

LIGHTFLOW-10 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 and 652lm delivered (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

Resources

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



Compatible exclusively with Titus FlowBar FL-10 Border 22 Diffusers



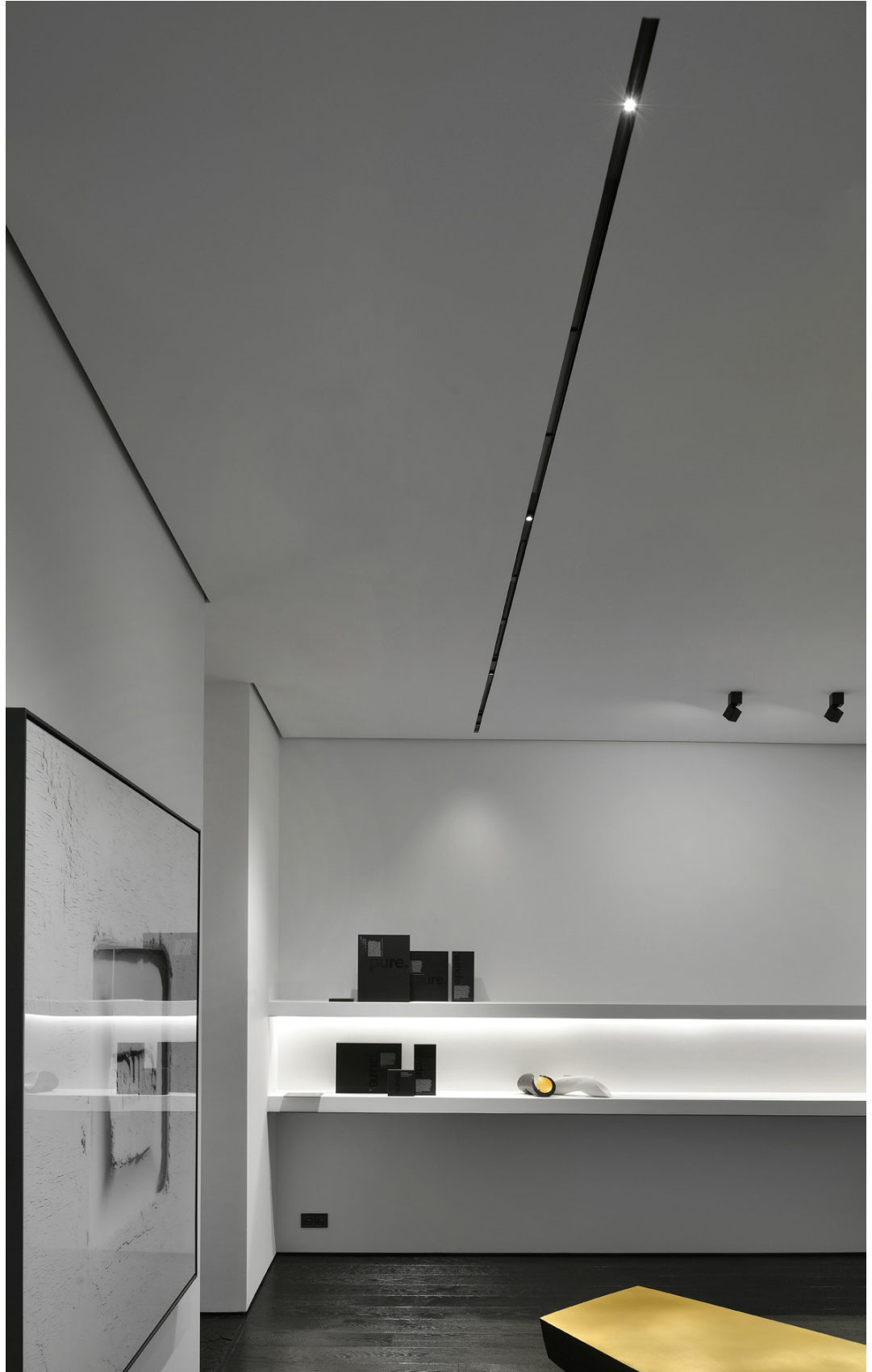
Resources



Titus FL-LED



Titus FL-10 FlowBar Diffuser with Apure LIGHTFLOW-10 Modules



Description

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, 652lm max delivered 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 <input type="checkbox"/> AT - Minus HVAC Module	MODEL <input type="checkbox"/> 2 - Minus Two	FLOWBAR TYPE <input type="checkbox"/> 1 - FL10-LED	ORIENTATION <input type="checkbox"/> F - Fixed
TEMPERATURE (CCT) <input type="checkbox"/> 27 - Warm White (2700K) <input type="checkbox"/> 30 - Soft White (3000K)	COLOR RENDERING INDEX <input type="checkbox"/> 90 - ≥90		
OPTICS (DEGREE) <input type="checkbox"/> S - Spot (20°) <input type="checkbox"/> F - Flood (40°)	DIMMING PROTOCOL <input type="checkbox"/> A - Magnetic Low Voltage (MLV) (24V)* <input type="checkbox"/> L - Lutron 3-Wire Hi-Lume 0.1% (24V)* <input type="checkbox"/> CC** - 0-10V / DALI / Phase Dim (1000mA Constant Current, 12VDC)*		

*remote power supply required

**Also cataloged as "EU"

ORDERING EXAMPLE AT21F3090FCC

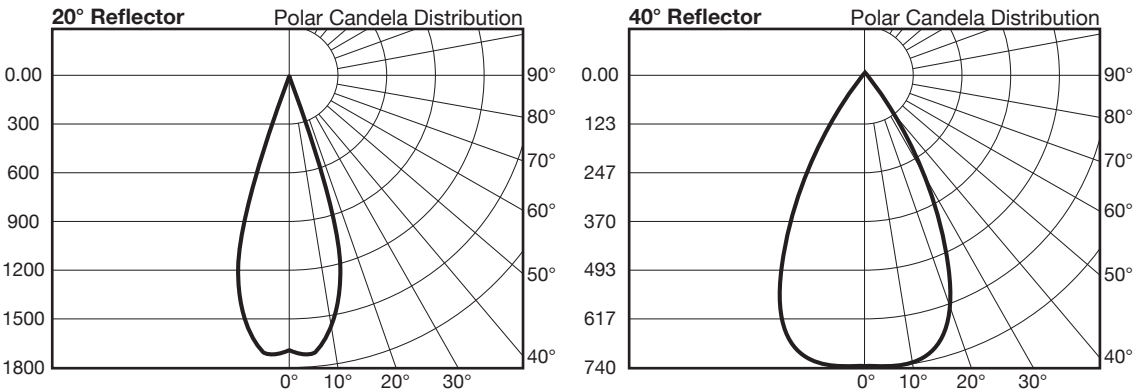
ORDERING INFORMATION - TITUS FLOWBAR

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 scan the QR code to locate a rep near you.



Find a Rep

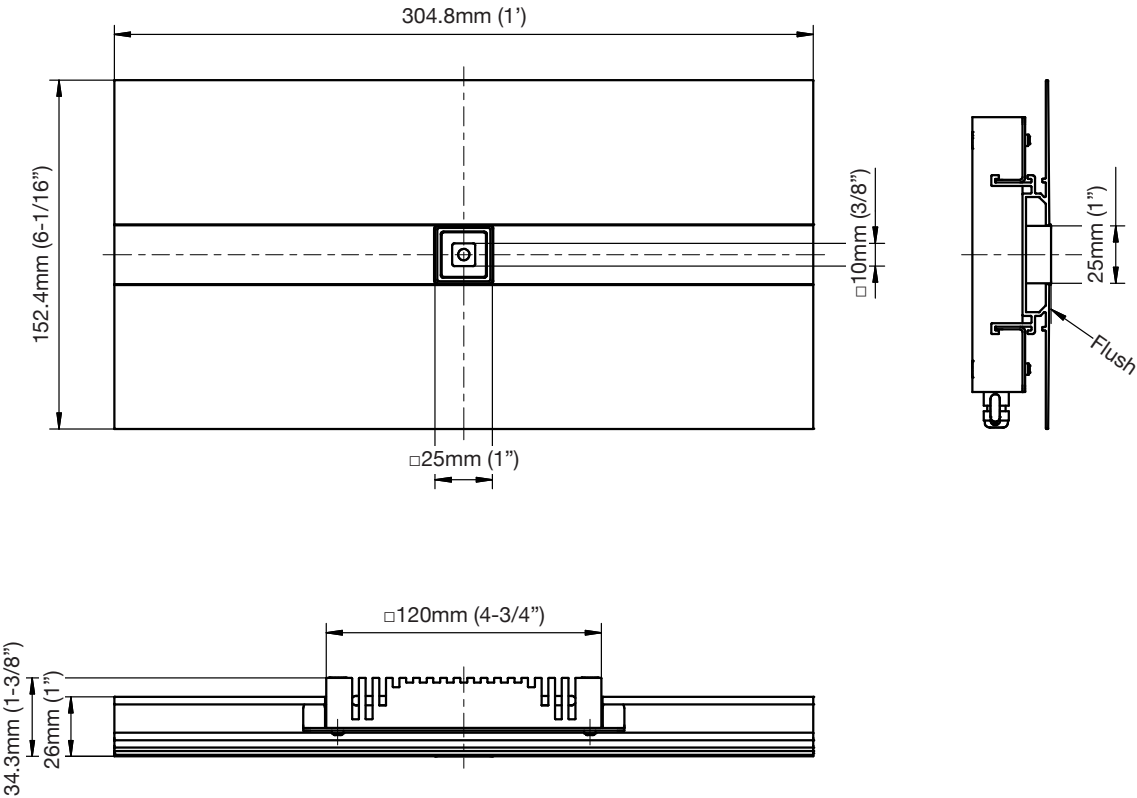
LED Photometrics



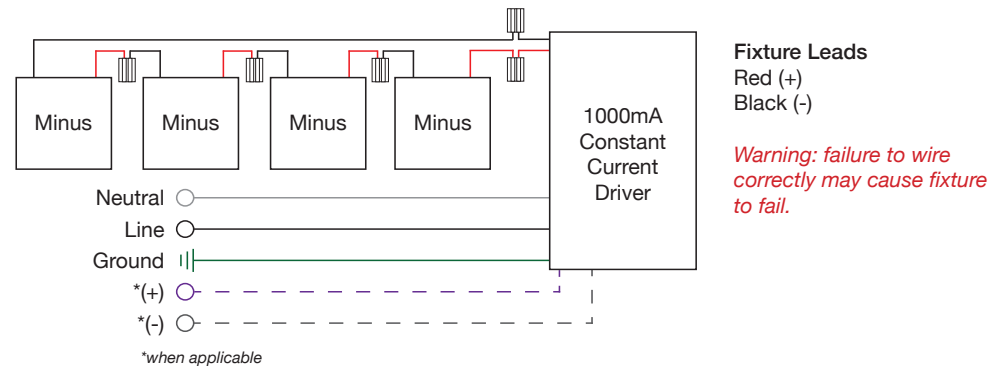
Remote Power Supply for MLV Variant - [A] Magnitude M-Series Power Supply (96W 24VDC)	Part Number AA3096M	Input Voltage 120Vac	Listings ETL
Remote Power Supply for Lutron Variant - [L] Lutron 3-wire Hi-Lume Premier Eco Driver (by others) Lutron 3-wire HomeWorks Digital Control (by others)	Part Number L3D0-96W24V-U LHD0-96W24V-U	Input Voltage 120-277V 120-277V	Listings UL UL
Remote Power Supply for CC or EU Variant - [CC] Magnitude AFLEX Power Supply (1000mA 60W)* Magnitude AFLEX JBZN Series (1000mA 60W)** Hatch FTX 0-10V (1000mA 50W)* Hatch XTC (1000mA 32W)* Apure Phase Dimmable (1000mA 26W) Apure Phase Dimmable (1000mA 65W) KGP DALI 2 NFC Touch Dim (500-1000mA 53.2W)*	Part Number AA3010M1000 AA3010MJBXX AA3FTXH1000 AA3XTCH1000 AA32202DEU AA32205DEU AA3DALI2EU	Input Voltage 120-277Vac 120-277Vac 120-277Vac 120-277Vac 220-240Vac 220-240Vac 220-240Vac	Listings UL Listed UL Listed UL Listed UL Recognized CE CE CE

*Driver enclosure required where applicable.
**Refer to reseller for more information.

Module Dimensions



Wiring Diagram for Constant Current Minus products - [CC]



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.

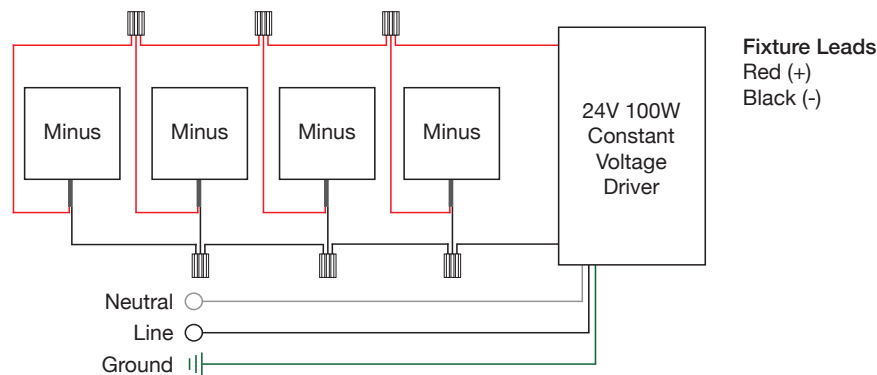
• Magnitude AFLEX 0-10V Driver (1000mA 60W)	1-4 Minus	16AWG - 82ft (25m)	US/CAN
• Hatch FTX 0-10V (1000mA 50W)	2-3 Minus	16AWG - 82ft (25m)	US/CAN
• Hatch XTC34 Phase Dimmable (1000mA 32W)	1-2 Minus	16AWG - 82ft (25m)	US/CAN
• Apure Phase Dimmable (1000mA 26W)	1-2 Minus	16AWG - 82ft (25m)	EU/INT'L
• Apure Phase Dimmable (1000mA 65W)	3-5 Minus	16AWG - 82ft (25m)	EU/INT'L
• KGP DALI 2 NFC Touch Dim (500-1000mA 53.2W)	1-4 Minus	16AWG - 82ft (25m)	EU/INT'L

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.

Dimmer Compatibility

Driver manufacturers perform extensive compatibility testing with various dimmers and LED loads. Dimming performance may vary based on driver type, load, wiring, and dimmer model. Apure recommends verifying system performance prior to installation. Refer to the LED driver specification sheet for detailed dimming data.

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.

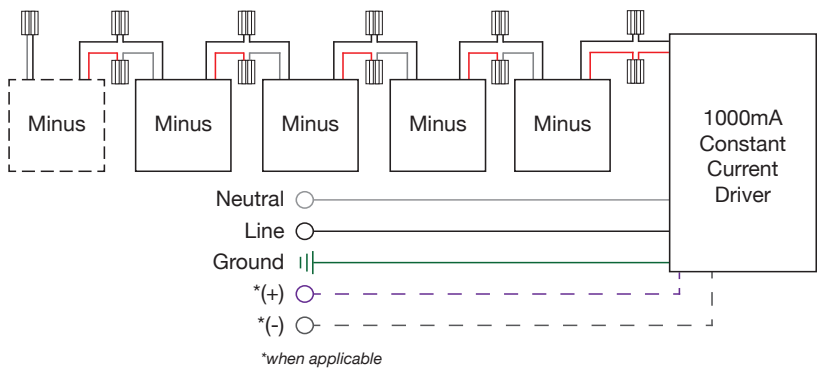
• Magnitude M-Series Constant Voltage Driver (96W 24VDC)	1-4 Minus	≤16AWG - 150ft (45m)	US/CAN
• Lutron Hi-Lume Constant Voltage Driver (96W 24VDC)	1-4 Minus	≤16AWG - 150ft (45m)	US/CAN
• Lutron HomeWorks Constant Voltage Driver (96W 24VDC)	1-4 Minus	≤16AWG - 150ft (45m)	US/CAN

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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 last fixture 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 0-10V Driver (1000mA 60W)	1-4 Minus	16AWG - 82ft (25m)	US/CAN
• Hatch FTX 0-10V (1000mA 50W)	2-3 Minus	16AWG - 82ft (25m)	US/CAN
• Hatch XTC34 Phase Dimmable (1000mA 32W)	1-2 Minus	16AWG - 82ft (25m)	US/CAN
• Apure Phase Dimmable (1000mA 26W)	1-2 Minus	16AWG - 82ft (25m)	EU/INT'L
• Apure Phase Dimmable (1000mA 65W)	3-5 Minus	16AWG - 82ft (25m)	EU/INT'L
• KGP DALI 2 NFC Touch Dim (500-1000mA 53.2W)	1-4 Minus	16AWG - 82ft (25m)	EU/INT'L

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.

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