

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

Table of Contents

2

Technological Innovations in HID

3

Part Number Guide

4

Case Styles

5-6

Part Numbers & Specifications

7-18

Pico	7
Pico2	8
Nano	9-10
Micro Slim	11-12
Slim	13-14
Mini	15-16
Standard	17-18

Wire Diagrams

19-20

Remote Mounting Information

21

Products By Hatch

22

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

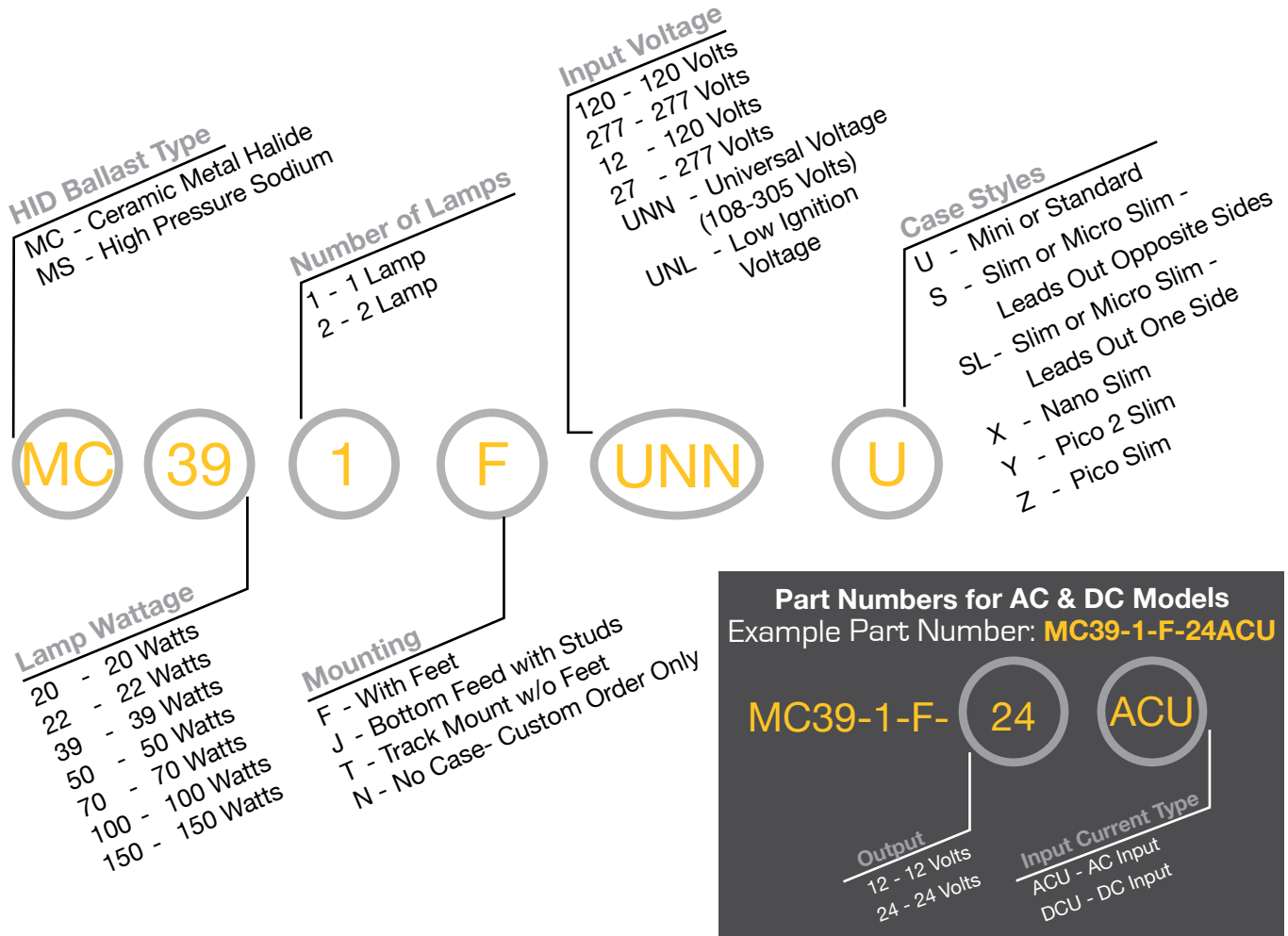
Hatch ballasts have a patented system for actively compensating for lamp conditions and adjusting the lamp current drive waveform to control the lamp current crest factor under all lamp operating conditions over lamp warm up and lamp life. This results in reduced electrode erosion and increased lamp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



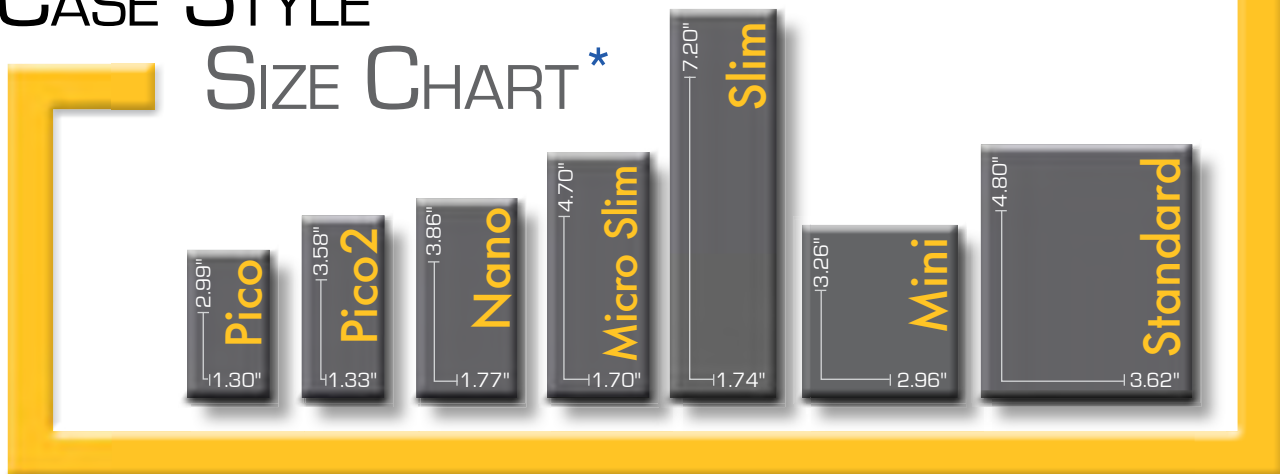
Wattages	Voltages
20 Watt	120V or 277V Dedicated & Universal
22 Watt	
39 Watt	
50 Watt	Universal
70 Watt	

Standard



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

CASE STYLE SIZE CHART*



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

To view a complete Hatch Product Catalog, 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





hatch

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

P: 813.288.8006
F: 813.288.8105

www.hatchlighting.com

REV: 2.0 111027

BALLASTS, DRIVERS, TRANSFORMERS & LAMPS FOR ALL LIGHTING APPLICATIONS