

MasterColor Ceramic
Metal Halide ED-17 Lamps
Featuring ALTO Lamp
Technology

*Ideal for general lighting,
downlighting, and
flood lighting*

MasterColor



TCLP
Compliant*

† This lamp is better for the environment because of its reduced mercury content. All Philips ALTO lamps give you end-of-life options which can simplify and reduce your lamp disposal costs depending on your state and local regulations.

* The EPA's TCLP test is used to determine if an item can be managed as hazardous or non-hazardous waste. Philips ALTO and ALTO II lamps are TCLP Compliant and can be managed as non-hazardous waste.

Outstanding color performance.

MasterColor Ceramic Metal Halide ED-17 Lamps featuring **ALTO Lamp Technology** provides excellent lumen maintenance and outstanding color performance over time.

Excellent Color Rendering

- 85 for 3000K; 92 for 4000K

Total Cost of Ownership Benefits

- Improved lumen maintenance over standard metal halide
- Energy-efficient alternative to incandescent/halogen lamps
- Operates on existing ballasts

FadeBlock

- Lamps feature integrated UV blocking medium for reduced fading of fabrics and paintings¹

Environmentally Responsible TCLP* Compliant ALTO Lamp Technology

- Passes EPA's TCLP test for non-hazardous waste

¹) Available only on protected ED-17P lamps.

PHILIPS

MasterColor Ceramic Metal Halide ED-17 Lamps featuring ALTO Lamp Technology

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

Product Number	Base	Bulb	Ordering Code	ANSI Code	Watts	Std. Pkg. Qty.	LCL (In.)	MOL (In.)	Rated Avg. Life (Hrs.) ¹	Approx. Initial Lumens ²	Approx. Mean Lumens ³	CRI	Color Temp (K)
36891-0	Med.	ED-17P	MHC50/U/MP/3K/ALTO	M148/M110/O	50	12	3 7/16	5 7/16	10,000	4000	2680	85	3000
36893-6	Med.	ED-17P	MHC50/U/MP/4K/ALTO	M148/M110/O	50	12	3 7/16	5 7/16	20,000	3600	2450	92	4000
23366-8	Med.	ED-17P	MHC70/U/MP/3K/ALTO	M143/M98/O	70	12	3 7/16	5 7/16	16,000	5900	4365	85	3000
23367-6	Med.	ED-17P	MHC70/C/U/MP/3K/ALTO	M143/M98/O	70	12	—	5 7/16	16,000	5400	3995	85	3000
36057-8	Med.	ED-17P	MHC70/U/MP/4K/ALTO	M143/M98/O	70	12	3 7/16	5 7/16	20,000	5800	4060	92	4000
36059-4	Med.	ED-17P	MHC70/C/U/MP/4K/ALTO	M143/M98/O	70	12	—	5 7/16	20,000	5200	3640	92	4000
23368-4	Med.	ED-17P	MHC100/U/MP/3K/ALTO	M140/M90/O	100	12	3 7/16	5 7/16	16,000	8600	6450	85	3000
23444-3	Med.	ED-17P	MHC100/C/U/MP/3K/ALTO	M140/M90/O	100	12	—	5 7/16	16,000	7900	5925	85	3000
36060-2	Med.	ED-17P	MHC100/U/MP/4K/ALTO	M140/M90/O	100	12	3 7/16	5 7/16	20,000	8200	6150	92	4000
36061-0	Med.	ED-17P	MHC100/C/U/MP/4K/ALTO	M140/M90/O	100	12	—	5 7/16	20,000	7500	5625	92	4000
13463-5	Med.	ED-17P	MHC150/U/MP/3K/ALTO	M142/M102/O	150	12	3 7/16	5 7/16	16,000	12,900	9545	85	3000
13464-3	Med.	ED-17P	MHC150/C/U/MP/3K/ALTO	M142/M102/O	150	12	—	5 7/16	16,000	11,900	8805	85	3000
37724-2	Med.	ED-17P	MHC150/U/MP/4K/ALTO	M142/M102/O	150	12	3 7/16	5 7/16	20,000	12,000	9000	92	4000
37726-7	Med.	ED-17P	MHC150/C/U/MP/4K/ALTO	M142/M102/O	150	12	—	5 7/16	20,000	11,000	8250	92	4000
36020-6	Med.	ED-17	MHC50/U/M/3K/ALTO	M148/M110/E	50	12	3 7/16	5 7/16	10,000	4100	2750	85	3000
36022-2	Med.	ED-17	MHC50/C/U/M/3K/ALTO	M148/M110/E	50	12	—	5 7/16	10,000	3800	2545	85	3000
36023-0	Med.	ED-17	MHC50/U/M/4K/ALTO	M148/M110/E	50	12	3 7/16	5 7/16	20,000	3750	2550	92	4000
36024-8	Med.	ED-17	MHC50/C/U/M/4K/ALTO	M148/M110/E	50	12	—	5 7/16	20,000	3600	2450	92	4000
20884-3	Med.	ED-17	MHC70/U/M/3K/ALTO	M143/M98/E	70	12	3 7/16	5 7/16	16,000	6200	4585	85	3000
20887-6	Med.	ED-17	MHC70/C/U/M/3K/ALTO	M143/M98/E	70	12	—	5 7/16	16,000	5800	4290	85	3000
28129-5	Med.	ED-17	MHC70/U/M/4K/ALTO	M143/M98/E	70	12	3 7/16	5 7/16	20,000	5900	4130	92	4000
28133-7	Med.	ED-17	MHC70/C/U/M/4K/ALTO	M143/M98/E	70	12	—	5 7/16	20,000	5500	3850	92	4000
20888-4	Med.	ED-17	MHC100/U/M/3K/ALTO	M140/M90/E	100	12	3 7/16	5 7/16	16,000	9500	7125	85	3000
20889-2	Med.	ED-17	MHC100/C/U/M/3K/ALTO	M140/M90/E	100	12	—	5 7/16	16,000	8800	6600	85	3000
28135-2	Med.	ED-17	MHC100/U/M/4K/ALTO	M140/M90/E	100	12	3 7/16	5 7/16	20,000	9000	6750	92	4000
28136-0	Med.	ED-17	MHC100/C/U/M/4K/ALTO	M140/M90/E	100	12	—	5 7/16	20,000	8400	6300	92	4000
36543-7	Mog.	ED-28	MHC100/U/ED28/HR/4K	M140/M90/E	100	12	5	8 3/16	10,000	8500	6800	92	4100
13022-9	Med.	ED-17	MHC150/U/M/3K/ALTO	M142/M102/E	150	12	3 11/32	5 7/16	16,000	14,000	10,500	85	3000
13023-7	Med.	ED-17	MHC150/C/U/M/3K/ALTO	M142/M102/E	150	12	—	5 7/16	16,000	12,500	9375	85	3000
37720-0	Med.	ED-17	MHC150/U/M/4K/ALTO	M142/M102/E	150	12	3 7/16	5 7/16	20,000	13,000	9750	92	4000
37721-8	Med.	ED-17	MHC150/C/U/M/4K/ALTO	M142/M102/E	150	12	—	5 7/16	20,000	12,000	9000	92	4000

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.

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

3) Approximate mean lumen output at 40% of lamp rated average life.

WARNINGS, CAUTIONS, AND OPERATING INSTRUCTIONS

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 sub-chapter 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.

This lamp contains an arc tube with a filling gas containing less than 65 nCi Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08873.

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.

C. These lamps can be used on pulse start magnetic ballast. Reference the technical data sheet for proper ANSI ballast code compatibility. Do not operate lamps on electronic ballasts.

D. All pulse start mogul based lamps require a socket rated to withstand a 4000 volt pulse.

- 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 15 minutes to re-light if there is a power interruption. Less than 10 minutes on pulse start ballasts.
- Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
- Use non-protected lamps only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000 °C.



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