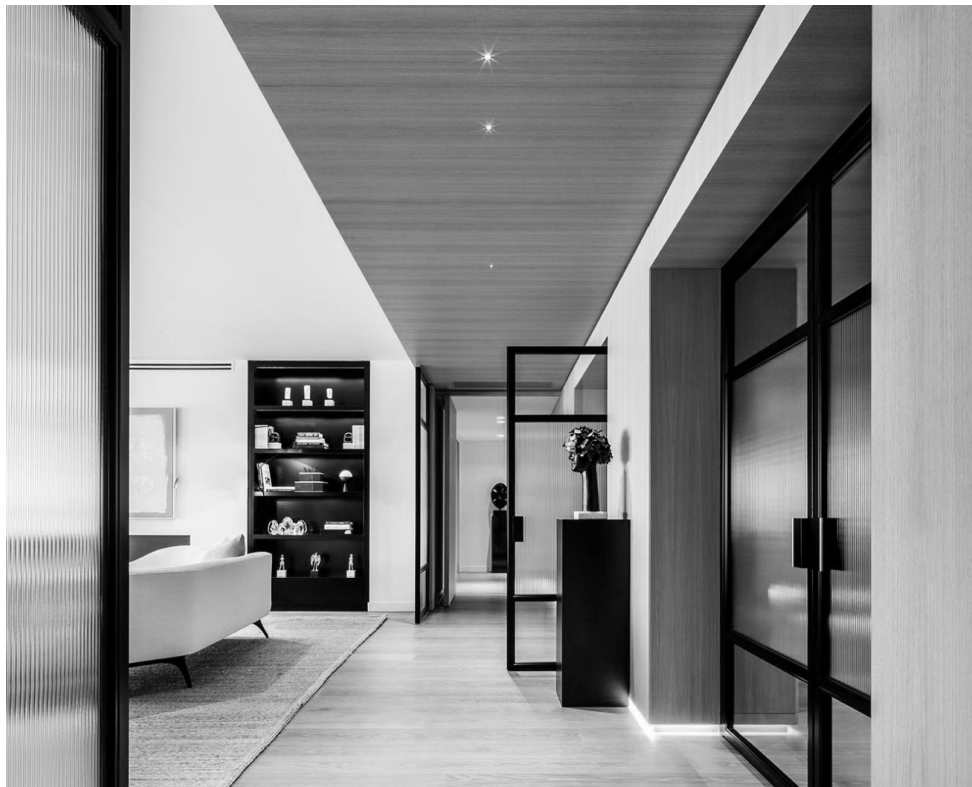


MINUS ONE Minimal Recessed

Quick Facts

- Class 2 Fixture, Remote Powered up to 45m (150ft) max
- Minimal fixture aperture - 10mm (3/8")
- 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
- Suitable for installation in drywall, wood, metal and stone ceilings
- Suitable for dry, damp and wet locations (IP43)
- Type IC Rated, Plenum Rated, Airtight Rated
- Patented Product
- Engineered and made in Germany



Description

The MINUS ONE downlight brings sophistication to interior spaces with its never-before-seen performance. A single high performance LED is combined with precision-focusing optics to create an unprecedented light fixture. The high-tech design features a perfectly round 10 mm (3/8") aperture in either a 20 or 40 degree beam spread and includes various dimming protocols, each fully compatible with all major architectural lighting control systems.

Construction

- Extruded aluminum fixture body
- 50,000 hours LED lifetime
- Approximate fixture weight: 720g (1.58lbs)
- Operating Temperature: 10°C to 50°C

Fixture Size

- Visible Aperture: 10mm (3/8")
- 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 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

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

Installation Types

- Drywall installation for new construction and retrofit installations possible with the Universal Drywall Bracket, available for various drywall thicknesses.
- Custom installations for wood, metal and stone ceilings. Requires shop drawings available per request by Apure.
- The Minus series is not suitable for installation within steam rooms or saunas!

Listings

- UL Listed, CE Conform
- Suitable for dry, damp and wet locations, standard IP43, IP66 (*upon request*)
- Type IC Rated, Plenum Rated, Airtight Rated

Resources / Installation Videos

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



Resources



Videos



ORDERING INFORMATION

SERIES

- AM - Minus Series

MODEL

- 1 - Minus One

TYPE

- 1 - LED

ORIENTATION

- F - 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

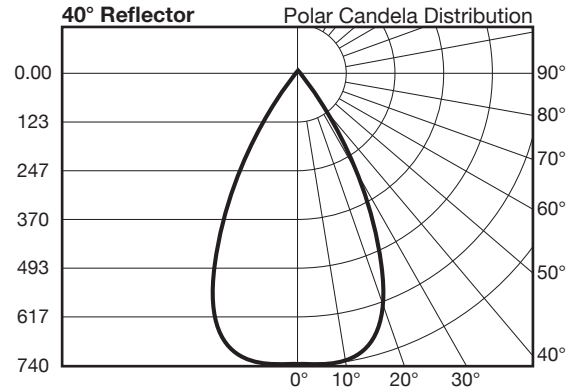
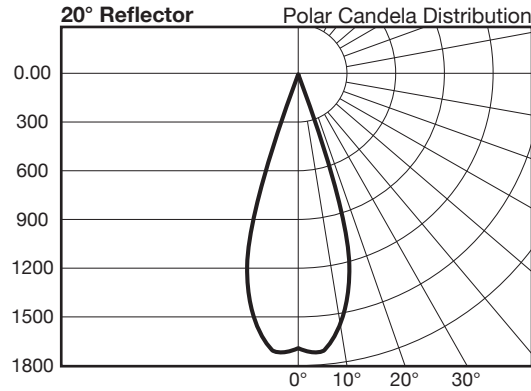
- A - Magnetic Low Voltage (MLV) (24V)*
 L - Lutron 3-Wire Hi-Lume 0.1% (24V)*
 EU - 0-10V / DALI / Phase Dim (12V)*

*remote power supply required

ORDERING EXAMPLE

AM11F3090FA

LED Photometrics



Drywall Accessories

Universal Drywall Bracket	AM1BRKU10
Universal Drywall Bracket	AM1BRKU12
Universal Drywall Bracket - (<i>International Standard</i>)	AM1BRKU15
Universal Drywall Bracket - (<i>US Standard</i>)	AM1BRKU18

Part Number

Thickness

Requirement

10mm	Drywall Installations
12.5mm	Drywall Installations
15mm	Drywall Installations
18mm	Drywall Installations

Remote Power Supply for MLV Variant - [A]

Magnitude Power Supply (96W 24VDC)	AA3096M
Lumiron Power Supply (96W 24VDC)	AA3100L

Part Number

Input Voltage

Listings

120Vac	ETL
120Vac	ETL

Remote Power Supply for Lutron Variant - [L]

Lutron 3-wire Hi-Lume Premier Eco Driver	L3D0-96W24V-U
Lutron 3-wire HomeWorks Digital Control	LHD0-96W24V-U

Part Number

Input Voltage

Listings

120-277V	UL
120-277V	UL

Remote Power Supply for EU Variant - [EU]

Magnitude AFLEX Power Supply (1000mA 60W)*	AA3010M
Magnitude AFLEX JBZN Series (1000mA 60W)**	AA3010MJBXX
Apure Phase Dimmable (1000mA 29W)	AA32202DEU
Apure Phase Dimmable (1000mA 30-65W)	AA32205DEU
Apure DALI, Push, 1-10V (1000mA 30-65W)*	AA3DALIDEU

Part Number

Input Voltage

Listings

120-277Vac	UL Listed
120-277Vac	UL Listed
220-240Vac	CE
220-240Vac	CE
110-240Vac	CE

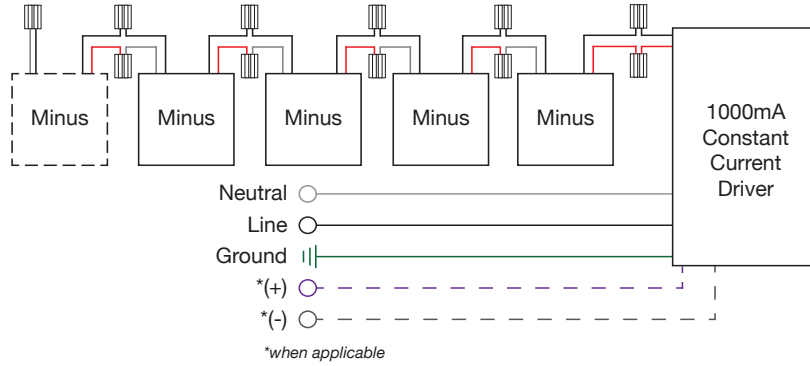
*Driver enclosure required where applicable.

**Refer to reseller for more information.

Custom Installation Types

- The universal bracket (AM1BRKUXX) is intended only for drywall installations.
- System ceilings, stone, wood and metal ceiling integrations are accomplished through custom fabrication by others. Please note, not all materials are suitable for installation. However, Apure will make every effort to accommodate custom integrations. Please contact your authorized Minus reseller for more information regarding custom ceiling integrations.
- Fixtures must have a minimum clearance of 12 inches (30cm) below or horizontally from the light source at all times!
- Observe and follow all local and national installation codes for all installation types.
- Test and make sure that all fixtures are working properly before any mudding, painting or finishing occurs!
- Read and adhere to all instructions supplied with each power supply and fixture.
- Follow all instructions supplied by power supply / driver manufacturer!

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!

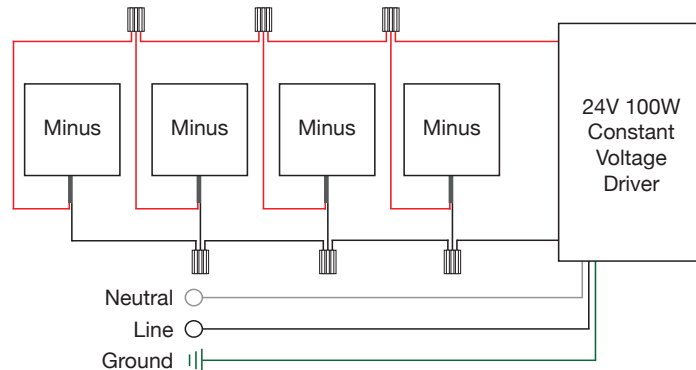
Additional Considerations

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 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.

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



Fixture Leads
Red (+)
Black (-)

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.