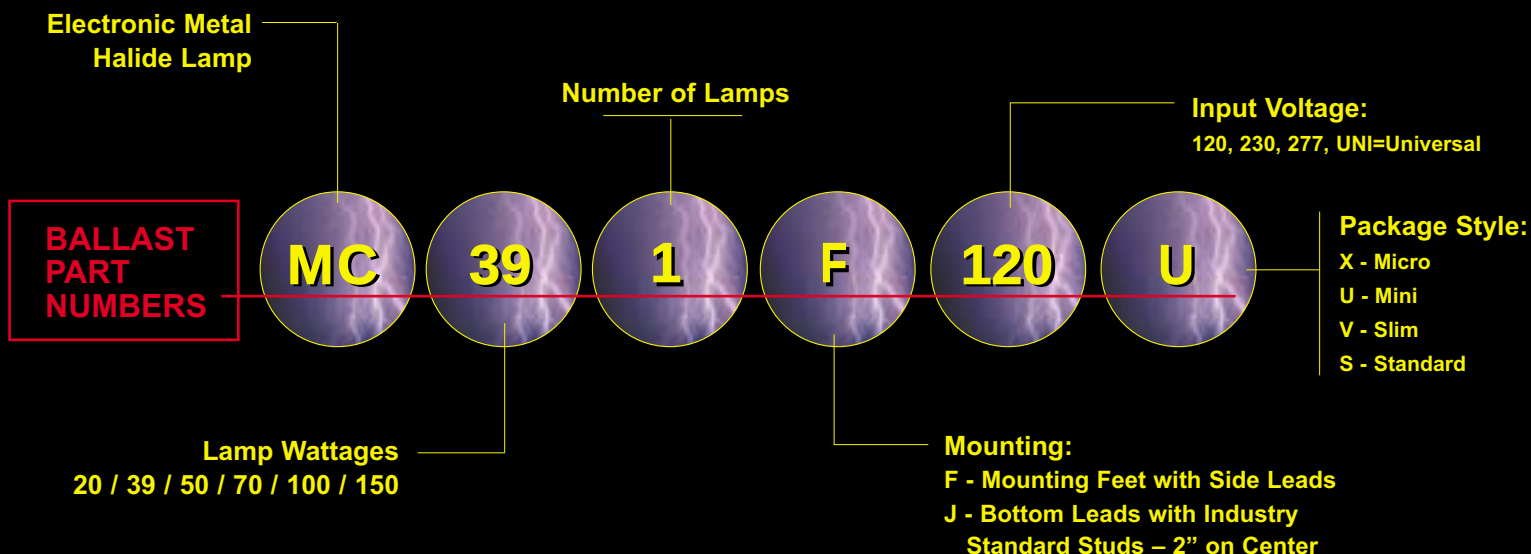


Understanding Hatch Electronic Metal Halide Ballast Item Numbers.



Hatch Electronic Metal Halide Ballasts combine safety, innovation and superior performance.

Unparalleled Safety

All Hatch Electronic Metal Halide Ballasts feature "intelligent" technology to insure safe lamp performance, and incorporate industry leading safety standards.

True Fault Shutdown Protection

Highly advanced protection systems will immediately shutdown the ballast in any of the following events: open circuit (no lamp), short circuit, defective lamp, rectifying currents, partial glow discharges, lamp end-of-life (high voltages). Hatch's rapid shutdown feature (within 3 seconds) prevents damage to fixture components and eliminates possible safety hazards, as compared to magnetic ballasts with no shutdown feature or some electronic ballasts which take up to 39 minutes before shutting down under adverse conditions.

Thermal Protection

Hatch Electronic Metal Halide Ballasts incorporate thermal protection.

Hatch Transient Protection

Hatch Electronic Metal Halide Ballasts employ MOVs for transient protection. Hatch Electronic Metal Halide Ballasts are in compliance with ANSI/IEEE guidelines and are able to withstand 7kV transient pulses, electrostatic discharges of 20kV, in 120V units short term excursions of 140 VAC and in 277V units short term excursions of 320V.

FCC EMI Compliance: Code of Federal Regulations, 47 CFR Part 18

Federal laws regarding compliance to 47 CFR Part 18 for the prevention of electromagnetic interference and radio frequency interference to telecommunications equipment is enforced by the FCC.

Every Hatch Electronic Metal Halide Ballast complies with 47 CFR Part 18, non-consumer limits to prevent any EMI/RFI interference with telecommunications systems and equipment.

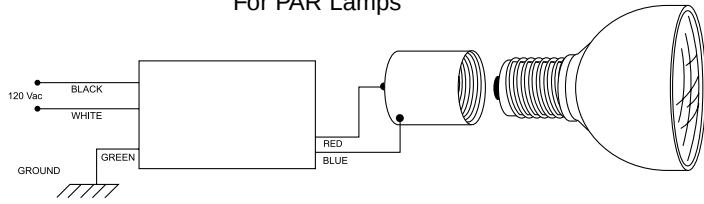
Hatch Compliance Listings

- UL Listed and C-UL Listed, CE available
- All Hatch Electronic Metal Halide Ballasts are listed for Outdoor Type 1 applications
- Thermal protection suitable for recessed lighting fixtures



WIRING DIAGRAMS

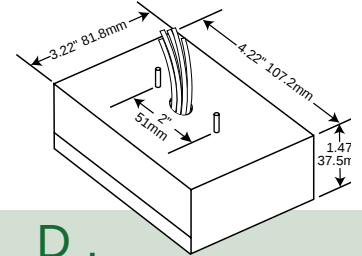
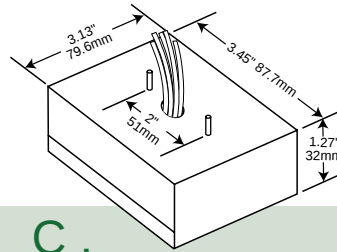
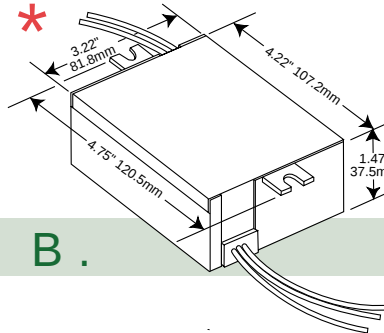
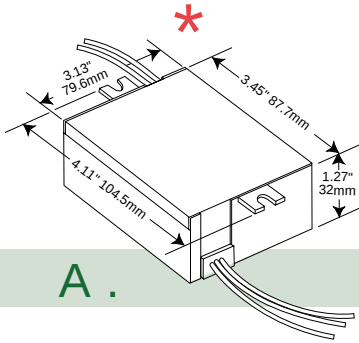
For PAR Lamps



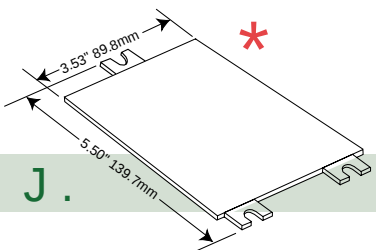
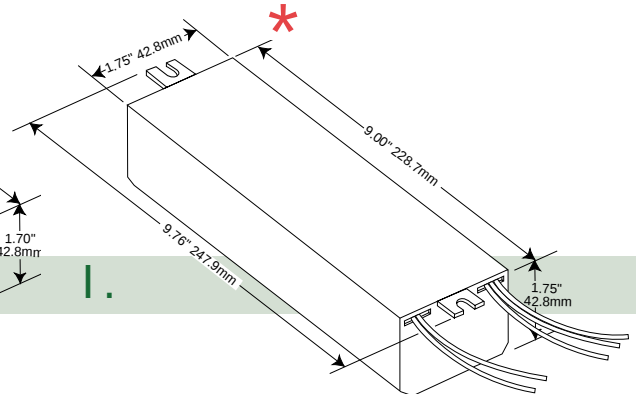
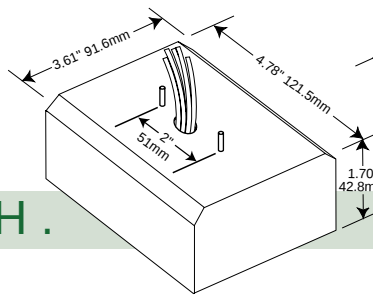
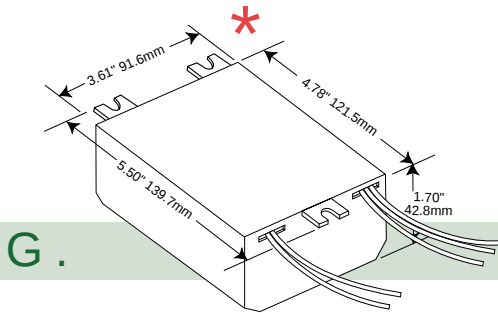
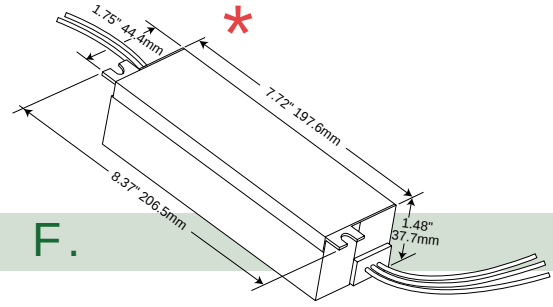
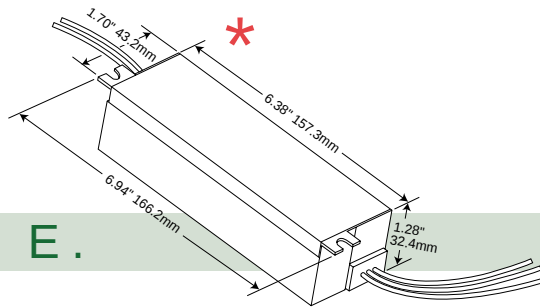
For Double Ended or Bi-Pin Lamps



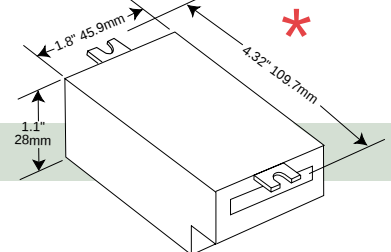
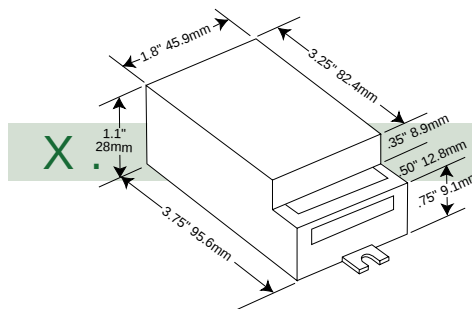
CASE DIMENSIONS



* Center line to center line is .16" less than end to end on models with mounting feet.



MC-MP – Mounting plate for adapting Hatch 20/39/50/70 Mini Case Side Lead Ballast to industry standard footprint.



Note: In an effort to keep our products at the forefront of the lighting industry, case dimensions may change. Please consult your Hatch representative for confirmation or updated information.

Electronic Metal Halide Ballasts

Watts	GE	OSRAM	PHILIPS	No. Lamps	Input Wattage	Input Volts	Input Amps	Case Dim.	Hatch Item Number
20	CMH20/TC	NA	NA	1	22	UNI**	0.20/0.10	X	MC20-1-F-UNIX
						120	0.20	A	MC20-1-F-120U
								C	MC20-1-J-120U
						277	0.09	A	MC20-1-F-277U
								C	MC20-1-J-277U
39	CMH39/TC CMH39/TU CMH39PAR20 CMH39PAR30	MC39T6 MCP39PAR30 MCP39PAR20	CDM35/T6 CDM35/PAR20 CDM35/PAR30	1	43	120	0.36	A	MC39-1-F-120U
								C	MC39-1-J-120U
								E	MC39-1-F-120V
						277	0.16	A	MC39-1-F-277U
								C	MC39-1-J-277U
								E	MC39-1-F-277V
						UNI*	0.36 0.16	A	MC39-1-F-UNIU
								C	MC39-1-J-UNIU
								E	MC39-1-F-UNIV
50	NA	NA	MHC50/U/M(P)	1	55	120	0.46	B	MC50-1-F-120U
								D	MC50-1-J-120U
						UNI*	0.20	G	MC50-1-F-UNIS
							0.46	B	MC50-1-F-UNIU
							0.20	D	MC50-1-J-UNIU
								F	MC50-1-F-UNIV
70	CMH70/TC CMH70/TU CMH70/TD CMH70/C/U CMH70/U CMH70PAR30 CMH70PAR38	MC70T6 MCP70/C/U MCP70/U MCP70PAR30 MCP70PAR38	CDM70/T6 CDM70/TD CDM70/PAR30 CDM70/PAR38 MHC70/C/U MHC70/U	1	77	120	0.63	B	MC70-1-F-120U
								D	MC70-1-J-120U
								F	MC70-1-F-120V
						277	0.27	B	MC70-1-F-277U
								D	MC70-1-J-277U
								F	MC70-1-J-277V
						UNI*	0.63 0.27	G	MC70-1-F-UNIS
								B	MC70-1-F-UNIU
								D	MC70-1-J-UNIU
								F	MC70-1-F-UNIV
100	CMH100/C/U CMH100/U CMH100PAR38	MC100T6 MCP100/U MCP100/C/U MCP100PAR38	CDM100/PAR38 MHC100/C/U MHC100/U	1	110	120	0.94	G	MC100-1-F-120U
								H	MC100-1-J-120U
								I	MC100-1-F-120V
						277	0.41	G	MC100-1-F-277U
								H	MC100-1-J-277U
								I	MC100-1-F-277V
150	CMH150/T/U CMH150/TD	MC150T6	MHC150/U/M(P) CDM150/T6 CDM150/TD	1	164	120	1.39	G	MC150-1-F-120U
								H	MC150-1-J-120U
								I	MC150-1-F-120V
						277	0.60	G	MC150-1-F-277U
								H	MC150-1-J-277U
								I	MC150-1-F-277V

Consult factory for compatible lamp types as new lamp types are being added regularly.

*120-277 Volts **120-240 Volts

Electrical/Mechanical Specifications

INPUT

Frequency45-65Hz/DC

Lamp Wattage

Regulation vs Input1%

Power Factor> 0.99

Total Harmonic Distortion< 5%

OUTPUT

Lamp Wattage Regulation Over+/-1%

Lamp Voltage Range Frequency150Hz

Lamp Current C.F.<1.3

Open Circuit Voltage0-Volts When Unit in Shutdown Mode

Ignition Voltage/Frequency2.5kV pk @23.7kHz FM

Short Circuit ProtectionYes

Thermal ProtectionYes

Open Circuit / No Lamp / Hot Lamp Shutdown, Retry and Ignition Failure ProtectionSoftware controlled with retry at 1 min, 12 min and 23 min then shutdown. Power on reset

End User Defined Software AvailableYes

MECHANICAL / ENVIRONMENTAL

Minimum Starting Temperature-30°C

Lamp Distance from BallastStandard 50' Special Order 300' +

Maximum Case Temperature80°C

EmiFCC Part 18 Class A

Sound RatingA

WarrantyUp to 5 Years

Safety ListingUL / C-UL / CE Type 1 Outdoor