

Philips Basic Metal Halide,
Protected Metal Halide,
and High Pressure Sodium

*Ideal for industrial and
outdoor applications*

BASIC HID LAMPS



Basic HID lamps

Philips Basic High Intensity Discharge Lamps are an alternative option to Standard Metal Halide, Protected Metal Halide and High Pressure Sodium lamps.

Basic Metal Halide Lamps

- Available in 175W, 250W, 400W, and 1000W

Basic Protected Metal Halide Lamps

- Available in 175W, 250W, 400W, and 1000W

Basic High Pressure Sodium Lamps

- T-15 bulb shape
- Available in 70W, 100W, 150W, 250W, and 400W

PHILIPS

sense and simplicity



Philips Basic Metal Halide Lamps

Ordering, Electrical and Technical Data

Product Number	Description	Watts	Pkg Qty	Bulb	Bulb Finish	Base	ANSI Code	MOL (In.)	LCL (In.)	Rated Avg. Life (Hrs.) ¹	Approx. Initial Lumens ²	Approx. Mean Lumens ³	Color Temp. (K) ⁴
15104-3	MH175/U BASIC	175	12	ED-28	Clear	Mogul	M57/E	8%	5	7500	12,000	10,000	4300
15105-0	MH250/U BASIC	250	12	ED-28	Clear	Mogul	M58/E	8%	5	7500	18,000	14,000	4300
15106-8	MH400/U BASIC	400	6	ED-37	Clear	Mogul	M59/E	11½	7	15,000	32,000	22,000	4300
15107-6	MH1000/U BASIC	1000	6	BT-56	Clear	Mogul	M47/E	15%	9½	9000	95,000	75,000	4300

1) Rated average life is the life obtained, on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hours per start. It is based on survival of at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average. For HPS lamps with a rated average life of 18,000 hours, life is based on survival of 67% of the lamps.

2) Measured at 100 hours of life in vertical operating position.

3) Approximate mean lumen output at 40% of lamp rated average life. Measured in vertical operating position.

4) Approximate color temperature in Kelvin degrees.

Above specifications subject to change without notice.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Basic Metal Halide Lamps (Enclosed Fixtures Only Unless Otherwise Noted)

Warnings, Cautions and Operating Instructions

R^{WARNING:} These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available. This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA: 21CFR 1040.30 Canada:SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

Certain lamps that will retain all the glass particles should inner arc-tube rupture occur are commercially available from Philips Lighting Company.

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

1. Turn off lamps at least once a week for at least 15 minutes in systems which are operating on a continuous basis (24 hours/day-7days/week). FAILURE TO TURN OFF LAMPS FOR THE MINIMUM RECOMMENDED TIME MAY INCREASE THE POSSIBILITY OF AN INNER ARC-TUBE RUPTURE.
2. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
3. Use only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000°C.
4. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
5. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.
6. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.

7. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.

8. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.

9. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.

10. Lamps may require 10 to 20 minutes to re-light if there is a power interruption.

11. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

12. Do not use this lamp:

A. In a fixture that contains a Pulse Start metal halide ballast.

B. In a fixture that is specifically designed for use with Pulse Start metal halide lamps.

Operation of these lamps on Pulse Start Metal Halide systems may increase the chance of an outer bulb rupture and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.



Philips Basic Protected Metal Halide Lamps

Ordering, Electrical and Technical Data

Product Number	Description	Watts	Pkg Qty	Bulb	Bulb Finish	Base	ANSI Code	MOL (In.)	LCL (In.)	Rated Avg. Life (Hrs.) ¹	Approx. Initial Lumens ²	Approx. Mean Lumens ³	Color Temp. (K) ⁴
15475-7	MPI 75/BU BASIC	175	12	ED-28	Clear	Mogul	M57/O	8 $\frac{1}{4}$	5	7500	12,000	10,000	3800
15476-5	MP250/U BASIC	250	12	ED-28	Clear	Mogul	M58/O	8 $\frac{1}{4}$	5	7500	18,000	14,000	3900
15477-3	MP400/BU BASIC	400	6	ED-37	Clear	Mogul	M59/O	11 $\frac{1}{2}$	7	15,000	32,000	22,000	3800
15478-1	MP1000/BU BASIC	1000	6	BT-56	Clear	Mogul	M47/O	15 $\frac{1}{2}$	9 $\frac{1}{2}$	9000	90,000	75,000	3800

1) Rated average life is the life obtained, on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hours per start. It is based on survival of at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average. For HPS lamps with a rated average life of 18,000 hours, life is based on survival of 67% of the lamps.

2) Measured at 100 hours of life in vertical operating position.

3) Approximate mean lumen output at 40% of lamp rated average life. Measured in vertical operating position.

4) Approximate color temperature in Kelvin degrees.

Above specifications subject to change without notice.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Basic Protected Metal Halide Lamps (Base Up Operation \pm 15° Unless Noted; Open or Enclosed Fixtures)

Warnings, Cautions and Operating Instructions

R“**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA: 21 CFR 1040.30 Canada: SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

These lamps are designed to retain all the glass particles should an arc tube rupture occur.

The following operating instructions are recommended to minimize these occurrences. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING

LAMP OPERATING INSTRUCTIONS

MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

- RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
- Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
- Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer:
 - Operate lamp only within specified limits of operation.
 - For total supply load refer to ballast manufacturers electrical data.

- Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
- If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
- Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
- Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.
- Lamps may require 10 to 20 minutes to re-light if there is a power interruption.
- Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
- Do not use this lamp:
 - In a fixture that contains a Pulse Start metal halide ballast.
 - In a fixture that is specifically designed for use with Pulse Start metal halide lamps.

Operation of these lamps on Pulse Start Metal Halide systems may increase the chance of an outer bulb rupture and pieces of extremely hot glass might be discharged into the surrounding environment.

If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**



Philips Basic High Pressure Sodium (HPS) Lamps

Ordering, Electrical and Technical Data

Product Number	Description	Watts	Pkg Qty	Bulb	Bulb Finish	Base	ANSI Code	MOL (In.)	LCL (In.)	Rated Avg. Life (Hrs.) ¹	Approx. Initial Lumens ²	Approx. Mean Lumens ³	Color Temp. (K) ⁴
15243-9	C70S62/BASIC HPS	70	12	T-14	Clear	Mogul	S62	7 $\frac{1}{4}$	5	18,000	6000	4500	2100
15244-7	C100S54/BASIC HPS	100	12	T-14	Clear	Mogul	S54	7 $\frac{1}{4}$	5	18,000	9000	6750	2100
15245-4	C150S55/BASIC HPS	150	12	T-14	Clear	Mogul	S55	7 $\frac{1}{4}$	5	18,000	15,000	11,250	2100
15246-2	C250S50/BASIC HPS	250	12	T-14	Clear	Mogul	S50	9 $\frac{1}{4}$	5 $\frac{1}{4}$	18,000	25,500	19,125	2100
15247-0	C400S51/BASIC HPS	400	12	T-14	Clear	Mogul	S51	9 $\frac{1}{4}$	5 $\frac{1}{4}$	18,000	47,500	35,625	2100

1) Rated average life is the life obtained, on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hours per start. It is based on survival of at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average. For HPS lamps with a rated average life of 18,000 hours, life is based on survival of 67% of the lamps.

2) Measured at 100 hours of life in vertical operating position.

3) Approximate mean lumen output at 40% of lamp rated average life. Measured in vertical operating position.

4) Approximate color temperature in Kelvin degrees.

Above specifications subject to change without notice.

WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS for Basic High Pressure Sodium Lamps

Warnings, Cautions and Operating Instructions

WARNING: These lamps must be operated in fixtures designed for use with High Pressure Sodium lamps. The fixture wattage rating must match the wattage indicated on the outer glass bulb. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the glass is struck. Operating the lamp improperly may result in **PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

1. If the outer glass bulb is broken, shut off power immediately and remove the lamp after it has cooled.

2. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.

A. Operate lamp only within specified limits of operation.
B. For total supply load refer to ballast manufacturers electrical data.

3. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.

4. Replace the lamp if the outer glass bulb has been scratched, cracked or damaged in any way.

5. If a lamp bulb support is used, be sure to insulate the support electrically so as to avoid possible decomposition of the bulb glass.

6. Do not use this lamp in a fixture which redirects a substantial portion of the energy toward the arc tube and its immediate vicinity, as this may lead to very early lamp failure.

7. Take care in handling and disposing of lamps. If arc tube is broken, avoid skin contact with any of the contents or fragments.

8. The arc tube of this lamp contains sodium and mercury. Dispose of in accordance with federal, state and local requirements.



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