

**PHILIPS
ADVANCE**

eHID Ballasts

e-Vision TrakStick
and Mini Square



Slim design, unlimited possibilities

Offering design freedom in a slim, compact housing, Philips Advance e-Vision TrakStick and Mini Square electronic ballasts for 20W, 39W, 50W and 70W metal halide lamps are ideal for a variety of downlighting, track lighting and accent lighting applications. They provide an energy-efficient, cost-effective alternative to halogen and first generation ceramic metal halide lighting.

Features

- All metallic enclosures
- 90°C maximum case temperature rating
- Superior lamp wattage regulation
- Enhanced safety features include automatic lamp power control, lamp monitoring and end-of-life (EOL) detection
- IntelliVolt multiple-voltage technology (operates 120 to 277V, 50/60 Hz)

Benefits

- Superior heat transfer relative to plastic, enhancing safety and durability
- Optimizes lamp color quality over life
- Minimizes lamp-to-lamp variations
- Reduction of lamp overpowering and/or thermal stress by shutting down should the lamp behave erratically or fail to ignite



Applications

- Retail, Hospitality, Commercial, Institutional



e-Vision TrakStick and Mini Square Electronic Ballasts

Ordering, Electrical and Technical Data (Subject to change without notice)

Mini Square Ballasts

Lamp Data				Certifications		Line Current (Amps)	Input Power ANSI (Watts)	Max. Case Temp.	Wiring Diag.	Fig.	Weight (lb.)	Max. Distance to Lamp (ft.)
Number	Watts	Input Volts	Catalog Number									
20W Lamp, ANSI Code M156/C156, Minimum Starting Temp. -20°C/-4°F												
1	20	120	IMH-G20-G-LF or	✓	✓	0.20	24	90°C	3	G	0.90	5
	20	277	IMH-G20-G-BLS			0.09	24	90°C	3	G	0.95	5
39W Lamp, ANSI Code M130/C130, Minimum Starting Temp. -20°C/-4°F												
1	39	120	IMH-39-G-LF or			0.37	44	90°C	3	G	0.90	3
	39	277	IMH-39-G-BLS	✓	✓	0.17	43	90°C	3	G	0.95	3
39W Mini MasterColor Lamp, CDM-Tm 35W/930, ANSI Code M179/C179, Minimum Starting Temp. -20°C/-4°F												
1	39	120	IMH-P39-G-LF or	✓	✓	0.39	46	90°C	3	G	0.90	5
	39	277	IMH-P39-G-BLS	✓	✓	0.17	45	90°C	3	G	0.95	5
50W Lamp, ANSI M110, C193 (Philips CDM Elite), Minimum Starting Temp. -20°C/-4°F												
1	50	120	IMH-50-G-LF or	✓	✓	0.47	56	90°C	3	G	0.90	3
	50	277	IMH-50-G-BLS	✓	✓	0.21	55	90°C	3	G	0.95	3
70W Lamp, ANSI Code M98/C98 or M143 or M139/C139, Minimum Starting Temp. -20°C/-4°F												
1	70	120	IMH-70-G-LF or	✓	✓	0.66	79	90°C	3	G	0.90	3
	70	277	IMH-70-G-BLS	✓	✓	0.28	76	90°C	3	G	0.95	3

Trakstick Ballasts

Lamp Data				Certifications		Line Current (Amps)	Input Power ANSI (Watts)	Max. Case Temp.	Wiring Diag.	Fig.	Weight (lb.)	Max. Distance to Lamp (ft.)
Number	Watts	Input Volts	Catalog Number									
20W Lamp, ANSI Code M156/C156, Minimum Starting Temp. -20°C/-4°F												
1	20	120	IMH-G20-E-LF	✓	✓	0.21	24	90°C	3	E	0.80	5
	20	277		✓	✓	0.09	24	90°C	3	E	0.80	5
39W Lamp, ANSI Code M130/C130, Minimum Starting Temp. -20°C/-4°F												
1	39	120	IMH-39-E-LF	✓	✓	0.38	44	90°C	3	E	0.80	5
	39	277		✓	✓	0.16	43	90°C	3	E	0.80	5
50W Lamp, ANSI M110, C193 (Philips CDM Elite), Minimum Starting Temp. -20°C/-4°F												
1	50	120	IMH-50-E-LF	✓	✓	0.48	57	90°C	3	E	0.80	5
	50	277		✓	✓	0.20	56	90°C	3	E	0.80	5
70W Lamp, ANSI Code M98/C98 or M143 or M139/C139, Minimum Starting Temp. -20°C/-4°F												
1	70	120	IMH-70-E-LF	✓	✓	0.68	80	90°C	3	E	0.80	5
	70	277		✓	✓	0.29	78	90°C	3	E	0.80	5

e-Vision TrakStick and Mini Square Electronic Ballasts

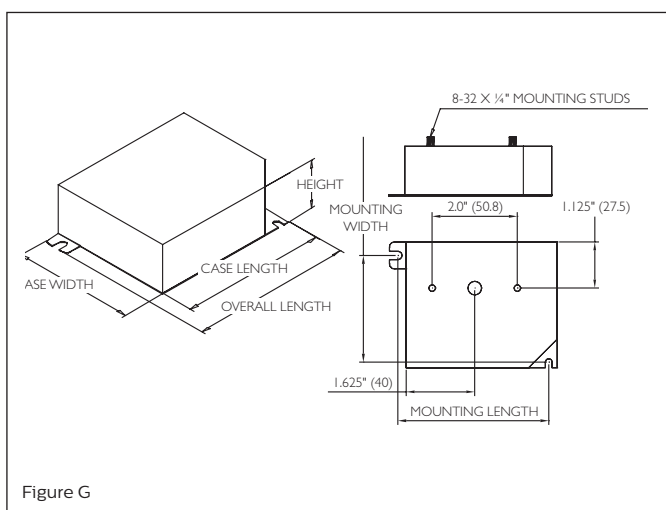
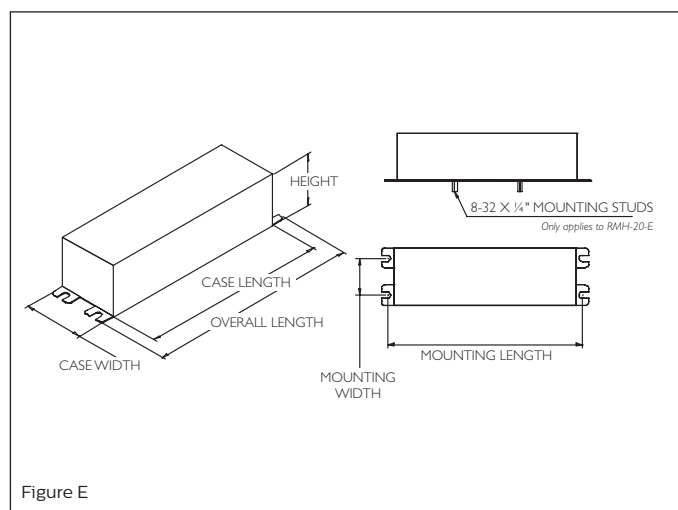
Installation Notes

1. Red lead must be connected to center terminal of lamp (for Edison screw base lamps). Do not connect red or blue lead to neutral or ground.
2. Use an appropriately rated lamp holder.
3. Maximum ballast-to-lamp distance is provided in this bulletin as well as on each ballast's data sheet and label. For maximum lamp starting performance, this specification should be followed using typical wiring methods and materials.
4. Power mains must be cycled off and then on to reset ballast after failed lamps are replaced.

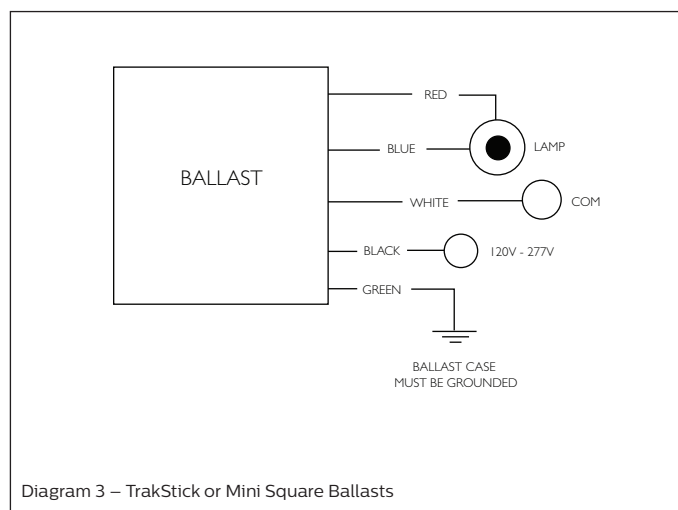
Ballast Thermal Measurement Location

Case temperature measurement locations differ with each ballast model and are designated on the individual ballast labels. Consult ballast labels and ballast specification sheets for measurement locations.

Dimensions



Wiring Diagram



Case Figure	Overall Length	Case Length	Case Width	Case Height	Mounting Length	Mounting Width
E	140mm [5.5"]	127mm [5.0"]	44mm [1.7"]	30mm [1.2"]	135mm [5.3"]	26mm [1.0"]
G	97mm [3.8"]	90mm [3.5"]	77mm [3.0"]	30mm [1.2"]	87mm [3.4"]	67mm [2.6"]

e-Vision TrakStick and Mini Square Electronic Ballasts

Philips Advance Ballast Specifications

Section I - Physical Characteristics

1.0 The electronic ballast shall be furnished with integral, color-coded leads.

Section II - Performance Requirements

2.0 The electronic ballast shall operate from a nominal line voltage range of 120-277V, +/-10%, 50/60 Hz unless stated otherwise.

2.1 The electronic ballast input current shall have Total Harmonic Distortion (THD) of less than 15%.

2.2 The electronic ballast shall have a Power Factor greater than 90%.

2.3 The electronic ballast shall have a lamp end-of-life detection and shutdown circuit.

2.4 The electronic ballast shall be Sound Rated A.

2.5 The electronic ballast output frequency to the lamps shall be less than 200 Hz to prevent acoustic resonance inside the lamp arc tube and to minimize visible flicker.

2.6 The electronic ballast shall provide a "Lamp Current Crest Factor" of less than 1.5.

2.7 The electronic ballast shall be thermally protected to shut off when operating temperatures reach unacceptable levels.

Section III - Regulatory Requirements

3.0 The electronic ballast shall meet the requirements of the Federal Communications Commission rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.

3.1 The electronic ballast shall be Underwriters Laboratories (UL) Listed and CSA Certified where applicable.

3.2 Ballast shall comply with ANSI C62.41 Category A for transient protection.

3.3 Ballast shall comply with RoHS.

Section IV - Other

4.0 The electronic ballast shall not contain Polychlorinated Biphenyl (PCB's).

4.1 The electronic ballast shall carry a three-year limited warranty from the date of manufacture against defects in material or workmanship for operation at marked maximum case temperature or less. View limited warranty at http://www.usa.lighting.philips.com/connect/tools_literature/warranties.wpd for details and restrictions.

4.2 The manufacturer shall have a twenty-five year history of producing HID lamp ballasts for the North American market.

4.3 The electronic ballast shall be produced in a factory certified to ISO 9001 Quality System Standards.

† Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electrical products. For products used in North America, compliance with RoHS is voluntary and self-certified.

