apure.

## Wiring Diagram for Constant Current Minus products - [EU]



Fixture Leads In Red with Red (+) Black with Black (-)

Fixture Leads Out Black with Black White with Red

Warning: failure to wire correctly may cause fixture to fail.

Note: The white and black cables of the <u>last fixture</u> in the series must be bridged together!

#### **Additional Considerations**

The above wiring diagram applies only to Constant Current Minus products with product ordering codes ending with "EU". The diagram above shows the typical wiring schematic, however the total number of fixtures per driver is driver specific.

•	Magnitude AFLEX Power Supply (1000mA 60W)	1-4 Minus	16AWG - 82ft (25m)
•	Apure Phase Dimmable (1000mA 29W)	1-2 Minus	16AWG - 82ft (25m)
•	Apure Phase Dimmable (1000mA 30-65W)	3-5 Minus	16AWG - 82ft (25m)
•	Apure DALI, Push, 1-10V (1000mA 30-65W)	1-4 Minus	16AWG - 82ft (25m)

**WARNING:** The power supply must operate within the range of minimum to maximum fixtures. Operation with less or more fixtures from the specified amount will result in damage to the power supply and/or lighting fixture. Incorrectly wiring the Constant Current lighting fixture may cause luminaire to fail.