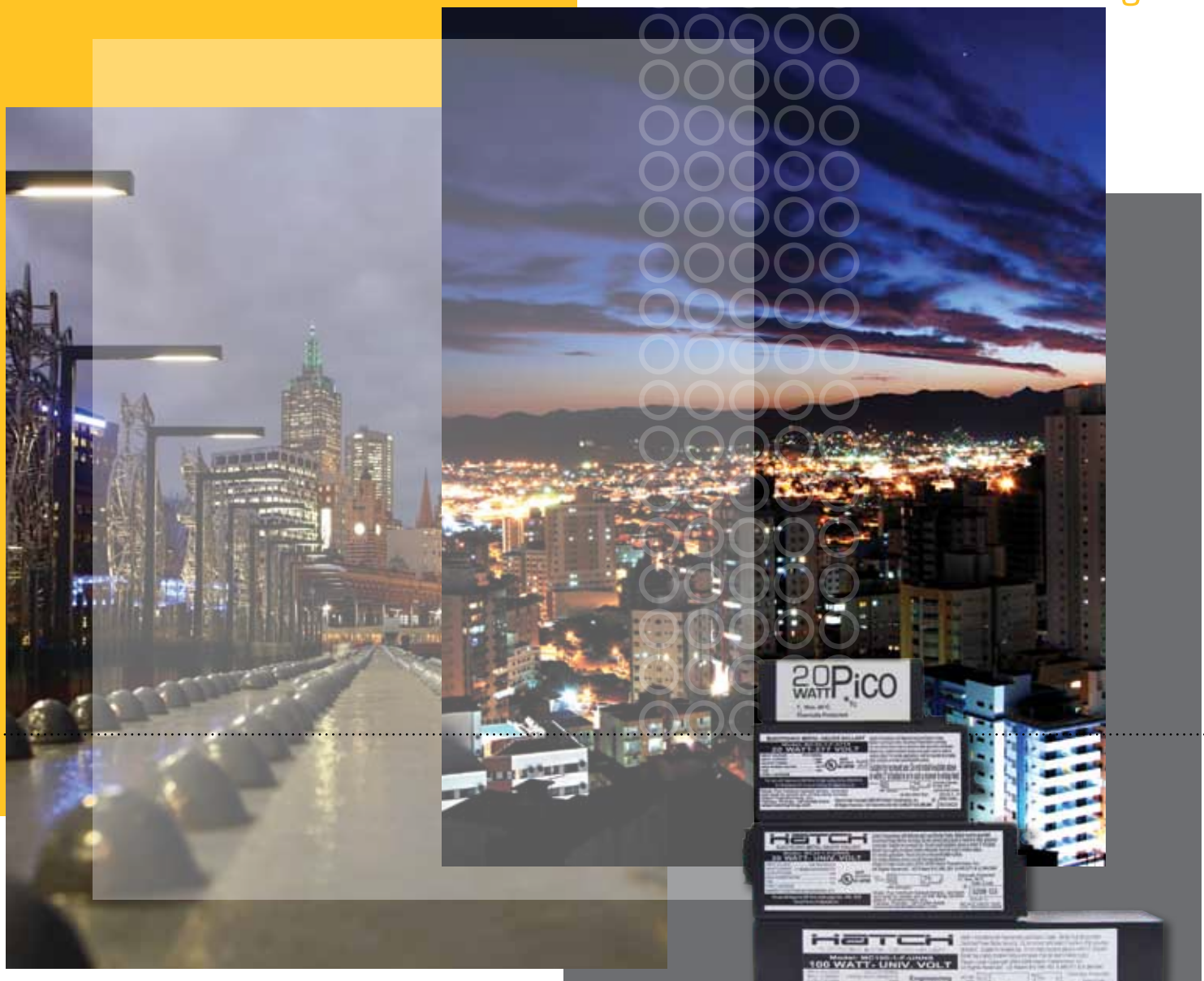
ELECTRONIC HID BALLASTS

hatch

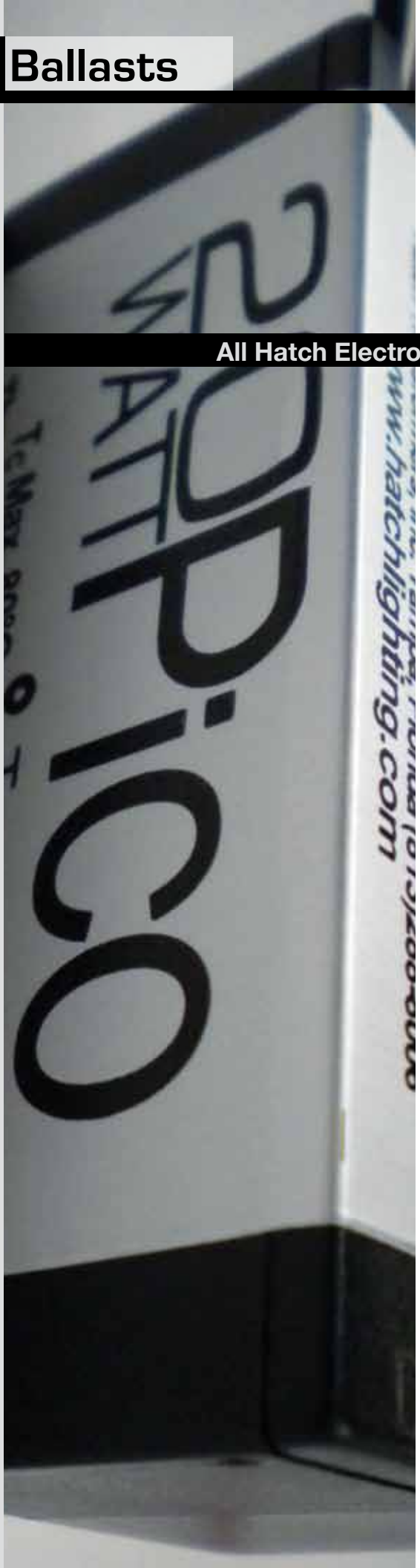
Precision Power. Perfect Light.



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

Table of Contents

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

c UL us LISTED

RoHS COMPLIANT

Understanding Hatch HID Ballast Part Numbers

Example Part Number: MC39-1-F-UNNU

MC39-1-F-UNNU

HID Ballast Type
- MC - Ceramic Metal Halide
- MS - High Pressure Sodium

Lamp Wattage (39)
- 20 - 20 Watts
- 22 - 22 Watts
- 39 - 39 Watts
- 50 - 50 Watts
- 70 - 70 Watts
- 100 - 100 Watts
- 150 - 150 Watts

Number of Lamps (1)
- 1 - 1 Lamp
- 2 - 2 Lamp

Mounting (F)
- F - With Feet
- J - Bottom Feed with Studs
- T - Track Mount w/o Feet
- N - No Case- Custom Order Only

Input Voltage (UNN)
- 120 - 120 Volts
- 277 - 277 Volts
- 12 - 120 Volts
- 27 - 277 Volts
- UNN - Universal Voltage (108-305 Volts)
- UNL - Low Ignition Voltage

Case Styles (U)
- U - Mini or Standard
- S - Slim or Micro Slim - Leads Out Opposite Sides
- SL - Slim or Micro Slim - Leads Out One Side
- X - Nano Slim
- Y - Pico 2 Slim
- Z - Pico Slim

Part Numbers for AC & DC Models

Example Part Number: **MC39-1-F-24ACU**

MC39-1-F-24ACU

Output (24)
- 12 - 12 Volts
- 24 - 24 Volts

Input Current Type (ACU)
- ACU - AC Input
- DCU - DC Input

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	

Case Styles

Slim

Wattages	Voltages
70 Watt	Universal
100 Watt	

Mini

Also available in AC & DC input models

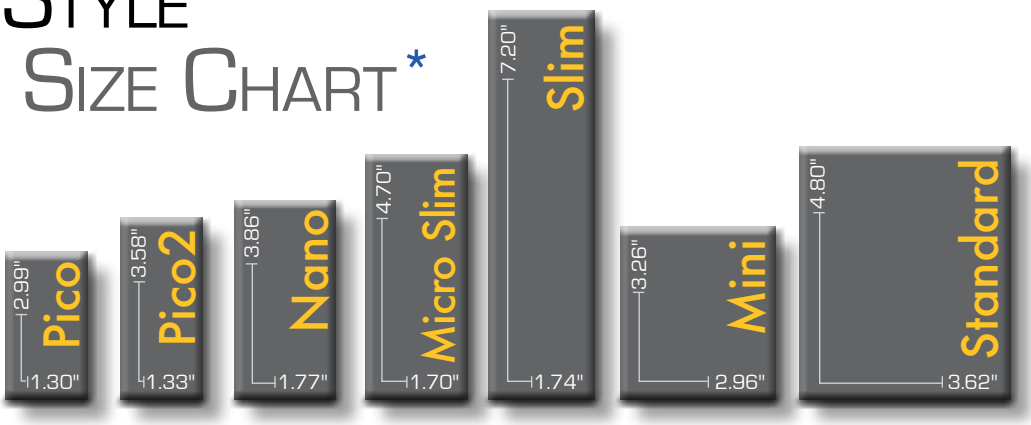
Wattages	Voltages
20 Watt	120V or 277V Dedicated & Universal
22 Watt	
39 Watt	
50 Watt	Universal
70 Watt	

Standard

Available for CMH or HPS Lamps

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

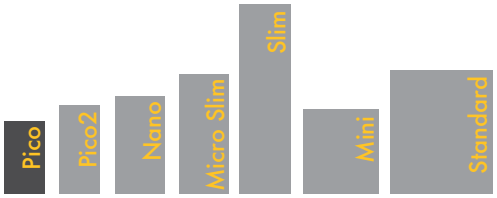
Case Style Size Chart*



Part Numbers & Specifications

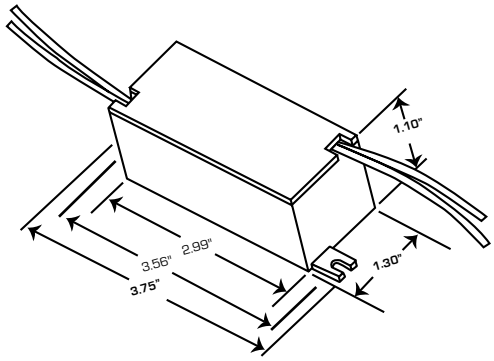
All measurements in inches

Pico



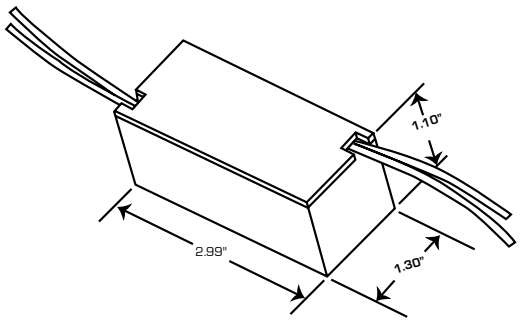
Case Material: Polycarbonate

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

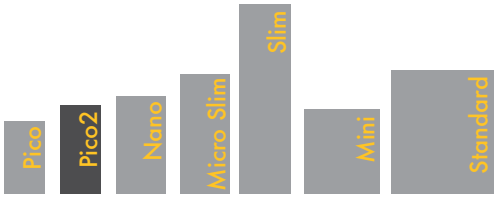
Wiring Information	
Lead Length :	Input/Output : 6.5"
Wire Type :	Input: 18AWG, 105°C, 600V
Remote Mounting :	10 ft Max
Operating Temperatures	
Minimum Starting Temperature :	-30°C
Maximum Case Temperature :	80°C

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					

All measurements in inches

Part Numbers & Specifications



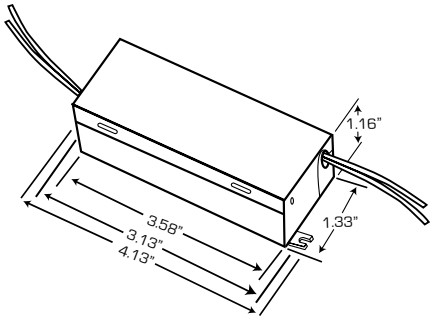
Pico2

Case Material: Metal

Case Dimensions & Mechanical Specifications

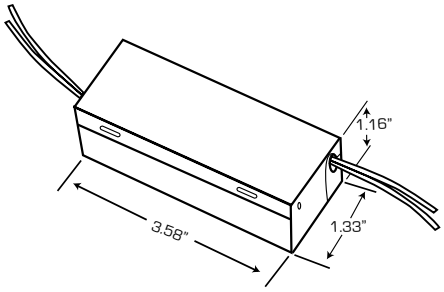
CASE STYLE	MOUNTING
Y - Pico 2 Slim	**F - Side leads with feet**

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



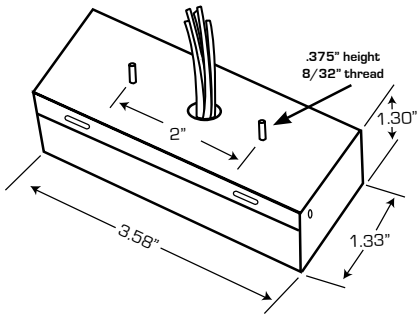
CASE STYLE	MOUNTING
Y - Pico 2 Slim	**T- Track mount w/o feet**

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



CASE STYLE	MOUNTING
Y - Pico 2 Slim	**J - Bottom feed with studs**

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



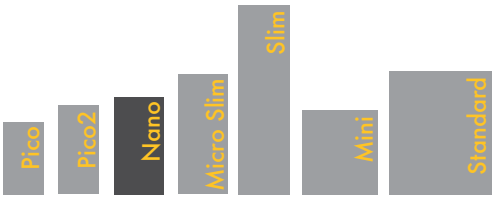
Part Numbers & Electrical Specifications

Watts	Hatch Part Number	Description	Lamp Types/ ANSI Codes	Voltage	Nominal Input Power	Input Current/ Input Voltage	Wire Diagram
20	MC20-1-T-UNNY	20 Watt Universal Pico 2 w/o Feet	M/C156 Ceramic MH	Universal 120V to 277V	24 Watts	.20 Amps @ 120V .12 Amps @ 208V .10 Amps @ 240V .09 Amps @ 277V	I, VI
	MC20-1-F-UNNY	20 Watt Universal Pico 2 With Feet					
	MC20-1-J-UNNY	20 Watt Universal Pico 2 Bottom Feed					
39	MC39-1-T-120Y	39 Watt 120V Pico 2 Track	M/C156 Ceramic MH	Dedicated 120V or 277V	44 Watts	.37 Amps @ 120V .22 Amps @ 208V .19 Amps @ 240V .16 Amps @ 277V	I, VI
	MC39-1-F-120Y	39 Watt 120V Pico 2 With Feet					
	MC39-1-J-120Y	39 Watt 120V Pico 2 Bottom Feed					

Part Numbers & Specifications

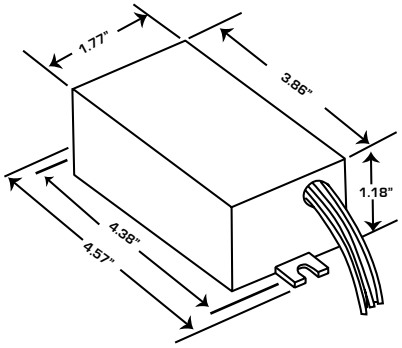
All measurements in inches

NANO



Case Material: Metal

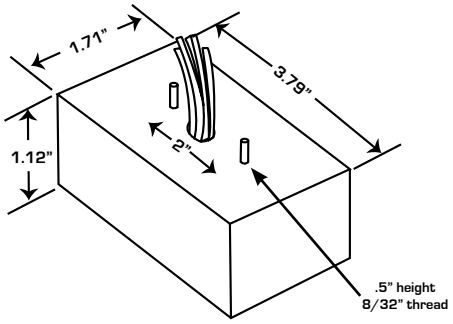
Case Dimensions & Mechanical Specifications



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					

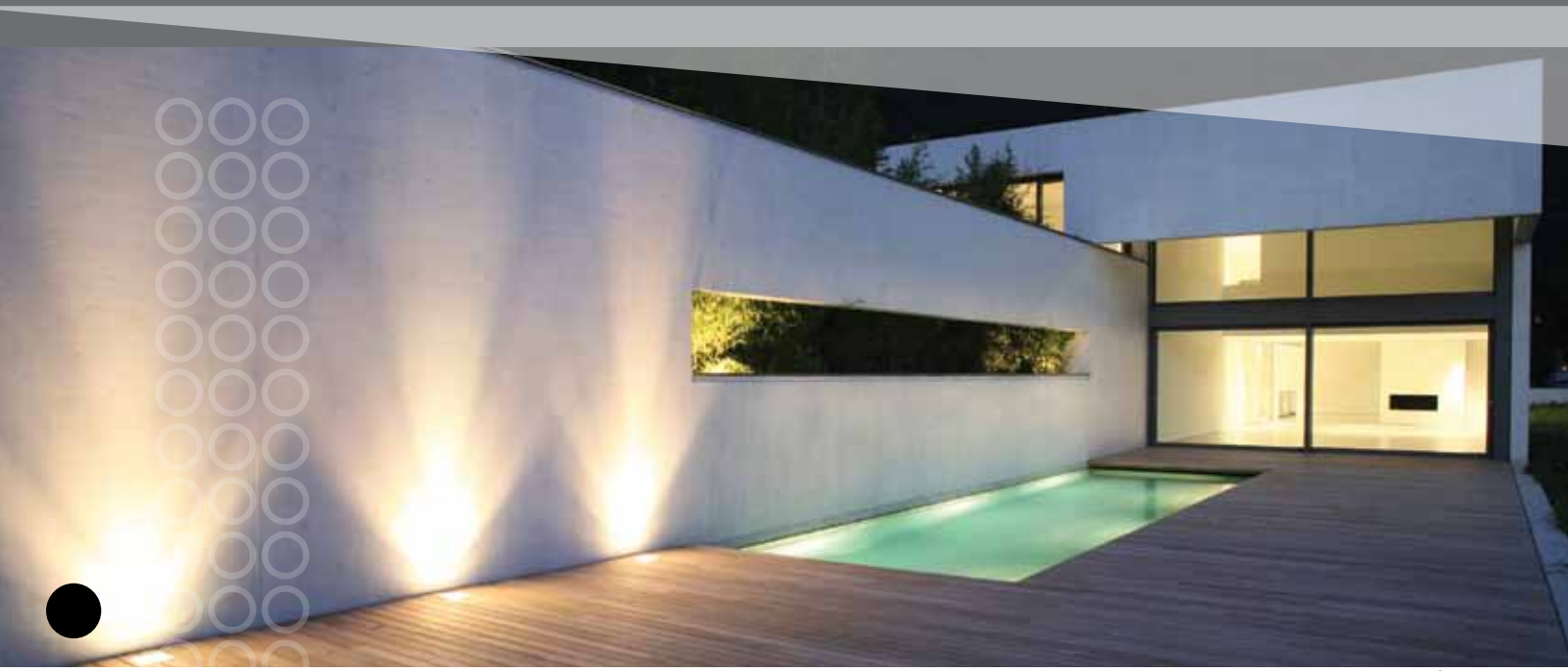
* Call for manufacturers approval

All measurements in inches

Part Numbers & Specifications

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	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					

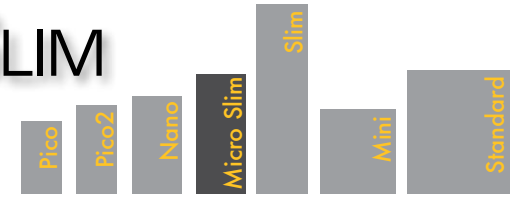
* Call for manufacturers approval



Part Numbers & Specifications

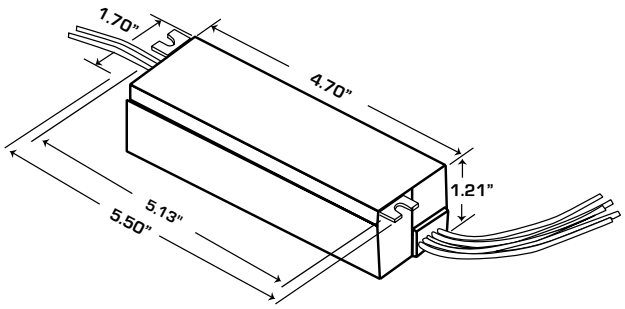
All measurements in inches

Micro Slim



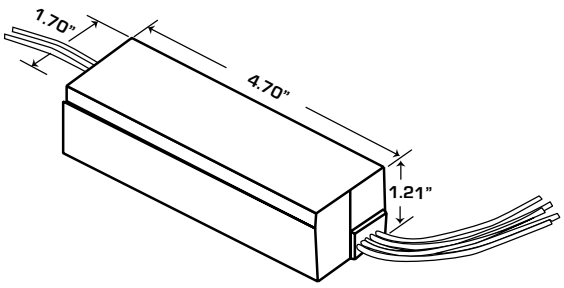
Case Material: Polycarbonate

Case Dimensions & Mechanical Specifications



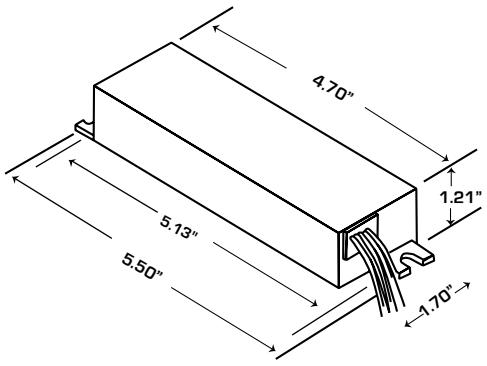
CASE STYLE	MOUNTING
S - Mircro Slim: Leads out opposite sides	F - With feet

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 - Mircro 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

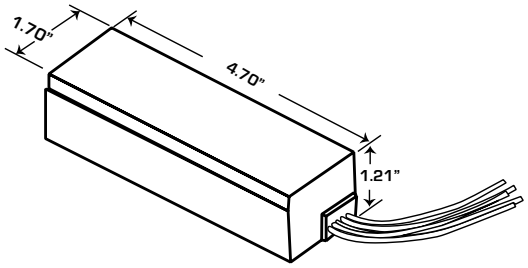


CASE STYLE	MOUNTING
SL - Mircro Slim: Leads out one side	F - With feet

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

All measurements in inches

Part Numbers & Specifications



CASE STYLE	MOUNTING
SL - Mircro 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

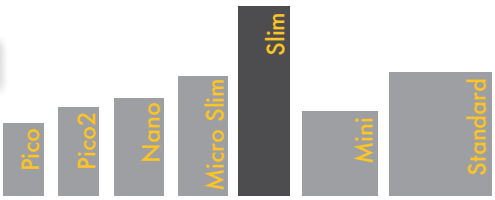
Part Numbers & Electrical Specifications

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

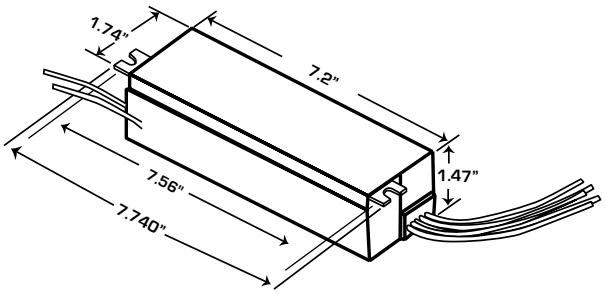
All measurements in inches

SLIM



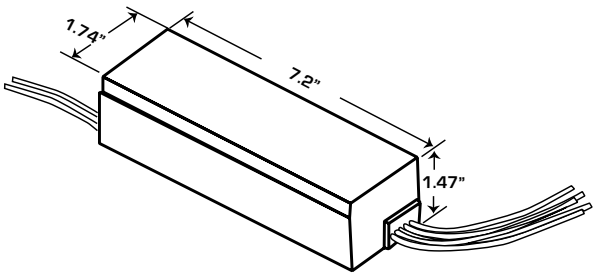
Case Material: Metal

Case Dimensions & Mechanical Specifications



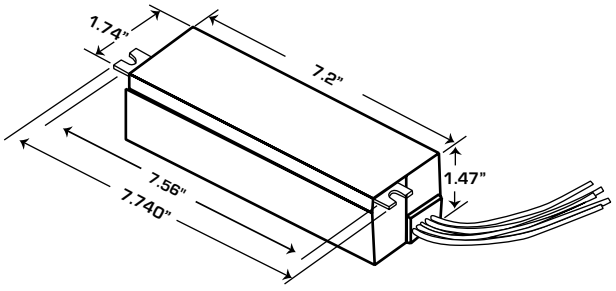
CASE STYLE	MOUNTING
S - Slim: Leads out opposite sides	F - With feet

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	MOUNTING
S - Slim: Leads out opposite sides	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	MOUNTING
SL - 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

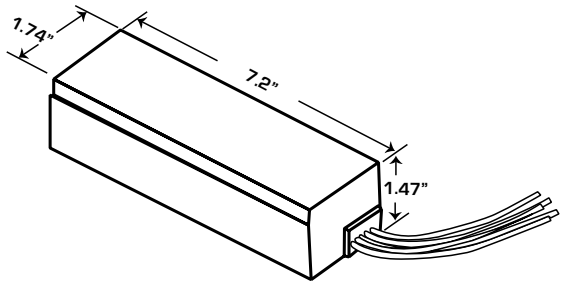
All measurements in inches

Part Numbers & Specifications

CASE STYLE | MOUNTING

SL - Slim: Leads out one side	T - Track mount w/o feet

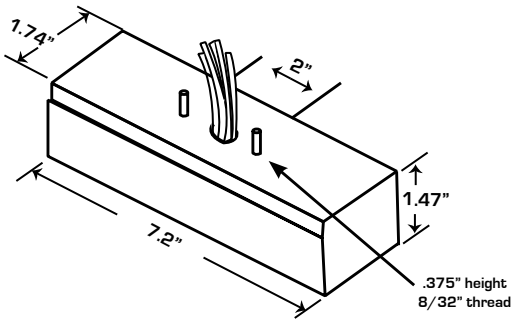
Wiring Information	
Lead Length :	Input/Output : 8"
Wire Type :	Input: 18AWG, 105°C, 600V
Remote Mounting :	25 ft Max
Operating Temperatures	
Minimum Starting Temperature :	-30°C
Maximum Case Temperature :	80°C



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

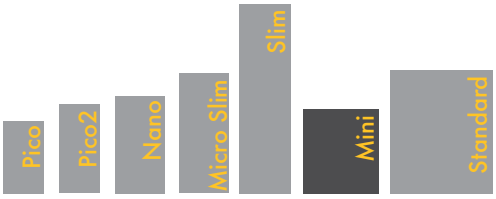
Watts	Hatch Part Number	Description	Lamp Types/ANSI Codes	Voltage	Nominal Input Power	Input Current/ Input Voltage	Wire Diagram
70	MC70-1-F-UNNSL-HB	70 Watt Universal Slim w/Feet and Leads out One Side	M/C90, M/C140 Ceramic MH	Universal 120V to 277V	78 Watts	.65 Amps @ 120V .37 Amps @ 208V .32 Amps @ 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

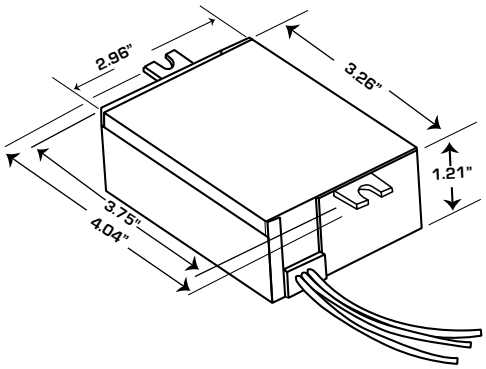
All measurements in inches

MINI



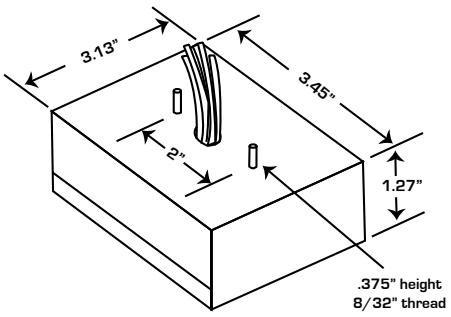
Case Material: Metal

Case Dimensions & Mechanical Specifications



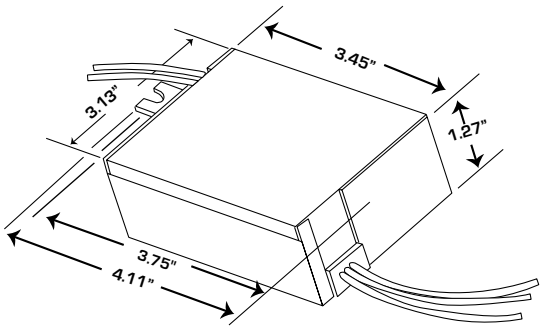
CASE STYLE	MOUNTING
U - Mini	**F - With feet**

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

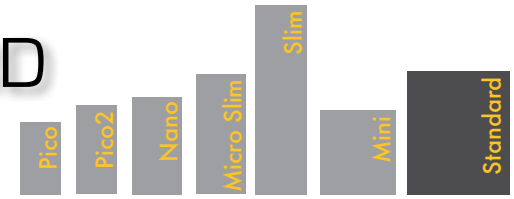
Part Numbers & Electrical Specifications

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-24DCU	39 Watt Mini with 24V DC Input Custom Order Only	M130 Ceramic MH	24V DC Input	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

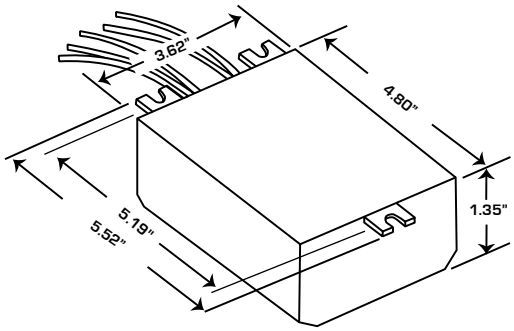


Case Material: Metal

Case Dimensions & Mechanical Specifications

CASE STYLE	MOUNTING
U - Standard	**F - With feet**

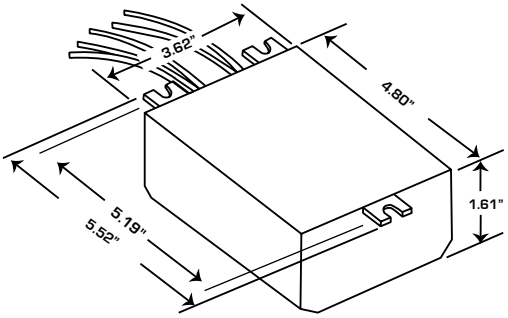
Wiring Information	
Lead Length :	Input/Output : 8"
Wire Type :	Input: 18AWG, 105°C, 600V
Remote Mounting :	25 ft Max
Operating Temperatures	
Minimum Starting Temperature :	-30°C
Maximum Case Temperature :	80°C



Height 1.35"
100 Watt Models Only

CASE STYLE	MOUNTING
U - Standard	**F - With feet**

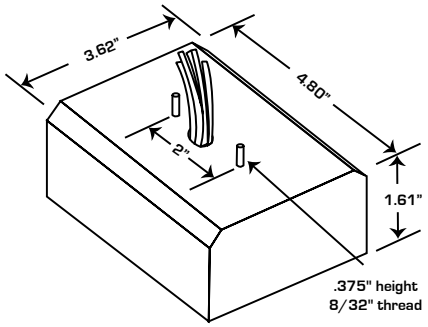
Wiring Information	
Lead Length :	Input/Output : 9"
Wire Type :	Input: 18AWG, 105°C, 600V
Remote Mounting :	25 ft Max
Operating Temperatures	
Minimum Starting Temperature :	-30°C
Maximum Case Temperature :	80°C



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"

All measurements in inches

Part Numbers & Specifications

Part Numbers & Electrical Specifications

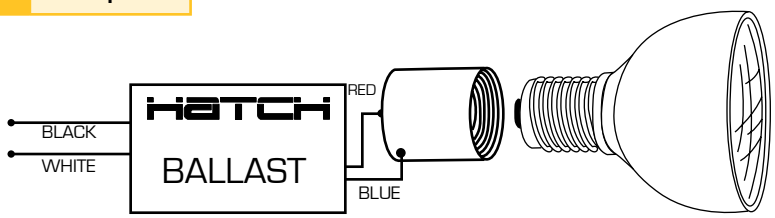
Watts	Hatch Part Number	Description	Lamp Types/ ANSI Codes	Voltage	Nominal Input Power	Input Current/ Input Voltage	Wire Diagram
70	MC70-1-F-UNNU-HB	70 Watt Universal Standard w/Feet	M/C98, M/C139, M/C143 Ceramic MH	Universal 120V to 277V	78 Watts	.65 Amps @ 120V .37 Amps @ 208V .32 Amps @ 240V .28 Amps @ 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

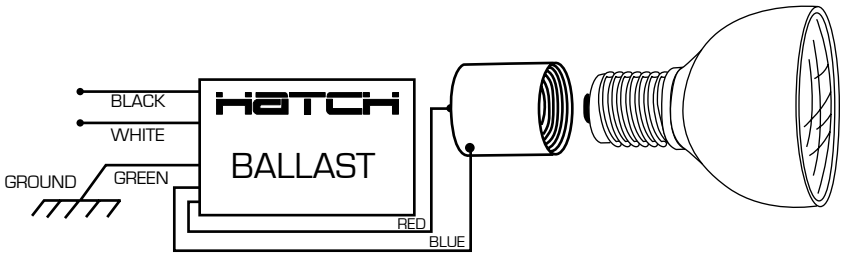
WIRE DIAGRAM

PAR Lamps I



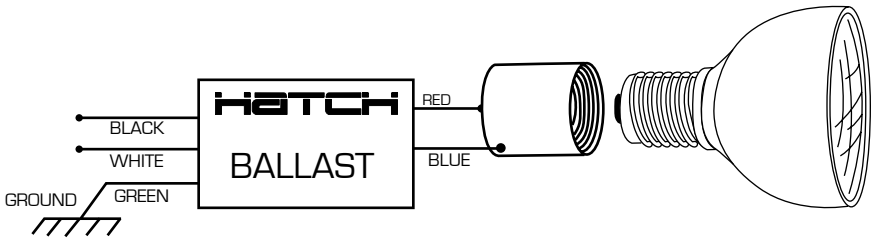
WIRE DIAGRAM

PAR Lamps II



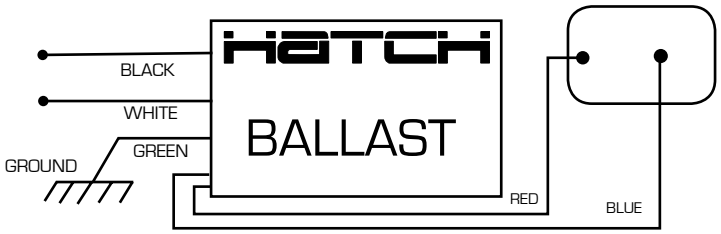
WIRE DIAGRAM

PAR Lamps III



WIRE DIAGRAM

Double Ended or Bi-Pin Lamps IV



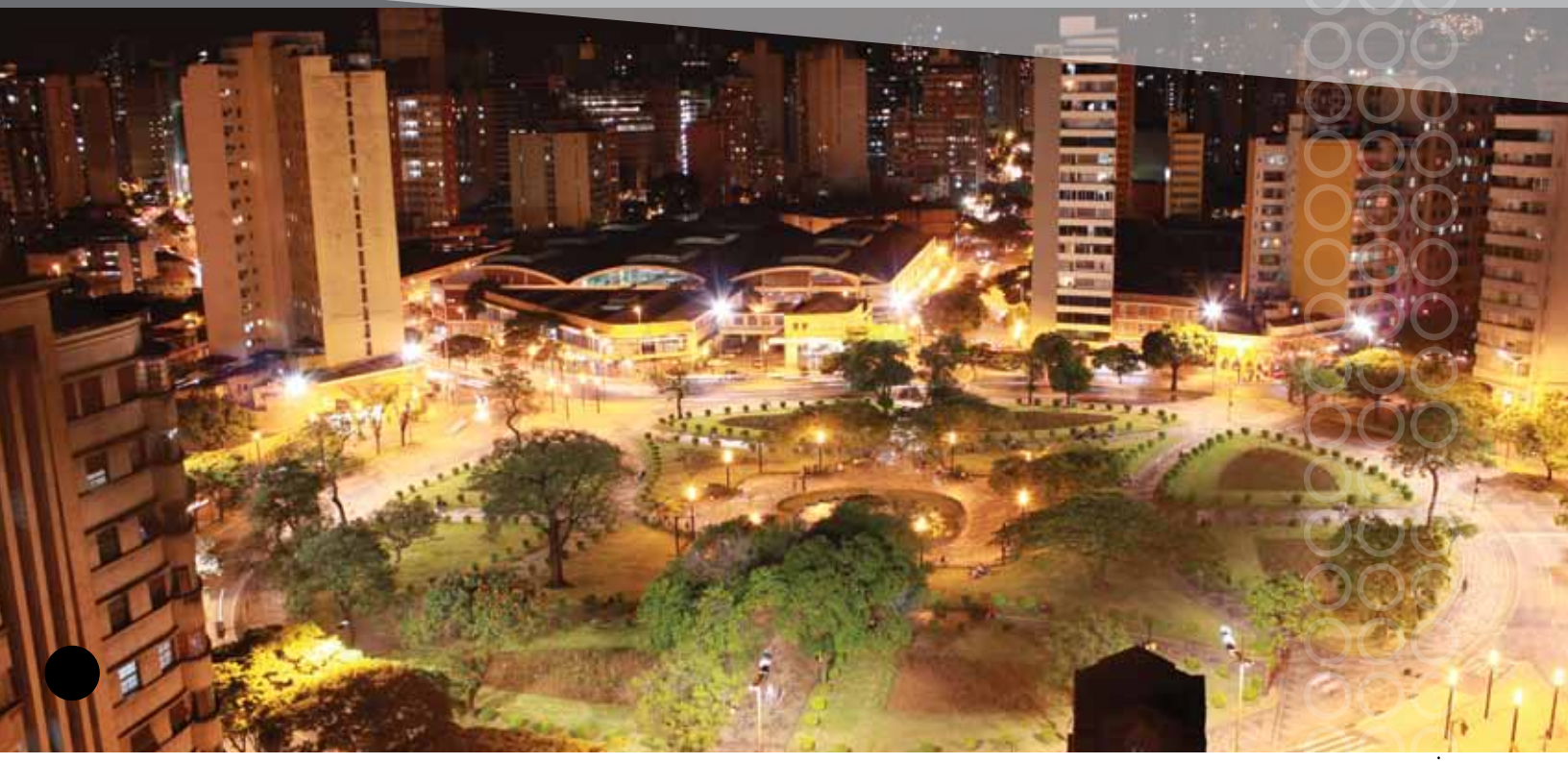
Wire Diagrams

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.

WWW.HATCHLIGHTING.COM • 7821 WOODLAND CENTER BLVD, TAMPA, FL 33614 • PH: 813.288.8006 • FX: 813.288.8105

About Hatch

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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Hatch Transformers, Inc.
Global Headquarters
7821 Woodland Center Blvd.
Tampa, FL 33614

P: 813.288.8006
F: 813.288.8105

www.hatchlighting.com

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