

Uni-Form® Systems

UNI-FORM® PULSE START METAL HALIDE LIGHTING SYSTEMS



UNI-FORM®

PULSE START METAL HALIDE LIGHTING SYSTEMS

In Lighting, A Leader Always Shines Bright

Formed-Body Arc Tube

The shape of our formed-body quartz arc tube follows the actual curve of the arc stream. Improved thermal profile generates more light.

Reduced Pinch Fins

By reducing the large pinch fins on the standard metal halide arc tube, the quartz mass is lessened, which results in a more uniform thermal profile.

Tipless Arc Tube

Our exclusive tipless design ensures a totally uniform surface to the arc tube shape, improved efficacy and color uniformity.

Weldless Arc Tube Mount

Venture's nearly unbreakable patented weldless construction is stronger than standard welded mounts.

Opti-Wave® Ballasts

The lower current crest factor in the electrical output of our ballasts is optimized for pulse start lamps. It reduces ballast energy losses more than 50%, resulting in cooler operation, and improves lamp lumen maintenance.

Uni-Form® technology will exceed your expectations

- More Light For Less Energy
- Superior Lumen Maintenance
- Longer Life
- Better Color Uniformity
- Better Cold Starting
- Faster Warm-Up/Restrike
- Improved Lamp Power Control
- Quieter Operation
- Unity Ballast Factor
- Rated for Open Luminaires
- Features UV Shield® Protection

50 Watt

UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

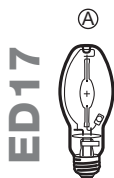
ANSI Type-E Medium Base Lamps (ED17)

Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MH 50W/U/PS	52312	M110/E	3400V/3100H	68V/62H	2200V/2000H	10000V/7500H	4000	1-2	1-2	65	Clear	U	A	12
MH 50W/C/U/PS	13093	M110/E	3200V/2900H	64V/58H	2100V/1900H	10000V/7500H	3700	1-2	1-2	70	Coated	U	A	12

ANSI Type-O Medium Base Lamps (EDX17) UVShield™

Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MP 50W/U/UVS/PS/3K	10226	M110/O	3200V/2900H	64V/58H	2100V/1900H	10000V/7500H	3200	1-2	2-4	65	Clear	U	B	12
MP 50W/C/U/UVS/PS/3K	10381	M110/O	3000V/2700H	60V/54H	2000V/1800H	10000V/7500H	3200	1-2	2-4	70	Coated	U	B	12
MP 50W/U/UVS/PS	32100	M110/O	3200V/2900H	64V/58H	2100V/1900H	10000V/7500H	4000	1-2	2-4	65	Clear	U	B	12
MP 50W/C/U/UVS/PS	30041	M110/O	3000V/2700H	60V/54H	2000V/1800H	10000V/7500H	3700	1-2	2-4	70	Coated	U	B	12

Lamps



Dia. = 2 1/8" (54mm)
 MOL = 5 7/16" (138mm)
 LCL = 3 3/8" (86mm)
 Base = E26



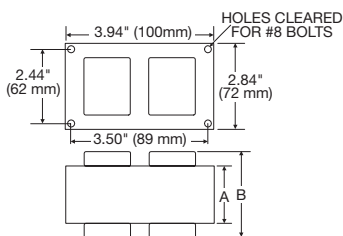
Dia. = 2 1/8" (54mm)
 MOL = 5 7/16" (138mm)
 LCL = 3 3/8" (86mm)
 Base = E26
 Narrow Neck

Ballasts 60Hz ANSI M110 CFL US

Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in) B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
120/208/240/277	V90D5731	HX-HPF	68	1.20/0.65/0.60/0.50	A/A/A/A	1.5	Y	1	1.05 2.45	3.5	6/280	A5	Dry	D	2
120/277/347	V90J5731	HX-HPF	72	1.20/0.50/0.40	A/A/A	1.5	A1	1	1.05 2.45	3.3	6/280	A5	Dry	D	2
120/277	V90H5731	HX-HPF	68	1.20/0.50	A/A	1.5	Q1	1	1.05 2.10	3.5	6/280	A5	Dry	D	2

Ballasts

① HX- 3x4 Core



Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap
 Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

70 Watt

UNILUM® PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-E Medium Base Lamps (ED17)														
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MH 70W/U/PS	78138	M98/E	5600V/5000H	80V/71H	3600V/3300H	15000V/11250H	4000	1-2	1-2	65	Clear	U	A	12
MH 70W/C/U/PS	12180	M98/E	5300V/4800H	76V/69H	3400V/3100H	15000V/11250H	3700	1-2	1-2	70	Coated	U	A	12
MH 70W/C/U/PS/3K	90170*	M98/E	5300V/4800H	76V/69H	3400V/3100H	15000V/11250H	3200	1-2	1-2	70	Coated	U	A	12

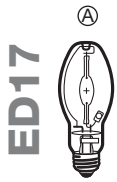
ANSI Type-E Mogul Base Lamps (ED28)														
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MH 70W/U/ED28/PS	16017	M98/E	5600V/5000H	80V/71H	3600V/3300H	15000V/11250H	4000	1-2	1-2	65	Clear	U	C	12

ANSI Type-O Medium Base Lamps (EDX17) UVShield®														
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MP 70W/U/UVS/PS	40389	M98/O	5300V/4800H	76V/69H	3400V/3100H	15000V/11250H	4000	1-2	2-4	65	Clear	U	B	12
MP 70W/C/U/UVS/PS	67115	M98/O	5000V/4500H	71V/64H	3300V/3000H	15000V/11250H	3700	1-2	2-4	70	Coated	U	B	12
MP 70W/U/UVS/PS/3K	45424	M98/O	5300V/4800H	76V/69H	3400V/3100H	15000V/11250H	3200	1-2	2-4	65	Clear	U	B	12
MP 70W/C/U/UVS/PS/3K	14611	M98/O	5000V/4500H	71V/64H	3300V/3000H	15000V/11250H	3200	1-2	2-4	70	Coated	U	B	12

ANSI Type-O Mogul Base Lamps (ED28) UVShield®														
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MP 70W/C/U/ED28/UVS/PS/3K	22466	M98/O	5000V/4500H	71V/64H	3300V/3000H	15000V/11250H	3200	1-2	2-4	70	Coated	U	D	12

Note: * Limited quantities available, please contact sales for availability

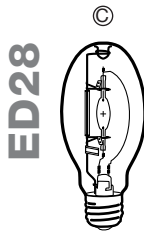
Lamps



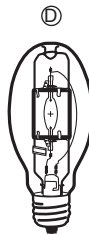
ED17
 Dia. = 2 1/8" (54mm)
 MOL = 5 7/16" (138mm)
 LCL = 3 3/8" (86mm)
 Base = E26



EDX17
 Dia. = 2 1/8" (54mm)
 MOL = 5 7/16" (141mm)
 LCL = 3 3/8" (86mm)
 Base = E26
 Narrow Neck



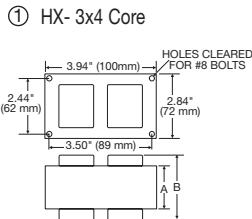
ED28
 Dia. = 3 1/2" (90mm)
 MOL = 8 5/16" (211mm)
 LCL = 5" (127mm)
 Base = E39



ED28
 Dia. = 3 1/2" (90mm)
 MOL = 8 5/16" (211mm)
 LCL = 5" (127mm)
 Base = EX39

Ballasts 60Hz ANSI M98 c RU us SPC															
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in) B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
120/208/240/277	V90D5832	HX-HPF	90	1.7/0.95/0.85/0.7	A/A/A/A	1.5	Y	1	1.45 2.85	4.9	8/280	A5	Dry	D	5
120/277/347	V90J5832	HX-HPF	90	1.70/0.70/0.60	A/A/A	1.5	A1	1	1.45 2.85	4.9	8/280	A5	Dry	D	5
120/277	V90H5832	HX-HPF	90	1.70/0.70	A/A	1.5	Q1	1	1.45 2.85	4.9	8/280	A5	Dry	D	5

Ballasts



Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap

Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

100 Watt

UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-E		Medium Base Lamps (ED17)												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MH 100W/U/PS	27266	M90/E	9000V/8100H	90V/81H	5900V/5300H	15000V/11250H	4000	1-2	2-4	65	Clear	U	A	12
MH 100W/C/U/PS	15823	M90/E	8500V/7700H	85V/77H	5500V/5000H	15000V/11250H	3700	1-2	2-4	70	Coated	U	A	12

ANSI Type-E		Mogul Base Lamps (ED28)												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MH 100W/U/ED28/PS	67868	M90/E	9000V/8100H	90V/81H	5900V/5300H	15000V/11250H	4000	1-2	2-4	65	Clear	U	C	12
MH 100W/C/U/ED28/PS	79986	M90/E	8500V/7700H	85V/77H	5500V/5000H	15000V/11250H	3700	1-2	2-4	70	Coated	U	C	12

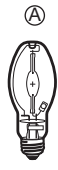
ANSI Type-O		Medium Base Lamps (EDX17)											UVShield	
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MP 100W/U/UVS/PS	96267	M90/O	8500V/7700H	85V/77H	5500V/5000H	15000V/11250H	4000	1-2	3-5	65	Clear	U	B	12
MP 100W/C/U/UVS/PS	11278	M90/O	8100V/7300H	81V/73H	5300V/4800H	15000V/11250H	3700	1-2	3-5	70	Coated	U	B	12
MP 100W/U/UVS/PS/3K	96770	M90/O	8500V/7700H	85V/77H	5500V/5000H	15000V/11250H	3200	1-2	3-5	65	Clear	U	B	12
MP 100W/C/U/UVS/PS/3K	11245	M90/O	8100V/7300H	81V/73H	5300V/4800H	15000V/11250H	3200	1-2	3-5	70	Coated	U	B	12
MP 100W/C/U/UVS/PS/27K	29112*	M90/O	8100	81	5300	15000	2700	1-2	3-5	70	Coated	V±15°	B	12

ANSI Type-O		Mogul Base Lamps (ED28)											UVShield	
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MP 100W/C/U/ED28/UVS/PS/3K	22145	M90/O	8100V/7300H	81V/73H	5300V/4800H	15000V/11250H	3200	1-2	3-5	70	Coated	U	D	12

Note: * Limited quantities available, please contact sales for availability


Lamps

ED17



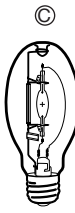
Dia. = 2 1/8" (54mm)
MOL = 5 7/16" (138mm)
LCL = 3 3/16" (86mm)
Base = E26

EDX17



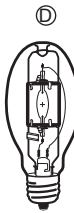
Dia. = 2 1/8" (54mm)
MOL = 5 7/16" (138mm)
LCL = 3 3/16" (86mm)
Base = E26
Narrow Neck

ED28



Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = E39

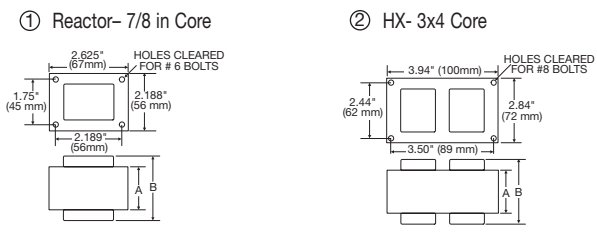
ED28



Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = EX39

Ballasts		60Hz		ANSI M90		cALi us										
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in)	B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
277	V90U5920	Reactor	118	1.05	A	1.5	B1	1	1.65	2.9	2.8	10/280	A6	Dry	D	5
120/208/240/277	V90D5932	HX-HPF	125	2.6/1.5/1.3/1.15	A/A/A/A	1.5	Y	2	1.70	3.1	5.3	12/280	A6	Dry	D	5
120/277/347	V90J5932	HX-HPF	126	2.6/1.15/0.9	A/A/A	1.5	A1	2	1.70	3.1	5.3	12/280	A6	Dry	D	5
120/277	V90H5932	HX-HPF	125	2.6/1.15	A/A	1.5	Q1	2	1.70	3.1	5.8	12/280	A6	Dry	D	5

Ballasts



Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap
 Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

125 Watt

UNIFORM® PULSE START METAL HALIDE LIGHTING SYSTEMS

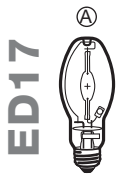
ANSI Type-E Medium and Mogul Base Lamps (ED17 and ED28)

Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MH 125W/HBU/PS	76602	M150/E	12000BU	96BU	8400BU	15000BU	4000	2-3	3-5	65	Clear	BU±90°	A	12
MH 125W/C/HBU/PS	35638	M150/E	11400BU	91BU	8000BU	15000BU	3700	2-3	3-5	70	Coated	BU±90°	A	12
MH 125W/HBU/ED28/PS	61914	M150/E	12000BU	96BU	8400BU	15000BU	4000	2-3	3-5	65	Clear	BU±90°	B	12

ANSI Type-O Medium Base Lamps (EDX17 and ED28) **UVShield**

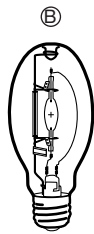
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MP 125W/BU/UVS/PS	13341	M150/O	11400	91	8000	15000	4000	2-3	3-5	65	Clear	BU±15°	C	12
MP 125W/C/BU/UVS/PS	43319	M150/O	10800	86	7600	15000	3700	2-3	3-5	70	Coated	BU±15°	C	12
MP 125W/V/ED28/UVS/PS	25813	M150/O	11400	91	8000	15000	4000	2-3	3-5	65	Clear	V±15°	D	12

Lamps



ED17

Dia. = 2 1/8" (54mm)
MOL = 5 7/16" (138mm)
LCL = 3 3/8" (86mm)
Base = E26



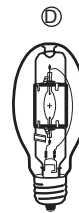
ED28

Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = E39



EDX17

Dia. = 2 1/8" (54mm)
MOL = 5 7/16" (138mm)
LCL = 3 3/8" (86mm)
Base = E26
Narrow Neck



ED28

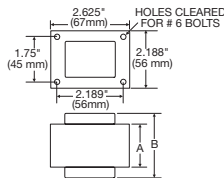
Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = EX39

Ballasts 60Hz ANSI M150

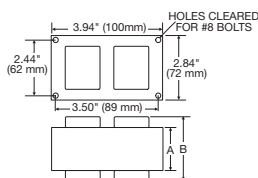
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in)	Dimensions B (in)	Total Wt. (lbs)	Capacitor (µfd/Vrmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
277	V90U8820	Reactor	141	0.85	A	1.5	B1	1	1.5	2.65	2.5	8/280	A5	Dry	D	50
120/277	V90H8811	CWA	150	1.25/0.55	A/A	1.60	T1	2	1.7	3.15	5.4	12/280	A6	Dry	D	20
120/208/240/277	V90D8811	CWA	150	1.25/0.75/0.65/0.55	A/A/A/A	1.60	E	2	1.7	3.15	5.4	12/280	A6	Dry	D	20

Ballasts

① Reactor- 7/8 in Core



② CWA- 3x4 Core



Options

Add Suffix for Options:
C - With Capacitor (Standard)
K - With Capacitor and Bracket Kit
B - With Welded Bracket, No Cap

Ballast Bracket and Kit Figures are located on Page #104

Capacitor and Ignitor Figures are located on Page #103

Wiring Diagrams are located on Page #60

150 Watt

UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

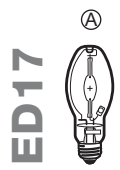
ANSI Type-E Medium and Mogul Base Lamps (ED17 and ED28)

Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MH 150W/U/PS	99584	M102/E 14000V/12600H	93V/84H	10500V/9500H	15000V/11250H	4000	1-2	2-4	65	Clear	U	A	12	
MH 150W/C/U/PS	94986	M102/E 13300V/12000H	89V/80H	10000V/9000H	15000V/11250H	3700	1-2	2-4	70	Coated	U	A	12	
MH 150W/U/ED28/PS	13556	M102/E 14000V/12600H	93V/84H	10500V/9500H	15000V/11250H	4000	1-2	2-4	65	Clear	U	C	12	
MH 150W/C/U/ED28/PS	21344	M102/E 13300V/12000H	89V/80H	10000V/9000H	15000V/11250H	3700	1-2	2-4	70	Coated	U	C	12	

ANSI Type-O Medium and Mogul Base Lamps (EDX17 and ED28) UVShield

Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MP 150W/U/UVS/PS	22455	M102/O 13300V/12000H	89V/80H	10000V/9000H	15000V/11250H	4000	1-2	3-5	65	Clear	U	B	12	
MP 150W/C/U/UVS/PS	22888	M102/O 12600V/11300H	84V/75H	9500V/8500H	15000V/11250H	3700	1-2	3-5	70	Coated	U	B	12	
MP 150W/U/UVS/PS/3K	22522	M102/O 13300V/12000H	89V/80H	10000V/9000H	15000V/11250H	3200	1-2	3-5	65	Clear	U	B	12	
MP 150W/C/U/UVS/PS/3K	80039	M102/O 12600V/11300H	84V/75H	9500V/8500H	15000V/11250H	3200	1-2	3-5	70	Coated	U	B	12	
MP 150W/U/ED28/UVS/PS	58963	M102/O 13300V/12000H	89V/80H	10000V/9000H	15000V/11250H	4000	1-2	3-5	65	Clear	U	D	12	
MP 150W/C/U/ED28/UVS/PS	32147	M102/O 12600V/11300H	84V/75H	9500V/8500H	15000V/11250H	3700	1-2	3-5	70	Coated	U	D	12	

Lamps



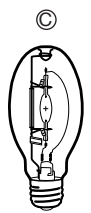
ED17

Dia. = 2 1/8" (54mm)
MOL = 5 7/16" (138mm)
LCL = 3 3/8" (86mm)
Base = E26



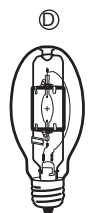
EDX17

Dia. = 2 1/8" (54mm)
MOL = 5 7/16" (138mm)
LCL = 3 3/8" (86mm)
Base = E26
Narrow Neck



ED28

Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = E39



ED28

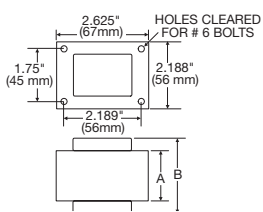
Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = EX39

Ballasts 60Hz ANSI M102 C R I US

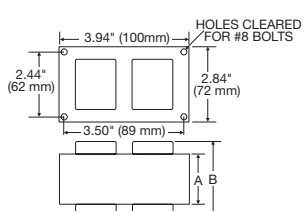
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in) B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
277	V90U7120	Reactor	170	1.5	A	1.5	B1	1	2.5 3.9	4.3	14/280	A1	Dry	D	2
120/277	V90H7130	HX-HPF	185	3.6/1.55	B/C	1.5	Q1	2	2.25 3.9	7.1	16/280	A7	Dry	D	2
120/208/240/277	V90D7130	HX-HPF	185	3.6/2.2/1.8/1.55	B/D/C/C	1.5	Y	2	2.25 3.9	7.1	16/280	A7	Dry	D	2
120/277/347	V90J7130	HX-HPF	185	3.65/1.55/1.25	C/D/D	1.5	A1	2	2.25 3.9	7.1	16/280	A7	Dry	D	2
120/208/240/277	V90D7110	CWA	190	1.7/1.0/0.85/0.75	C/C/C/D	1.6	E	2	2.5 3.9	8.2	16/330	A7	Dry	D	2
120/277/347	V90J7110	CWA	190	1.65/0.7/0.55	D/C/C	1.6	K	2	2.75 4.1	8.6	16/330	A7	Dry	D	2
480/120T	V90Y7110T	CWA	190	0.4	C	1.6	S1	2	2.75 4.1	8.6	16/330	A7	Dry	D	2

Ballasts

① Reactor- 7/8 in Core



② HX and CWA- 3x4 Core



Options

Add Suffix for Options:
C - With Capacitor (Standard)
K - With Capacitor and Bracket Kit
B - With Welded Bracket, No Cap
Ballast Bracket and Kit Figures are located on Page #104
Capacitor and Ignitor Figures are located on Page #103
Wiring Diagrams are located on Page #60

175 Watt

UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-E Medium Base Lamps (ED17)

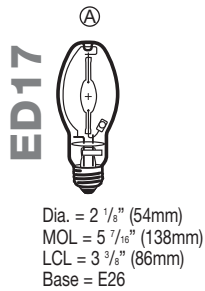
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MS 175W/BU/MED/PS	16497	M152/E*	17500	100	14000	15000	4000	1-2	2-4	65	Clear	BU±15°	A	12
MS 175W/C/BU/MED/PS	34691	M152/E*	16600	95	13300	15000	3700	1-2	2-4	70	Coated	BU±15°	A	12

ANSI Type-E Mogul Base Lamps (ED28)

Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MS 175W/BU/PS	68475	M152/E*	17500	100	14000	15000	4000	1-2	2-4	65	Clear	BU±15°	B	12
MS 175W/C/BU/PS	68246	M152/E*	16600	95	13300	15000	3700	1-2	2-4	70	Coated	BU±15°	B	12

Note: * Lamp warranty is limited on M137 ballasts.
See individual specification sheets for details.

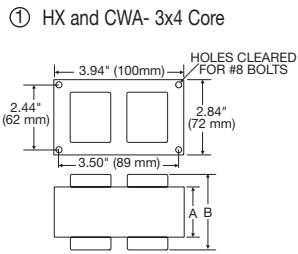
Lamps



Ballasts 60Hz ANSI M137/M152

Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in) B (in)	Total Wt. (lbs)	Capacitor (µfd/V/min)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
120/208/240/277	V90D7210	CWA	208	1.9/1.05/0.95/0.8	B/C/A/A	1.6	E	1	2.65 4.0	8.0	12.5/330	A1	Dry	D	10
120/277/347	V90J7210	CWA	208	1.9/0.8/0.65	B/B/B	1.6	K	1	2.65 4.0	8.0	12.5/330	A1	Dry	D	10
480/120T	V90Y7210T	CWA	208	0.5	C	1.6	S1	1	2.65 4.0	8.0	12.5/330	A1	Dry	D	10

Ballasts



Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap

Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

200 Watt

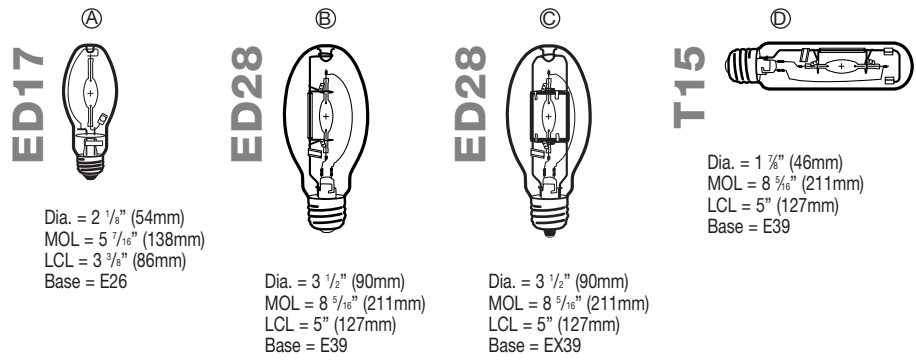
UNIFORM® PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-E		Medium Base Lamps (ED17)												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MS 200W/BU/MED/PS	60811	M136/E	21000	105	16800	12000	4000	1-2	2-4	65	Clear	BU±15°	A	12
MS 200W/C/BU/MED/PS	60812	M136/E	20000	100	16000	12000	3700	1-2	2-4	70	Coated	BU±15°	A	12

ANSI Type-E		Mogul Base Lamps (ED28 and T15)												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MS 200W/V/PS	57739	M136/E	21000	105	16800	15000	4000	1-2	2-4	65	Clear	V±15°	B	12
MS 200W/C/V/PS	70345	M136/E	20000	100	16000	15000	3700	1-2	2-4	70	Coated	V±15°	B	12
MS 200W/H75/T15/PS	70764	M136/E	19000	95	15000	15000	4000	1-2	2-4	65	Clear	HOR±75°	D	12

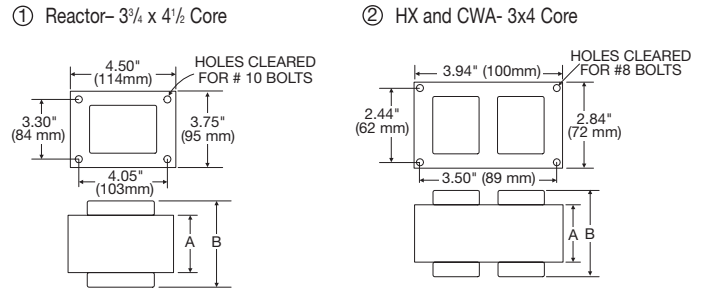
ANSI Type-O		Mogul Base Lamps (ED28)										UVShield®		
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 200W/V/UVS/PS	22147	M136/O	20000	100	16000	15000	4000	1-2	3-5	65	Clear	V±15°	C	12
MP 200W/C/V/UVS/PS	59174	M136/O	19000	95	15200	15000	3700	1-2	3-5	70	Coated	V±15°	C	12
MP 200W/C/V/UVS/PS/3K	44872	M136/O	19000	95	15200	15000	3200	1-2	3-5	70	Coated	V±15°	C	12

Lamps



Ballasts		60Hz		ANSI M136				c us								
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions		Total Wt.	Capacitor	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist.
									A (in)	B (in)	(lbs)	(µfd/Vmin)				(ft)
277	V90U7321	Reactor	219	1.25	A	1.5	B1	1	1	2.90	4.5	12/280	A6	Dry	D	5
120/208/240/277	V90D7330	HX-HPF	235	3.30/2.05/1.65/1.45	A/A/A/A	1.5	Y	2	2.25	3.50	7.0	16/290	A7	Dry	D	2
120/277/347	V90J7330	HX-HPF	240	3.45/1.45/1.15	D/C/C	1.5	A1	2	2.45	3.60	7.5	16/290	A7	Dry	D	2
480/120T	V90Y7330T	HX-HPF	235	0.80	D	1.5	W1	2	2.45	2.85	8.0	16/290	A7	Dry	D	2

Ballasts



Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap

Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

200 Watt Energy Savings

UNI-FORM® PULSE START METAL HALIDE LIGHTING SYSTEMS

Highest Output in Medium Base!

Venture's low current crest factor ballasts with high voltage ignitors, combined with our unique formed body arc tube lamps, provide longer life, more initial light, and significantly more light over time than today's standard metal halide systems.

200W Uni-Form Lamps


- 21,000 lumens!
- 50% longer life than standard 175W lamps
- Highest wattage available in an ED17 jacket

Uni-Form Pulse Start System

- The perfect 175W/MED alternative gives you more output - up to 68% more mean lumens with only 2-10% more system watts!
- Venture's "One Call" warranty
- Improved Color Uniformity
- Faster Warm-Up / Restrike
- Better Cold Starting

68% More Light!

MS 200W/BU/MED/PS						MH 175W/U/MED					
17.3	16.7	17.0	18.0	17.1	18.0	11.0	10.2	11.1	10.2	10.8	11.0
17.5	16.8	17.2	18.2	17.4	18.2	11.2	10.4	11.2	10.4	10.9	11.1
15.8	14.7	17.6	17.1	14.7	17.1	10.6	8.80	10.4	11.2	9.50	9.94
17.5	16.3	18.0	18.5	16.7	18.5	11.4	10.0	11.6	11.1	10.5	11.1
17.2	17.2	15.5	17.7	17.7	17.7	10.9	10.5	11.0	8.98	11.0	10.9
15.9	14.8	17.2	16.8	15.0	16.9	10.4	9.04	10.3	10.8	9.57	9.97
16.1	15.1	17.2	17.1	15.3	17.2	10.6	9.18	10.5	10.7	9.76	10.1
16.6	16.8	14.1	16.8	17.4	16.8	10.3	10.4	10.6	8.35	10.7	10.6
16.7	15.5	17.2	17.6	15.8	17.6	10.9	9.48	10.8	10.7	10.1	10.6

 = Luminaires

Energy Savings and More Light!

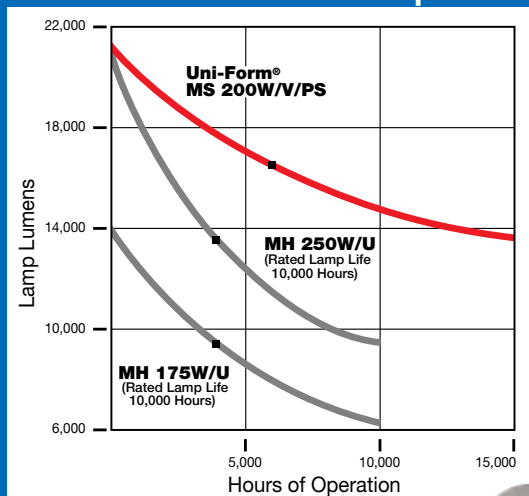
Opti-Wave® Ballasts

- 277Volt *Opti-Wave* ballast, only 219 system watts compared to 210 system watts of a 175W CWA ballast
- *Opti-Wave* multi-tap ballasts - Quad, tri and dual voltage tap ballasts available
- Improved lamp power regulation over life for improved color control
- Lower current crest factor for improved lumen maintenance
- UL temperature rise codes that are equal to or better than pulse start CWA ballasts
- Quieter operation

The Uni-Form® pulse start family provides the most light in an ED17 bulb. Lumen output is increased by 68% over standard 175 watt metal halide lamps. More light in a smaller lamp offers designers better, more cost-effective and energy-efficient choices:

1. Achieve the same light levels using fewer fixtures
OR
2. Achieve increased light levels using the same number of fixtures

Lumen Maintenance Comparison



68% More Light!

This typical parking garage lighting layout demonstrates how the 200W *Uni-Form* system delivers 68% more light.



250 Watt

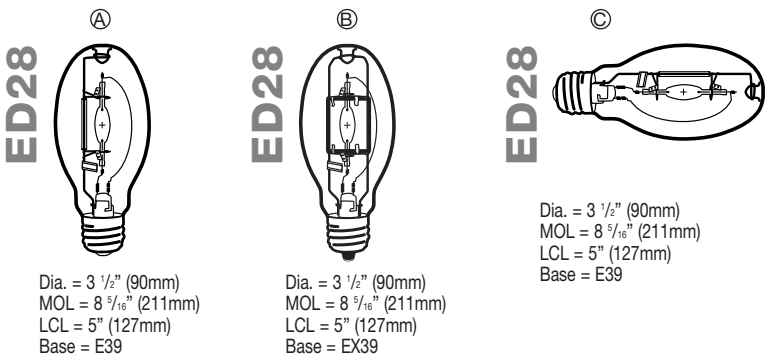
UNIFORM® PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-E		Mogul Base Lamps (ED28)												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MS 250W/V/PS	49621	M153/E*	25000	100	20000	15000	4000	2-3	3-5	65	Clear	V±15°	A	12
MS 250W/C/V/PS	81365	M153/E*	23800	95	19000	15000	3700	2-3	3-5	70	Coated	V±15°	A	12
MS 250W/H75/PS	81054	M153/E*	22000	88	17600	12000	4000	2-3	3-5	65	Clear	HOR±75°	C	12

ANSI Type-O		Mogul Base Lamps (ED28)											UVShield®	
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 250W/BU/UVS/PS	64658	M153/O*	23800	95	19000	15000	4000	2-3	4-6	65	Clear	BU±15°	B	12
MP 250W/C/BU/UVS/PS	32658	M153/O*	22600	90	17600	15000	3700	2-3	4-6	70	Coated	BU±15°	B	12

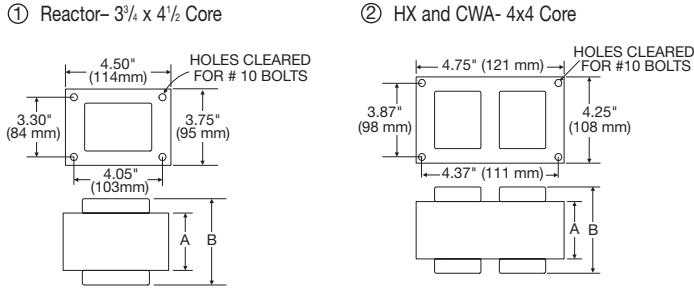
Note: * Lamp warranty is limited on M138 ballasts.
See individual specification sheets for details.

Lamps



Ballasts		60Hz		ANSI M138/M153					UL US		CS					
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in)	Dimensions B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
277	V90U8421	Reactor	275	1.35	A	1.5	B1	1	1.25	3.4	6.0	13/280	A1	Dry	D	5
120/208/240/277	V90D8410	CWA	288	2.5/1.45/1.25/1.1	B/B/A/A	1.6	E	2	1.55	3.5	10.0	15/400	A13	Dry	D	2
120/277/347	V90J8410	CWA	288	2.5/1.1/0.9	B/A/B	1.6	K	2	1.55	3.5	10.0	15/400	A13	Dry	D	2
480/120T	V90Y8410T	CWA	288	0.6	A	1.6	S1	2	1.55	4.25	10.0	15/400	A13	Dry	D	2

Ballasts



Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap
 Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

For Indoor or Outdoor

UNI-FORM® PULSE START METAL HALIDE LIGHTING SYSTEMS



UNI-FORM®
PULSE START METAL HALIDE LIGHTING SYSTEMS

320 Watt

UNIFORM® PULSE START METAL HALIDE LIGHTING SYSTEMS

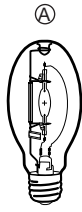
ANSI Type-E		Mogul Base Lamps (ED28, ED37 and T15)												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours**	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MS 320W/V/ED28/PS	59194	M154/E*	33000	103	26000	20000+	4000	2-3	4-6	65	Clear	V±15°	A	12
MS 320W/C/V/ED28/PS	77594	M154/E*	31000	97	25000	20000+	3700	2-3	4-6	70	Coated	V±15°	A	12
MS 320W/V/ED37/PS	52236	M154/E*	33000	103	26000	20000+	4000	2-3	4-6	65	Clear	V±15°	C	6
MS 320W/C/V/ED37/PS	67712	M154/E*	31000	97	25000	20000+	3700	2-3	4-6	70	Coated	V±15°	C	6
MS 320W/H75/ED28/PS	47549	M154/E*	30000	94	24000	20000+	4000	2-3	4-6	65	Clear	HOR±75°	F	12
MS 320W/H75/T15/PS	79710	M154/E*	30000	94	24000	20000+	4000	2-3	4-6	65	Clear	HOR±75°	G	12

ANSI Type-O		Mogul Base Lamps (ED28 and ED37)											UVShield®	
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours**	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 320W/BU/ED28/UVS/PS	10103	M154/O*	31000	97	25000	20000+	4000	2-3	5-8	65	Clear	BU±15°	B	12
MP 320W/C/BU/ED28/UVS/PS	10104	M154/O*	29000	91	23000	20000+	3700	2-3	5-8	70	Coated	BU±15°	B	12
MP 320W/BU/ED37/UVS/PS	21714	M154/O*	31000	97	25000	20000+	4000	2-3	5-8	65	Clear	BU±15°	D	6
MP 320W/C/BU/ED37/UVS/PS	32795	M154/O*	29000	91	23000	20000+	3700	2-3	5-8	70	Coated	BU±15°	D	6
MP 320W/C/BU/ED28/UVS/PS/3K	66506	M154/O*	29000	91	23000	20000+	3200	2-3	5-8	70	Coated	BU±15°	D	6

ANSI Type-O		Mogul Base Lamps (ED37) for Operation on Electronic Ballasts											UVShield®	
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours***	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 320W/V/EL/UVS/PS	25984	M154/O	31300	98	26900	20000++	4000	2-3	5-8	65	Clear	V±15°	D	6
MP 320W/C/V/EL/UVS/PS	32409	M154/O	29800	93	25600	20000++	3700	2-3	5-8	70	Coated	V±15°	D	6

Lamps

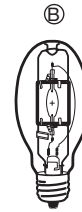
ED28



A

Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = E39

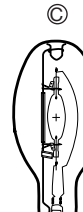
ED28



B

Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = EX39

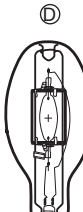
ED37



C

Dia. = 4 5/8" (120mm)
MOL = 11 1/2" (292mm)
LCL = 7" (178mm)
Base = E39

ED37



D

Dia. = 4 5/8" (120mm)
MOL = 11 1/2" (292mm)
LCL = 7" (178mm)
Base = EX39

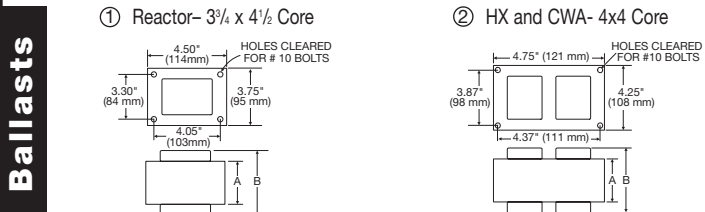
* Lamp warranty is limited on M132 ballasts. See individual specification sheets for details.

** A life rating of 20,000+ hours means that 70% of the lamps initially installed will still be operating after 20,000 hours.

*** A life rating of 20,000++ means that 80% of the lamps installed will still be operating after 20,000 hours.

See adjacent page for additional lamp diagrams

Ballasts		60Hz		ANSI M132/M154							cALUS		CS			
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in)	Dimensions B (in)	Total Wt. (lbs)	Capacitor (µfd/V/min)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
277	V90U7421	Reactor	349	1.7	A	1.5	B1	1	1.5	3.6	7.0	16/280	A7	Dry	D	2
120/208/240/277	V90D7430	HX-HPF	360	4.8/2.85/2.45/2.1	B/C/C/C	1.5	Y	2	1.8	3.6	11	20/280	A7	Dry	D	2
120/277/347	V90J7430	HX-HPF	365	5.25/2.25/1.7	D/D/D	1.5	A1	2	1.8	3.5	10.5	20/280	A7	Dry	D	2
480/120T	V90Y7430T	HX-HPF	370	1.09	D	1.5	W1	2	1.8	3.5	10.5	20/290	A7	Dry	D	2
120/208/240/277	V90D7411	CWA	368	3.2/1.8/1.6/1.4	B/B/B/B	1.6	E	2	1.85	3.65	10	22/330	A2	Dry	D	2
120/277/347	V90J7411	CWA	368	3.2/1.4/1.15	B/C/C	1.6	K	2	1.9	3.75	10.5	22/330	A2	Dry	D	2
480/120T	V90Y7411T	CWA	368	0.8	D	1.6	S1	2	1.9	3.75	10.5	22/330	A2	Dry	D	2



For Electronic Ballasts
See Page #51

Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap

Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

350 Watt

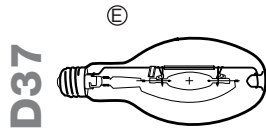
UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-E		Mogul Base Lamps												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours*	CCT (K)	Warm-up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MS 350W/V/PS	98389	M131/E	37000	106	29000	20000+	4000	2-3	4-6	65	Clear	V±15°	C	6
MS 350W/C/V/PS	71329	M131/E	35000	100	28000	20000+	3700	2-3	4-6	70	Coated	V±15°	C	6
MS 350W/V/ED28/PS	52980	M131/E	37000	106	29000	20000+	4000	2-3	4-6	65	Clear	V±15°	A	12
MS 350W/C/H75/PS	64866	M131/E	31000	89	24000	20000+	3700	2-3	4-6	70	Coated	HOR±75°	E	6
MS 350W/H75/ED28/PS	46959	M131/E	33000	94	26000	20000+	4000	2-3	4-6	65	Clear	HOR±75°	F	12
MS 350W/H75/T15/PS	93749	M131/E	33000	94	26000	20000+	4000	2-3	4-6	65	Clear	HOR±75°	G	12

ANSI Type-O		Mogul Base Lamps (ED28 and ED37)										UVShield®		
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours*	CCT (K)	Warm-up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 350W/V/UVS/PS	22149	M131/O	35000	100	28000	20000+	4000	2-3	5-8	65	Clear	V±15°	D	6
MP 350W/C/V/UVS/PS	44097	M131/O	33000	94	26000	20000+	3700	2-3	5-8	70	Coated	V±15°	D	6
MP 350W/C/V/UVS/PS/3K	27845	M131/O	33000	94	26000	20000+	3200	2-3	5-8	70	Coated	V±15°	D	6
MP 350W/V/ED28/UVS/PS	47887	M131/O	35000	100	28000	20000+	4000	2-3	5-8	65	Clear	V±15°	B	12
MP 350W/C/V/ED28/UVS/PS	55401	M131/O	33000	94	26000	20000+	3700	2-3	5-8	70	Coated	V±15°	B	12

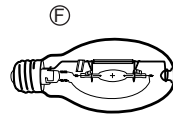
ANSI Type-O		Mogul Base Lamps (ED37) for Operation on Electronic Ballasts										UVShield®		
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours**	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 350W/V/EL/UVS/PS	44983	M131/O	35100	100	30200	20000++	4000	2-3	5-8	65	Clear	V±15°	D	6
MP 350W/C/V/EL/UVS/PS	48952	M131/O	33300	95	28600	20000++	3700	2-3	5-8	70	Coated	V±15°	D	6

Lamps



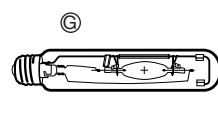
ED37

Dia. = 4 5/8" (120mm)
MOL = 11 1/2" (292mm)
LCL = 7" (178mm)
Base = E39



ED28

Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = E39



T15

Dia. = 1 7/8" (46mm)
MOL = 11 1/2" (292mm)
LCL = 7" (178mm)
Base = E39

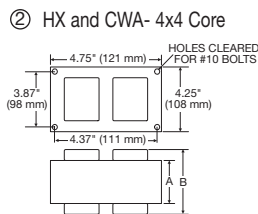
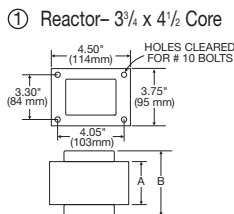
* A life rating of 20,000+ hours means that 70% of the lamps initially installed will still be operating after 20,000 hours.

** A life rating of 20,000++ means that 80% of the lamps installed will still be operating after 20,000 hours.

See adjacent page for additional lamp diagrams

Ballasts		60Hz		ANSI M131				UL US		CS						
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in)	B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
277	V90U7521	Reactor	380	1.9	B	1.5	B1	1	1.8	3.6	7.4	18/280	A7	Dry	D	2
120/208/240/277	V90D7530	HX-HPF	395	5.0/2.55/2.5/2.15	B/A/C/C	1.5	Y	2	1.8	3.5	11	21.5/280	A7	Dry	D	2
120/277/347	V90J7530	HX-HPF	400	4.6/2.0/1.6	C/D/D	1.5	A1	2	1.8	3.9	12.5	21.5/290	A7	Dry	D	2
480/120T	V90Y7530T	HX-HPF	400	1.35	D	1.5	W1	2	1.8	3.9	10.5	21.5/290	A7	Dry	D	2
120/208/240/277	V90D7512	CWA	400	3.6/2.1/1.8/1.55	B/C/C/C	1.6	E	2	1.92	3.8	10.5	24/330	A2	Dry	D	2
120/277/347	V90J7512	CWA	400	3.6/1.55/1.2	B/C/C	1.6	K	2	1.92	3.8	10.5	24/330	A2	Dry	D	2
480/120T	V90Y7512T	CWA	400	0.9	D	1.6	S1	2	2.02	3.9	11.2	24/330	A2	Dry	D	2

Ballasts



For Electronic Ballasts
See Page #51

Options

Add Suffix for Options:
C - With Capacitor (Standard)
K - With Capacitor and Bracket Kit
B - With Welded Bracket, No Cap
Ballast Bracket and Kit Figures are located on Page #104
Capacitor and Ignitor Figures are located on Page #103
Wiring Diagrams are located on Page #60

400 Watt

UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

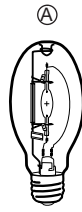
ANSI Type-E		Mogul Base Lamps												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours***	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MS 400W/V/PS	73531	M155/E*	44000	110	35000	20000+/30000**	4000	2-3	4-6	65	Clear	V±15°	C	6
MS 400W/C/V/PS	42401	M155/E*	42000	105	33000	20000+/30000**	3700	2-3	4-6	70	Coated	V±15°	C	6
MS 400W/V/ED28/PS	85260	M155/E*	44000	110	35000	20000+	4000	2-3	4-6	65	Clear	V±15°	A	12
MS 400W/C/V/ED28/PS	46416	M155/E*	42000	105	33000	20000+	3700	2-3	4-6	70	Coated	V±15°	A	12
MS 400W/H75/PS	58788	M155/E*	40000	100	32000	20000+	4000	2-3	4-6	65	Clear	HOR±75°	E	6
MS 400W/H75/ED28/PS	40124	M155/E*	40000	100	32000	20000+	4000	2-3	4-6	65	Clear	HOR±75°	F	12
MS 400W/C/H75/ED28/PS	55459	M155/E*	38000	95	30000	20000+	3700	2-3	4-6	70	Coated	HOR±75°	F	12

ANSI Type-O		Mogul Base Lamps												UVShield®
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours***	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 400W/BU/UVS/PS	71642	M155/O*	41000	103	33000	20000+	4000	2-3	5-8	65	Clear	BU±15°	D	6
MP 400W/C/BU/UVS/PS	45541	M155/O*	39000	98	31000	20000+	3700	2-3	5-8	70	Coated	BU±15°	D	6
MP 400W/BU/ED28/UVS/PS	12445	M155/O*	41000	103	33000	20000+	4000	2-3	5-8	65	Clear	BU±15°	B	12
MP 400W/C/BU/ED28/UVS/PS	88648	M155/O*	39000	98	31000	20000+	3700	2-3	5-8	70	Coated	BU±15°	B	12

ANSI Type-O		Mogul Base Lamps (ED37) for Operation on Electronic Ballasts												UVShield®
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours****	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 400W/V/EL/UVS/PS	56745	M155/O	41800	105	35900	20000++	4000	2-3	5-8	65	Clear	V±15°	D	6
MP 400W/C/V/EL/UVS/PS	78752	M155/O	39700	99	34100	20000++	3700	2-3	5-8	70	Coated	V±15°	D	6

Lamps

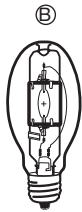
ED28



A

Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = E39

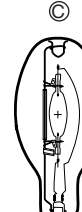
ED28



B

Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = EX39

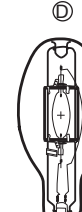
ED37



C

Dia. = 4 5/8" (120mm)
MOL = 11 1/2" (292mm)
LCL = 7" (178mm)
Base = E39

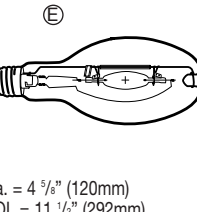
ED37



D

Dia. = 4 5/8" (120mm)
MOL = 11 1/2" (292mm)
LCL = 7" (178mm)
Base = EX39

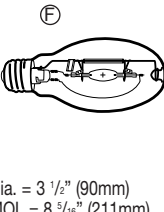
ED37



E

Dia. = 4 5/8" (120mm)
MOL = 11 1/2" (292mm)
LCL = 7" (178mm)
Base = E39

ED28



F

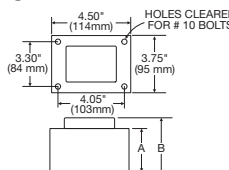
Dia. = 3 1/2" (90mm)
MOL = 8 5/16" (211mm)
LCL = 5" (127mm)
Base = E39

* Lamp warranty is limited on M135 ballasts. See individual specification sheets for details.
 ** At 120 or more hours per start, lamp life is rated at 30,000 hours.
 *** A life rating of 20,000+ hours means that 70% of the lamps initially installed will still be operating after 20,000 hours.
 **** A life rating of 20,000++ means that 80% of the lamps installed will still be operating after 20,000 hours.

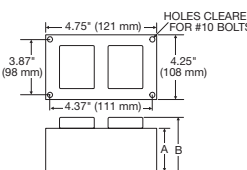
Ballasts		60Hz		ANSI M135/M155					UL US		CSA					
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in)	Dimensions B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
277	V90U7621	Reactor	435	2.1	C	1.5	B1	1	1.65	3.7	7.0	20/280	A7	Dry	D	2
120/208/240/277	V90D7612	CWA	450	4/2.3/2/1.75	C/C/C/C	1.6	E	2	2.00	3.9	10.7	26/330	A3	Dry	D	2
120/277/347	V90J7612	CWA	451	4/1.75/1.4	D/D/D	1.6	K	2	2.15	4	11.3	26/330	A3	Dry	D	2
480/120T	V90Y7612T	CWA	455	1	D	1.6	S1	2	2.2	4.1	12	26/330	A3	Dry	D	2

Ballasts

① Reactor- 3/4 x 4 1/2 Core



② HX and CWA- 4x4 Core



For Electronic Ballasts
See Page #51

Options

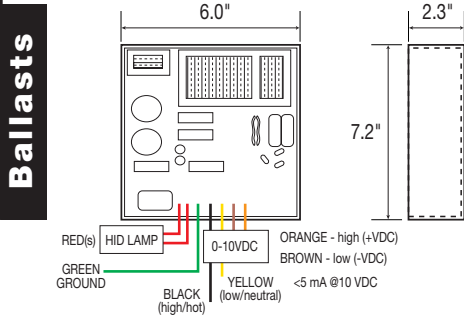
Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap
 Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

Electronic Ballasts

UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

Opti-E™ High Frequency Electronic Ballasts for e-Lamp™ product

Wattage	Voltage	Input Voltage Range	Product No.	Input Watts	Maximum Line Current	ANSI	EMI	Safety
320W	208-277	188-305	OPE320W	333	333/(.92*Vline)	M154	FCC Part 18	UL 1029
350W	208-277	188-305	OPE350W	363	363/(.92*Vline)	M131	FCC Part 18	UL 1029
400W	208-277	188-305	OPE400W	413	413/(.92*Vline)	M155	FCC Part 18	UL 1029
450W	277	249-305	OPE450W	465	465/(.92*Vline)	M144	FCC Part 18	UL 1029



Also Available: Opti-E™

Venture's own high frequency electronic ballast:

- Auto-Voltage input 208-277V (208V, 240V, 277V $\pm 10\%$); (50-60Hz AC, DC)
- True-sinusoidal, high-frequency lamp drive
- $\pm 0.5\%$ lamp power regulation over a 10% change in input voltage
- Improved arc tube stability; Flicker-Free
- Operates in ambient from -20°C to 55°C
- Superior color and lumen maintenance
- Continuous dimming of Venture's e-Lamp (4K) product (From full power down to 50%)
- Operates all other pulse start metal halide lamps - Dimming limited to 50% lamp power (achieved using optional Venture control interface VDM1)
- Keeps lamps lighted over wide range of line voltages
- Suitable for damp location
- Silent operation sound rated A
- 1.0 effective current crest factor
- Ballast Efficiency up to 93%

Wiring and Installation:

Install in accordance with National Electric Code / local wiring code. UNIT MUST BE GROUNDED. Connect with wires rated at least 105°C (121°F). Black and yellow are AC line connections for all voltages on label (automatic voltage detection).

Physical Characteristics:

Maximum Case Temp: 90°C as stand alone, see thermal requirement guide from VLI for more details
 Maximum Distance (Ballast from Lamp): 8'
 Length: 7.2"
 Width: 6"
 Height: 2.3"
 Weight: 3.5 lbs.

Standards:

Thermal Protection: AUTO RESET
UL/CUL Listed

Designed to meet:

Transient Protection: ANSI C62.41

EMI/RFI: FCC PART 18A CLASS A

Sound Rating: A

Warranty: 2 YEARS (Ballast Only),
 3 YEARS (System)

Luminaires must be submitted to Venture testing



450 Watt

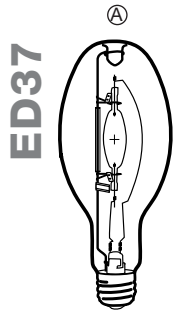
UNIFORM® PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-E		Mogul Base Lamps (ED37)												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours*	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MS 450W/V/PS	10079	M144/E	50000	111	40000	20000+	4000	2-3	4-6	65	Clear	V±15°	A	6
MS 450W/C/V/PS	10138	M144/E	47000	104	37000	20000+	3700	2-3	4-6	70	Coated	V±15°	A	6

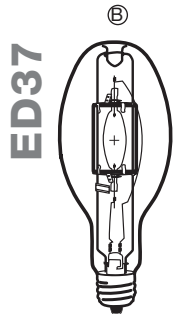
ANSI Type-O		Mogul Base Lamps (ED37)											UVShield™	
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours*	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 450W/BU/UVS/PS	65072	M144/O	47000	104	37000	20000+	4000	2-3	5-8	65	Clear	BU±15°	B	6
MP 450W/C/BU/UVS/PS	59216	M144/O	45000	100	36000	20000+	3700	2-3	5-8	70	Coated	BU±15°	B	6

Note: * A life rating of 20,000+ hours means that 70% of the lamps initially installed will still be operating after 20,000 hours.

Lamps



Dia. = 4 5/8" (120mm)
MOL = 11 1/2" (292mm)
LCL = 7" (178mm)
Base = E39

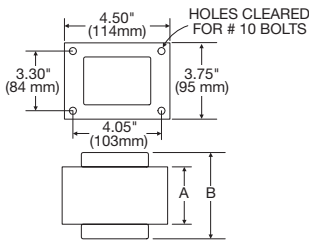


Dia. = 4 5/8" (120mm)
MOL = 11 1/2" (292mm)
LCL = 7" (178mm)
Base = EX39

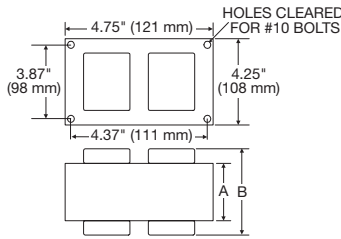
Ballasts		60Hz		ANSI M144		cULus										
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions		Total Wt.	Capacitor	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist.
									A (in)	B (in)	(lbs)	(µfd/Vmin)				(ft)
277	V90U8521	Reactor	485	2.3	C	1.5	B1	1	1.8	3.75	8.1	22/280	A2	Dry	D	2
120/208/240/277	V90D8530	HX-HPF	505	7/3.6/3.5/3	B/A/D/D	1.5	Y	2	2.4	3.6	14	30/280	A7	Dry	D	2
120/277/347	V90J8530	HX-HPF	510	6.15/2.3/2.2	D/B/D	1.5	A1	2	2.6	4.5	14	30/280	A7	Dry	D	2
480/120T	V90Y8530T	HX-HPF	515	1.75	D	1.5	W1	2	2.6	4.25	14	30/280	A7	Dry	D	2

Ballasts

① Reactor- 3 3/4 x 4 1/2 Core



② HX and CWA- 4x4 Core



Options

Add Suffix for Options:
C - With Capacitor (Standard)
K - With Capacitor and Bracket Kit
B - With Welded Bracket, No Cap
Ballast Bracket and Kit Figures are located on Page #104
Capacitor and Ignitor Figures are located on Page #103
Wiring Diagrams are located on Page #60

575 Watt

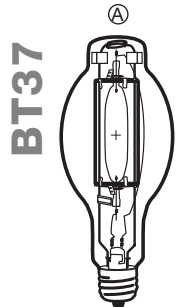
UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-O Mogul Base Lamps (ED37)

Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours*	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
MP 575W/V/BT37/PS	60023*	M178/O	60000	104	48000	20000+	4000	3-5	8-12	65	Clear	BU±15°	A	6
MP 575W/C/V/BT37/PS	60020*	M178/O	57000	99	45000	20000+	3700	3-5	8-12	70	Coated	BU±15°	A	6

Note: * New! Contact manufacturer for product availability.

Lamps



Dia. = 4 5/8" (120mm)
 MOL = 11 1/2" (292mm)
 LCL = 7" (178mm)
 Base = EX39

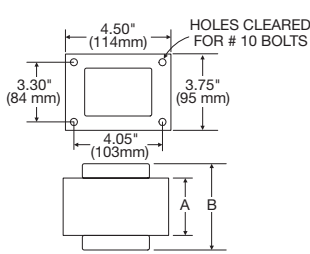
Ballasts 60Hz PRELIMINARY

Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in) B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
277	V90U5521	Reactor	620	3.15	C	1.5	B1	1	2.05 3.85	8.0	30/280	A2	Dry	D	2
120/208/240/277	V90D5530	HX	635	8.75/4.70/4.45/3.80	B/A/C/C	1.5	Y	2	3.25 4.90	18.0	38/330	A14	Dry	D	2
120/277/347	V90J5530	HX	635	9.75/3.70/3.20	D/C/D	1.5	A1	2	3.25 4.90	18.0	38/330	A14	Dry	D	2
480	V90Y5530T	HX	645	2.30	D	1.5	W1	2	3.25 4.90	18.5	38/330	A14	Dry	D	2

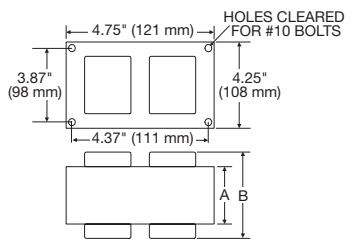
Note: * New! Contact manufacturer for product availability.

Ballasts

① Reactor- 3/4 x 4 1/2 Core



② HX 4x4 Core



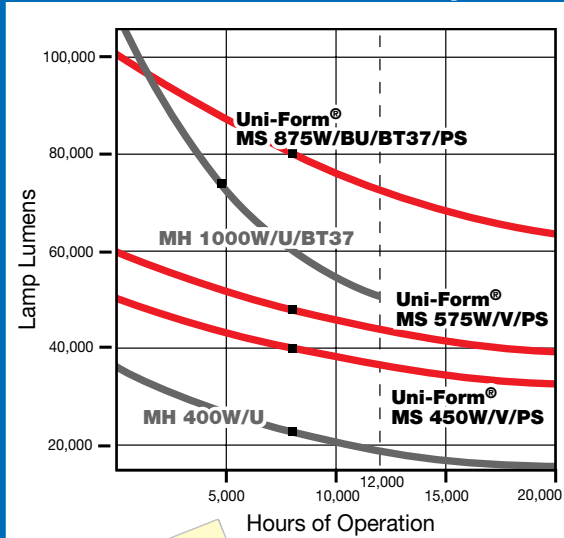
Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap
 Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

Super Site Lighting Systems

UNI-FORM® PULSE START METAL HALIDE LIGHTING SYSTEMS

Lumen Maintenance Comparison



VENTURE'S 875W HAS THE LONGEST LIFE OF ANY HIGH WATT SYSTEM



450 Watt

- Superior life and lumen maintenance! 50,000 initial lumens
- White light output equal to a 400 watt HPS lamp with better color rendition
- 74% more mean lumens compared to standard 400W
- Long life: 20,000+ hours

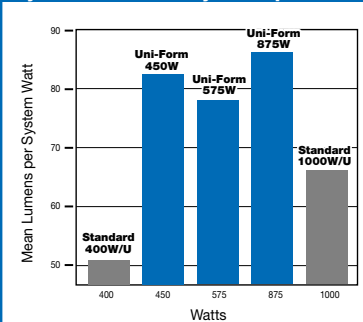
575 Watt

- 60,000 initial lumens
- Twice the mean lumens of a standard 400W metal halide lamp
- Long life: 20,000+ hours
- Matching lamp and ballast system
- Brightest lamp in its class

875 Watt

- The ultimate replacement for a standard 1000 watt metal halide system!
- Save up to 155 watts per luminaire
- High lumen output: 100,000 lumens - 115 lamp lumens per watt
- Horizontal and base-up versions available
- Shrouded MP 875W/BU lamps; 2005 NEC compliant rated ANSI Type-O
- Available with energy efficient 875 Watt 480V Opti-Wave® and CWA ballasts
- Long life: 20,000+ hours

System Efficiency Comparison



UP TO 57% INCREASE IN SYSTEM EFFICIENCY!

875 Watt

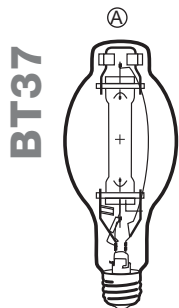
UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-E		Mogul Base Lamps (BT37)												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours*	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Case Qty
MS 875W/BU/BT37/PS	22619	M166/E	100000	114	80000	20000+	4000	3-5	8-12	65	Clear	BU±15°	A	6
MS 875W/BD/BT37/PS	35426	M166/E	100000	114	80000	20000+	4000	3-5	8-12	65	Clear	BD±15°	A	6
MS 875W/HOR/BT37/PS**	33759	M166/E	95000	109	76000	12000	4000	3-5	8-12	65	Clear	HOR±45°	B	6

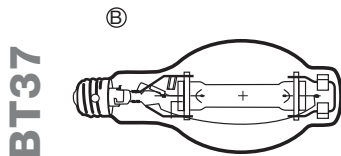
ANSI Type-O		Mogul Base Lamps (BT37)												
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours*	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Case Qty
MP 875W/BU/BT37/PS	58953	M166/O	95000	109	76000	20000+	4000	3-5	8-12	65	Clear	BU±15°	C	6
MP 875W/C/BU/BT37/PS	41686	M166/O	90000	103	72000	20000+	3700	3-5	8-12	70	Coated	BU±15°	C	6

Note: * A life rating of 20,000+ hours means that 70% of the lamps initially installed will still be operating after 20,000 hours.
 ** Permitted rotation about horizontal lamp axis ±15°.

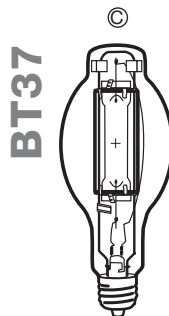
Lamps



Dia. = 4 5/8" (120mm)
 MOL = 11 1/2" (292mm)
 LCL = 7" (178mm)
 Base = E39



Dia. = 4 5/8" (120mm)
 MOL = 11 1/2" (292mm)
 LCL = 7" (178mm)
 Base = EP39 (POMB)



Dia. = 4 5/8" (120mm)
 MOL = 11 1/2" (292mm)
 LCL = 7" (178mm)
 Base = EX39

SPECIFY
 VENTURE'S MP
 875W FOR ANSI
 TYPE-O LUMINAIRE
 PROTECTION

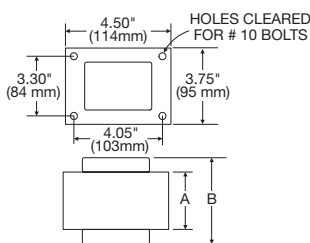


Venture's MP 875 watt lamp was accepted into the 2005 IESNA Progress Report, which recognizes new products that provide a unique and significant advancement to the art and science of lighting.

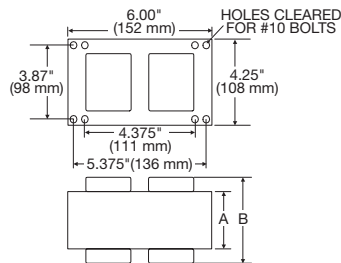
Ballasts		60Hz		ANSI M166												
Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in)	B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
480	V90Y8620	Reactor	925	2.75	C	1.5	B1	1	3.30	5.2	13.5	15/480	B9	Oil	F	5
120/208/240/277	V90D8611	CWA	940	8.0/4.5/4.0/3.45	B/A/A/A	1.6	E	2	2.8	4.8	21	22/460	B12	Oil	F	10
120/277/347	V90J8611	CWA	940	8.0/3.45/2.75	A/A/A	1.6	K	2	2.95	4.95	22	22/460	B12	Oil	F	10

Ballasts

① Reactor- 3 3/4 x 4 1/2 Core



② CWA- 4x6 Core



Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap

Ballast Bracket and Kit Figures are located on Page #104

Capacitor and Ignitor Figures are located on Page #103

Wiring Diagrams are located on Page #60

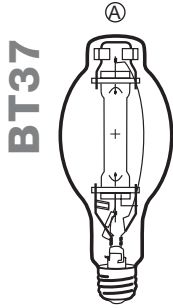
1000 Watt

UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-E Mogul Base Lamps

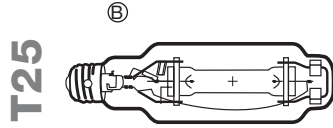
Lamp Description	Product No.	ANSI Code	Initial Lumens	Lumens Per Watt	Mean Lumens	Avg. Life Hours	CCT (K)	Warm-Up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Case Fig.	Qty
MS 1000W/BU/BT37/PS	71722	M141/E	115000	115	86000	15000	4000	3-5	8-12	65	Clear	BU±15°	A	6
MS 1000W/HOR/T25/PS*	49111	M141/E	110000	110	77000	5000	3400	3-5	10-15	65	Clear	HOR±45°	B	6

Lamps



BT37

Dia. = 4 5/8" (120mm)
 MOL = 11 1/2" (292mm)
 LCL = 7" (178mm)
 Base = E39



T25

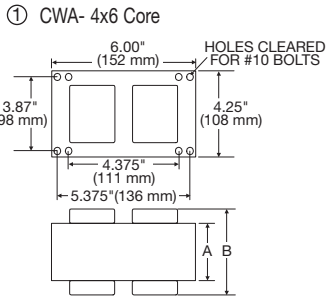
Dia. = 3 1/8" (79mm)
 MOL = 11 1/2" (292mm)
 LCL = 7" (178mm)
 Base = EP39 (POMB)

* Permitted rotation about horizontal lamp axis ±15°.

Ballasts 60Hz ANSI M141

Input Voltage	Product No.	Circuit Type	Input Watts	Max. Line Current	UL Coil Rise Code	Crest Factor	Wiring Diag.	Fig.	Dimensions A (in)	B (in)	Total Wt. (lbs)	Capacitor (µfd/Vmin)	Cap. Fig.	Cap. Type	Ign. Fig.	Max. Dist. (ft)
120/208/240/277	V90D7810	CWA	1080	9.0/5.2/4.5/3.9	D/A/B/B	1.6	E	1	2.8	4.8	21	24/480	B12	Oil	F	15
120/277/347	V90J7810	CWA	1080	9.0/3.9/3.15	D/B/A	1.6	K	1	2.9	4.95	21.5	24/480	B12	Oil	F	5
480/120T	V90Y7810T	CWA	1080	2.25	D	1.6	S1	1	2.82	4.85	21	24/480	B12	Oil	F	20

Ballasts



Options

Add Suffix for Options:
 C - With Capacitor (Standard)
 K - With Capacitor and Bracket Kit
 B - With Welded Bracket, No Cap
 Ballast Bracket and Kit Figures are located on Page #104
 Capacitor and Ignitor Figures are located on Page #103
 Wiring Diagrams are located on Page #60

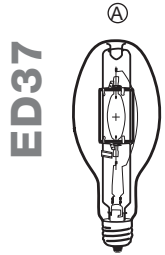
Natural White® 950 Series

UNI-FORM™ PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-O Mogul Base Lamps (ED37) for Operation on Electronic Ballasts UVShield®

Watts	Lamp Description	Product No.	ANSI Code	Effective Lumens ¹	Eff. Mean Lumens ²	Avg. Life Hours ³	CCT (K)	Warm-up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
320	MP 320W/BU/EL/UVS/PS/950	28712*	M__/O	26500	24000	20000++	5000	2-3	5-8	90+	Clear	BU±15°	A	6
320	MP 320W/C/BU/EL/UVS/PS/950	35698*	M__/O	25000	22500	20000++	5000	2-3	5-8	90+	Coated	BU±15°	A	6
350	MP 350W/BU/EL/UVS/PS/950	62584*	M__/O	29500	26500	20000++	5000	2-3	5-8	90+	Clear	BU±15°	A	6
350	MP 350W/C/BU/EL/UVS/PS/950	71035*	M__/O	28000	25000	20000++	5000	2-3	5-8	90+	Coated	BU±15°	A	6
400	MP 400W/BU/EL/UVS/PS/950	71564*	M__/O	34000	30500	20000++	5000	2-3	5-8	90+	Clear	BU±15°	A	6
400	MP 400W/C/BU/EL/UVS/PS/950	95103*	M__/O	32000	29000	20000++	5000	2-3	5-8	90+	Coated	BU±15°	A	6

Lamps



ED37

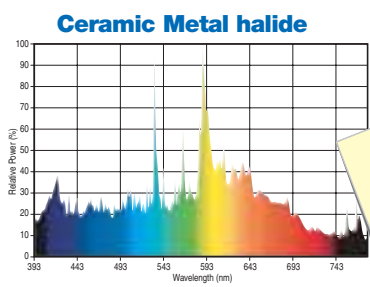
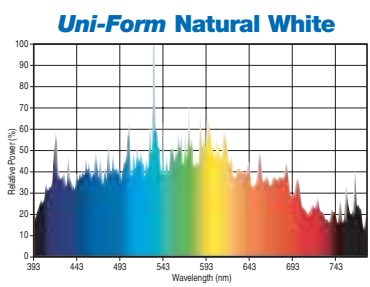


Dia. = 4 5/8" (120mm)
 MOL = 11 1/2" (292mm)
 LCL = 7" (178mm)
 Base = EX39

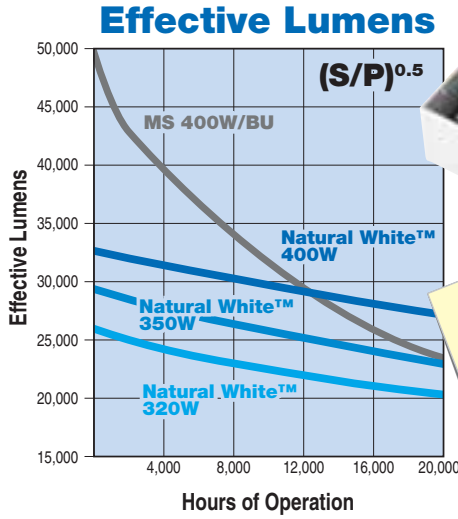
Venture's 350 and 320 watt *Natural White* electronic lamps were accepted into the 2005 IESNA Progress Report, which recognizes new products that provide a unique and significant advancement to the art and science of lighting.

- Notes:**
- 1 Effective lumens are scotopically enhanced for indoor lighting - (S/P)^{0.5} = 1.13 relative to standard 4000K lamps
 - 2 Mean lumen rating of 90% is based upon operation on Venture's Opti-E™ electronic ballasts.
 - 3 A life rating of 20,000++ hours means that at least 80% of the lamps initially installed will still be operating after 20,000 hours.
- * New! Contact manufacturer for product availability.

*For Electronic Ballasts
 Details, See Page #51*



COLOR BETTER THAN CERAMIC METAL HALIDE



90% MEAN LUMENS A FIRST IN THE INDUSTRY!

With *Natural White* lamps, blues are true blue and reds are more vibrant; whites are whiter and skin tones look like they're under sunlight. The light from our *Natural White* lamps is closest to natural sunlight.



Ceramic metal halide
 4000K - 90 CRI



Natural White®
 5000K - 90+ CRI



Compact Fluorescent
 3500K - 80 CRI

Natural White[®] 950 Series

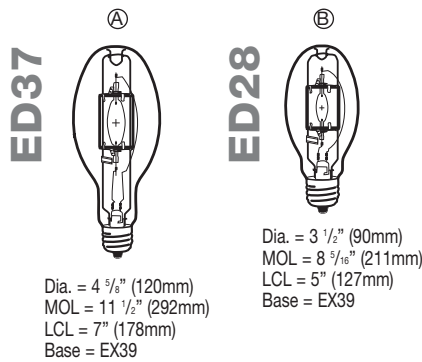
UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

ANSI Type-O		Mogul Base Lamps (ED37) for Operation on Magnetic Ballasts									UVShield [®]			
Watts	Lamp Description	Product No.	ANSI Code	Effective Lumens ¹	Mean Lumens ²	Avg. Life Hours ³	CCT (K)	Warm-up (Min)	Restrike (Min)	CRI	Finish	Oper. Pos.	Fig.	Case Qty
250	MP 250W/BU/UVS/PS/EM/950	19523*	M153/O	18500	16500	20000+	5000	2-3	5-8	90+	Clear	BU±15°	A	15
320	MP 320W/BU/ED28/UVS/PS/EM/950	98530*	M154/O	23500	21000	20000+	5000	2-3	5-8	90+	Clear	BU±15°	A	12
320	MP 320W/BU/ED37/UVS/PS/EM/950	98520*	M154/O	23500	21000	20000+	5000	2-3	5-8	90+	Clear	BU±15°	B	6
350	MP 350W/BU/ED28/UVS/PS/EM/950	33149	M131/O	27000	24000	20000+	5000	2-3	5-8	90+	Clear	BU±15°	A	12
350	MP 350W/BU/ED37/UVS/PS/EM/950	51628	M131/O	27000	24000	20000+	5000	2-3	5-8	90+	Clear	BU±15°	B	6
400	MP 400W/BU/ED28/UVS/PS/EM/950	72315	M155/O	31500	28500	20000+	5000	2-3	5-8	90+	Clear	BU±15°	A	12
400	MP 400W/BU/ED37/UVS/PS/EM/950	57129	M155/O	31500	28500	20000+	5000	2-3	5-8	90+	Clear	BU±15°	B	6
775	MP 775W/BU/BT37/PS/950	24983**	M___/O	70000	63000	20000+	5000	2-3	5-8	90+	Clear	BU±15°	C	6

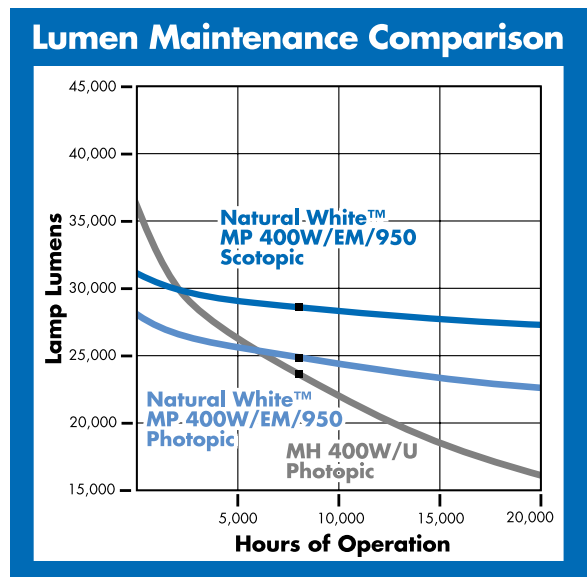
Notes: On CWA ballasts, mean lumens may be lower

** Product is in development, please contact Venture Lighting for product availability

Lamps



- Notes:**
- 1 Effective lumens are scotopically enhanced for indoor lighting; (S/P)^{0.5} = 1.13 relative to standard 4000K lamps
 - 2 Mean lumen rating of 90% is based upon operation on Venture Opti-Wave[®] ballasts.
 - 3 A life rating of 20,000+ hours means that at least 70% of the lamps initially installed will still be operating after 20,000 hours.
- * New! Contact manufacturer for product availability.



Wiring Diagrams

UNI-FORM PULSE START METAL HALIDE LIGHTING SYSTEMS

Introduction

Wiring diagrams for all Venture® Uni-Form® ballast products are provided on this page. The ballast data tables indicate the reference letter corresponding to the correct diagram

for each ballast product. Refer to the table for the required ballast before referencing any diagram.

The wiring diagram is the blueprint for the ballast circuitry, including the input supply voltage and grounding methods. A ground

connection must be made to all ballasts to avoid shock hazard, personal injury or damage to the luminaire or installation. Ballast installations and groundings should be made in accordance with all applicable government codes and regulations where required.

