

## SERIES TWS TOWER SECTOR




TWS  
SECTOR

### Your Choice

Quick Assembly  
(No Tools!)

Continuous light TWS-F  
Flashing light TWS-L

#### ALL WITH OPTIONAL

- Filament or Led Bulb
- Xenon Bulb
- LED INTEGRATED
- AND/OR
- Add a horn  with 32 sounds
- IP54 & IP65
- NEMA 4/4X



BLACK  
OPTION  
AVAILABLE



## SERIES "LD" TWS The "LD" OPTION LED INTEGRATED



IP66 for  
NEMA 4 & 4X

OR  
NEMA 1, 12, 3R  
Applications



"LD-TWS"

- Vibration Resistant  
(LED Mounted in Epoxy)
- Long LED Life
- Low Power
- Unparalleled Light Output
- Hose Test / Water Tight / Dust Tight  
(NEMA 4 / 4X / 12 / 3R)

## Other Sirena "LD" Styles CE

ALL "LD" LED INTEGRATED

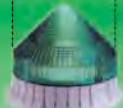
### LIGHTS AND HORNS

Beacons  
"LD"-CTL  
(pg. S 13)

2.6" Dia.



5.2" Dia.



Micro Beacons

"LD"-MC  
(pg. S 14)

2.6" Dia.



3" Dia.



Beacons  
"LD"-OVO OVOLUX  
(pg. S 14)

3" Dia.



"LD" Rotating  
Beacon  
(pg. S 15)



Light Bar  
"LD"-LN  
(pg. S 15)

# SIRENA

**TWS-BC WIRING** (base/cap module) Page 235

**Mechanical**

Degree of protection: **IP66**  
 Operating temperature: -22°F+140°F  
 Recommended wire size: .5-2.5mm  
 Cover lock ring tightening torque: Nm 4 (Kgm 0.4)  
 Terminal tightening torque: Nm 0.5 (Kgm 0.05)

**Electrical**

Voltage: 240 maximum

**Materials**

Housing/cover/lockring: Polycarbonate grey Ral 7035  
 Gaskets: EPDM  
 Screws: Zinc coated steel  
 Base printed circuit: FR4  
 Terminal board: 6 way, PA 6.6  
 Cable clamp: Nylon 6.6

**TWS-A** (horn module) Page 238

**Mechanical**

TWS-A (IP54) NEMA 12  
 Degree of protection: TWS-A - IP65 - NEMA 4, 4X  
 TWS-AM (IP54) NEMA 12

Operating temperature: -22°F+140°F  
 Cover lock ring tightening torque: Nm 4 (Kgm 0.4)

**Electrical**

Voltage: 12/24V AC/DC, 110/240V AC

**mA:** 2.7 (12V), 6 (24V), 4 (110V), 8.5 (240V)

**Materials**

Housing/lockring: Polycarbonate grey Ral 7035  
 Gaskets: EPDM  
 Screws: Zinc coated steel  
 Vertical printed circuit: FR4

**dB Ratings @ 1M:** 76 (12V), 82 (24V)  
 83 (110V), 86 (240V)

**TWS-F/L/X** (light modules) Pages 235,236

**Mechanical**

Degree of protection: **IP66, NEMA 4/4X**  
 Operating temperature: F, L (-22°+140°F) x (+14°-122°F)  
 Cover lock ring tightening torque: Nm 4 (Kgm 0.4)

**Electrical**

24 Volt to 240 Volt, see page S 6

150 ± 20 flashes per minute, see page S 6

**Materials**

Lens: Polycarbonate  
 Light separator, lampholder & lockring: Ral 7035  
 Gaskets: EPDM  
 Screws: Zinc coated steel  
 Vertical printed circuit: FR4

**MOUNTING ACCESSORIES** Page 239

**Mechanical**

Tightening torque: Nm 0.5 (Kgm 0.05)

**Materials**

Housing: Polycarbonate grey Ral 7035  
 Base gaskets/O-rings: EPDM

**RATINGS**

IP66, NEMA 4X



totally protected  
against dust

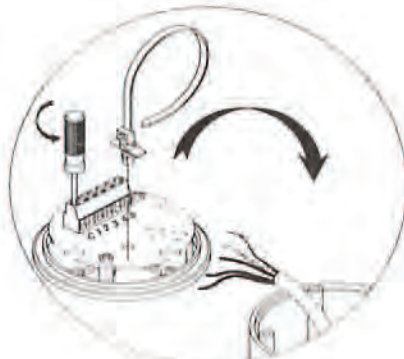


protected against  
strong jets of water  
from all directions

U.L. LISTED 



Quick Assembly



Base Wiring #TWS-BC



Circuit



Selected Mounting  
Options

**COMPLETE TOWER (TWS) - ORDER INFORMATION**

Wiring Base with Cover



#TWS-BC

+

- ◆ # LD-TWS  
LD Integrated  
(see below pg.256)
- ◆ # TWS  
Tower Sector less bulb (pg. 239)  
Add filament bulb or LED bulb  
(pg. 257)

Select Tower Sectors / Options



- ◆ XENON Sector  
(pg. 258)
- ◆ Flashing Beacon  
can be added to stack (pg. 265)



+

Mounting Options



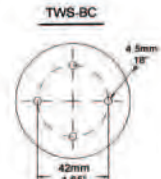
(pg. 243)



**BASE & CAP MODULE**

Required for use with light modules and / or horn.

Part Number	Description	List Price
TWS-BC	Base Module/cap	\$47.00



**TOWER SECTORS LD-TWS**

**LED INTEGRATED SECTORS  
LD-TWS**



Black housing is also available. Contact factory.



All LED's are Included

**Continuous Lights**

Part Number	Lens Color	List Price
LD-TWS-F2-*	amber	\$66.00
LD-TWS-F3-*	red	\$66.00
LD-TWS-F5-*	yellow	\$66.00
LD-TWS-F4-*	green	\$104.00
LD-TWS-F1-*	blue	\$104.00
LD-TWS-F6-*	clear	\$130.00

Number Example:  
LD-TWS-F1-GN

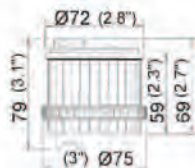


All LED's are Included

**Flashing Lights**

Part Number	Lens Color	List Price
LD-TWS-L2-*	amber	\$122.00
LD-TWS-L3-*	red	\$122.00
LD-TWS-L5-*	yellow	\$122.00
LD-TWS-L4-*	green	\$163.00
LD-TWS-L1-*	blue	\$163.00
LD-TWS-L6-*	clear	\$186.00

\* Must specify voltage suffix...  
\*GN (24VAC/DC), \*O (48VAC/DC),  
\*A (110VAC), \*C (240VAC)



	V	24		48		110		240	
		mA	90	65	20	20	20	20	
●●●●	mA	90	65	20	20	20	20	20	20
●●○●	mA	80	65	20	20	20	20	20	20

Power used per color.

150 ± 20 Flashes per min.

Temperature:  
°C -30 to +50°C

Gaskets:  
EPDM

Housing:  
Polycarbonate RAL7035

Discount Schedule TS

**TOWER SECTOR OPTIONS = (NOT LED INTEGRATED)**

**For use with: 1. Filament Bulbs Option (Not type LD, not LED Integrated)**  
**2. Separate LED Bulbs Option (Not type LD, not LED Integrated)**

The lens/light modules can be stacked in any configuration up to 5, or 4 with optional acoustic horn. For example, the top position could be a red xenon module, followed by an amber flashing module in the middle with a green continuous module on the bottom. If require, an acoustic horn module can be added to the top position.



<b>Continuous Light Modules</b>		
Part Number	Lens Color	List Price
TWS-F2	amber	\$30.00
TWS-F3	red	\$30.00
TWS-F5	yellow	\$30.00
TWS-F4	green	\$30.00
TWS-F1	blue	\$30.00
TWS-F6	clear	\$30.00

*Bulbs not included.*

<b>Flashing Light Modules</b>		
Part Number	Lens Color	List Price
TWS-L2	amber	\$87.00
TWS-L3	red	\$87.00
TWS-L5	yellow	\$87.00
TWS-L4	green	\$87.00
TWS-L1	blue	\$87.00
TWS-L6	clear	\$87.00

*Flashes/Min. 110 ± 20*

**FOR USE WITH INCANDESCENT BULB 5W OR LED BULB (see below).**

**INCANDESCENT BULBS or SEPARATE LED BULBS**

**(Not for LED Integrated Sector Modules)**

Purchase as separate items or include with above Sector Module.

**Filament Type Bulb**

\* Add voltage suffix to above module.  
Add \$4.00 List

*\* Must specify voltage suffix...*  
 \*M (12VAC/DC), \*G (24VAC), \*N (24VDC),  
 \*A (110VAC), \*C (240VAC)

**Separate Filament Bulb**

Part Number	Bulb Type	List Price
TWS-BA15D-*	Incandescent (5 watt)	\$4.00

Part Number	Bulb Type	List Price
TWS-LRX2J	Xenon	\$60.00

*Above xenon part number covers all voltage ranges, 24-240V, when used in Xenon TWS-X Sectors on page237 (above).*

**LED Type Bulb**

\* Add voltage suffix to above module.  
Add extra cost per below.

*\* Must specify voltage suffix...*  
 \*LM (12VAC/DC), \*LG (24VAC), \*LN (24VDC),  
 \*LA (110VAC), \*LC (240VAC/DC)  
 Contact factory on availability of other voltages.

**Separate Led Bulb**

Part Number	Bulb Type	List Price
TWS-LED1-*	blue led	\$60.00
TWS-LED2-*	amber led	\$60.00
TWS-LED3-*	red led	\$60.00
TWS-LED4-*	green led	\$60.00
TWS-LED6-*	clear led	\$60.00

*Not usable with Series LD LED Integrated.*

### Lens / Light Stack Modules

Xenon strobe flash sector

Part Number	Lens Color	List Price
TWS-X1-*	blue	\$146.00
TWS-X2-*	amber	\$130.00
TWS-X3-*	red	\$130.00
TWS-X4-*	green	\$130.00
TWS-X5-*	yellow	\$130.00
TWS-X6-*	clear	\$146.00

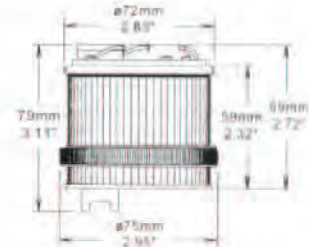
**\* Must specify voltage suffix...**  
 \*G (24VAC), \*N (24VDC),  
 \*A (110VAC), \*C (240VAC)  
 Xenon not available in  
 suffix M (12VAC/DC)



Xenon Tube  
Included.

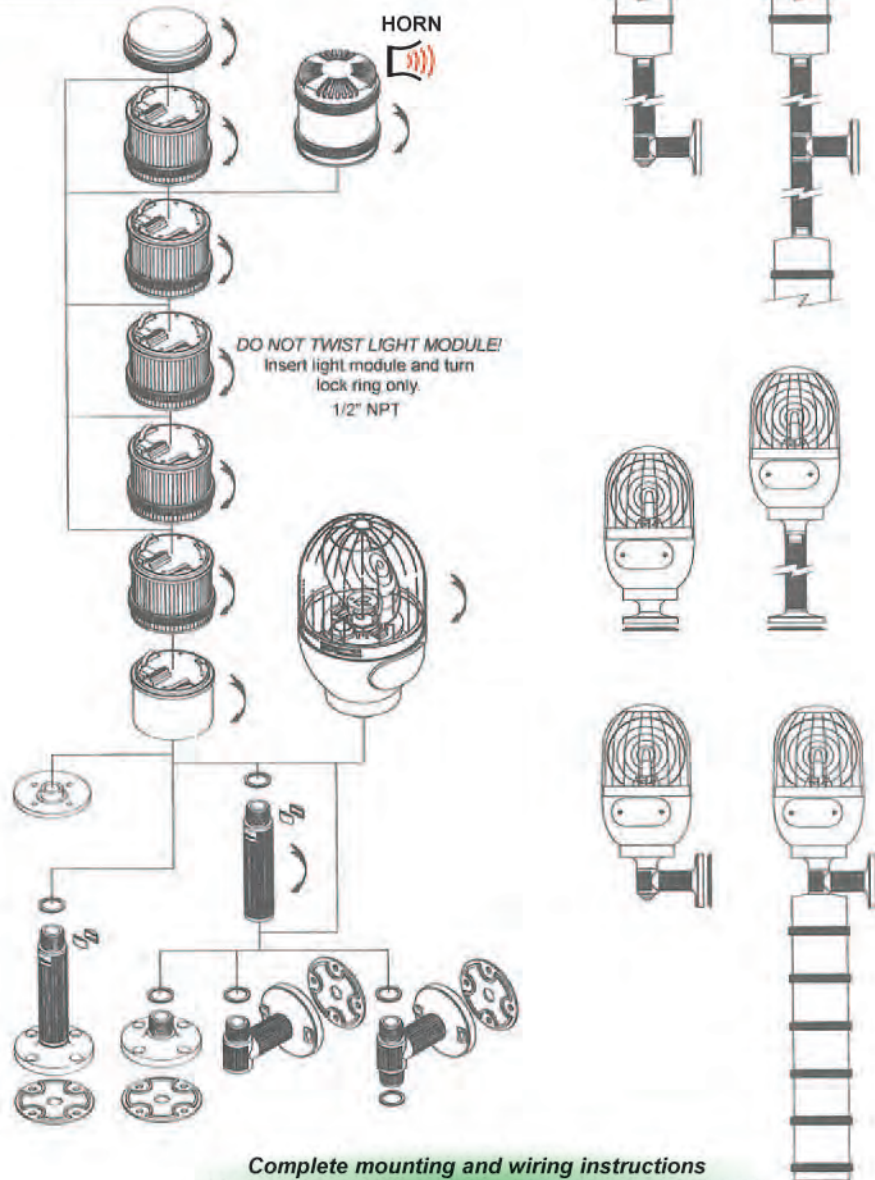


Xenon Module can be placed in any  
location in the Tower Sector stack.



Requires base cup module  
found on page 256.

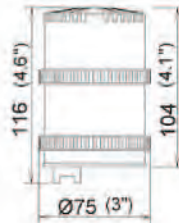
### Assembly & Mounting



Complete mounting and wiring instructions  
shipped with each TWS-BC base and module ordered.



**IP54  
NEMA 12**



V DC	12 / 24 / 48	-	-	-	-
V AC		110 / 230 / 240			
mA	2.7	6	13	4	8
Hz	2500 (± 100 Hz)				

Horns require base cup module on p.257 for connection.  
°C -30, +60°C

Part Number	List Price
TWS-A-*	\$82.00

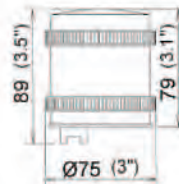
\* **Must specify voltage suffix...**  
\*GN (12 to 48 VAC/DC)  
\*A (110 to 240 VAC)

**DIP SWITCH - 6 SOUNDS**

	SLOW INTERMITTENT SOUND REDUCED OUTPUT	T ON 310 mS T OFF 260 mS	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 72 77 79 76 78 78		FAST INTERMITTENT SOUND MAXIMUM OUTPUT	T ON 70 mS T OFF 50 mS	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 78 85 87 81 85 85
	SLOW INTERMITTENT SOUND MAXIMUM OUTPUT	T ON 310 mS T OFF 260 mS	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 77 84 86 81 85 85		CONTINUOUS SOUND REDUCED OUTPUT	-	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 75 81 83 75 80 81
	FAST INTERMITTENT SOUND REDUCED OUTPUT	T ON 70 mS T OFF 50 mS	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 74 79 81 76 78 79		CONTINUOUS SOUND MAXIMUM OUTPUT	-	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 79 85 89 81 86 87



**IP65  
NEMA 4, 4X**



V DC	12 / 24 / 48	-	-	-	
V AC		110 / 230 / 240			
mA	2.7	6	13	4	
Hz	2500 (± 100 Hz)				

Horns require base cup module on p.257 for connection.

°C -30, +60°C

Part Number	List Price
TWS-A- IP65-*	\$87.00

\* **Must specify voltage suffix...**  
\*GN (12 to 48 VAC/DC)  
\*A (110 to 240 VAC)

**DIP SWITCH**

	SLOW INTERMITTENT SOUND REDUCED OUTPUT	T ON 310 mS T OFF 260 mS	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 64 69 71 68 70 70		FAST INTERMITTENT SOUND MAXIMUM OUTPUT	T ON 70 mS T OFF 50 mS	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 70 77 79 73 77 77
	SLOW INTERMITTENT SOUND MAXIMUM OUTPUT	T ON 310 mS T OFF 260 mS	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 69 76 78 73 77 77		CONTINUOUS SOUND REDUCED OUTPUT	-	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 67 73 75 67 72 73
	FAST INTERMITTENT SOUND REDUCED OUTPUT	T ON 70 mS T OFF 50 mS	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 66 71 73 68 70 71		CONTINUOUS SOUND MAXIMUM OUTPUT	-	V  12 24 48 - - - V  12 24 48 110 230 240 dB(A)1m 71 77 81 73 78 79



**IP54  
NEMA 12**



V DC	12/24	-	-	-	
V AC		48	110	230/240	
mA	see table next page.				
Hz	see table next page.				

Horns require base cup module on p.257 for connection.

°C -30, +60°C

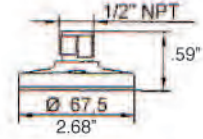
Part Number	List Price
TWS-AM-*	12/24V \$160.00 110/240V \$160.00

\* **Must specify voltage suffix...**  
\*GN (12 to 24VAC/DC), \*O (48VAC),  
\*A (110VAC), \*C (240VAC)

**FOOT - with O-Ring and base gasket** Use with Series TWS and OVOLUX



Part Number	Description	List Price
TWS-BS	Base with gaskets	\$11.00

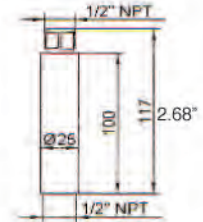


**EXTENSION STEM - with O-Ring and two removable snap-shut stoppers**



Part Number	Description	List Price
TWS-PR	4" extension stem	\$9.00

Multiple extension pieces may be coupled to desired length.



**1 THREAD WALL SUPPORT - with O-Ring and base gasket**



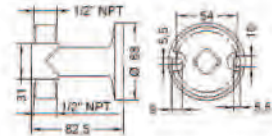
Part Number	Description	List Price
TWS-BP1	Wall mount, single	\$17.00



**2 THREAD WALL SUPPORT - with O-Ring and base gasket**



Part Number	Description	List Price
TWS-BP2	Wall mount, double	\$18.00



**1 PR + 1BS - with O-Ring, base gasket and two removable snap-shut stoppers**

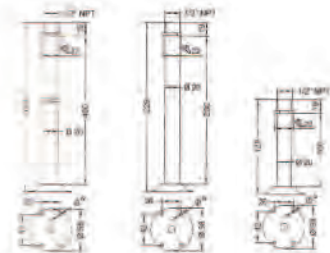


Part Number	Description	List Price
TWS-KIT	Base & extension stem	\$21.00



**Stainless Steel Extension Stem with O-Ring**

Part Number	Description	List Price
TWS-SSE1	Stainless steel extension w/base	\$42.00
TWS-SSE2	Stainless steel extension w/base	\$50.00
TWS-SSE3	Stainless steel extension w/base	\$65.00



**PVC Extension Stem with Base**

Part Number	Description	List Price
TWS-J-12	12" extension w/base	\$12.00
TWS-J-24	24" extension w/base	\$18.00
TWS-J-36	36" extension w/base	\$25.00
TWS-J-90D	90° elbow	\$ 9.00

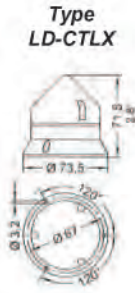


**Flexible Steel Extension Stem**

Part Number	N TWS PF2
Description	Flexible Steel Extension stem
List Price	\$74.00



**FLASHING BEACONS with LED's Integrated NEMA 12/13/3R (IP54) Rain Tight / Dust Tight Heavy Duty Oil Tight Design Beacons & Horns**

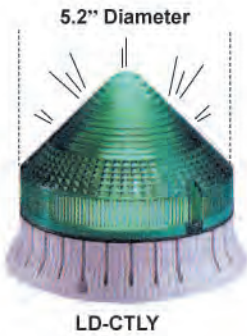


2.6" Diameter		
Part Number	Lens Color	List Price 24V/110V
LD-CTLX-2A-*	amber	\$120.00
LD-CTLX-3R-*	red	\$120.00
LD-CTLX-5Y-*	yellow	\$120.00
LD-CTLX-4G-*	green	\$123.00
LD-CTLX-1B-*	blue	\$123.00
LD-CTLX-6C-*	clear	\$139.00

	VDC	24	48	-	-
	VAC				110
mA		70	65	20	20
mA		70	70	20	20

Power used per color.

0-150 + 20 Flashes per min.  
°C -30 + 50



5.2" Diameter		
Part Number	Lens Color	List Price 24V/110V
LD-CTLY-2A-*	amber	\$235.00
LD-CTLY-3R-*	red	\$235.00
LD-CTLY-5Y-*	yellow	\$235.00
LD-CTLY-4G-*	green	\$314.00
LD-CTLY-1B-*	blue	\$314.00
LD-CTLY-6C-*	clear	\$359.00

\* Must specify voltage suffix...  
\*GN (24VAC/DC), \*A (110VAC), \*C (240VAC)

	VDC	24	48	-	-
	VAC				110
mA		105	120	20	20
mA		105	95	20	20

Power used per color.

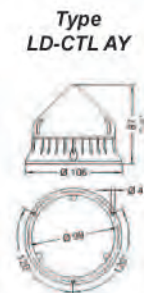
**FLASHING BEACONS with Audio (Horn) all with LED INTEGRATED NEMA 1 (IP30) Heavy Duty**



2.6" Diameter		
Part Number	Lens Color	List Price 24V/110V
LD-CTL AX-2A-*	amber	\$109.00
LD-CTL AX-3R-*	red	\$109.00
LD-CTL AX-5Y-*	yellow	\$109.00
LD-CTL AX-4G-*	green	\$140.00
LD-CTL AX-1B-*	blue	\$140.00
LD-CTL AX-6C-*	clear	\$155.00

	V $\equiv$	24	48	-	-
	V $\sim$				110
mA		70	65	20	20
mA		70	70	20	20
dB(A)1m		65	65	65	65
Hz 3600		F/m 110		F/m 0	

0-150 + 20 Flashes per min.  
°C -30 + 50



5.2" Diameter		
Part Number	Lens Color	List Price 24V/110V
LD-CTLAY-2A-*	amber	\$277.00
LD-CTLAY-3R-*	red	\$277.00
LD-CTLAY-5Y-*	yellow	\$277.00
LD-CTLAY-4G-*	green	\$350.00
LD-CTLAY-1B-*	blue	\$350.00
LD-CTLAY-6C-*	clear	\$401.00

\* Must specify voltage suffix...  
\*GN (24VAC/DC), \*A (110VAC), \*C (240VAC)

	V $\equiv$	24	48	-	-
	V $\sim$				110
mA		70	65	20	20
mA		70	70	20	20
dB(A)1m		65	65	65	65
Hz 3600		F/m 110		F/m 0	



**TYPE LD-OVO / TYPE LD-MICRO  
ALL LED INTEGRATED (per CE)**



**SERIES OVO BEACONS with LED's Integrated NEMA 4/4X/3R/12 (IP65) Water Tight / Dust Tight**

**Heavy Duty Design**



LD-OVO F & L  
(OVOLUX)

For mounting options, see page 261.



"CONTINUOUS"			"FLASHING"	
Part Number	Lens Color	List Price 24V/110V	Part Number	List Price 24V/110V
LD-OVO F-2A-*	amber	\$59.00	LD-OVO L-2A-*	\$119.00
LD-OVO F-3R-*	red	\$61.00	LD-OVO L-3R-*	\$119.00
LD-OVO F-5Y-*	yellow	\$59.00	LD-OVO L-5Y-*	\$119.00
LD-OVO F-4G-*	green	\$95.00	LD-OVO L-4G-*	\$159.00
LD-OVO F-1B-*	blue	\$119.00	LD-OVO L-1B-*	\$159.00
LD-OVO F-6C-*	clear	\$127.00	LD-OVO L-6C-*	\$182.00

**TYPE LD-OVO**  
0-150 ± 20 Flashes per min. / °C -30 + 50

\* **Must specify voltage suffix...**  
\*GN (24VAC/DC)  
\*A (110VAC)  
\*C (240VAC)

**SERIES OVO LIGHT BEACONS with INCANDESCENT BULBS**

"CONTINUOUS"			"FLASHING"	
Part Number	Lens Color	List Price 24V/110V	Part Number	List Price 12V to 24V
OVOLUX-F1-*	blue	\$28.00	OVOLUX-L1-*	\$84.00
OVOLUX-F2-*	amber	\$28.00	OVOLUX-L2-*	\$84.00
OVOLUX-F3-*	red	\$28.00	OVOLUX-L3-*	\$84.00
OVOLUX-F4-*	green	\$28.00	OVOLUX-L4-*	\$84.00
OVOLUX-F5-*	yellow	\$28.00	OVOLUX-L5-*	\$84.00
OVOLUX-F6-*	clear	\$28.00	OVOLUX-L6-*	\$84.00



Filament Bulb

\* **Must specify voltage suffix...**  
\*M (12VDC), \*G/N (24VAC/DC),  
\*A (110VAC), \*C (240VAC)

All pricing includes size BA15 incandescent bulb. For spare BA15, see page 257.  
Mounting options, see page , 258,261.

**LD MICRO FLASHING BEACON with LED INTEGRATED NEMA 3/3R/12/13 (IP54) Heavy Duty Oil Tight**



LD-MC



Part Number	Lens Color	List Price 24V/110V
LD-MC-2A-*	amber	\$98.00
LD-MC-3R-*	red	\$98.00
LD-MC-5Y-*	yellow	\$98.00
LD-MC-4G-*	green	\$125.00
LD-MC-1B-*	blue	\$125.00
LD-MC-6C-*	clear	\$140.00

V	24	48	110	240
mA	90	65	20	20
mA	80	65	20	20

Power used per color.

0-150 ± 20 Flashes per min. / °C -30 + 50

\* **Must specify voltage suffix...**  
\*GN (24VAC/DC), \*A (110VAC),  
\*C (240VAC)

**LD MICRO FLASHING BEACON with AUDIO HORN LED INTEGRATED NEMA 1 (IP30)**



LD-MCA



Part Number	Lens Color	List Price 24V/110V
LD-MCA-2A-*	amber	\$150.00
LD-MCA-3R-*	red	\$150.00
LD-MCA-5Y-*	yellow	\$150.00
LD-MCA-4G-*	green	\$183.00
LD-MCA-1B-*	blue	\$183.00
LD-MCA-6C-*	clear	\$206.00

V	24	48	110	240
mA	70	65	20	20
mA	70	70	20	20
dB(A)1m	65	65	65	65
Hz 3600	F/m 110 F/m 0			

0-150 ± 20 Flashes per min.  
°C -30 + 50

Discount Schedule TS