



High performance, low total cost of ownership

Pulse Start Metal Halide Standard

Philips Pulse Start Metal Halide Lamps offer an optimized metal halide system for greater efficiency and lumen maintenance.

Benefits

- Flexible lighting solution - available in various bases and wattages.
- Long Life when compared to switch start metal halide (for 175W and 250W versions).

Features

- Up to 25% increase in maintained light output over standard metal halide.
- Increased efficacy (up to 120 lpw) equals low total cost of ownership.
- Up to 50% faster warm-up and restrike time.
- Up to 50% increase in life when compared to switch start metal halide (for 175W and 250W versions).
- ED-37 base available in 350 and 400 watts base up and horizontal operations as well as COATED / BT-37 available in 750 and 1000 watt base up operation and 750 watt horizontal operation / ED-28 available in 175, 200, 250, 320, and 400 watts base up or horizontal operations. 175 and 320 watts of the ED-28 base are also available in COATED.

Application

- Ideal for industrial and retail high/low bays and parking lots.

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Warnings and Safety

- 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)
- Lamp contains mercury. Manage in Accord with Disposal Laws. See: www.lamprecycle.org or 1-800-555-0050

Versions

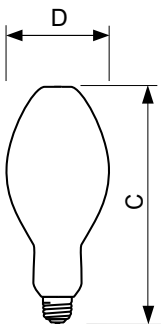
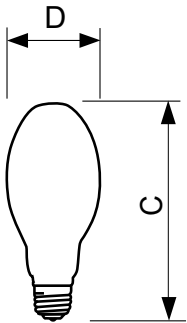


E39, ED-28, Clear



E39, ED-37, Clear

Dimensional drawing



Product	D	C (max)
MS175/BU/PS 12PK	3.5 in	8.313 in
MS250/BU/PS 12PK	3.5 in	8.313 in
Pulse Start MH Std 400W/640 CW Mog ED28 1SL	3.5 in	8.3 in
Pulse Start MH Std 400W/640 Mog ED28 1WR	3.5 in	8.3 in

Product	D	C (max)
MS400/U/PS 6PK	4.625 in	11.5 in

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General Information

Cap-Base	E39
Main Application	General Lighting (G)
System Description	Pulse Start

Mechanical and Housing

Bulb Finish	Clear
Bulb Material	Hard Glass

Approval and Application

Order Code	Full Product Name	Mercury (Hg) Content (Max)	Mercury (Hg) Content (Nom)
276626	MS175/BU/PS 12PK	-	23.5 mg
276618	MS250/BU/PS 12PK	-	32 mg
232520	MS400/BU/ED28/PS 12PK	-	50 mg

Order Code	Full Product Name	Mercury (Hg) Content (Max)	Mercury (Hg) Content (Nom)
232538	MS400/HOR/ED28/PS 12PK	-	50 mg
232835	MS400/U/PS 6/1	42.0 mg	-

Operating and Electrical

Order Code	Full Product Name	Lamp Current (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)	Re-Ignition Time (Min) (Max)
276626	MS175/BU/PS 12PK	1.5 A	147 V	117 V	132 V	10 min
276618	MS250/BU/PS 12PK	2 A	147 V	119 V	133 V	4 min
232520	MS400/BU/ED28/PS 12PK	3.2 A	150 V	120 V	135 V	6 min
232538	MS400/HOR/ED28/PS 12PK	3.2 A	150 V	120 V	135 V	6 min
232835	MS400/U/PS 6/1	3.25 A	150 V	120 V	135 V	10 min

General Information

Order Code	Full Product Name	Life To 50% Failures (Nom)	Operating Position
276626	MS175/BU/PS 12PK	15000 h	Base Up +/- 15 D
276618	MS250/BU/PS 12PK	15000 h	Base Up +/- 15 D
232520	MS400/BU/ED28/PS 12PK	20000 h	Base Up +/- 15 D

Order Code	Full Product Name	Life To 50% Failures (Nom)	Operating Position
232538	MS400/HOR/ED28/PS 12PK	20000 h	Horizontal +/- 15 D
232835	MS400/U/PS 6/1	20000 h	Universal

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
276626	MS175/BU/PS 12PK	400 °C
276618	MS250/BU/PS 12PK	400 °C
232520	MS400/BU/ED28/PS 12PK	450 °C

Order Code	Full Product Name	Bulb Temperature (Max)
232538	MS400/HOR/ED28/PS 12PK	450 °C
232835	MS400/U/PS 6/1	400 °C

Light Technical (1/2)

Order Code	Full Product Name	Chromaticity		Color Code	Correlated Color Temperature (Nom)	Color Rendering Index (Nom)	Luminous Efficacy (rated) (Min)
		Coordinate X (Nom)	Coordinate Y (Nom)				
276626	MS175/BU/PS 12PK	395	390	635	White (WH)	-	82.3 lm/W
276618	MS250/BU/PS 12PK	374	392	645	Cool White (CW)	4300 K	85.5 lm/W
232520	MS400/BU/ED28/PS 12PK	385	390	640	Cool White (CW)	4000 K	105 lm/W

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Order Code	Full Product Name	Chromaticity	Chromaticity	Color Code	Color Designation	Correlated Color Temperature (Nom)	Color Rendering Index (Nom)	Luminous Efficacy (rated) (Min)
		Coordinate X (Nom)	Coordinate Y (Nom)					
232538	MS400/HOR/ED28/PS 12PK	385	390	640	Cool White (CW)	4000 K	68	97.5 lm/W
232835	MS400/U/PS 6/1	385	390	640	Cool White (CW)	4000 K	65	-

Light Technical (2/2)

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Design Mean Lumens	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)	Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Design Mean Lumens	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)
		276626	MS175/BU/PS 12PK	91 lm/W	11200 lm			14400 lm	16000 lm	232538	MS400/HOR/ED28/PS 12PK
276618	MS250/BU/PS 12PK	95 lm/W	16625 lm	21375 lm	23750 lm	232835	MS400/U/PS 6/1	90 lm/W	30000 lm	-	40000 lm
232520	MS400/BU/ED28/PS 12PK	110 lm/W	-	42000 lm	44000 lm						

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape	Order Code	Full Product Name	Bulb Shape
276626	MS175/BU/PS 12PK	ED28	232538	MS400/HOR/ED28/PS 12PK	ED28
276618	MS250/BU/PS 12PK	ED28	232835	MS400/U/PS 6/1	ED37
232520	MS400/BU/ED28/PS 12PK	ED28			

