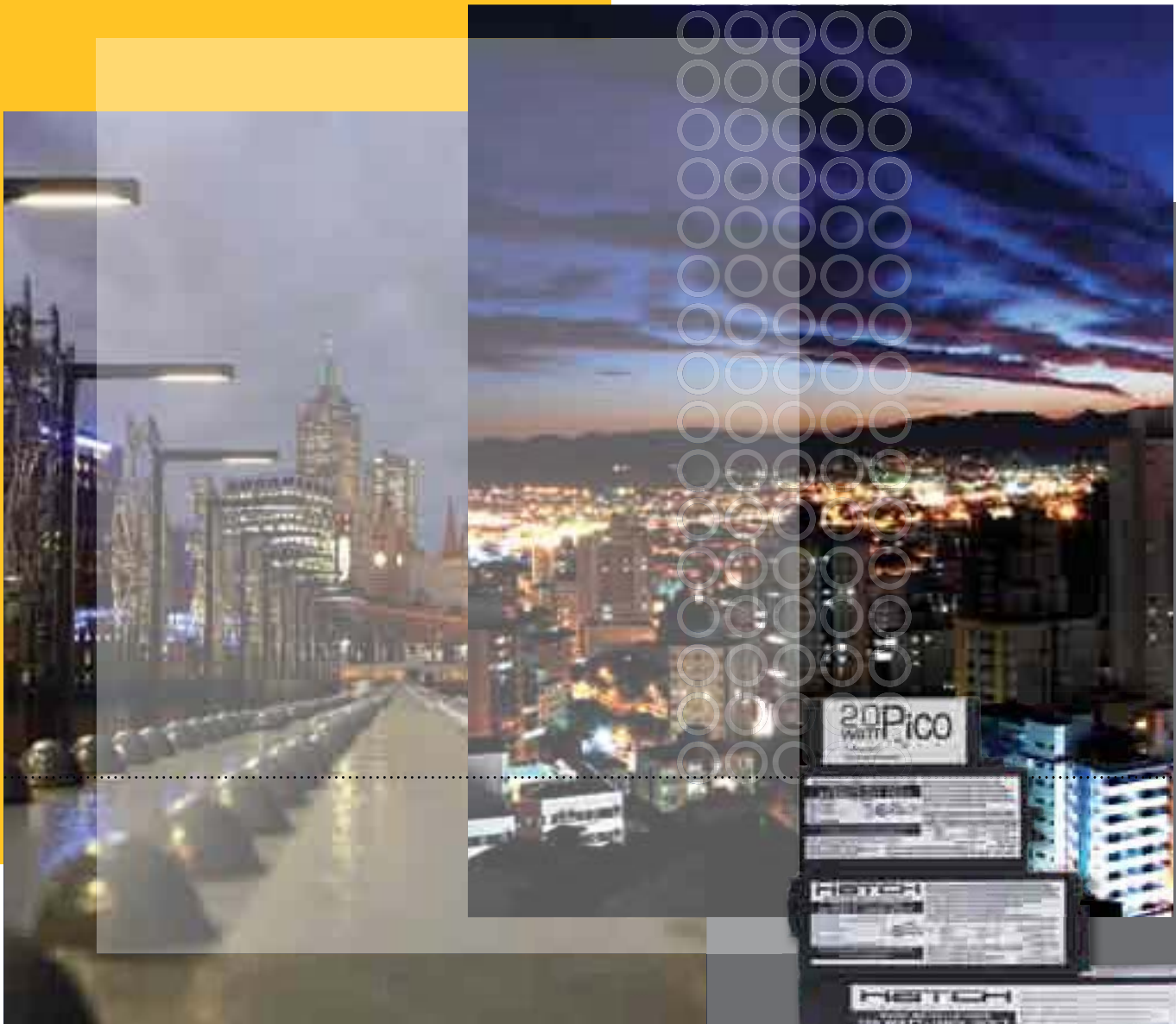


ELECTRONIC HID BALLASTS

HATCH

Precision Power. Perfect Light.



BALLASTS, DRIVERS, TRANSFORMERS & LAMPS FOR ALL LIGHTING APPLICATIONS

Electronic HID Ballasts

Hatch Electronic HID ballasts have been designed from the ground up to be the most reliable and flexible ballasts in the lighting industry. Available in a wide variety of case sizes and configurations, Hatch HID ballasts are recognized in the lighting industry for their proven dependability in countless applications. With millions of units performing in the field today, Hatch HID ballasts can be trusted to deliver superior light and lamp life.

HATCH

All Hatch Electronic HID Ballasts Feature:

- Superior color uniformity
- Low profile, lightweight cases
- Excellent lumen maintenance
- Constant lumen output over a wide input voltage range and lamp voltage variation
- Significant energy savings when compared to magnetic ballasts
- Integrated thermal protection
- Approval for recessed use
- Microprocessor control
- Safety Shutdown features
- End of lamp life protection
- Superior hot lamp restrike characteristics
- Designed, tested, & approved for most lamp brands
- Low voltage lamp shutdown

www.hatchlighting.com

Intro: Electronic HID Ballasts

1

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To view complete online HID ballast specifications, scan this barcode with your Smartphone.

Don't have a scanning App? Search the Apple App Store, Android Market or BlackBerry App World for a barcode scanning application





Technological Innovations In HID



Ultra Low Spectral Power Ratio

This is a measure of the ballasts fundamental frequency (desired frequency) power in proportion to the unwanted frequency (high frequency) power. For operation with most lamps, ANSI requires that the Spectral Power Ratio in any 1kHz band between 10kHz and 400kHz be less than 1.8% of the total lamp power. All Hatch ballasts meet or exceed this requirement.

Resonant Start Technology & Hybrid Pulsed Resonant Ignition System (HPRIS)

Hatch was amongst the very early adopters of resonant start technology for HID lamps. Historically HID lamps were started using a pulse ignitor which used a 3-4kV pulse to start the lamp. Hatch adopted resonant start technology so as to reduce inconsistencies in starting performance, especially where the lamp is mounted some distance from the ballast. With the patented Hatch Resonant Start Technology, it is possible to start and run a lamp some distance from the ballast where pulse ignition systems would fail due to lamp wiring capacitance. Hatch's patented Resonant Start Technology has been developed over the years to further refine lamps starting characteristics and our most up to date Hybrid Pulsed Resonant Ignition System (*HPRIS*) is the safest and best performing HID ignition system to be found in the industry.

Patented Half Bridge (HB) Technology

Hatch Half Bridge 70 Watt and 100 Watt ballast models use a patented design of half bridge topology which allows Hatch to produce one of the most high performance low wattage ballast systems available. This patented technology improves many aspects of product reliability over competitive ballast designs.

Patented Lamp Current Crest Factor Control

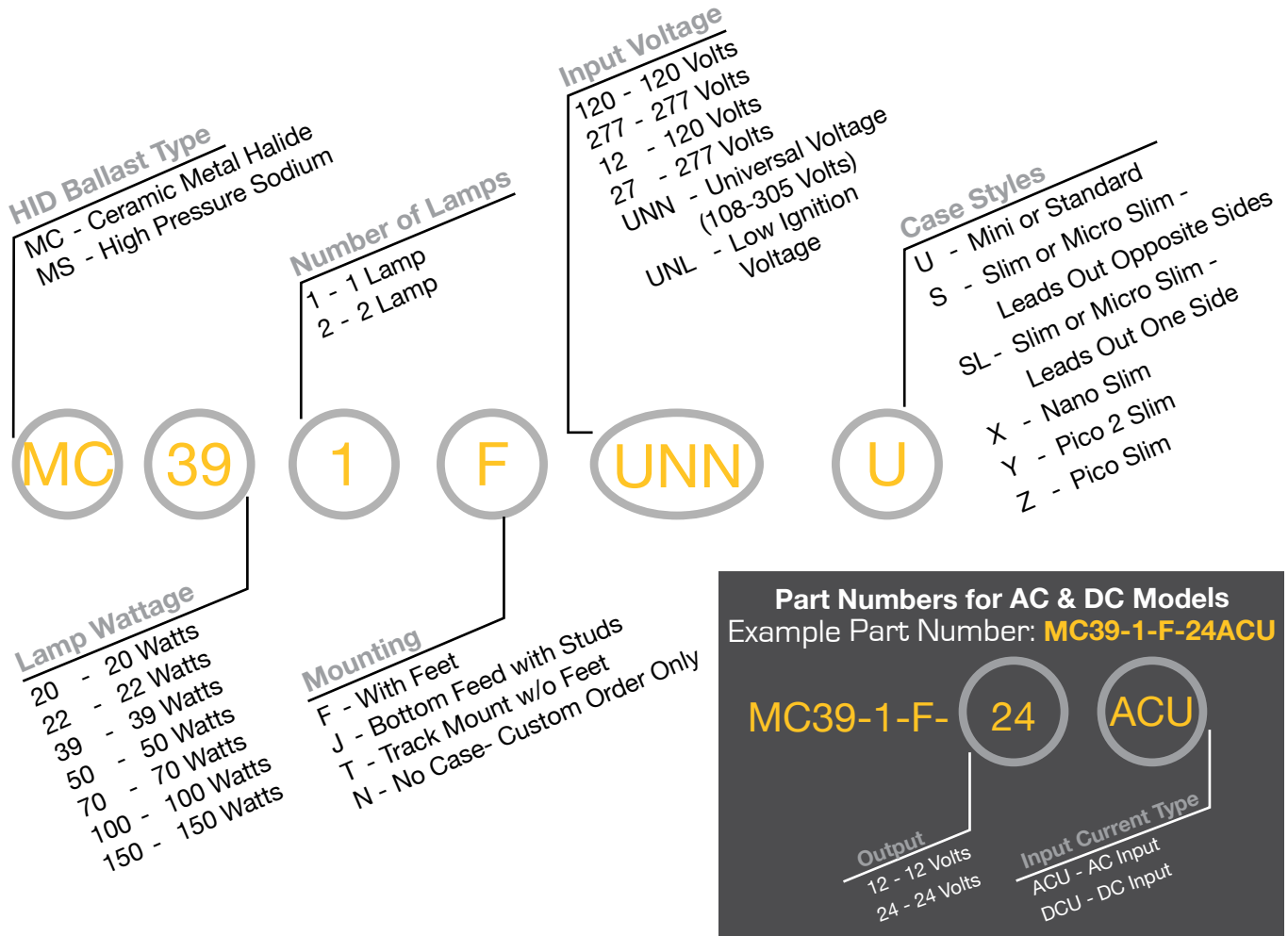
Hatch ballasts have a patented system for actively compensating for lamp conditions and adjusting the lamp current drive waveform to control the lamp current crest factor under all lamp operating conditions over lamp warm up and lamp life. This results in reduced electrode erosion and increased lamp life.

Certifications



Understanding Hatch HID Ballast Part Numbers

Example Part Number: **MC39-1-F-UNNU**



Case Styles

TRAILBLAZING BALLAST TECHNOLOGY IN SEVEN UNIQUE CASE STYLES

NEW

Pico



| Wattage | Voltage |
|---------|----------------|
| 20 Watt | 120V Dedicated |

Hatch offers the largest selection of electronic HID case styles and configurations in the lighting industry. Since 1999, Hatch has pioneered the miniaturization of E-HID technology and has set several industry design standards for new, smaller E-HID fixtures. Hatch is proud to introduce the new Pico and Pico2 case styles which represent the pinnacle of low wattage E-HID design efficiency and technology.

* Each case style listed in the Size Chart represents a side lead model with no mounting feet. All HATCH E-HID Ballasts are available in several mounting and wiring configurations, each with slightly different dimensions from those listed in the chart. Please see each ballast specification for exact configuration dimensions.

NEW

Pico2



| Wattage | Voltage |
|---------|----------------|
| 20 Watt | Universal |
| 39 Watt | 120V Dedicated |

Nano



| Wattages | Voltages |
|----------|---------------------------|
| 20 Watt | 120V or 277V Dedicated |
| 22 Watt | |
| 39 Watt | |

Micro Slim



| Wattages | Voltages |
|----------|-----------|
| 20 Watt | Universal |
| 39 Watt | |
| 70 Watt | |

VANCOUVER INTERNATIONAL AIRPORT - VANCOUVER, BC



Architectural Fixtures Powered by **HATCH**
MC39-1-F-UNNU & MC150-1-F-120U Ballasts



HID STREET LIGHTS - *NEW YORK CITY, NEW YORK*

Over 300,000 Street Lights Powered by **HATCH**
MS100-1-F-120U & MC150-1-F-120U Ballasts

Slim



| Wattages | Voltages |
|----------|-----------|
| 70 Watt | Universal |
| 100 Watt | |

Mini



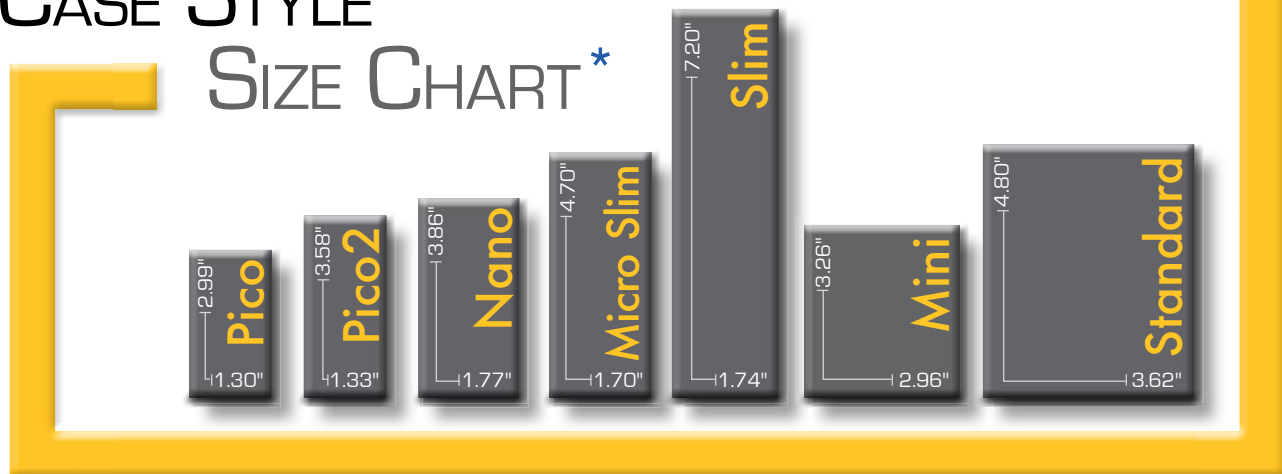
| Wattages | Voltages |
|----------|--|
| 20 Watt | 120V or 277V Dedicated & Universal |
| 22 Watt | |
| 39 Watt | |
| 50 Watt | Universal |
| 70 Watt | |

Standard



| Wattages | Voltages |
|----------|--|
| 70 Watt | Universal |
| 100 Watt | 120V or 277V Dedicated & Universal |
| 150 Watt | 120V or 277V Dedicated |

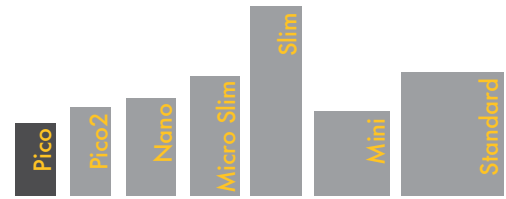
CASE STYLE SIZE CHART*



Part Numbers & Specifications All measurements in inches

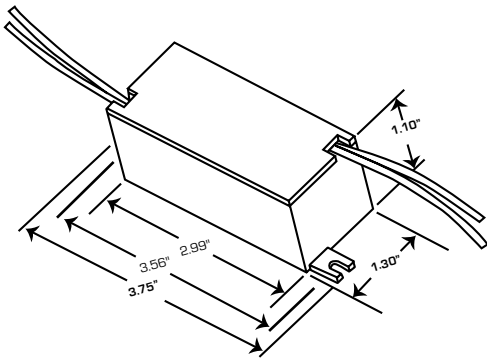


PICO



Case Material: Polycarbonate

Case Dimensions and Mechanical Specifications



CASE STYLE

MOUNTING

Z - Pico Slim

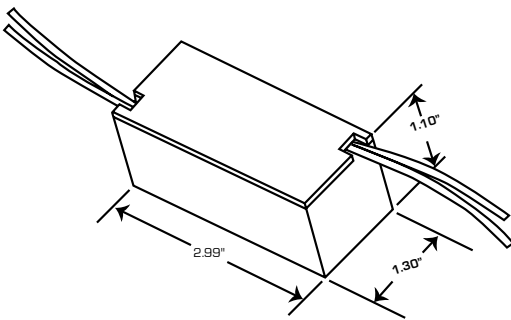
F - With Feet

Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 6.5" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 10 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |



CASE STYLE

MOUNTING

Z - Pico Slim

T- Track mount w/o feet

Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 6.5" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 10 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |

Part Numbers & Electrical Specifications

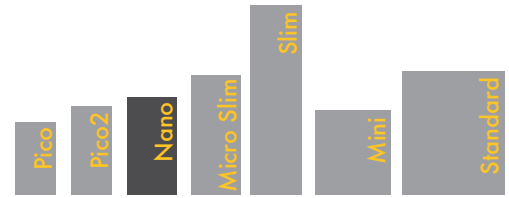
| Watts | Hatch Part Number | Description | Lamp Types/ ANSI Codes | Voltage | Nominal Input Power | Input Current/ Input Voltage | Wire Diagram |
|-------|-------------------|----------------------------|------------------------|----------------|---------------------|------------------------------|--------------|
| 20 | MC20-1-F-120Z | 20 Watt 120V Pico w/Feet | M/C156 Ceramic MH | Dedicated 120V | 24 Watts | .20 Amps @ 120V | I, VI |
| | MC20-1-T-120Z | 20 Watt 120V Pico w/o Feet | | | | | |



Part Numbers & Specifications All measurements in inches

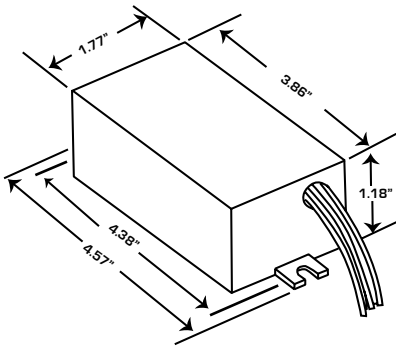


NANO



Case Material: Metal

Case Dimensions & Mechanical Specifications



CASE STYLE

MOUNTING

X - Nano Slim

F - Side lead with feet

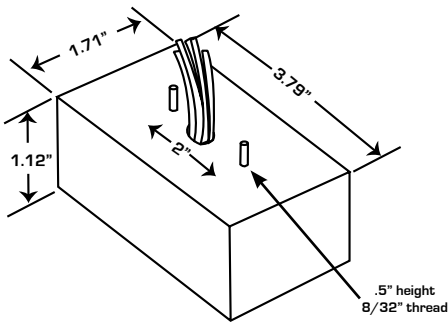
Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 8" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |

* Available without feet, special order



CASE STYLE

MOUNTING

X - Nano Slim

J - Bottom feed with studs

Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 10" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

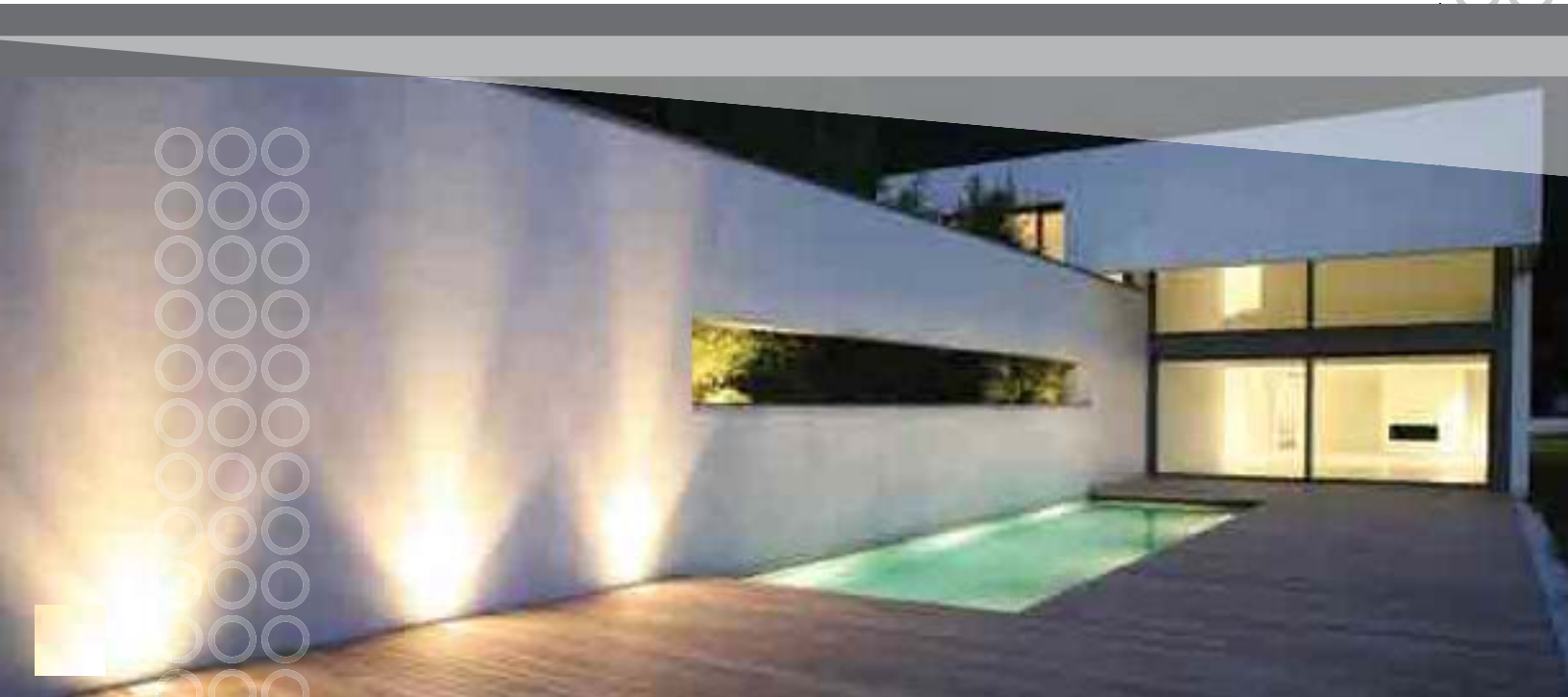
| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |

Part Numbers & Electrical Specifications

| Watts | Hatch Part Number | Description | Lamp Types/ ANSI Codes | Voltage | Nominal Input Power | Input Current/ Input Voltage | Wire Diagram |
|-------|-------------------|--|-------------------------------------|---------------------------------|---------------------|--|--------------|
| 20 | MC20-1-F-120X | 20 Watt 120V Nano w/Feet | M/C156 Ceramic MH | Dedicated 120V or 277V | 24 Watts | .20 Amps @ 120V .12 Amps @ 208V .10 Amps @ 240V .09 Amps @ 277V | II, IV |
| | MC20-1-F-277X | 20 Watt 277V Nano w/Feet | | | | | |
| | MC20-1-J-120X | 20 Watt 120V Nano Bottom Feed | | | | | |
| | MC20-1-J-277X | 20 Watt 277V Nano Bottom Feed | | | | | |
| 22 | MC22-1-F-12LX | 22 Watt 120V Nano w/Feet Low Strike | Phillips - CDM-TM 20W/830° C175E | Dedicated 120V or 277V | 26 Watts | .22 Amps @ 120V .13 Amps @ 208V .11 Amps @ 240V .10 Amps @ 277V | IV |
| | MC22-1-F-27LX | 22 Watt 277V Nano w/Feet Low Strike | | | | | |
| | MC22-1-J-12LX | 22 Watt 120V Nano Bottom Feed Low Strike | | | | | |
| | MC22-1-J-27LX | 22 Watt 277V Nano Bottom Feed Low Strike | | | | | |

* Call for manufacturers approval

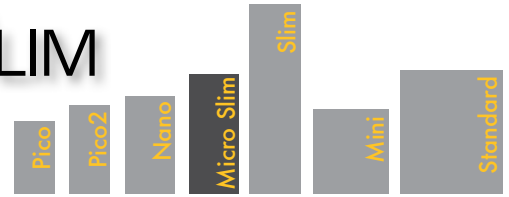
| Watts | Hatch Part Number | Description | Lamp Types/ ANSI Codes | Voltage | Nominal Input Power | Input Current/ Input Voltage | Wire Diagram |
|-------|-------------------|--|---|------------------------|---------------------|--|--------------|
| 39 | MC39-1-F-12LX | 39 Watt 120V Nano w/Feet Low Strike | Phillips – CDM-TM 35W/830* C179E * Call for manufacturers approval | Dedicated 120V or 277V | 44 Watts | .37 Amps @ 120V .22 Amps @ 208V .19 Amps @ 240V .16 Amps @ 277V | II, IV |
| | MC39-1-F-27LX | 39 Watt 277V Nano w/Feet Low Strike | | | | | |
| | MC39-1-J-12LX | 39 Watt 120V Nano Bottom Feed Low Strike | | | | | |
| | MC39-1-J-27LX | 39 Watt 277V Nano Bottom Feed Low Strike | | | | | |
| 39 | MC39-1-F-120X | 39 Watt 120V Nano w/Feet | M130 Ceramic MH | Dedicated 120V or 277V | 44 Watts | | II, IV |
| | MC39-1-F-277X | 39 Watt 277V Nano w/Feet | | | | | |
| | MC39-1-J-120X | 39 Watt 120V Nano Bottom Feed | | | | | |
| | MC39-1-J-277X | 39 Watt 277V Nano Bottom Feed | | | | | |



Part Numbers & Specifications All measurements in inches

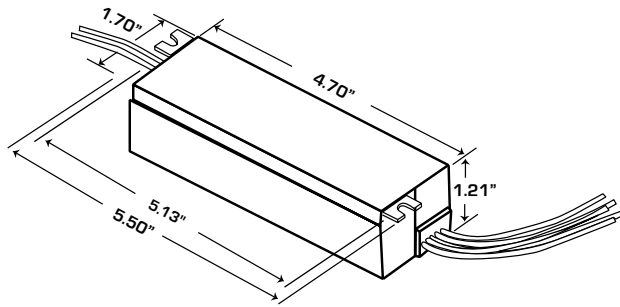


MICRO SLIM



Case Material: Polycarbonate

Case Dimensions & Mechanical Specifications

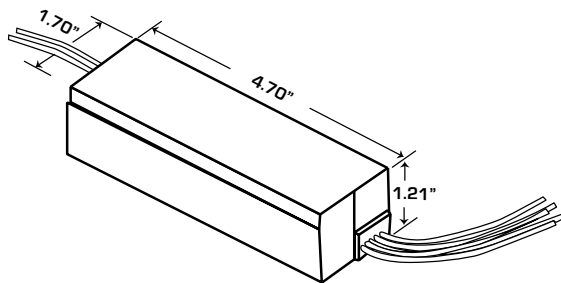


CASE STYLE

MOUNTING

| | |
|--|----------------------|
| S - Micro Slim: Leads out opposite sides | F - With feet |
|--|----------------------|

| Wiring Information | |
|--------------------------------|---------------------------|
| Lead Length : | Input : 10", Output : 8" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |
| Operating Temperatures | |
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |

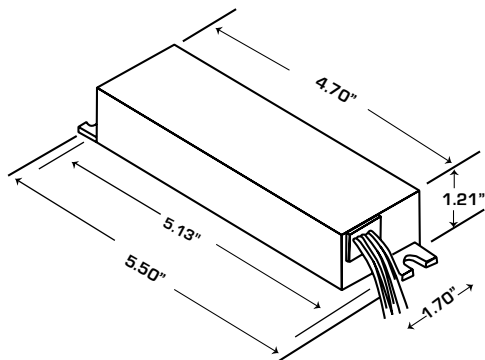


CASE STYLE

MOUNTING

| | |
|--|---------------------------------|
| S - Micro Slim: Leads out opposite sides | T - Track mount w/o feet |
|--|---------------------------------|

| Wiring Information | |
|--------------------------------|---------------------------|
| Lead Length : | Input : 10", Output : 8" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |
| Operating Temperatures | |
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |

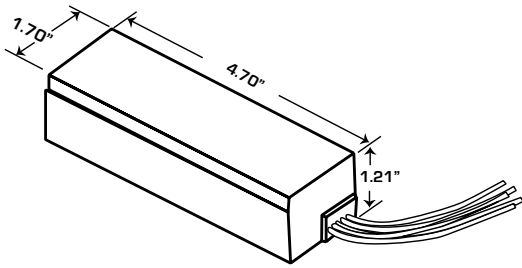


CASE STYLE

MOUNTING

| | |
|---|----------------------|
| SL - Micro Slim: Leads out one side | F - With feet |
|---|----------------------|

| Wiring Information | |
|--------------------------------|---------------------------|
| Lead Length : | Input/Output : 8" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |
| Operating Temperatures | |
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |



CASE STYLE

SL - Micro Slim:
Leads out one side

MOUNTING

T - Track mount
w/o feet

Wiring Information

Lead Length : Input/Output : 8"
Wire Type : Input: 18AWG, 105°C, 600V
Remote Mounting : 25 ft Max

Operating Temperatures

Minimum Starting Temperature : -30°C
Maximum Case Temperature : 80°C

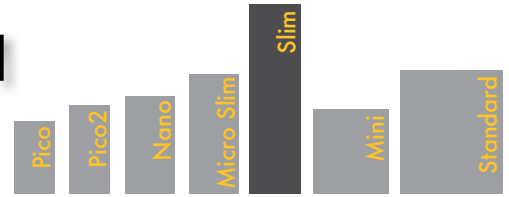
Part Numbers & Electrical Specifications

| Watts | Hatch Part Number | Description | Lamp Types/ ANSI Codes | Voltage | Nominal Input Power | Input Current/ Input Voltage | Wire Diagram |
|-------|-------------------|---|--|---------------------------------|---------------------|--|--------------|
| 20 | MC20-1-F-UNNS | 20 Watt Universal Micro Slim w/Feet and Leads out Opposite Sides | M/C156 Ceramic MH | Dedicated 120V or 277V | 24 Watts | .20 Amps @ 120V .12 Amps @ 208V .10 Amps @ 240V .09 Amps @ 277V | II, III, IV |
| | MC20-1-T-UNNS | 20 Watt Universal Micro Slim w/o Feet w/ Leads out Opposite Sides | | | | | |
| | MC20-1-F-UNNSL | 20 Watt Universal Micro Slim w/Feet and Leads out One Side | | | | | |
| | MC20-1-T-UNNSL | 20 Watt Universal Micro Slim w/o Feet w/ Leads out One Side | | | | | |
| 39 | MC39-1-F-UNNS | 39 Watt Universal Micro Slim w/Feet and Leads out Opposite Sides | M130 Ceramic MH | Universal 120V to 277V | 44 Watts | .37 Amps @ 120V .22 Amps @ 208V .19 Amps @ 240V .16 Amps @ 277V | II, III, IV |
| | MC39-1-T-UNNS | 39 Watt Universal Micro Slim Track w/Leads out Opposite Sides | | | | | |
| | MC39-1-F-UNNSL | 39 Watt Universal Micro Slim w/Feet and Leads out One Side | | | | | |
| | MC39-1-T-UNNSL | 39 Watt Universal Micro Slim Track w/Leads out One Side | | | | | |
| 70 | MC70-1-F-UNNS | 70 Watt Universal Micro Slim w/Feet and Leads out Opposite sides | M/C85, M/C98, M/C39, M/C143 Ceramic MH | Universal 120V to 277V | 78 Watts | .65 Amps @ 120V .37 Amps @ 208V .32 Amps @ 240V .28 Amps @ 277V | III, IV |
| | MC70-1-T-UNNS | 70 Watt Universal Micro Slim Track w/Leads out Opposite Sides | | | | | |
| | MC70-1-F-UNNSL | 70 Watt Universal Micro Slim w/Feet and Leads out One side | | | | | |
| | MC70-1-T-UNNSL | 70 Watt Universal Micro Slim Track w/Leads out One Side | | | | | |

Part Numbers & Specifications All measurements in inches

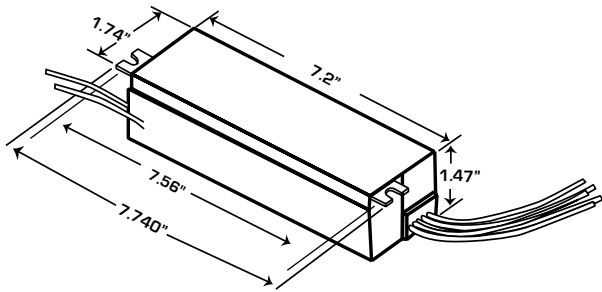


SLIM



Case Material: Metal

Case Dimensions & Mechanical Specifications



CASE STYLE

S - Slim:
Leads out opposite sides

MOUNTING

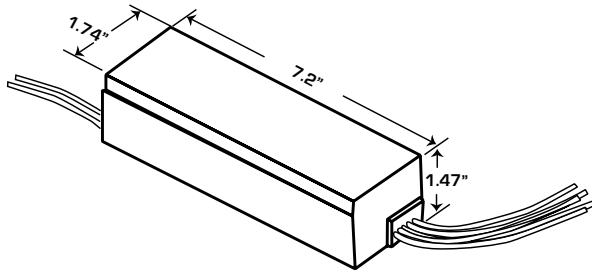
F - With feet

Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input : 8", Output : 10" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |



CASE STYLE

S - Slim:
Leads out opposite sides

MOUNTING

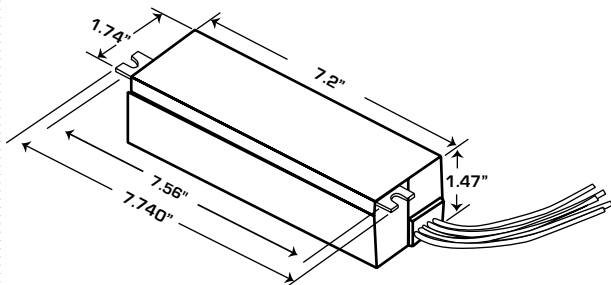
**T - Track mount
w/o feet**

Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input : 8", Output : 10" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |



CASE STYLE

SL - Slim:
Leads out one side

MOUNTING

F - With feet

Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 8" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |

CASE STYLE

MOUNTING

SL - Slim:
Leads out one side

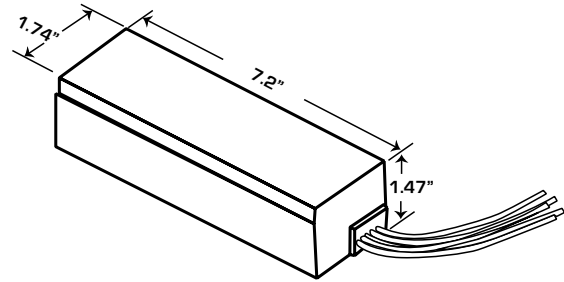
T - Track mount
w/o feet

Wiring Information

Lead Length : Input/Output : 8"
Wire Type : Input: 18AWG, 105°C, 600V
Remote Mounting : 25 ft Max

Operating Temperatures

Minimum Starting Temperature : -30°C
Maximum Case Temperature : 80°C



CASE STYLE

MOUNTING

S - Slim

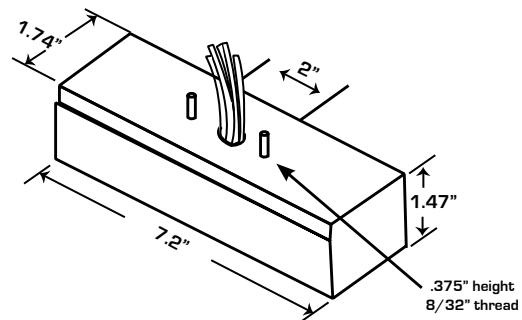
J - Bottom feed with studs

Wiring Information

Lead Length : Input/Output : 8"
Wire Type : Input: 18AWG, 105°C, 600V
Remote Mounting : 25 ft Max

Operating Temperatures

Minimum Starting Temperature : -30°C
Maximum Case Temperature : 80°C



Part Numbers & Electrical Specifications

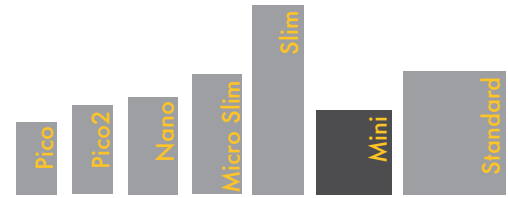
| Watts | Hatch Part Number | Description | Lamp Types/ANSI Codes | Voltage | Nominal Input Power | Input Current/ Input Voltage | Wire Diagram |
|-------|--------------------|---|--------------------------|---------------------------|---------------------|--|--------------|
| 70 | MC70-1-F-UNNSL-HB | 70 Watt Universal Slim w/Feet and Leads out One Side | M/C90, M/C140 Ceramic MH | Universal 120V to 277V | 78 Watts | .65 Amps @ 120V .37 Amps @ 208V .32 Amps @ 240V .28 Amps @ 277V | II, IV |
| | MC70-1-F-UNNS-HB | 70 Watt Universal Slim w/Feet and Leads out Opposite Sides | | | | | |
| | MC70-1-T-UNNSL-HB | 70 Watt Universal Slim Track w/Leads out One Side | | | | | |
| | MC70-1-T-UNNS-HB | 70 Watt Universal Slim Track w/Leads out Opposite Sides | | | | | |
| | MC70-1-J-UNNS-HB | 70 Watt Universal Slim Bottom Feed | | | | | |
| 100 | MC100-1-F-UNNSL-HB | 100 Watt Universal Slim w/Feet and Leads out One Side | M/C90, M/C140 Ceramic MH | Universal 120V to 277V | 110 Watts | .94 Amps @ 120V .54 Amps @ 208V .47 Amps @ 240V .41 Amps @ 277V | II, IV |
| | MC100-1-F-UNNS-HB | 100 Watt Universal Slim w/Feet and Leads out Opposite Sides | | | | | |
| | MC100-1-T-UNNSL-HB | 100 Watt Universal Slim Track w/Leads out One Side | | | | | |
| | MC100-1-T-UNNS-HB | 100 Watt Universal Slim Track w/Leads out Opposite Sides | | | | | |
| | MC100-1-J-UNNS-HB | 100 Watt Universal Slim Bottom Feed | | | | | |

*HB indicates a new half bridge ballast topology for certain 70 watt and 100 watt models. This patented technology improves many aspects of product reliability over competitive ballast designs.

Part Numbers & Specifications All measurements in inches

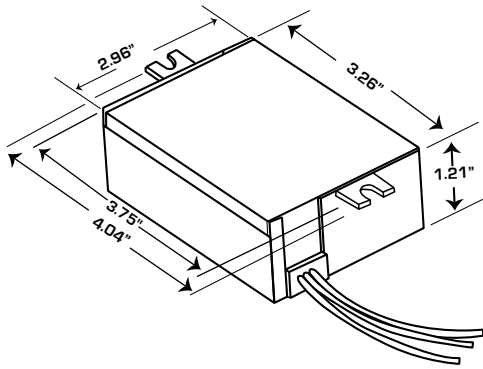


MINI



Case Material: Metal

Case Dimensions & Mechanical Specifications



CASE STYLE

MOUNTING

U - Mini

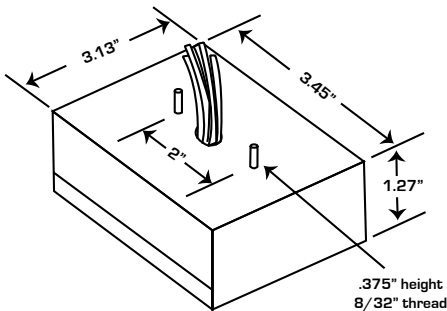
F - With feet

Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 8" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |



CASE STYLE

MOUNTING

U - Mini

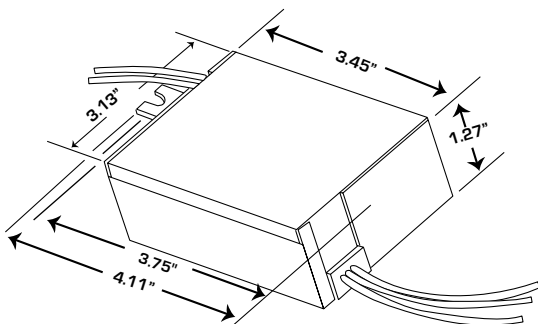
B - Bottom feed with studs

Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 10" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |



CASE STYLE

MOUNTING

U - Mini

F - With feet

*24V AC/DC models only

Case Style Specs

| | |
|---------------|---------------------------|
| Lead Length : | Input/Output : 8" |
| Wire Type : | Input: 18AWG, 105°C, 600V |

Mechanical Specifications:

| | |
|-----------------------|-----------|
| Min. Starting Temp. : | -30°C |
| Max. Case Temp. : | 80°C |
| Remote Mounting : | 25 ft Max |



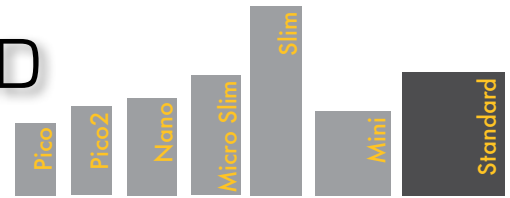
Part Numbers & Electrical Specifications

| Watts | Hatch Part Number | Description | Lamp Types/ ANSI Codes | Voltage | Nominal Input Power | Input Current/ Input Voltage | Wire Diagram |
|---------------|---------------------------------------|---|--|---------------------------------|---------------------|--|--------------|
| 20 | MC20-1-N-120U | 20 Watt 120V No Case Custom Order Only | M/C156 Ceramic MH | Dedicated 120V or 277V | 24 Watts | .20 Amps @ 120V .12 Amps @ 208V .10 Amps @ 240V .09 Amps @ 277V | II, IV |
| | MC20-1-F-UNNU | 20 Watt Universal Mini w/Feet | M/C156 Ceramic MH | Universal 120V to 277V | 24 Watts | .20 Amps @ 120V .12 Amps @ 208V .10 Amps @ 240V .09 Amps @ 277V | II, IV |
| | MC20-1-J-UNNU | 20 Watt Universal Mini Bottom Feed | | | | | |
| | MC20-1-F-24DCU | 20 Watt Mini w/24V DC Input | M/C156 Ceramic MH | Dedicated 120V | 24 Watts | 24V DC-1.0 Amps | III, IV |
| 22 | MC22-1-F-UNLU | 22 Watt Universal Mini Low Strike w/Feet | Phillips – CDM-TM 20W/830* C175E | Universal 120V to 277V | 26 Watts | .22 Amps @ 120V .13 Amps @ 208V .11 Amps @ 240V .10 Amps @ 277V | IV |
| | MC22-1-J-UNLU | 22 Watt Universal Mini Low Strike Bottom Feed | | | | | |
| 39 | MC39-1-N-120U | 39 Watt Mini 120V No Case Custom Order Only | M130 Ceramic MH | Dedicated 120V or 277V | 44 Watts | .37 Amps @ 120V .22 Amps @ 208V .19 Amps @ 240V .16 Amps @ 277V | II, III, IV |
| | MC39-1-F-277U | 39 Watt 277V Mini w/Feet | | | | | |
| | MC39-1-J-277U | 39 Watt 277V Mini Bottom Feed | | | | | |
| | MC39-1-N-277U | 39 Watt Mini 277V No Case Custom Order Only | | | | | |
| | MC39-1-F-UNLU | 39 Watt Universal Mini Low Strike w/Feet | Phillips – CDM-TM 35W/830 C179E | Universal 120V to 277V | 44 Watts | .37 Amps @ 120V .22 Amps @ 208V .19 Amps @ 240V .16 Amps @ 277V | II, IV |
| | MC39-1-J-UNLU | 39 Watt Universal Mini Low Strike Bottom Feed | | | | | |
| | MC39-1-F-24ACU | 39 Watt Mini w/24V A/C Input | M130 Ceramic MH | Universal 120V to 277V | 44 Watts | 1.84 Amps @ 24V | III, V |
| | MC39-1-J-24ACU | 39 Watt Mini w/24V A/C Input | | | | | |
| | MC39-1-F-24DCU | 39 Watt Mini with 24V DC Input Custom Order Only | M130 Ceramic MH | Universal 120V to 277V | 44 Watts | 1.84 Amps @ 24V | III, V |
| | MC39-1-F-UNNU | 39 Watt Universal Mini w/Feet | M130 Ceramic MH | Universal 120V to 277V | 44 Watts | .37 Amps @ 120V .22 Amps @ 208V .19 Amps @ 240V .16 Amps @ 277V | II, IV |
| MC39-1-J-UNNU | 39 Watt Universal Mini Bottom Feed | | | | | | |
| 50 | MC50-1-F-UNNU | 50 Watt Universal Mini w/Feet | M110, M148 Ceramic MH | Universal 120V to 277V | 56 Watts | .41 Amps @ 120V .27 Amps @ 208V .24 Amps @ 240V .21 Amps @ 277V | II, IV |
| | MC50-1-J-UNNU | 50 Watt Universal Mini Bottom Feed | | | | | |
| 70 | MC70-1-F-UNNU | 70 Watt Universal Mini w/Feet | M/C98, M/C139, M/C143 Ceramic MH | Universal 120V to 277V | 78 Watts | .65 Amps @ 120V .37 Amps @ 208V .32 Amps @ 240V .28 Amps @ 277V | II, IV |
| | MC70-1-J-UNNU | 70 Watt Universal Mini Bottom Feed | | | | | |

Part Numbers & Specifications All measurements in inches



STANDARD



Case Material: Metal

Case Dimensions & Mechanical Specifications

CASE STYLE

MOUNTING

U - Standard

F - With feet

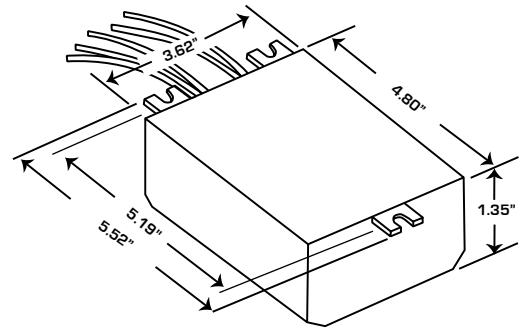
Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 8" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |

Height 1.35"
100 Watt Models Only



CASE STYLE

MOUNTING

U - Standard

F - With feet

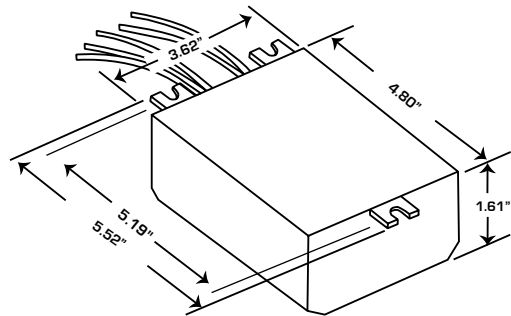
Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 9" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |

Height 1.61"
150 Watt Models Only



CASE STYLE

MOUNTING

U - Standard

J - Bottom feed with studs

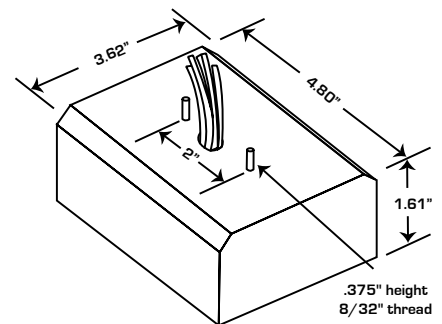
Wiring Information

| | |
|-------------------|---------------------------|
| Lead Length : | Input/Output : 9" |
| Wire Type : | Input: 18AWG, 105°C, 600V |
| Remote Mounting : | 25 ft Max |

Operating Temperatures

| | |
|--------------------------------|-------|
| Minimum Starting Temperature : | -30°C |
| Maximum Case Temperature : | 80°C |

* NOTE: Height 1.61"



Part Numbers & Electrical Specifications

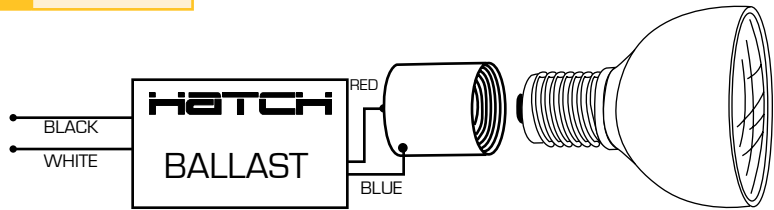
| Watts | Hatch Part Number | Description | Lamp Types/ ANSI Codes | Voltage | Nominal Input Power | Input Current/ Input Voltage | Wire Diagram |
|-------|-------------------|--|--|---------------------------------|---------------------|--|--------------|
| 70 | MC70-1-F-UNNU-HB | 70 Watt Universal Standard w/Feet | M/C98, M/C139, M/C143 Ceramic MH | Universal 120V to 277V | 78 Watts | .65 Amps @ 120V .37 Amps @ 208V .32 Amps @ 240V .28 Amps @ 277V | II, IV |
| | MC70-1-J-UNNU-HB | 70 Watt Universal Standard Bottom Feed | | | | | |
| 100 | MC100-1-F-UNNU-HB | 100 Watt Universal Standard w/Feet | M/C90, M/C140 Ceramic MH | Universal 120V to 277V | 110 Watts | .92 Amps @ 120V .53 Amps @ 208V .46 Amps @ 240V .40 Amps @ 277V | II, IV |
| | MC100-1-J-UNNU-HB | 100 Watt Universal Standard Bottom Feed | | | | | |
| | MC100-1-F-120U | 100 Watt 120V Standard w/Feet | M/C90, M/C140 Ceramic MH | Dedicated 120V or 277V | 110 Watts | .92 Amps @ 120V .53 Amps @ 208V .46 Amps @ 240V .40 Amps @ 277V | I, IV |
| | MC100-1-J-120U | 100 Watt 120V Standard Bottom Feed | | | | | |
| | MC100-1-F-277U | 100 Watt 277V Standard w/Feet | | | | | |
| | MC100-1-J-277U | 100 Watt 277V Standard Bottom Feed | | | | | |
| 150 | MC150-1-F-120U | 150 Watt 120V Standard w/Feet | M102, M142 Ceramic MH | Dedicated 120V or 277V | 164 Watts | 1.37 Amps @120V .79 Amps @ 208V .69 Amps @ 240V .60 Amps @ 277V | II, IV |
| | MC150-1-J-120U | 150 Watt 120V Standard Bottom Feed | | | | | |
| | MC150-1-F-277U | 150 Watt 277V Standard w/Feet | | | | | |
| | MC150-1-J-277U | 150 Watt 277V Standard Bottom Feed | | | | | |
| | MC150-1-F-120P | 150 Watt 120V Standard w/Feet Potted Case | | | | | |
| | MC150-1-F-277P | 150 Watt 277V Standard w/Feet Potted Case | | | | | |

*HB indicates a new half bridge ballast topology for certain 70 watt and 100 watt models. This patented technology improves many aspects of product reliability over competitive ballast designs.

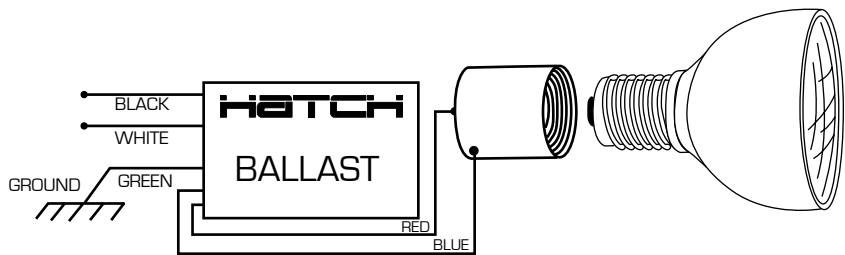


Wire Diagrams

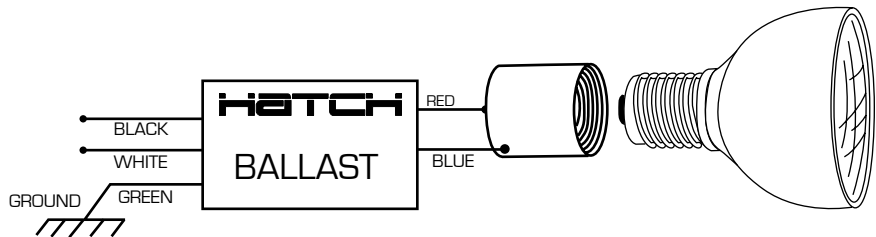
PAR Lamps WIRE DIAGRAM I



PAR Lamps WIRE DIAGRAM II



PAR Lamps WIRE DIAGRAM III



Double Ended or Bi-Pin Lamps WIRE DIAGRAM IV



WIRE DIAGRAM

Double Ended or Bi-Pin Lamps

V



WIRE DIAGRAM

Double Ended or Bi-Pin Lamps

VI



Remote Mounting and Installation Requirements for Electronic HID Ballasts

To achieve optimal performance with Hatch Transformers Electronic HID Ballasts, remote installation guidelines listed must be followed. Failure to follow the guidelines listed below can result in unacceptable lamp performance and loss of warranty coverage for remote installation.

Installation Guidelines:

- The main power supply to the ballast should be run separately from the lamp leads, and cables from other electrical systems should not run in the same conduit as, or in close proximity to, the lamp leads.
- Do not add additional lamp leads from other ballasts in the same conduit.
- Use metal conduit that is a minimum of ½ in or 20mm in diameter.
- Maximum recommended remote mounting distance is 25 feet from the ballast to the socket. For distances greater than 25 feet, please contact your Hatch representative for guidance.
 - Note: For all Pico and Pico 2 Slim models, maximum recommended remote mounting distance is 10 feet.
- The following wire types are approved for use as lead wire extensions:
 - UL 3321/AWM
 - UL3071/SEW-2 or SF-2

Use of any other mounting method or wire type could create safety hazards, cause erratic performance, and/or cause permanent damage to ballast components. This can lead to premature field failures and void the ballast warranty. Please contact Hatch for approval of other wire types and with any other question regarding the remote mounting of Hatch Electronic HID Ballasts.

Since 1985, Hatch has been the recognized market leader in the design and manufacture of premium power lighting products and solutions. Hatch offers a complete line of electronic and magnetic ballasts and transformers for virtually all lighting applications and is one of the largest independent, full-line power supply manufacturers in the world.

Current Hatch products include:

Electronic LED Drivers

Electronic HID Ballasts

Linear Fluorescent Ballasts

Compact Fluorescent Ballasts

Electronic Low Voltage Transformers

Remote Transformers

Magnetic HID Ballasts

Fluorescent Lamps

Sign Ballasts



Electrical data and product specifications in this catalog are subject to change without notice

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BALLASTS, DRIVERS, TRANSFORMERS & LAMPS FOR ALL LIGHTING APPLICATIONS