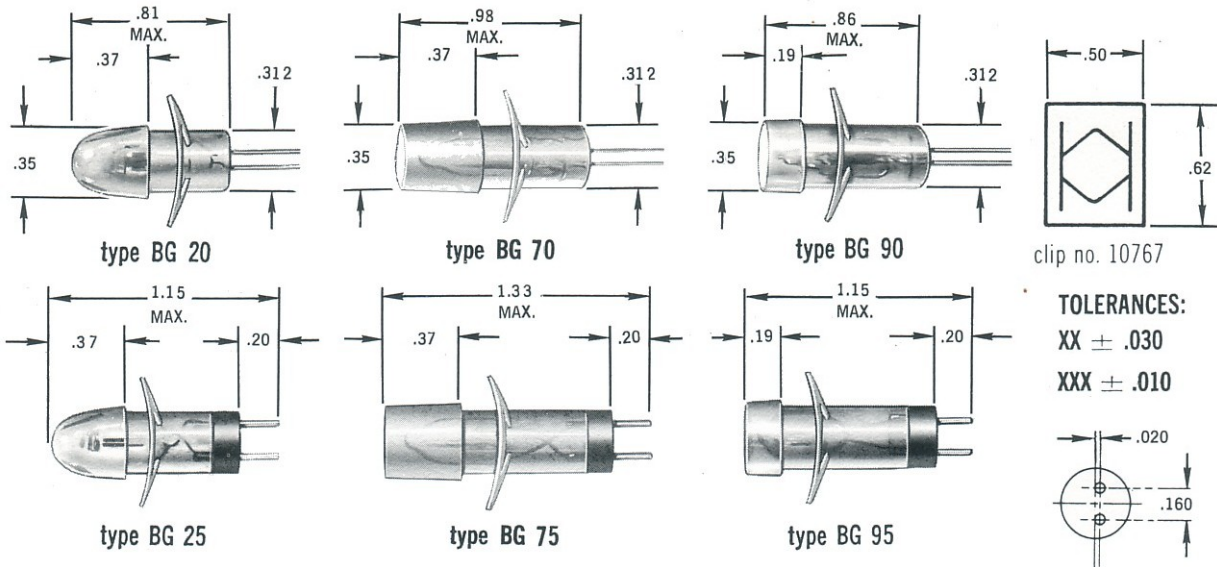


# ELDEMA B-LITES



## EXAMPLE

BG90-RC-NE2E Would be style BG90, red clear lens and NE2H lamp.

The BG20, BG70 and BG90 may be furnished with attached resistor. The style available is listed as the NE2H with 33K resistor which is the recommended combination for 120 volt. Other lamp-resistor combinations obtained on special order in production quantities.

The 2K sockets is a low cost connector for use with the 2 pin B-lites, styles BG25 BG75 and BG95. The socket is of military grade molded material with tin plated solder terminals.

## SPECIFICATIONS

Styles 20,25,70,75,90 & 95

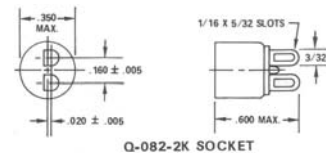
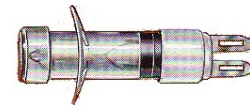
Lens Cap: Injection molded butyrate FED-L-P-349

Neon Lamp: NE2H Type

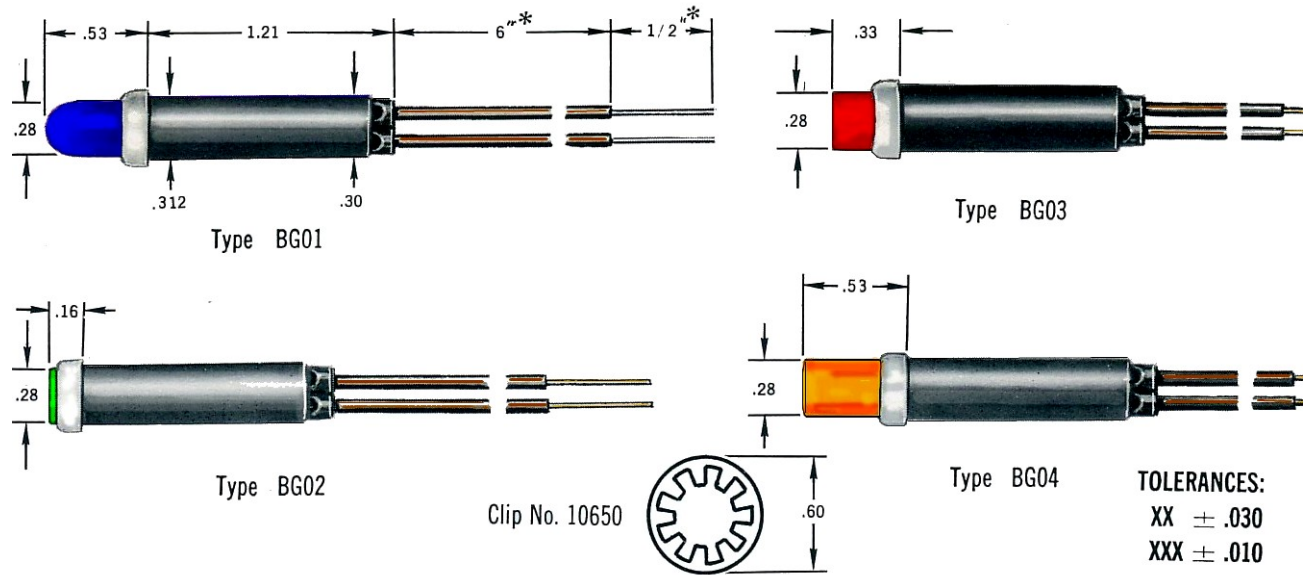
Mounting: Mounts in 5/16" hole in panels up to 1/8 thick with tinnerman clip.

Leads: Approximately 2" wire leads

STYLE	LENS COLOR	LAMP NUMBER	CLIP/SOCKET
<b>BG20</b>	<b>AC-</b> Amber	NE2E NE2V A1C	Order as separate item
<b>BG25</b>	<b>CC-</b> Cloudy	NE2E NE2U A1B	Clip # 10767 furnished
<b>BG70</b>	<b>RC-</b> Red		In bulk with B- Lites
<b>BG75</b>	<b>WC-</b> Water	NE2H-33K= for 110 Volts	
<b>BG90</b>	<b>GC-</b> Green		Socket # 2K separately
<b>BG 95</b>	<b>BC-</b> Blue		Quoted and supplied
	Note: Blue, Green and white Lens colors are not recommended With neon glow lamps	<b>NOTE:</b> Available with LED'S contact ELDEMA	



# ELDEMA B-LITES



Type	Lens Color	Collar color	Lamp Number	CLIP/SOCKET
XX	XX	XXXX	XXXX	Order as a separate item
BG 01	RC-Red Clear	STANDARD	NE2E NE2V A1C	Clip #10650 furnished In bulk with B- lites
BG 02	AC-Amber Clear	S-silver	NE2H NE2U A1B	
BG 03	CC-Cloudy Clear	OPTIONAL	NE2H-033K=for 110 volts	
BG 04	WC- Water Clear	B - Black	NE2H-150K=for 240 volts NE2E-068K=for 90 volt D.C.	
	GC- Green Clear		The BG 02 <b>cannot</b> be Supplied with resistor.	
	BC- Blue Clear		Available with LED'S Contact ELDEMA	

## EXAMPLE:

BG03-RCS-NE2H-033K would be a type BG03  
With a red clear lens, silver collar, an NE-2H lamp  
With a 33K resistor, and standard leads.

## LENS MARKING:

Lens marking may be ordered with any of the flat top lenses  
up to two digits, letters or symbols .187" high. Please specify completely.  
Black legends are standard.

## SPECIFICATIONS-

Styles: 01,02, 03, & 04.

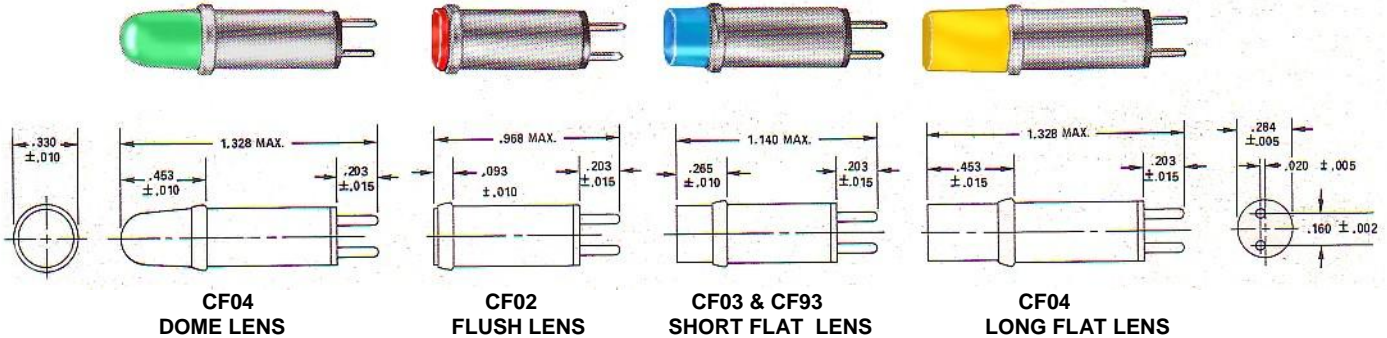
Lens Cap: Injection molded butyrate per Fed-L-P-349  
Collar: Aluminum alloy.  
Case: Injection molded nylon.  
Leads: AWG # 22 tinned copper wire, 7 strand, 1/32" vinyl  
Type U.L. approved insulation, 105 C. Standard color  
is brown, stripped 1/2".  
Standard length is 6"-other lengths on special order.

Mounting: Mounts in a .312" hole in panels up to .375"  
Thick with a spring clip.

# ELDEMA CF SERIES INCANDESCENT C-LITES

Eldema CF Series incandescent C-lites have an unbased lamp packaged inside the cartridge, with connections made to the two pins. The lamps used are the standard T-1-3/4 bulb size or smaller with ratings from 1.35 To 28 volts available. Lens colors in both clear and translucent shades are all standard. The short flat lens style cartridge- CF03, meets MS18235 requirements.

## MATE WITH DH LAMP HOLDERS



### ORDERING INFORMATION

To order Eldema incandescent C – Lites refer to the table at the right and specify Style, Lens Color, Cartridge Finish and Lamp Number.

**EXAMPLE PART NUMBER**  
CF03 – RTS – 2187

### CHOICE OF LENS SHAPE & COLOR

The CF03, short flat lens is the style used in most applications. The long flat lens, CF04 and the dome lens, CF01 are used where wide side visibility is important.

The lens colors for CF incandescent C-Lites are usually the translucent shades except for the lower brilliance lamps which should be used with the clear colors. The translucent lens colors give an even, diffused light over the lens surface.

The transparent lens color (WC- water clear) should be used with the lampholders and screw-on D Series lens caps.

### LAMP SPECIFICATIONS





The lamp specification shown are the lamps manufacturer's rating and are based on average performance under laboratory conditions. The milli ampere MA ratings are nominal values with 10% tolerance at rated voltage operation.



### CF 93 lens style

A fluted lens cap for improved light dispersion on low power Lamps and elimination of "hot spots" on high power lamps is available.

Dimensionally same as **CF03** above

SERIES CF STYLE	LENS COLOR	FINISH	LAMP									
			NUMBR	VOLTS	MA	LIFE (HRS)						
 <b>CF 01</b> DOME	<b>Translucent</b>  AT – Amber BT – Blue GT – Green RT – Red WT – White YT – Yellow  <b>CLEAR</b>  AC – Amber BC – Blue CC – Cloudy GC – Green RC – Red WC – Water clear YC – Yellow	<b>Standard</b> S - clear Anodize  OPTIONAL B – Black Anodize	1728*	1.35	60	5,000						
			1738*	2.7	60	6,000						
			2158*	3.0	15	10,000						
			680	5.0	60	60,000						
			1730	6.0	40	1,000						
			2114	6.0	60	3,000						
			1784	6.0	200	1,000						
			2180	6.0	40	20,000						
			2112	6.3	200	5,000						
			2181	6.3	200	20,000						
 <b>CF 02</b> FLUSH			1869*	10.0	14	100,000						
			2107*	10.0	40	10,000						
			 <b>CF 03 &amp; CF 93</b> SHORT FLAT			2174	12.0	40	10,000			
						1705	14.0	80	1,500			
						2182	14.0	80	15,000			
						4814*	14.0	17	50,000			
						 <b>CF 04</b> LONG FLAT			4818*	18.0	20	20,000
									2102	18.0	40	10,000
									1762	28.0	40	4,000
									2185	28.0	40	20,000
2187	28.0	40							7,000			

\* These Lamps should be used with the clear lens colors only because of their relatively lower light output

STANDARD		FLUTED
CF 03	Becomes	CF 93
CG03	Becomes	CG 93
CR 03	Becomes	CR 93

# ELDEMA CG AND CR SERIES NEON C-LITES

## CR SERIES-NEON LAMP WITH BUILT-IN-RESISTOR CG SERIES-NEON LAMP ONLY

Eldema neon C-lites come in two basic types-CG series with the neon lamp built into the cartridge but requiring an external resistor and CR series, with the lamp and current limiting resistor built into the cartridge. Neon C-Lites only come in clear (transparent) lens colors due to their low light output. The water clear (WC) lens color should be specified when the neon C-Lites is used with a DH lampholder and lens cap. The CR01 conforms to MS18236 and the CR04 to MS18237 requirements



### ORDERING INFORMATION

To order Eldema neon C - Lites refer to The table at right and specify the style Lens color-Cartridge finish and lamp Or lamp/Resistor number.

#### Example Part Number

CG03-RCS-N120  
CR03-WCS-N117

#### CHOICE OF LAMP

High brightness lamps offer the best Indication and require 110 volts AC Or 150 volts DC for their operation. The current is less than 1.5 MA with A 33K resistor in series with the lamp.

The standard brightness lamps require Less than 0.6 MA current and operate On 90 volts DC or 65 volts AC with a 100K resistor in series with the lamp.

The special component lamps are comparable To the standard brightness lamps selected for The firing voltages listed.

#### RECOMMENDED RESISTOR VALUES

The lower the resistor value, the greater The light output but the life rating Decreases. The standard life ratings Is the best compromise for most Applications. Listed below are the Approximate life ratings for operation on 110-125 volts AC and recommended resistor.







#### HIGH BRIGHTNESS LAMPS

Standard life - 25,000 hours - 33K  
Medium life - 3,000 hours - 22K

#### STANDAR BRIGHTNESS LAMPS

Standard life - 15,000 Hrs - 100K  
Medium life - 5,000 Hrs - 56K  
Long Life - 25, 00 Hrs - 150K

The last digit in the Lamp/resistor number Designates the resistor value as follows:  
CG style 0 - (none)  
CR style (1 - 22K, 4 - 56K, 8 -150 K)  
Other resistor values on special order

CG SERIES STYLE	LENS COLOR	FINISH	LAMP NUMBER
 <b>CG01</b> Dome	Clear Colors only  AC - Amber CC - Cloudy RC - Red WC - Water clear YC - Yellow BC - Blue clear GC - Green clear  Cloudy Clear (CC) is the shade of white most suitable for Neon Lamps.	<b>S</b> - Clear Anodize (standard)  <b>B</b> - Black Anodize (special)	<b>Standard Neon Lamps</b> <b>N110</b> - Standard Brightness  <b>N120</b> - High Brightness
 <b>CG93 &amp; CG03</b> Short Flat			<b>Special Component Lamps</b> (available in CG01 and CG04 Only)  <b>N210*</b> - Firing Voltage 72+/- 8 VDC  <b>N220*</b> - Firing Voltage 72+/- 4 VDC  <b>N230*</b> - Firing Voltage 80 VDC Max.
 <b>CG04</b> Long Flat			
CR SERIES STYLE	LENS COLOR	FINISH	LAMP/ RESISTOR NUMBER
 <b>CR01</b> Dome	Same As above	Same As above	STANDARD NEON LAMPS  <b>N114</b> - Standard Brightness Medium Life (56K)  <b>N117</b> - Standard Brightness Standard Life (100K)  <b>N118</b> - Standard Brightness Long life (150K)  <b>N121</b> - High Brightness Medium Life (22K)  <b>N123</b> - High Brightness Standard Life (33K)
 <b>CR93 &amp; CR03</b> Short Flat			
 <b>CR04</b> Long Flat			

\* the special component lamps are longer than the indicator style lamps and require the long CG01 and CG04 lens shape. These lamps are available with a built-in resistor in the long CN series

## ELDEMA CL, CM AND CQ SERIES C-LITES

The incandescent C-lites shown on this page are designed around the Longer length telephone-type lamp bulbs. The extra length of bulb is Required to accommodate sufficient filament to handle voltages up to 120 Volts. This group of C-lites and the mating DL and DM single lampholders Provide rugged, dependable indicators and use a minimum of panel space. The CQ neon series is designed to match with the CM incandescents in The same lampholders.

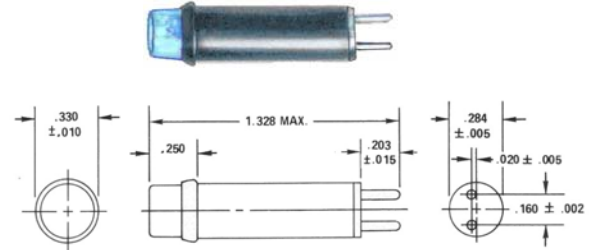
### ELDEMA C-LITES FOR DL SERIES LAMP HOLDERS

#### TYPE CL 24

The CL24 incandescent C-lites mate With the DL series lampholders with the D06, D09 or D25 lens caps. These C-lites package the pilot-lamp style telephone bulbs. Black anodized case. The bulb end is exposed.

MS Number Configurations:  
 CL24-48PS MS18238-1  
 CL24-60PS MS18238-2

ORDERING INFORMATION			
Part Number	Volts	MA	Life (Hrs)
CL24 - 6PS	6.0	140	5,000
CL24 - 12 PS	12.0	170	5,000
CL24 - 24 PS	24.0	73	5,000
CL24 - 28 PS	28.0	40	5,000
CL24 - 48 PS	48.0	53	5,000
CL24 - 60 PS	60.0	50	5,000
CL24 -120PS	120.0	25	5,000



#### PART MARKING

ELDEMA - C - LITE - PART NUMBER - VOLTAGE AND MA.

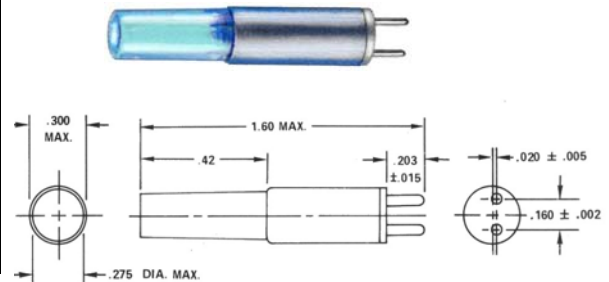
### ELDEMA C - LITES FOR DM SERIES LAMP HOLDERS

#### TYPE CM 12

The CM12 incandescent C-lites mate with the DM Series lampholders with the D06, D09 or D25 lens caps. These C-lites employ rugged long life telephone lamps. Clear anodized case. The bulb end is exposed.

The CM12 may also be used with the DL Holder with the D07 long lens cap where wide side visibility is required.

ORDERING INFORMATION			
Part Number	Volts	MA	Life (Hrs)
CM 12- 6A	6.0	140	5,000
CM12- 12 A	12.0	100	5,000
CM12- 24 B	24.0	40	5,000
CM12- 48 C	48.0	35	5,000
CM12- 60 A	60.0	50	5,000



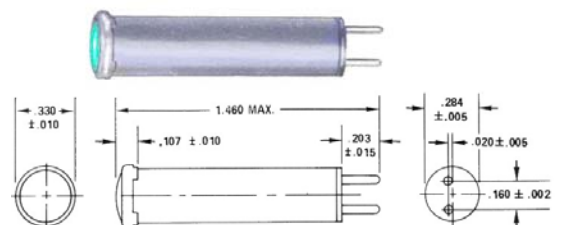
#### PART MARKING

ELDEMA - C - LITE - PART NUMBER - VOLTAGE AND MA

#### TYPE CM65

The CM65 incandescent C-lites mate with the DM series lampholders with the D06, D09 or D25 lens caps. These C-lites packaged the pilot-lamp type telephone bulbs. Clear anodized case with high-temperature frosted lens cap to diffuse the light.

ORDERING INFORMATION			
Part Number	Volts	MA	Life (Hrs)
CM65-6PS	6.0	140	5,000
CM65-12PS	12.0	170	5,000
CM65-28PS	28.0	40	5,000
CM65-48PS	48.0	53	5,000
CM65-60PS	60.0	50	5,000
CM65-120PS	120.0	25	5,000



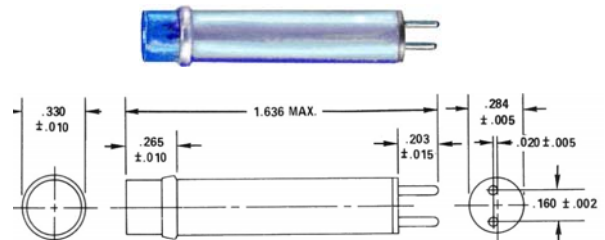
#### PART MARKING

ELDEMA - C - LITE - PART NUMBER - VOLTAGE AND MA.

### CQ SERIES-NEON WITH BUILT IN RESISTOR

The CQ series Neon C-lite have the neon lamp resistor built into the cartridge and mate with the DM series lamp-holders. Any of the lamp/resistor numbers offered in the CR or CN neon C-lites Are available in the CQ series. Specify style-lens color, finish, lamp/resistor Number.

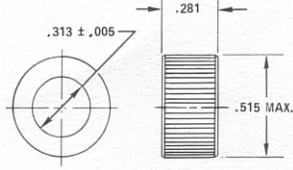
**EXAMPLE:** CQ03-WCS-N123, high brightness lamp for 110-125 Volt AC operation with 33k resistor built in for 25,000 - hour life rating.



# ELDEMA D – HOLDERS LENS CAPS AND COLLARS

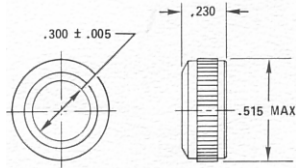
## MATE WITH SINGLE LAMP HOLDERS

These lens caps and collars mate with the single lamp holders. The Collars may be used with C-lites that have colored lenses. The lens Caps should be used with C-lites with water clear (transparent) lenses. The lens caps are high temperature plastic with anodized aluminum bushings.



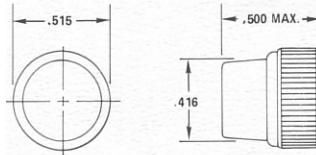
D14 COLLAR

The D14 knurled collar is designed for use on the DHO holder only. The collar securely retains all CF,CG or CR series C- lites cartridges



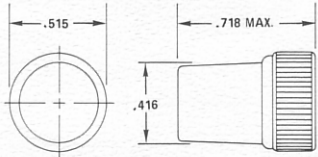
D15 COLLAR

The D15 is a new trim style collar for the DHN or DHO holders. The collar securely retains all CF, CG or CR series C-lite Cartridges.



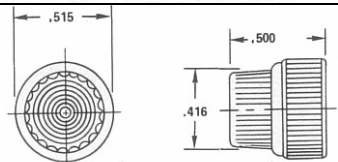
D06 SMOOTH LENS

The D06 lens caps rotate so lens marking may be aligned after installation. These caps mate with the CF03, CG03, CR03, and CF24 style C-lite. The D06 meets MIL—3661, type LC32.



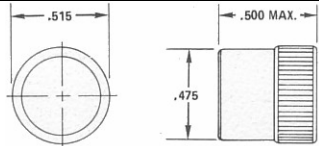
D07 SMOOTH LENS

The D07 lens will rotate to align lens marking. The long cap mates with the CF, CG, and CR Cartridges with the dome and long flat shapes.



D09 FLUTED LENS  
Clear colors only

The D09 fluted lens caps mate with CF03,CG03, CR03, CD 03, CD93 and CF24 style C-lites. These caps are available in clear lens colors only. The D09 meets MIL-L-3661 type LC30.



D25 SHROUD LENS  
Translucent colors only

The D25 is a full shroud lens with end on viewing only. The D25 comes in translucent colors only and mates with the CF03 and CF24 C-lite incandescent cartridges.



DHO -10B HOLDER ONLY WITH CF03-C-LITE FOR FLUSH PANEL MOUNTING

HOLDER	LENS CAP	O.A.L	MAX. PANEL
DHO or DHN	D06 or D09	1.57 MAX.	.250
DHO or DHN	D07	1.78 MAX.	.250
DHO	D 14 or	1.28 MAX.	.190
DHN	D15	1.29 MAX.	.250
DHO or DHN	D 15	1.57 MAX.	.250
DHO	D 25	1.20 MAX.	.290
	NONE		

# ELDEMA DH SERIES SINGLE LAMP HOLDERS

## TYPE DHO-REAR MOUNTING, 3/8" HOLE

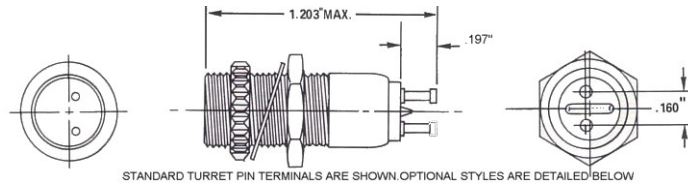
The **DHO** rear mounting single lampholders are available in three terminal configuration styles - turret pin, solder cup and solder lug. The complete assembly consists of the **DH** lampholder and the **D** series cap (or collar).



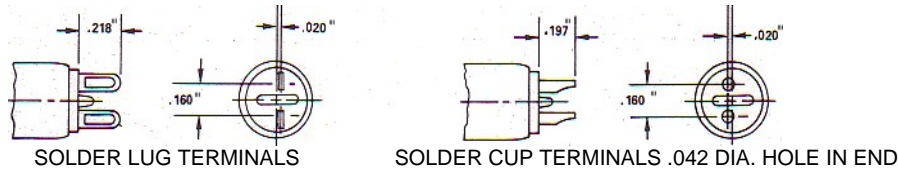
### DH series Lampholders mate with CG or CR Neon, CF incandescent C-lite And CD -LED's

TERMINAL PIN POSITION MATCHES STANDARD C-LITE LENS MARKING ORIENTATION. SOLDER LUG TERMINALS AS SHOWN BELOW HAVE THIS INTERNAL POSITION.

#### DHO REAR MOUNTING LAMP HOLDER



### OPTIONAL TERMINAL STYLE AVAILABLE ON ALL SINGLE LAMP HOLDER STYLES



ORDERING INFORMATION	DH SINGLE LAMP HOLDER				D SERIES LENS CAP		
	STYLE	TERMINAL	FEATURES	FINISH	STYLE	FINISH	LENS COLORS
<p><b>EXAMPLE</b> DHO-10B-D06BRC: Assembly DHO-10B: Lampholder only D06BRC : Lens cap only</p> <p><b>PART MARKING:</b> Part marking includes Eldema and the Lampholder number (ELDEMA DHO-10B). Complete assembly numbers are not Marked since the lens caps or collars Can be removed and changed.</p> <p><b>MILITARY PART NUMBERS</b> Eldema lampholders DHO-11B meets LH90/2 and lampholders with collar DHO-11B-D14B meets LH90/1.</p>	DHO Rear Mount	1	0	B	D06	B	<b>Translucent</b> AT- Amber BT- Blue GT- Green RT- Red WT- White YT- Yellow  <b>Clear</b> AC- Amber BC- Blue CC- Cloudy+ GC- Green RC- Red + WC- Water + YC- Yellow +
		Turret Pin	standard Mounting	Black Anodize	Smooth Lens	Black Anodize	
		3	1	S	D07	S	
		Solder Cup	Anti-Rotational Mounting	Clear Anodize	Smooth Lens	Clear Anodize	
		6		Y	D09		
		Solder lug		Yellow Chromate	Fluted Lens		
					D25 Shroud Lens		
					D 14* Collar D 15* Collar		
				* No lens color callout for D14 or D15 collar. + these colors recommended for neon C - LITES.			

# ELDEMA DL AND DM SERIES SINGLE LAMP HOLDERS

TYPE DLO-REAR MOUNTING, 3/8" HOLE  
 TYPE DMO-REAR MOUNTING, 3/8" HOLE



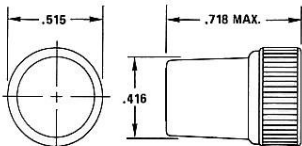
DLO30B - D06BGC



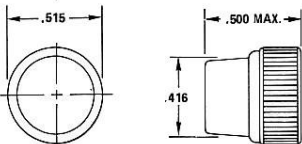
DMO10B - D06BAC

The DL and DM series lamp holders are designed primarily to accommodate the longer high voltage. The DL and DM are identical to the DHO types except for the longer lengths and use the same lens cap.

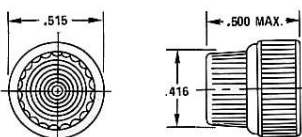
**D07**  
Smooth lens



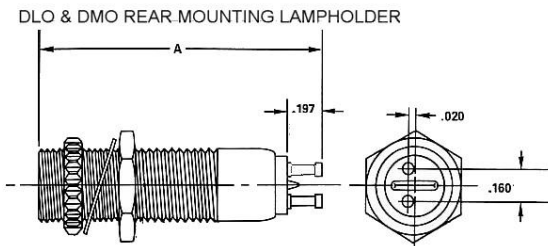
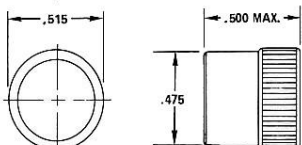
**D06**  
Smooth lens



**D09**  
Fluted lens  
Clear colors  
Only



**D25**  
Shroud lens  
translucent colors only



STANDARD TURRET PIN TERMINALS ARE SHOWN

OPTIONAL TERMINAL STYLE

SOLDER LUG TERMINALS

SOLDER CUP TERMINALS  
.042 DIA. HOLE IN END

TYPE	DIM. A	MAX. PANEL
DLO	1.42 Max	.440"
DMO	1.70 Max	.570"

Rear mounting lamp holder .380" Clearance hole

## ORDERING INFORMATION

DL and DM SERIES lampholders may be ordered separately or as complete Assembly. Formulate the part number using the table at the right.

**EXAMPLE PART NUMBERS**  
 DLO10B - D06BGT Assembly  
 DLO10B Lampholder Only  
 D06BGT Lens Cap only

DL AND DM LAMP HOLDERS						
D SERIES LENS CAPS						
STYL E	TERMINAL	MOUNTING	FINISH	STYLE	FINISH	LENS COLOR
DLO Rear Mount	1 Turret Pin	0 Standard Mounting	B - Black Anodize	D06 Smooth lens	B - Black Anodize	<b>Translucent</b> AT - Amber BT - Blue GC - Green RT - Red WT - White YT - Yellow
	3 Solder Cup	1 Anti Rotational Mounting (Available as an option on Front mount Holders only)	S - Clear Anodized	D07 Smooth lens	S - Clear Anodized	
	6 Solder Lug		Y - Yellow Chromate	D25 Shroud lens	Y -Yellow Chromate	
						<b>Clear</b> AC - Amber BC - Blue CC - Cloudy GC - Green RC - Red WC - Water YC - Yellow

OVER ALL LENGTH WITH LENS CAPS INSTALLED	MATING C- LITES
<b>DLO</b> With D06 or D09 1.78 MAX. With D07 1.98 MAX. With D25 1.78 MAX.	CL 24 CM12 CL24
<b>DMO</b> With D06 or D09 2.07 MAX. With D25 2.07 MAX.	Any CL / CQ Any CM

PART MARKING: ELDEMA and the lampholder number (ELDEMA DLO10B)

Eldema lampholder DLO11B meets MIL - L - 3661, Type LH90/3



## ELDEMA RFI/EMI SHIELDED D-HOLDERS

RFI/EMI shielding of D-holders is accomplished by the use of a wire mesh captured within the lens cap that makes a contact through the conductive threads to the lampholders body and is subsequently grounded to the panel. This is done by plating the lampholder body with a conductive yellow chromate finish. A special lens bushing is used (and the knurled ring on the rear mounting holders) which has the internal threads also plated with the conductive yellow chromate and the external surfaces black or clear anodized. Viewed from the front of the panel, the external metal portions of the D-holders assembly have an anodized finish and at the same time a conductive path effectively grounding the mesh to the panel is maintained.

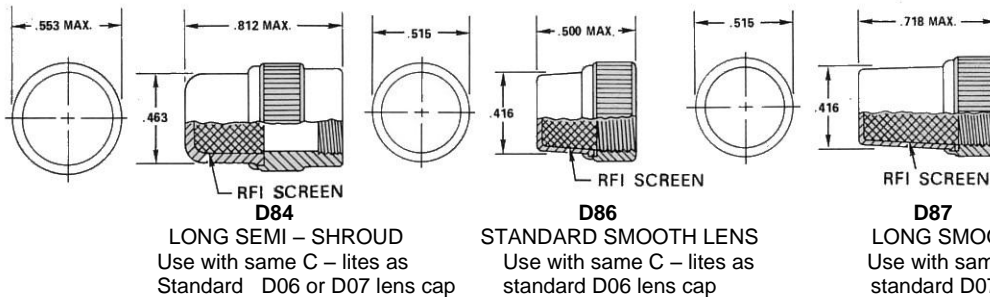


The D-holders ground to either or both sides of the panel and the contacts through the threads insures no loss of shielding even if the lens cap is partially unscrewed. Anti-rotational optional mounting is only available on front mounting holders- the flat on the threads provides a leakage path past the hardware on the rear-mounting holders. Details on test results of these assemblies, with attenuation in excess of 100 db, are shown in the Eldema RFI/EMI shielded indicator lite technical bulletin.

The lens caps are similar in appearance to the standard non-shielded types, however lens marking is not recommended since they do not rotate. The wire mesh is stainless steel.



The shielded single lamp holders are identical to the standard lamp holders in all respects except for the chromate plating per Mil-C-5541 instead of an anodized finish.



### ORDERING INFORMATION

Formulate the part number using the Table at right.

#### EXAMPL PART NUMBER

DHO10Y - D86BRT Assembly  
DHO10Y Lampholder only  
D86BRT Lens cap only

#### PART MARKING

Part marking includes Eldema and the Lampholder number.

The front mounting holders are available in the "Y" finish only. Extra ring nuts for the rear mounting holders may be ordered as follows:

Z-141-10003-012 - Black anodize knurl gold chromate threads.

Z-141-10003-013- Clear anodize knurl gold chromate threads.

RFI/EMI SPECIAL FINISH D - HOLDERS				RFI/EMI D - LENS CAPS		
Style	Terminals	features	Finish	Style	Finish	Colors
DHO	1	0	Y	D84	B Black anodized exterior on lens bushing	TRANSLUCENT AT - Amber BT - blue GT - Green RT - Red WT - white YT - Yellow
DLO	Turret Pin	Standard mounting	Yellow Chromate (Special Black ring Furnished on rear mount Holders)			
DMO	3 Solder Cup					
DNO	6 Solder Lug	1 Anti - Rotational Mounting  (Available as an option on front mount holders only)	W Yellow Chromate (Special clear ring Furnished on rear mount Holders)	D86	S Clear Anodized (Exterior on Lens bushing)	CLEAR AC - Amber Clear BC - Blue CC - Cloudy GC - Green RC - Red WC - Water Clear YC - Yellow

# ELDEMA DH-SERIES ARRAY-LITES

**TYPE DHP FOR PRESS-IN MOUNTING FROM THE FRONT OF PANEL**  
**TYPE DHC FOR SWAGE-IN MOUNTING FROM THE REAR OF PANEL**

For permanent installation requirements, two styles of single lampholders, the DHP and DHC, are available in the DH series that mate with the CF, CG, CD and CR Series C-lites. These lampholders are anodized aluminum with high dielectric insulation and the same terminal options available on the standard DH series lampholders.

The DHC and DHP are ideal for those installations where the array-lite assembly is not convenient to use, but where the built-in flush panel appearance is desirable.

The DHP type lampholders is designed for press fit mounting from the front of the panel into a .397" diameter hole in metal or plastic panels. The DHP may be placed with spacings between centers as close as 1/2" it may be ordered with either a black or clear anodized finish.

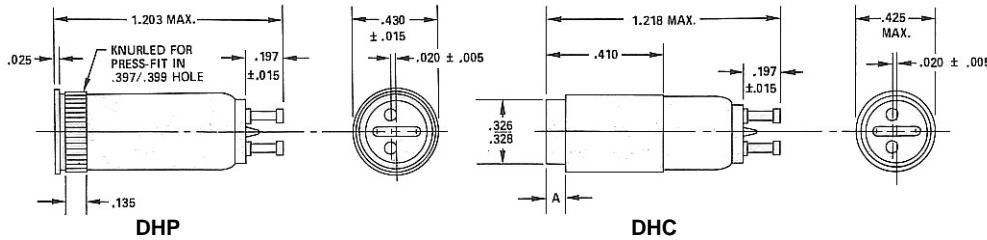
The DHC type lampholder is for swage-in installation from the rear of the panel. This lampholder is available to mate with various panel thicknesses.



**DHP 15B**  
Press in Holder



**DHC 63S**  
Swage – in Holder



DHC MOUNTING	
DIM. A	PANEL THICKNESS
0.095"	0.062"
0.125"	0.093"
0.160"	0.125"

ORDERING INFORMATION	STYLE	TERMINAL	MOUNTING	FINISH	STYLE	TERMINAL	MOUNTING	FINISH
Formulate the part number using the table at the right	<b>DHP</b> Press-in Mounting Single Lamp Holder	<b>1</b>	Knurled for Press fit in .397" hole	<b>B</b> Black Anodize	<b>DHC</b> Swage-in Mounting Single Lamp Holder	<b>1</b>	<b>2</b> .062" Panel	<b>S</b> Clear Anodize
<b>EXAMPLE PART NUMBERS</b> DHP – 15B DHP – 12S		<b>3</b> Solder Cup				<b>3</b> Solder Cup		
<b>PART MARKING</b> Parts are marked with Eldema and The Part number		<b>6</b> Solder lug				<b>4</b> .125" Panel		

Extra ring nuts for the lampholders may also be ordered as follows:


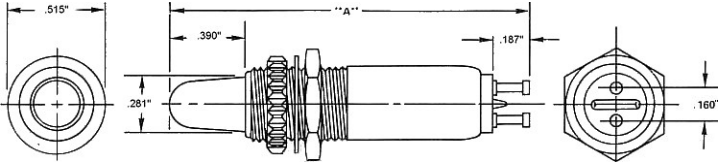

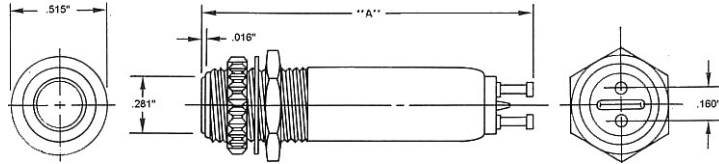

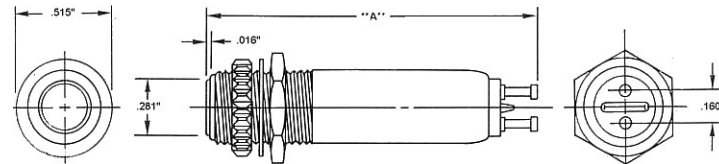

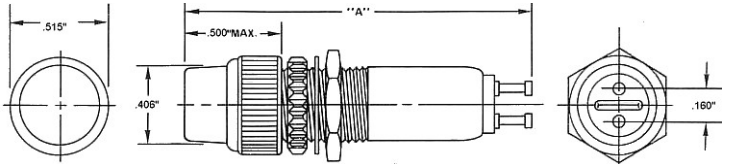
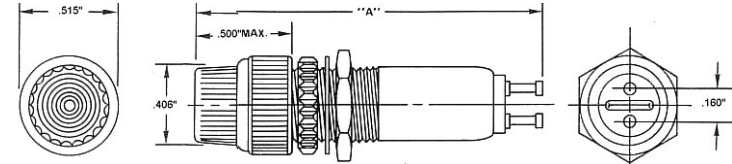
Part Number **Z-141-10003-010** Black Anodized Finish  
 Part Number **Z- 141-10003-011** Clear Anodized Finish

# ELDEMA NEON E-LITES

**EG SERIES- NEON LAMPS WITHOUT RESISTOR**  
**ER SERIES- NEON LAMPS WITH BUILT-IN RESISTOR**

Eldema neon E-lites are permanent mounting indicators that are rugged and simple to install. Lamp life can easily be expected to extend beyond any necessity for replacement. E-lites have aluminum cases with either a black or clear anodized finish, high dielectric insulation and two tin plated turret terminals. The lenses are available in a choice of five colors and a variety of shapes for any display requirement.

Neon E-lites are ideal on applications for 110-125vac. The suggested lamp resistor combination for this voltage is the high brightness NE2H type with 33K ohm which gives considerable brilliance and a life in excess of 25,000 hours, designated as N123 in the part number. The standard brilliance lamps- NE2E type- should normally be used in DC circuits where there is insufficient voltage for the high brightness lamps.

	 <p style="text-align: center;"><b>DOMES LENS TYPE EG01/ER01</b></p>	<p style="text-align: center;"><b>DIM. A</b></p> <p><b>EG01</b> 1.41" MAX. Neon</p> <p><b>ER01</b> 1.85" MAX Neon with Resistor</p> <p>.250" maximum Panel thickness</p>
	 <p style="text-align: center;"><b>FLUSH LENS TYPES EG01/ER02</b></p>	<p style="text-align: center;"><b>DIM. A</b></p> <p><b>EG02</b> 1.250" MAX. Neon</p> <p><b>ER02</b> 1.68" MAX. Neon with Resistor</p> <p>.250 maximum Panel thickness</p>
	 <p style="text-align: center;"><b>SHORT FLAT LENS TYPES EG03/ER03</b></p>	<p style="text-align: center;"><b>DIM. A</b></p> <p><b>EG03</b> 1.406" MAX. Neon</p> <p><b>ER03</b> 1.843" MAX. Neon with Resistor</p> <p>.250" maximum Panel thickness</p>
	 <p style="text-align: center;"><b>SMOOTH LENS TYPES EG06/ER06</b></p>  <p style="text-align: center;"><b>FLUTED LENS TYPES EG19/ER19</b></p>	<p style="text-align: center;"><b>DIM. A</b></p> <p><b>EG06</b> 1.343" MAX. <b>EG19</b> Neon</p> <p><b>ER06</b> 1.781" MAX. <b>ER19</b> Neon with Resistor</p> <p>.187" maximum Panel thickness</p>

# ELDEMA NEON E-LITES

## ORDER INFORMATION

Formulate the part number using table at the right

### EXAMPLE PART NUMBER

EG03-RCS-N120  
ER03-WCS-N117

### CHOICE OF LAMPS

High brightness lamps offer the best indication. They require 110-125 volts AC or 150 Volts DC for their operation. The current required is less than 2 MA with a 33K resistor in series with the lamp. The standard brightness lamps require less Than 0.7 MA current. They operate on a minimum Of 90 volts DC or 65 volts AC with a 100K resistor in series with the lamp.

### CHOICE OF RESISTORS

The lower the resistor value the greater the Light output, but the life rating decreases. The Standard life ratings are the best compromise For most applications.

The last digit in the lamp/resistor number Designates the resistor value as follows: (EG types) 0- none; (ER type) 1-22K, 3-33K, 4-56K, 7-100K. other resistor values are available on special order.

### RECOMMENDED RESISTOR VALUES

#### High brightness lamps

Standard life - 25,000 hours -33K  
Medium life - 5,000 hours-22K

#### Standard Brightness Lamps

Standard life -25,000 hours -100K  
Medium life -5,000 hour -56K

Life rating approximate and based on operation at 110 -125 volts AC

### PART MARKING

Part marking on neon E – lites include Eldema, The E – lite series and the lamp number or the lamp/resistor number and resistor value.

EG SERIES NEON LAMP WITHOUT RESISTOR			
STYLE	LENS COLOR	FINISH	LAMP NUMBER
<b>EG01</b> Dome  <b>EG02</b> Flush  <b>EG03</b> Short flat  <b>EG06</b> Smooth Cap  <b>ER19</b> Fluted Cap	<b>AC</b> – Amber <b>CC</b> – Cloudy <b>RC</b> – Red <b>WC</b> – water Clear <b>YC</b> - Yellow	STANDARD B – Black anodize	<b>N110</b> – Standard Brightness (NE2E Lamp)
		OPTIONAL S – clear anodize	<b>N120</b> – High Brightness (NE2H Lamp)
ER SERIES NEON WITH BUILT-RESISTOR			
STYLE	LENS COLOR	FINISH	LAMP / RESISTOR NUMBER
<b>ER01</b> Dome  <b>ER02</b> Flush  <b>ER03</b> Short Flat  <b>ER06</b> Smooth Cap  <b>ER19</b> Fluted Cap	Same as above	Same as above	<b>N114</b> – Standard Brightness Medium Life (NE2E – 56 K)
			<b>N117</b> – Standard Brightness Standard Life (NE2E – 100K)
			<b>N121</b> – High Brightness Medium Life (NE2H – 22K)
			<b>N123</b> – High Brightness Standard Life (NE2H – 33K)

The lens colors are all clear (transparent) shades for maximum light output. Cloudy clear (CC) is the shade of white most suitable for neon lamps. Note That green or blue lens colors are not effective with neon glow lamps. Available with LED's on special order.

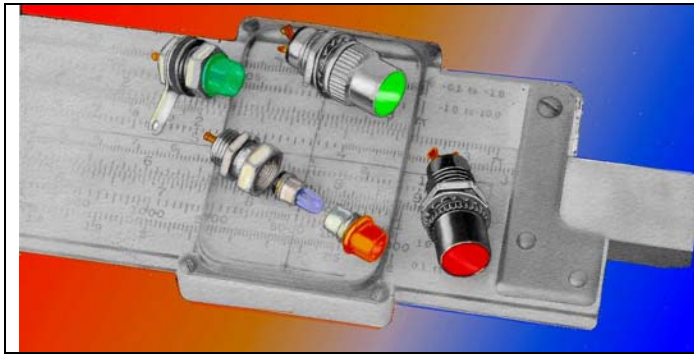
### LENS MARKING



All Flat top Eldema neon E- LITES Lens Caps may be hot stamped. The smaller diameter (EG02/ER02, EG03/ER03) accommodate 2 characters, .109" high. The large lens caps (EG06/ER06) accommodate: 3 characters, .109" high. Note also that that the large diameter screw-on lens cap are designed to rotate to Align the lens marking after installation. The EG19/ER19 fluted lenses are not Recommended for lens marking.

# ELDEMA H-LITES

TYPE HLA, HLS, HLB, HLC, AND HLD INDICATOR LIGHTS

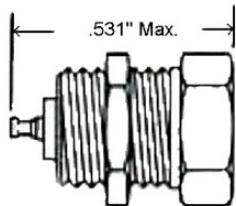


The H-Lite series provides a highly reliable indicator light assembly that requires a minimum of panel space. These units use the T-1 flange-based lamps- and both lamps and lens caps are replaceable from the front of the panel without any special tools.

H-LITES allow the designer a number of mounting configurations and a choice of lens styles, colors and metal finishes. H-LITES are attractive, easy to install, and meet applicable military requirements of MIL-L3661

Other H-LITE series features are optional water tight and RFI shielded models.

**Fig. 1**  
HLA Hex fixed Flange



Part Number  
**HLA1010**

Finish  
Bright Nickel

Mating lens caps fig's 8,10



**HLA – 1010 – HL230GT**

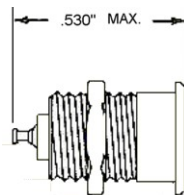


**HLA – 3010 – HL230AT**

**HLA – LAMPHOLDER**

Single terminal front mount lampholder case grounded to panel. Hex or round flange – bright nickel finish .250" mounting hole .359" centers panel up to .250" thick with round flange; .203" with hex flange.

**Fig 2**  
HLA, ROUND FIXED FLANGE



Part Number  
**HLA3010**

finish  
Bright Nickel

Mating lens Caps Fig. 9 &10



**HLB – 1010 – HL 321RT**

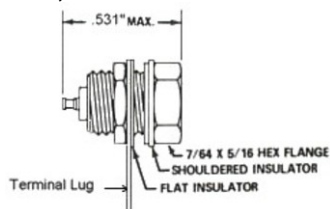


**HLB – 1010 – HL230BT**

**HLB- LAMPHOLDER**

Two terminal style front mount lampholder washers isolate case from panel lug terminal grounded to case hex or round flange-bright nickel finish .312" mounting hole-.375" centers Panels up to .203" thick with round flange .156" with hex flange.

**Fig. 3**  
HLB, HEX NUT FIXED FLANGE



Part Number  
**HLB1010**

Finish  
Bright Nickel

Mating lens Caps Fig. 9 & 11

**MATERIALS**

**Case:** brass, nickel – plated  
**Mounting Hardware:** Brass, nickel plated  
**Center Terminal:** Brass, Gold plated  
**Rear insulator:** High dielectric plastic

The HLB is the same as HLA plus lug – brass, tin plated  
Shoulder Insulator - black nylon  
Flat insulator – high dielectric phenolic.

The H-Lite series provides a highly reliable indicator light assembly that requires a minimum of panel space. These units use the T-1 flange-based lamps and both lamps and lens caps are replaceable from the front of the panel without any special tools. H-LITES allow the designer a number of mounting configurations and a choice of lens styles, colors and metal finishes. H-LITES are attractive, Easy to install, and meet applicable military requirements. Other H-LITE series features are optional water tight and RFI shielded models.



**HLC – 2220 – HL722GT**



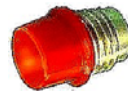
**HLC – 2020 – HL230YT**



**HLD – 1010 – HL321BT**



**HLD – 2010 – HL230WC**



**HL 230RT**



**HL321GT**

**HLC-LAMPHOLDER**

Two terminal front mount Lampholder Terminals isolated from case and panel Fixed knurled flange-water tight optional Bright or black nickel finish. .312" mounting hole-.562" centers panels up to .250" thick

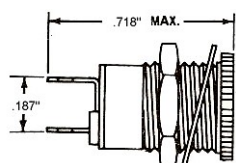
**HLD LAMP HOLDERS**

Two terminal front or rear mount Lampholder terminal isolated from case and panel Hex nut or knurled ring movable flange Bright or black nickel finish. .312" mounting hole - .562" centers panel up to .234" thick.

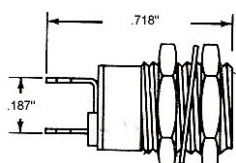
**All plastic style**  
For wide angle viewing

**Shroud style**  
For end-on view

**FIG. 5**  
**HLC, KNURLED FIXED FLANGE**



**FIG. 7**  
**HLD, TWO HEX NUTS**



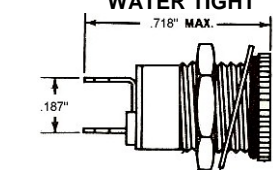
Part Number	Finish
HLC - 2010	Bright Nickel
HLC - 202	Black Nickel

Part number	Finish
HLD - 1010	Bright nickel
HLD - 1020	Black nickel

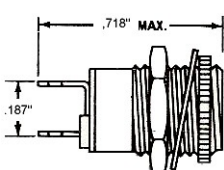
Mating lens Caps, Fig. 9, 11, 13

Mating lens caps, Fig. 9,11,13

**FIG. 6**  
**HLC, KNURLED FIXED FLANGE WATER TIGHT**



**FIG. 8**  
**HLD, RING AND HEX NUT**



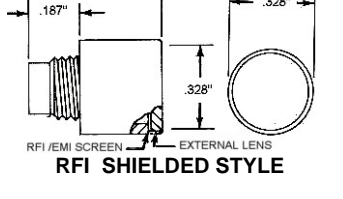
Part Number	Finish
HLC - 2210	Bright Nickel
HLC - 2220	Black Nickel

Part Number	Finish
HLD - 2010	Bright Nickel
HLD - 2020	Black Nickel

Mating Lens Caps, Fig. 10, 12

Mating lens caps fig. 9, 11, 13

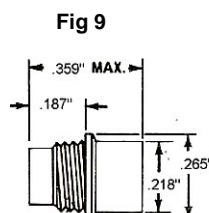
**FIG. 13**



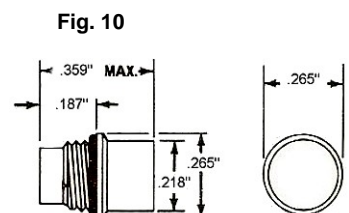
Part Number	Finish
HL821XX	Bright Nickel
HL822XX	Black Nickel
HL921XX	Bright Nickel
HL922XX	Black Nickel

**MATERIALS**  
Meets the applicable requirements of MIL-L-3661  
Case: Brass, Nickel plated  
Insulation: high dielectric plastic  
Terminals: bras, gold plated

**ALL PLASTIC STYLES**

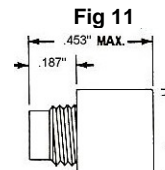


Standard  
**HL230XX**

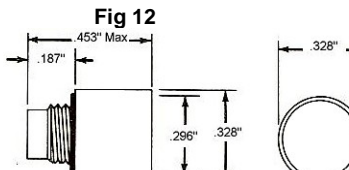


Water tight  
**HL430XX**

**SHROUD TYPE**



Standard



Water tight

Part number	finish	Part number	Finish
HL321XX	Bright nickel	HL621XX	Bright Nickel
HL322XX	Black Nickel	HL622xx	Black Nickel

**ORDERING INFORMATION**

HL series Lampholders and lens caps may be ordered separately or as a complete assembly

**EXAMPLE PART NUMBERS**

Holder part number	Lens style	Lens color
<u>HLA1010</u>	<u>HL230</u>	<u>RT</u>

HLA 1010-HL230RT: Assembly  
HLA 1010: Lampholder  
HL230RT: Lens style & color

**LENS COLORS**

**STANDARD COLORS**  
AT – Amber translucent  
BT - Blue Translucent  
GT - Green Translucent  
RT - Red Translucent  
YT - Yellow Translucent  
WT - White Translucent  
CC - Cloudy Clear  
WC - Water Clear

**BI-COLORS**  
AW – Amber/ White  
BW – Blue/ white  
GW – Green/ White  
RW – Red/ White

**ELDEMA H-LITES TYPE HLE**




**HLE- INDICATOR LIGHTS**

The HLE assemblies consist of three parts-a lamphousing, a HL230 lens cap, and a screw-on shroud lens cap that goes Over the HL230. The HL230 is used to retain the lamp bulb. It may also be a color filter for bi-color effects when used with a white translucent shroud lens cap.

The HLE and screw-on cap give positive conductive contact through the threads for RF shielding.

This contact allows the unit to be both RFI shielded and water-tight.

The HLE requires approximately .125" less space behind the panel than the HLC or HLD styles.

**GENERAL DESCRIPTION**  
**HLE LAMPHOLDER**  
 Two terminal front mounting lamphousing. Terminals isolated from case and panel. Bright or black nickel finish. .312" mounting hole; .962" centers. Panels up to .187" thick; .156" on water Tight styles.  
 Meets the applicable requirements of Mil-L-3661.

**HLE LENS CAPS**  
 Screw on shroud style choice of finished and lens color may be RFI shielded.

**ORDERING INFORMATON**

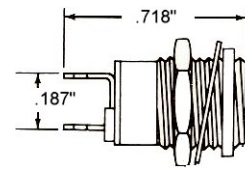
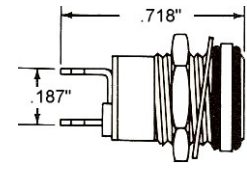
The HLE indicator lite consists of three parts and each must be ordered to make the complete assembly.

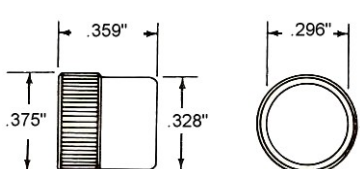
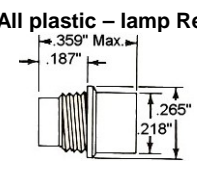
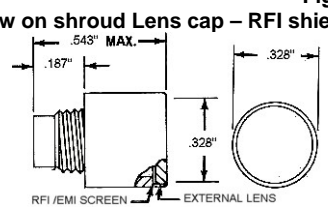
The text below and the two examples show how the HLE may be Assembled as a standard or as a bi-color indicator lite depending Upon the lens color chosen.


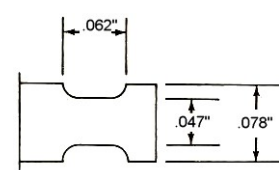
**EXAMPLE**

**(Bi-color) (Red)**

(STANDARD)		
HLE-3010	Lamphousing	HLE-3010
HL230WC	Lamp Retainer	HL230RT
HL351RT	Lens Cap	HL351WT

<p><b>HLE LAMPHOLDER – STANDARD</b> <span style="float: right;">Fig. 14</span></p>  <p><b>PART NUMBER</b> HLE3010 HLE3020</p> <p><b>FINISH</b> Bright Nickel Bright Nickel</p> <p>Mating Lens Caps, Fig. 16, 17, 18</p>	<p><b>HLE LAMPHOLDER – WATER TIGHT</b> <span style="float: right;">Fig 15</span></p>  <p><b>PART NUMBER</b> HLE 3210 HLE 3220</p> <p><b>FINISH</b> Bright Nickel Black Nickel</p> <p>Mating Lens Caps, Fig. 16, 17, 18</p>
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<p><b>Fig. 16</b> Screw on shroud lens Cap -Standard</p>  <p><b>PART NUMBER</b> HL351XX HL352XX</p> <p><b>FINISH</b> Bright Nickel Black Nickel;</p>	<p><b>Fig. 17</b> All plastic – lamp Retainer</p>  <p>Used as bulb retainer- WC (Water clear)          Lens with colored screw – on Lens Cap.          For bi – color effect, used colored          HL230 and white translucent screw –on cap</p>	<p><b>Fig. 18</b> Screw on shroud Lens cap – RFI shielded</p>  <p><b>PART NUMBER</b> HL851XX HL852XX</p> <p><b>FINISH</b> Bright Nickel Black Nickel</p>
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LAMP TABLE T – 1 FLANGE BASE	LAMP #	VOLTAGE	CURRENT (MA)	LIFE HOURS	CANDLE POWER	TERMINAL DETAIL
Sub – Miniature Incandescent lamp  	682	5.0	100	100M	.03	 <p>The HLC,HLD &amp; HLE type lampholders                      Have two turret style terminals.</p>
	685	5.0	60	100M	.05	
	714	5.0	75	25M	.08	
	718	5.0	115	40M	.13	
	7240	10.0	27	10M	.10	
	32	12.0	60	16M	.13	
	7241	18.0	26	13M	.13	
	6839	28.0	24	16M	.13	

# ELDEMA SOLID STATE J-LITES





## JD & JS SERIES



Eldema solid state J- lites are permanent mounting sub-miniature Indicators. The lamps are gallium phosphide electroluminescent Diodes. Their extremely long life, high reliability, resistance to shock and vibration and simple trouble free installation give them wide application potential. Color coded insulated lead wires are provided for positive anode identification. The lamp is designed to operate at a forward voltage of a nominal 2.1 volts D.C. for other voltages external resistance must be supplied.

### WIRE LEADS

All J – lites are supplied with 6" insulated wire leads

<p><b>SERIES JD</b> Commercial and MIL Specs Materials</p>  <p>Style 330 Fresnel Dome</p>																																																															
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<p><b>SERIES JD</b> Commercial Styles and Mil Spec Materials</p>  <p>Style 220 Flat Top</p>																																																															
<p><b>SERIES JS</b> Commercial Styles only</p>  <p>Style 230 low profile</p>																																																															
<p><b>ORDERING INFORMATION</b> Formulate the part number using the table at the right</p> <p><b>EXAMPLE PART NUMBER</b> JD9151-001-330RC</p> <p><b>LENS STYLE AND COLOR</b> J-Lites offer a choice of dome ,Fresnel Dome, flat top or low profile lens shapes.</p> <p><b>WIRE LEADS</b> All J-Lites are supplied with 6" insulated wire leads. Special leads lengths are available. Specify in detail when ordering.</p> <p>Lead wires are color coded RED - Positive White - Negative</p>	<table border="1"> <thead> <tr> <th rowspan="2">JD SERIES</th> <th colspan="4">LAMP INFORMATION</th> <th colspan="2">LENS INFORMATION</th> </tr> <tr> <th>Lamp No.</th> <th>VOLTS</th> <th>Current (MA)</th> <th>External Resistor Required</th> <th>STYLE</th> <th>COLOR</th> </tr> </thead> <tbody> <tr> <td rowspan="4">JD8111 (Commercial)</td> <td rowspan="4">001</td> <td>5</td> <td>10</td> <td>330 Ohms</td> <td rowspan="2">210 Dome</td> <td>Clear colors Only</td> </tr> <tr> <td>6</td> <td>10</td> <td>390 Ohms</td> <td>AC- Amber CC- Cloudy RC- Red</td> </tr> <tr> <td>10</td> <td>10</td> <td>820 Ohms</td> <td rowspan="2">220 Flat top</td> <td>WC- Water GC- green</td> </tr> <tr> <td>12</td> <td>10</td> <td>1 K Ohm</td> <td>BC- blue</td> </tr> <tr> <td rowspan="3">JD 9151 (Mil Spec Materials)</td> <td rowspan="3"></td> <td>28</td> <td>10</td> <td>2.75 K Ohm</td> <td>330 Fresnel</td> <td>YC- yellow</td> </tr> <tr> <th colspan="4">JS SERIES</th> <th>STYLE</th> <th>COLOR</th> </tr> <tr> <td colspan="4">Same as above</td> <td rowspan="2">230 Low profile</td> <td rowspan="2">Same as above</td> </tr> <tr> <td>JS 70B1 (Black finish)</td> <td colspan="4"></td> </tr> <tr> <td>JS 70S1 Bright finish</td> <td colspan="4"></td> </tr> </tbody> </table>	JD SERIES	LAMP INFORMATION				LENS INFORMATION		Lamp No.	VOLTS	Current (MA)	External Resistor Required	STYLE	COLOR	JD8111 (Commercial)	001	5	10	330 Ohms	210 Dome	Clear colors Only	6	10	390 Ohms	AC- Amber CC- Cloudy RC- Red	10	10	820 Ohms	220 Flat top	WC- Water GC- green	12	10	1 K Ohm	BC- blue	JD 9151 (Mil Spec Materials)		28	10	2.75 K Ohm	330 Fresnel	YC- yellow	JS SERIES				STYLE	COLOR	Same as above				230 Low profile	Same as above	JS 70B1 (Black finish)					JS 70S1 Bright finish				
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**ELDEMA J- LITES**



**SERIES JK AND JL- STANDARD MODELS**

**SERIES JM AND JN- RFI/EMI SHIELDED**

Eldema J-lites are permanent mounting indicators with built in long life T-1 lamps. Completely sealed to resist moisture and dust .meet the applicable requirements of MIL-I-6723 and MIL-L-3661.

They provide simple trouble free installation, mounting from the front of the panel. Two insulated lead wires are brought out for simple circuit connection.

Both military specification versions and commercial styles with a choice of body styles, lens shapes and colors are available. Series JM and JN units are RFI/EMI shielded. Shielding is grounded to the panel by the mounting hardware, forming an effective shield.

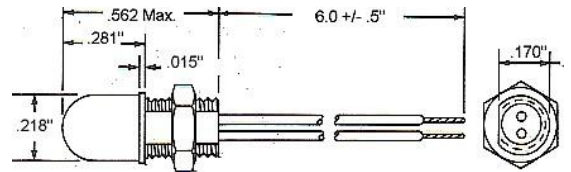
**Panel mounting**

Recommended panel mounting hole for military-type D-hole mounting viewed From the front panel. May be used only with units that have flat on housing (series JK and JM only)

**SERIES K**  
COMMERCIAL AND MILITARY STYLES



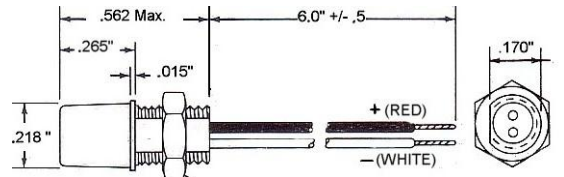
210 DOME



**SERIES JK**  
COMMERCIAL STYLE



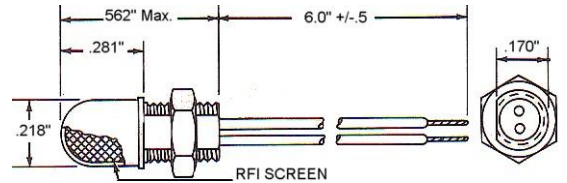
220 FLAT TOP



**SERIES JM**  
RFI/EMI SHIELDED



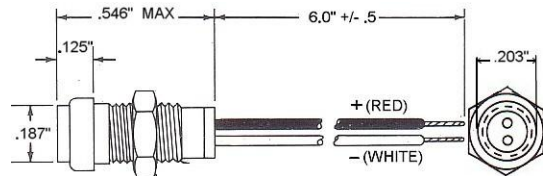
810 DOME



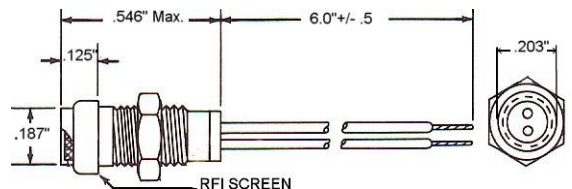
**SERIES JL**  
COMMERCIAL STYLES



230 LOW PROFILE



**SERIES JN**  
RFI/EMI SHIELDED



ORDERING INFORMATION	SERIES	LAMP				LENS STYLE	COLOR	
		Lamp #	Volts	Current (MA)	Life (hrs)			
<p>Formulate the part number using the table at the right</p> <p><b>EXAMPLE PART NUMBER</b></p> <p><u>JK8111</u> - <u>050</u> - <u>210</u> <u>RT</u> Series lamp # lens style color</p> <p><b>INCANDESCENT LAMPS</b> Incandescent lamps for 3 Volt through 28 Volt application are available. Specifications Listed in the lamp table are the manufacturing ratings and subject to the manufacturer's tolerance. Incandescent lamps are usually used with translucent colors. Flat top or low profile Lens shapes may be hot stamped. Clear Translucent colors may be used with all incandescent lamps listed.</p> <p>All J-lites are supplied with 6.0" insulated wires leads. Special lead lengths available. Specify in detail when ordering</p> <p>Eldema military J-lites meet the applicable requirements of MIL-L-3661 and MIL-L-6723</p>	<b>JK8111</b> (Commercial)	031	03	60	100,000	<b>210</b> Dome	STANDARD TRANSLUCENT	
		050	05	60	100,000			<b>AT-</b> Amber
		<b>JK9151</b> (Mil spec.)	051	05	60	100,000	<b>220</b> Flat top	<b>BT-</b> Blue
			100	10	27	10,000		<b>GT-</b> Green
			120	12	60	16,000		<b>RT-</b> Red
			180	18	26	10,000		<b>WT-</b> White
			280	28	24	16,000		<b>YT-</b> Yellow
								<b>CLEAR</b> (For low power lamps)
							<b>AC-</b> Amber <b>BC-</b> Blue <b>CC-</b> Cloudy <b>RC-</b> Red <b>WC-</b> Water <b>YC-</b> Yellow	
		<b>JL SERIES</b>	<b>LAMP #</b>				<b>LENS STYLE</b>	<b>COLOR</b>
	<b>JL70B1</b> (black Finish)	Same as above				<b>230</b> Low profile	Same as above	
	<b>JL70S1</b> (Bright Finish)							
	<b>JM SERIES</b>	<b>LAMP #</b>				<b>LENS STYLE</b>	<b>COLOR</b>	
	<b>JM9151</b> (RFI Shielded)	Same as above				<b>810</b> Dome	Same as above	
	<b>JN SERIES</b>	<b>LAMP #</b>				<b>LENS STYLE</b>	<b>COLOR</b>	
	<b>JN70Y1</b> (RFI Shielded)	Same as above				<b>830</b> Low Profile	Same as above	

MILITARY J-LITES	MILITARY PART NUMBERS			
	LHC PART NUMBER MIL – L - 3661	MS PART NUMBER MIL-L-6723	LENS COLOR	ELDEMA EQUIVALENT PART NUMBER
<p>Refer to the table at right for military part number listings. MIL-L-3661,revision B has been expanded to include both RFI/EMI shielded and none-shielded indicator lights and LHC type designations assigned. MIL-L-661 and MIL-L-6723.</p> <p>Specifications subjet to change Without notice.</p>	LHC82/1BT2	MS25446-2	Blue Translucent	JK9151-050-210BT
	LHC82/1GT2	MS25446-3	Green Translucent	JK9151-050-210GT
	LHC82/1RT2	MS25446-4	Red Translucent	JK9151-050-210RT
	LHC82/1WT2	MS25446-5	White Translucent	JK9151-050-210WT
	LHC82/1YT2	MS25446-6	Amber Translucent (Yellow)	JK9151-050-210AT
	NONE	MS25446-7	Water Clear (transparent)	JK9151-050-210-WC
	LHC82/2BT2	NONE	Blue Translucent	JM9151-050-810BT
	LHC82/2GT2	NONE	Green Translucent	JM9151-050-810GT
	LHC82/2RT2	NONE	Red Translucent	JM9151-050-810RT
	LHC82/2WT2	NONE	White Translucent	JM9151-050-810WT
	LHC82/2YT2	NONE	Amber Translucent(Yellow)	JM9151-050-810AT

# ELDEMA Q SERIES/LED SOCKETS

# Q084, Q085, Q086 SERIES



Eldema Q series are positive panel mounting for standard T 1-3/4 lamps. The Q084series is a low cost LED mounting assembly kit. The Q085 series is a complete LED indicator lite with flexible leads, available in all colors. The Q086 is a universally relampable LED socket assembly and is available with either in-line or 90° terminal. Its 0.025 square pins make it ideal for wire wrap or printed circuit board mounting. The Q series mounts in standard, none- critical 1/4 diameter holes in panels up to 0.187" thick, are attractive in appearance without additional bezels and are ideal for array designs.

Reduce your cost and simplify the installation of LED lamps with this unique Mountings, plug-in sockets and complete indicator lite assemblies. They are easily mounted from either panel front or rear through standard 1/4" holes (no critical tolerance). Lamps can be installed or replaced from the panel front. Their rugged and reliable construction, along with their design flexibility make these units ideal for applications where economy, ease of installation, Attractive appearance and dependability are prime considerations.

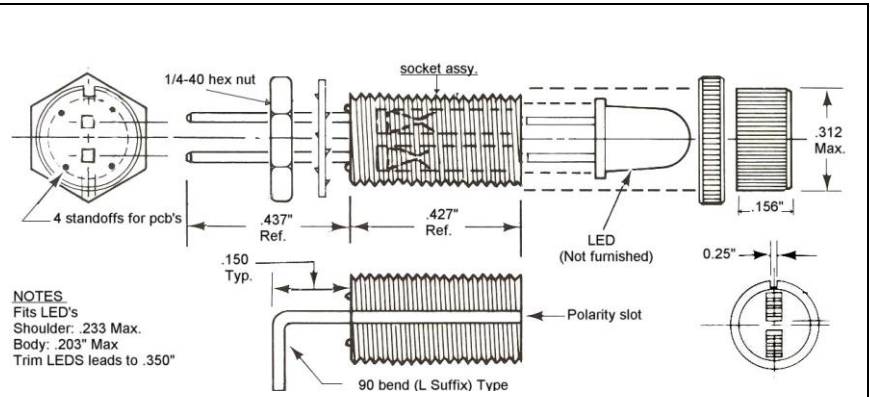
### ORDERING INFORMATION

Series **Q086** - X X X

Terminal Plating  
1= Tin  
2= Gold

D = in line terminals  
L = 90 Bend terminals

Bezel & retainer Nut finish  
2 = Silver  
3 = Black



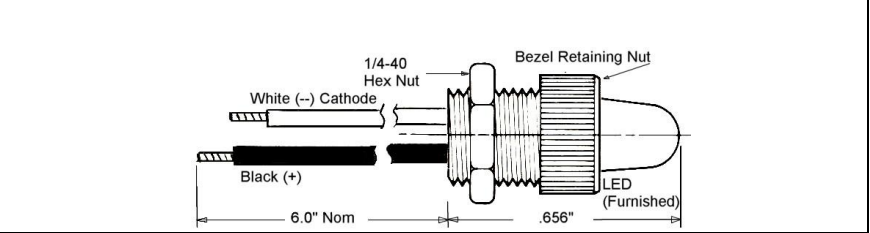
### ORDERING INFORMATION

SERIES **Q085** - X X X - X06

LED STYLE  
F = flat top  
D = Dome

COLOR  
RC = Red clear  
RT = Red translucent

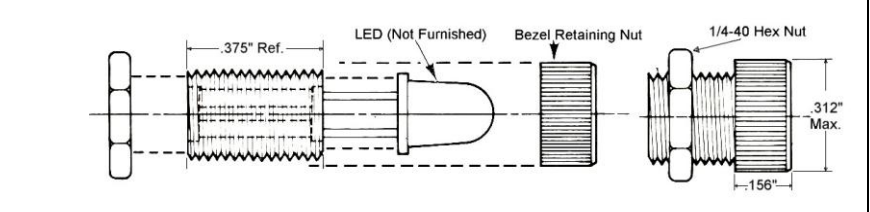
BEZEL FINISH  
106 = Silver  
206 = Black



### ORDERING INFORMATION

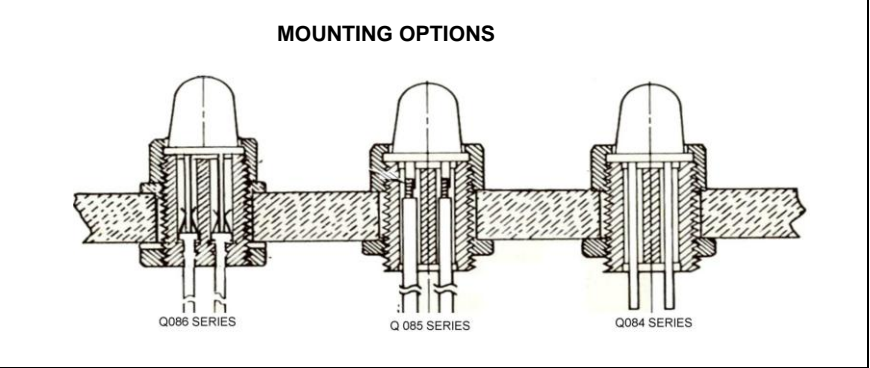
SERIES **Q084** - XD

BEZEL FINISH  
2D = silver  
3D = Black

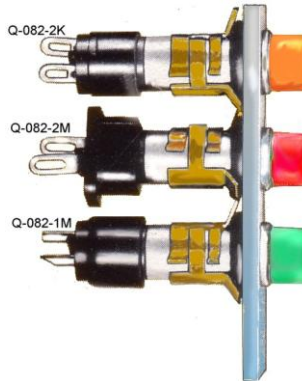


### MATERIALS

**Barrel Material:** black Delrin  
**Bezel and retainer Nut:** Black or silver plated brass Finish  
**Hardware:** Brass plated



## ELDEMA Q- SERIES CLIPS & SOCKETS

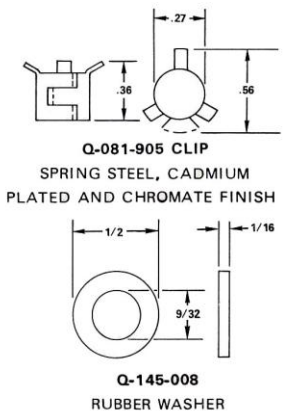
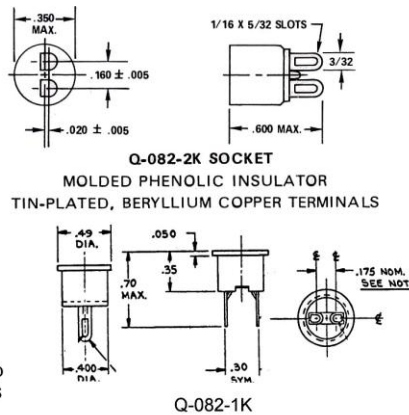
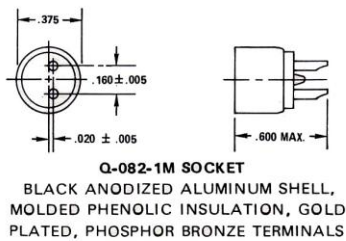


The Q- Series Clip and Socket sets shown on this page provide inexpensive, convenient mounting of C-Lite cartridges. Access to both sides of the panel is required for installation and replacement of the lamp cartridge. The recommended optional use of the rubber gasket makes snug installation of the spring clip much simpler. Installation should be on metal panels whenever possible to increase heat conduction.

The lower power incandescent, LED and the neon cartridges shown on the inside pages of this catalog should be used exclusively to reduce replacements and also because they generate less heat. Both solder lug and solder cup terminal type sockets are available. The ELDEMA socket Q-082-2K with the solder lug terminals is normally used in this type of installation and is the most popular.

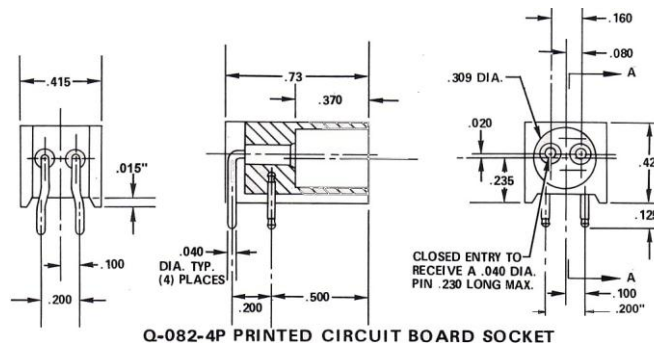
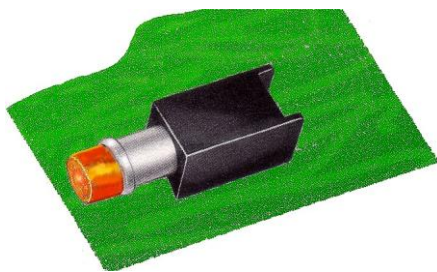
The Q-082-1K Socket is designed for commercial applications utilizing 2-pin G.E lamp bulbs. Mounting is accomplished with either the speed clip spring clip or spring clip shown. The terminals "float" slightly to accommodate variations in the center-to-center spacing of the 2 pins.

C-LITES MOUNTED WITH  
Q-081-905 CLIP AND  
Q-145-008 WASHER



### Q- 082-4P SOCKET

The ELDEMA Q-082-4P socket is for direct printed circuit boards installation. It is slightly raised at the pins to clear any Eyelets on to the board. The terminals are soldering – finished. The front two pins are mounting pins to assist in anchoring the part; the rear two are the lamp connections. Gold-plated spring loaded contacts inside the terminals at the connection point with the C-lite pins insure positive electrical connections. The molded phenolic socket body has a dielectric rating of 500 V RMS.




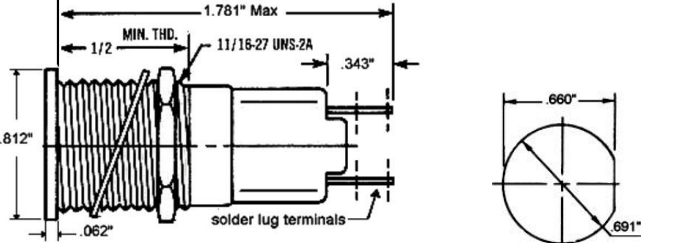

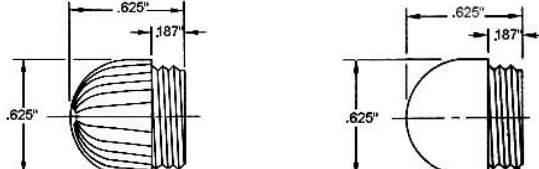

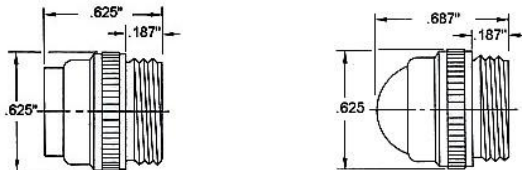

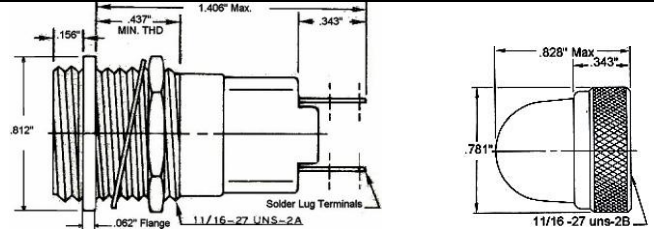
# ELDEMA KA AND KC – SERIES



# KAF, KC AND KAG SERIES FOR 11/16 CLEARANCE HOLE

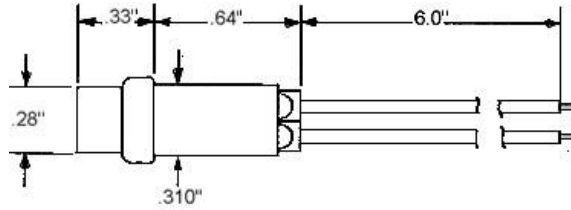
The Eldema K - Series indicator lites are designed to accommodate the T – 3-1/4 bayonet base incandescent, LED and neon lamps. Four basic types – KAF, KC for incandescent and LED – KAG,KG with resistor for neon. Front mounting in 11/16" clearance hole. It features rounded acrylic lenses for wide angle viewing, threaded for easy removal from bezel and easy bulb replacement from the panel front. Solder terminals. Complete with mounting nut and fiber washer.

A choice of two attractive finishes – bright nickel and black nickel  
The lens caps are of clear, or diffusing shades in all colors

<p>KA SERIES SCREW-IN LENS CAPS AND HOLDER</p>  <p>KAF-6020-KA130AC      KAF-6010-KA223GC</p>	 <p>optional mounting flat</p>															
 <p>KA130BC      KA120AC</p>																
 <p>KA243GC      KA223AC</p>																
<p>KC SERIES SCREW-ON LENS CAPS AND HOLDERS</p>  <p>KCF-6220-KC213BC      KC213AC</p>																
<p><b>ORDERING INFORMATION</b></p> <p>EXAMPLE Complete neon bulb assembly with 33 K ohm resistor KAG-6013 - KA120RC Lens cap only: KA120RC Holder only: KAG-6013 (neon)</p> <p style="text-align: center;"> <span style="border: 1px solid black; padding: 2px;">K</span> <span style="border: 1px solid black; padding: 2px;">A</span> <span style="border: 1px solid black; padding: 2px;">X</span> <span style="border: 1px solid black; padding: 2px;">--</span> <span style="border: 1px solid black; padding: 2px;">6</span> <span style="border: 1px solid black; padding: 2px;">01</span> <span style="border: 1px solid black; padding: 2px;">X</span> </p> <p> <small>SERIES</small>      <small>BODY LENGHT (1.87)</small>      <small>LAMP TYPE</small>      <small>RESISTOR VALUE</small>      <small>BODY FINISH</small>      <small>TERMINAL STYLE</small> </p>	<table border="1"> <thead> <tr> <th>Style</th> <th>Type</th> <th>Lens Color</th> <th>Body finish</th> <th>Resistor</th> </tr> </thead> <tbody> <tr> <td>KA</td> <td>F Incandescent</td> <td>RC- Red clear AC- Amber clear BC- Blue clear GC- Green clear WC-Water clear WT- White Translucent</td> <td>01 Bright Nickel</td> <td>3-33K ohm 7- 100 K ohm D-180 K ohm L-1.0 K ohm</td> </tr> <tr> <td>KC</td> <td>G Neon</td> <td></td> <td>02 Black Nickel</td> <td>0- No resistor</td> </tr> </tbody> </table>	Style	Type	Lens Color	Body finish	Resistor	KA	F Incandescent	RC- Red clear AC- Amber clear BC- Blue clear GC- Green clear WC-Water clear WT- White Translucent	01 Bright Nickel	3-33K ohm 7- 100 K ohm D-180 K ohm L-1.0 K ohm	KC	G Neon		02 Black Nickel	0- No resistor
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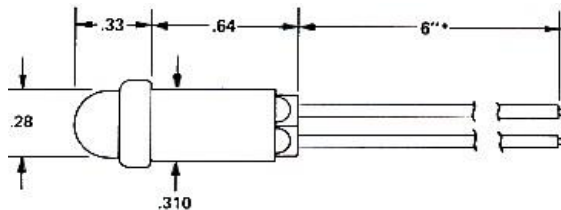
**BD Series** long-lasting, reliable LED illumination source indicator lites are easy to mount in **.316"** mounting holes with push-on retainer clips. They mount in a wide range of panel thickness and require a minimum of space behind the panel. Standard lead length is 6.0" other lengths available on special order.



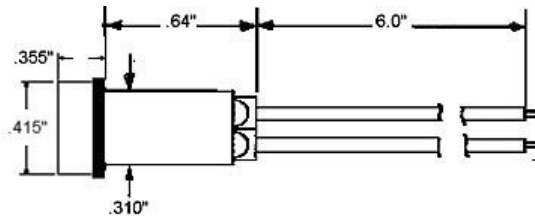
**BD 93 SHORT FLAT**



**CLIP NO. 10650**



**BD13 DOME**



**BD09 WIDE SHORT FLAT TOP**

**ORDERING INFORMATION**

To order Eldema solid state B-lites, refer to the table at the right and specify: Style, Lens shape, Lens color, Bezel finish and voltage

Example Part Number:  
BD13-RCB -28VDC

**MATERIALS**  
Lens – heat resistant plastic  
Housing – Molded Nylon  
Bezel – Aluminum alloy  
Leads insulated AWG 24

**STYLE LENS SHAPE**

**BD93**  
Short flat

**BD 13**  
Dome

**BD09**  
Wide short flat

**LENS COLOR**

**RC** – Red clear  
**AC** – Amber clear  
**BC** – Blue clear  
**YC** – Yellow clear  
**WC** – Water clear  
**GC** – Green clear

**RT** - Red translucent  
**AT** – Amber translucent  
**BT** – Blue translucent  
**YT** – Yellow translucent  
**WT** – White translucent  
**GT** – Green translucent

**BEZEL FINISH**

**B**  
(Black)

**S**  
(Silver)

**VOLTAGE**

**6.0/48 VDC**

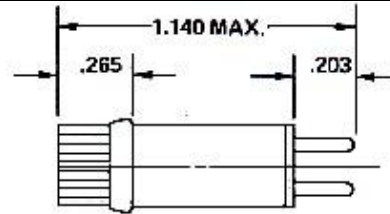
Other voltages available on special order



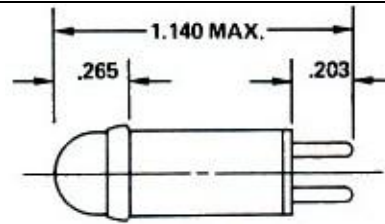


The Eldema solid state (LED) Mounted in the standard Eldema C-Lites package , they offer the versatility and And easy mounting of other Eldema cartridge lights. Their extremely long life, high reliability, resistance to Shock, vibration and catastrophic failure give them a wide application potential as visual indicator lights

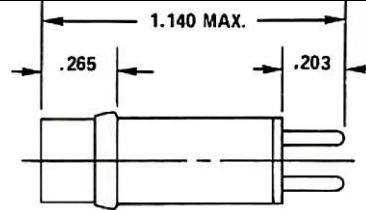
MATE WITH DH SERIES LAMPHOLDERS



**CD 93 SHORT FLAT FLUTED LENS STYLE**



**CD 13 DOME LENS STYLE**



**CD 03 SHORT FLAT LENS STYLE**

**ORDERING INFORMATION**

To order Eldema solid state CD-lites, refer to the table at the right and specify: Style, Lens shape, Lens color, finish and voltage

Example Part Number:  
CD93-RCB -28VDC

**MATERIALS**

Lens – High strength plastic  
Housing – Anodized aluminum  
Header – High dielectric Molded Nylon

Will meet or exceeds requirements of MIL-L-3661

**STYLE LENS SHAPE**

**LENS COLOR**

**FINISH**

**VOLTAGE**

**CD93**  
Short flat

**RC** – Red clear  
**AC** – Amber clear  
**BC** – Blue clear  
**YC** – Yellow clear  
**WC** – Water clear  
**GC** – Green clear

**B**  
(Black)

**6.0/48 VDC**

**CD 13**  
Dome

**S**  
(Silver)

Other voltages available on special order including A/C applications

**CD03**  
Short flat

**RT** - Red translucent  
**AT** – Amber translucent  
**BT** – Blue translucent  
**YT** – Yellow translucent  
**WT** – White translucent  
**GT** – Green translucent



ED Series long life and high reliability makes the solid state (LED) ideal for permanent mounting indicators. Solid state ED-Lites may be permanently mounted in panels up to ¼ inch thick. ED-Lites have aluminum cases with either black or silver anodized finish, high dielectric insulation and tin plated terminals. Life can easily be expected to extend beyond any necessity for replacement.

	<p style="text-align: center;"><b>ED13 DOME</b></p>																													
	<p style="text-align: center;"><b>ED93 SHORT FLAT</b></p>																													
<p style="text-align: center;"><b>ORDERING INFORMATION</b></p> <p>To order Eldema solid state ED-lites, refer to the table at the right and specify: Style, Lens shape, Lens color, finish and voltage</p> <p style="text-align: center;">Example Part Number: ED13-RCB -28VDC</p> <p><b>MATERIALS</b>                  Lens – High strength plastic                  Housing – Anodized aluminum                  Hex Nut – brass bright nickel plated                  Terminals – brass tin plated</p> <p>Will meet or exceeds requirements of MIL-L-3661</p>	<table border="1"> <thead> <tr> <th>STYLE</th> <th>LENS SHAPE</th> </tr> </thead> <tbody> <tr> <td><b>ED93</b></td> <td>Short flat</td> </tr> <tr> <td><b>ED 13</b></td> <td>Dome</td> </tr> </tbody> </table>	STYLE	LENS SHAPE	<b>ED93</b>	Short flat	<b>ED 13</b>	Dome	<table border="1"> <thead> <tr> <th>LENS COLOR</th> </tr> </thead> <tbody> <tr> <td><b>RC</b> – Red clear</td> </tr> <tr> <td><b>AC</b> – Amber clear</td> </tr> <tr> <td><b>BC</b> – Blue clear</td> </tr> <tr> <td><b>YC</b> – Yellow clear</td> </tr> <tr> <td><b>WC</b> – Water clear</td> </tr> <tr> <td><b>GC</b> – Green clear</td> </tr> <tr> <td><b>RT</b> - Red translucent</td> </tr> <tr> <td><b>AT</b> – Amber translucent</td> </tr> <tr> <td><b>BT</b> – Blue translucent</td> </tr> <tr> <td><b>YT</b> – Yellow translucent</td> </tr> <tr> <td><b>WT</b> – White translucent</td> </tr> <tr> <td><b>GT</b> – Green translucent</td> </tr> <tr> <td><b>Bi-color available on special Order</b></td> </tr> </tbody> </table>	LENS COLOR	<b>RC</b> – Red clear	<b>AC</b> – Amber clear	<b>BC</b> – Blue clear	<b>YC</b> – Yellow clear	<b>WC</b> – Water clear	<b>GC</b> – Green clear	<b>RT</b> - Red translucent	<b>AT</b> – Amber translucent	<b>BT</b> – Blue translucent	<b>YT</b> – Yellow translucent	<b>WT</b> – White translucent	<b>GT</b> – Green translucent	<b>Bi-color available on special Order</b>	<table border="1"> <thead> <tr> <th>FINISH</th> </tr> </thead> <tbody> <tr> <td><b>B</b> (Black)</td> </tr> <tr> <td><b>S</b> (Silver)</td> </tr> </tbody> </table>	FINISH	<b>B</b> (Black)	<b>S</b> (Silver)	<table border="1"> <thead> <tr> <th>VOLTAGE</th> </tr> </thead> <tbody> <tr> <td><b>6.0/48 VDC</b></td> </tr> <tr> <td>Other voltages available on special order including A/C applications</td> </tr> </tbody> </table>	VOLTAGE	<b>6.0/48 VDC</b>	Other voltages available on special order including A/C applications
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# ELDEMA RIB – LOC SERIES

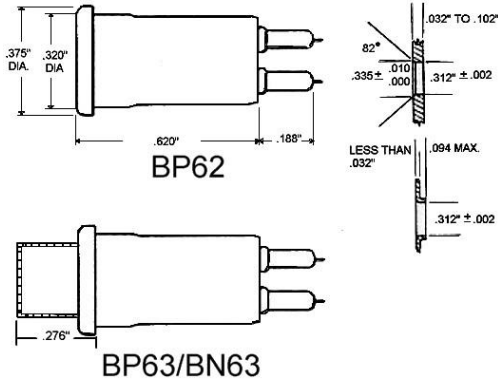
## 0.312" MOUNTING HOLE



Rib – loc miniature panel indicator lites are low cost and simple to install from the front of the panel.  
 No mounting hardware is required. Their unique black polyamide molded "ribbed" case allows them to fit firmly when pressed into 0.312" punched holes. This along with a wide selection durable polycarbonate lenses in six colors (in both flush and flat top configurations) as well as Incandescent, Led and Neon lamp versions, makes these units a perfect choice for most any application where economy appearance and ease of installation are prime considerations.

### ORDERING INFORMATION

B      P      62      --      AC      1762      28DC  
 SERIES    TYPE    LENS STYLE    LENS COLOR    LAMP    VOLTS



B	P	62	AC	1762	28DC	
SERIES	TYPE	LENS STYLE	LENS COLOR	LAMP	VOLTS	CURRENT AMPS.
B	P Incandescent	62 Flush	CLEAR AC- Amber BC- Blue GC- Green RC-Red WC- Water	INCAN-DESCENT		
				1784	6.0	.200
				1730	6.0	.040
	N Neon	63 Flat Top		1705	14.0	.080
				1762	28.0	.040
				2187	28.0	.040
	D LED	63 Flat Top		2182	14.0	.080
				2181	6.3	.200
				2180	6.3	.040
				<b>NEON</b> Requires 33K ohm resistor		
				N110	105/125	.002
				N120	105/125	.002
		N170	105/125	.002		
		<b>LED</b>	4.0/48 VDC	.020		

# ELDEMA RA SERIES FOR 15/32" & 17/32" CLEARANCE HOLE



The RA Series lamp holders offers easy installation of lens caps And flange based T-1¼ incandescent lamp from the front of the panel without the use of special tools. The lamp-housing come in three mounting styles with a choice of finishes. Lens caps in a wide variety of shapes and colors are available.

- Finishes – Black Nickel, Bright Nickel
- Complete choice of lens colors both translucent and clear shades
- Electrically isolated from the panel – two terminal Housings

The RA Series meets the applicable requirements of MIL-L-3661 and MIL-I-6723

### MATERIALS


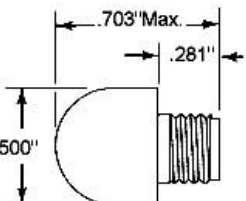
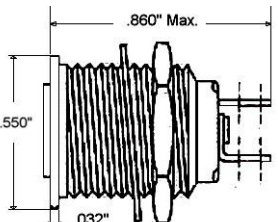

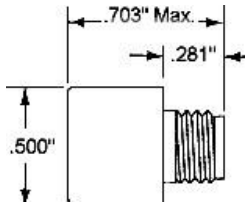
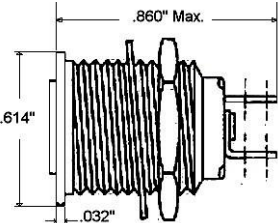

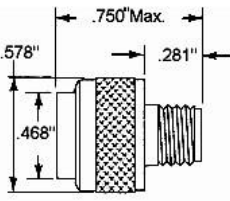
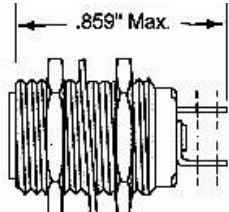
Housing and lens shroud – Brass, Bright Nickel, Black Nickel

Lens – High strength plastic

Hex Nut & lock washer – Brass, Bright Nickel

Insulator – High Dielectric Phenolic

Terminals – Brass tin plated

 <p>RAA-6010-RA210RC</p>	 <p>RA210 – Dome</p>	 <p>RAA Housing mounts from the front of the panel In a 15/32" Diameter hole</p>														
 <p>RAB-6020-RA220GC</p>	 <p>RA220 – Flat top</p>	 <p>RAB Housing mounts from the front of the panel In a 17/32 Diameter hole</p>														
 <p>RAC-6020-RA342AT</p>	 <p>Rotating lens RA342</p>	 <p>RAC Housing mounts from the front or rear of the panel in a 17/32 diameter hole</p>														
<p><b>RA SERIES ORDER INFORMATION</b></p> <p>LAMP HOUSING      LENS CAP</p> <p><b>RAA – 6010 – RA220RC</b></p> <p>Style      Finish      Lens Style      Lens Color</p>	<p><b>LAMP HOUSING</b></p> <p><b>STYLE</b></p> <p>RAA – 15/32" Front Mount RAB – 17/32" Front Mount RAC – 15/32 front or rear Mount</p> <p><b>FINISH</b></p> <p>6010 – Bright Nickel 6020 – Black Nickel</p>	<p><b>LENS CAP ASSEMBLIES</b></p> <p><b>LENS STYLE</b></p> <p>RA210 Dome RA220 Flat top RA341 semi-shroud (Bright Nickel Finish) RA342 semi-shroud (Black Nickel Finish)</p> <p><b>LENS COLOR</b></p> <table border="0"> <tr> <td><b>TRANSLUCENT</b></td> <td><b>CLEAR</b></td> </tr> <tr> <td>AT - Amber</td> <td>AC - Amber</td> </tr> <tr> <td>BT - Blue</td> <td>BC - Blue</td> </tr> <tr> <td>GT - Green</td> <td>GC - Green</td> </tr> <tr> <td>RT - Red</td> <td>RC - Red</td> </tr> <tr> <td>WT - White</td> <td>WC - Water Clear</td> </tr> <tr> <td>YT - Yellow</td> <td>YC - Yellow</td> </tr> </table>	<b>TRANSLUCENT</b>	<b>CLEAR</b>	AT - Amber	AC - Amber	BT - Blue	BC - Blue	GT - Green	GC - Green	RT - Red	RC - Red	WT - White	WC - Water Clear	YT - Yellow	YC - Yellow
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## ELDEMA RL SERIES LAMP HOLDER

**RLD REAR MOUNTING, 3/8" CLEARANCE HOLE, 1/8" PANEL**  
**RLE REAR MOUNTING, 3/8" CLEARANCE HOLE, 3/16" PANEL**  
**RLA FRONT MOUNTING, 15/32" CLEARANCE HOLE**



The RL series single lamp holders provide a choice of either front or rear mounting Configuration to meet any installation requirements. The complete assembly consist of the RL lampholder and one of the several basic RL series lens cap styles. This lampholder group is available with either black or clear anodized finish and may May be furnished with gasket for water tight applications.

RL series lens caps accommodate either midjet flange based incandescent or neon Lamps. The lampholders are available with built-in resistor for neon lamp applications.

### MATERIALS & SPECIFICATIONS

RL series meets or exceeds the applicable requirements of MIL-L-3661

**Housing & knurled ring** – Anodized aluminum per MIL-A-8625

**Lamp socket & lens barrel** – Nickel plated brass

**Insulator** - High Dielectric Phenolic

**Hex nut & lock washer** - Cadmium plated & Chromated Steel

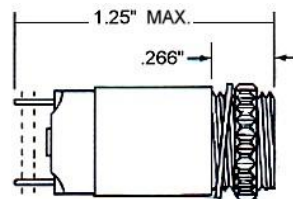
**Lens** - Butyrate plastic

**Terminal** - Brass, tin plated with two elongated slots.

RLD60B0-RL090GC



RLD60S0-RL150WC



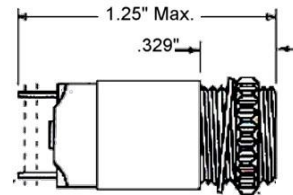
RLD Lamp Holder rear mounting 3/8 clearance hole

Mate with all RL series Lens caps

RLE60S0-RL130WC



RLE60S0-RL130RC

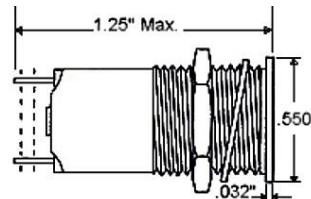


RLE Lamp holder rear mounting 3/8 clearance hole

Mate with all RL series Lens caps



RLA62B0-RL170AC

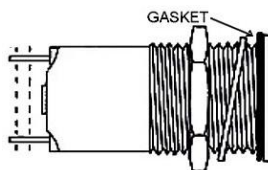


RLA Lamp holder front mounting 15/32 clearance hole

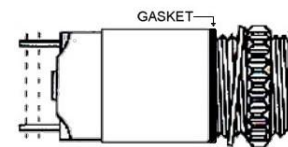
Mate with all RL series Lens caps



RL170 Water tight



RLA Water tight









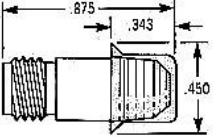
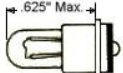
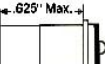
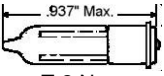
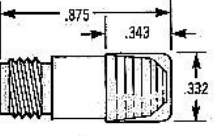





RLD/RLE Water tight

# ELDEMA RL SERIES LENS CAPS

MATE WITH RL SINGLE LAMP HOLDERS

These lens caps mate with the RL series single lampholders. All of the three basic lens shapes are available with either a smooth face and back or internal Fresnel ring. The Fresnel ring lens cap is available in the clear (transparent) shades. The internal Fresnel Ring has a light diffusing effect that makes the output of neon lamps and low power incandescent lamps more brilliant and easier to see. The Fresnel effect actually breaks up the light output and diffuses it across the entire face of the lens cap. The smooth face and back Lens cap styles are normally supplied in translucent lens colors and are best used with the higher brilliance incandescent lamps. The uniform wall thickness gives even light distribution over the entire lens cap surface.

   <b>SMOOTH FACE STYLES</b>    <b>WATERTIGHT STYLES</b>  	 <b>RL150 SKIRT</b>	<b>LAMP INFORMATION</b>  The RL series is designed to accommodate the midget flange based T1-1-3/4 Incandescent lamp or T-2 Neon lamps   T1-3/4 incandescent   T1-3/4 LED (optional)   T-2 Neon	<b>T-1-3/4 INCANDESCENT LAMPS</b>			<b>MANUFACTURERS RATING</b>																																																																																				
	 <b>RL090 FLAT TOP</b>		<table border="1"> <thead> <tr> <th>LAMP #</th> <th>VOLTS</th> <th>AMPS</th> <th>HOURS</th> <th>CANDLE POWER</th> </tr> </thead> <tbody> <tr><td>331</td><td>1.35</td><td>.06</td><td>500</td><td>.006</td></tr> <tr><td>338</td><td>2.7</td><td>.06</td><td>500</td><td>.04</td></tr> <tr><td>375</td><td>3.0</td><td>.015</td><td>20,000</td><td>.004</td></tr> <tr><td>328</td><td>6.0</td><td>.20</td><td>1,000</td><td>.63</td></tr> <tr><td>345</td><td>6.0</td><td>.04</td><td>1,000</td><td>.03</td></tr> <tr><td>349</td><td>5.3</td><td>.20</td><td>3,000</td><td>.55</td></tr> <tr><td>380</td><td>6.3</td><td>.04</td><td>50,000</td><td>.02</td></tr> <tr><td>381</td><td>6.3</td><td>.20</td><td>50,000</td><td>.40</td></tr> <tr><td>344</td><td>10.0</td><td>.014</td><td>50,000</td><td>.002</td></tr> <tr><td>367</td><td>10.0</td><td>.04</td><td>20,000</td><td>.08</td></tr> <tr><td>330</td><td>14.0</td><td>.08</td><td>750</td><td>.50</td></tr> <tr><td>382</td><td>14.0</td><td>.08</td><td>50,000</td><td>.30</td></tr> <tr><td>370</td><td>18.0</td><td>.04</td><td>1,000</td><td>.15</td></tr> <tr><td>327</td><td>28.0</td><td>.04</td><td>1,000</td><td>.34</td></tr> <tr><td>387</td><td>28.0</td><td>.04</td><td>25,000</td><td>.30</td></tr> </tbody> </table>	LAMP #	VOLTS	AMPS	HOURS	CANDLE POWER	331	1.35	.06	500	.006	338	2.7	.06	500	.04	375	3.0	.015	20,000	.004	328	6.0	.20	1,000	.63	345	6.0	.04	1,000	.03	349	5.3	.20	3,000	.55	380	6.3	.04	50,000	.02	381	6.3	.20	50,000	.40	344	10.0	.014	50,000	.002	367	10.0	.04	20,000	.08	330	14.0	.08	750	.50	382	14.0	.08	50,000	.30	370	18.0	.04	1,000	.15	327	28.0	.04	1,000	.34	387	28.0	.04	25,000	.30	<table border="1"> <thead> <tr> <th>LAMP NO.</th> <th>CHARACTERISTICS</th> </tr> </thead> <tbody> <tr> <td>NE2J (C9A)</td> <td>High brightness lamp for 110 VAC Applications. Use with 27K resistor</td> </tr> <tr> <td>NE2D (C7A)</td> <td>Medium brightness lamp for 90 VDC Application. Use 62K resistor.</td> </tr> </tbody> </table>	LAMP NO.	CHARACTERISTICS	NE2J (C9A)	High brightness lamp for 110 VAC Applications. Use with 27K resistor	NE2D (C7A)	Medium brightness lamp for 90 VDC Application. Use 62K resistor.
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<b>ORDERING INFORMATION</b>  Formulate the part number using the table at right  <b>PART NUMBER EXAMPLE</b> RLA60B5-RL090WC Assembly RLA60B5 Lampholder only RL090WC Lens cap only  Water tight version of RL series lampholders and lens caps are available. To order these parts specify water tight under the mounting designation in the Lampholder part number and specify either the smooth face or Fresnel ring style skirted lens with gasket as in the table for example, a complete water tight assembly part number: RLA62B0-RL170WC  <b>PART MARKING</b> Part making includes Eldema and the lampholder number ELDEMA RLA 6085			<b>RL SERIES LAMP HOLDER</b>			<b>RL SERIES LENS CAPS</b>																																																																																				
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# ELDEMA RM & RN SERIES FOR 15/32" CLEARANCE HOLE

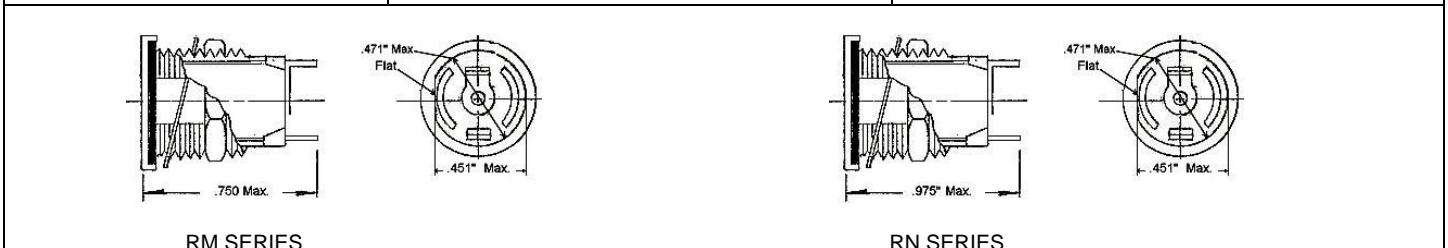


**R – Lites** are Eldema's product family of relampable holders and lens caps for Midget flange based T- 1 ¼ incandescent and T-2 neon bulbs. The lamps and lens caps are replaceable from the front of the panel. There are five R-Lites groups each with its own features - the holder and Lens cap part numbers in each group start with the same two letters to insure mating parts.

The **RM-RN** groups meet MIL-L-3661. The **RM** is for incandescent lamps - the **RN** Series with a built in resistor is for neon lamps. Standard types **RMA** and **RNA** – water proof types **RMM**, **RNM** and **RNW** – two tin plated lug terminals – Black anodized aluminum case – High impact plastic lenses. Mount from the front in .468" clearance hole. Equivalent Military numbers are listed.

 RMA-64BO-RM120WC   RMA-64BO-RM160GC   RMM-63BO-RM130AC   RMA-64BO-RM22BAC	<p><b>RM SERIES</b></p> <p><b>HOLDER P/N</b>                      <b>MIL. TYPE</b></p> <p><b>RMA-64B0</b> Standard - LH73/1 Black Finish</p> <p><b>RMM-63B0</b> Water proof - LH89/1 Black finish</p> <p><b>LENS CAP STYLE</b></p> <p><b>RM120</b> Dome - LC12  <b>RM160</b> Flat top - LC29  <b>RM130</b> Water proof dome - LC35  <b>RM22B</b> Semi-Shroud -----</p>	<p><b>LENS COLOR</b>                      <b>MIL. TYPE</b></p> <p><b>AC</b> Amber Color                      YN2  <b>BC</b> Blue Color                      BN2  <b>CC</b> Cloudy Clear                      ----  <b>GC</b> Green Clear                      GN2  <b>RC</b> Red Clear                      RN2  <b>WC</b> Water Clear                      ----  <b>AT</b> Amber Translucent                      YT2  <b>BT</b> Blue Translucent                      BT2  <b>GT</b> Green Translucent                      GT2  <b>RT</b> Red Translucent                      RT2  <b>WT</b> White Translucent                      WT2  <b>YT</b> Yellow Translucent                      WT2</p> <p><b>SPECIFY HOLDER – LENS CAP STYLE AND LENS COLOR</b></p> <p>For Example:  RMM-63BO-RM130RC is Eldema p/n  LH89/1-LC35RN2 is Military p/n  NOTE: RMA-64BO-RM120 also meets MS25256 Designate lens color.</p>
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 RNA-64B5-RN120RC   RNM-63B5-RN130GT	<p><b>RN SERIES</b></p> <p><b>HOLDERS P/N</b>                      <b>MIL TYPE</b></p> <p><b>RNA-64B5</b> Standard - LH74/1 Black Finish with 62K ohm for NE2D Lamp</p> <p><b>RNA-64B2</b> Standard - LH74/2 Black finish with 27K ohm for NE2J Lamp</p> <p><b>RNW-63B5</b> Mil-Drawing 13214E1391 LH88/1 Black finish with 62K ohm for NE2D Lamp</p> <p><b>RNM-63B2</b> Waterproof - LH88/2 Black Finish with 27K ohm for NE2J Lamp</p> <p><b>LENS CAP STYLE</b>                      <b>MIL TYPE</b></p> <p><b>RN 120</b> Dome                      LC13  <b>RN130</b> Waterproof                      LC33</p>	<p><b>LENS COLORS</b>                      <b>MIL TYPE</b></p> <p><b>AC-</b> Amber Clear                      YN2  <b>CC-</b> Cloudy Clear                      WT2  <b>RC-</b> Red Clear                      RN2  <b>WC-</b> Water Clear                      CN2  <b>YC-</b> Yellow Clear                      ----</p> <p><b>SPECIFY HOLDER --- LENS CAP STYLE AND COLOR</b></p> <p>For Example:  RNA-64B5-RN120RC is Eldema p/n  LH74/1-LC13RN2 is Military p/n  <b>NOTE:</b> RNA-64B5-RN120 also meets MS25257 Designate Lens Color.</p>
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# ELDEMA RM & RN SERIES LENS CAPS

MATE WITH RM & RN SINGLE LAMP HOLDERS

These lens caps mate with the RM & RN series single lampholders. The holder and lens cap part numbers in each group start with the same two letters to insure mating parts. The RM lens cap is for incandescent lamps T-1 3/4 Midget flanged base the RN lens cap is for the T-2 Neon lamps. All the lens caps are crimped in three places to securely hold the lamp and easily removed from the front panel without any special tools.

Image	Part Number	LAMP INFORMATION	T-1-3/4 INCANDESCENT LAMPS			MANUFACTURERS RATING	
			LAMP #	VOLTS	AMPS	HOURS	CANDLE POWER
	RM 130	The RM series is designed to accommodate the midget flange based T1-1-3/4 Incandescent lamp or T1-3/4 LED	331	1.35	.06	500	.006
	RM 120	T1-3/4 incandescent	338	2.7	.06	500	.04
	RM160	T1-3/4 LED (optional)	375	3.0	.015	20,000	.004
	RM22	T-2 Neon	328	6.0	.20	1,000	.63
	RM76		345	6.0	.04	1,000	.03
	RN 830		349	5.3	.20	3,000	.55
	RN 130		380	6.3	.04	50,000	.02
	RN120		381	6.3	.20	50,000	.40
			344	10.0	.014	50,000	.002
			367	10.0	.04	20,000	.08
			330	14.0	.08	750	.50
			382	14.0	.08	50,000	.30
			370	18.0	.04	1,000	.15
			327	28.0	.04	1,000	.34
			387	28.0	.04	25,000	.30
			<b>T-2 NEON LAMP</b>				
			LAMP NO.		CHARACTERISTICS		
			NE2J (C9A)		High brightness lamp for 110 VAC Applications. Use with 27K resistor		
			NE2D (C7A)		Medium brightness lamp for 90 VDC Application. Use 62K resistor.		
			<b>ORDERING INFORMATION</b>				<b>LENS COLOR</b>
			<b>HOLDER</b>		<b>LENS CAP</b>		<b>Clear</b> Recommended For neon lamps
			TYPE	RN/RM	MOUNTING	FEATURES	
			RN	A	6	3	B
			5	RN120	RC	LENS COLOR	AC- Amber
			LENS STYLE	RESISTOR	FINISH	LENS COLOR	BC- Blue
			0= none	2= 27K	B= black anodized	LENS COLOR	CC- Cloudy
			1= flat on side	5= 62K	S= silver anodized	LENS COLOR	GC- Green
			2= water proof	Y= gold irridate		LENS COLOR	RC- Red
			3= flat & water proof			LENS COLOR	WC- Water
			4= notched on flange			LENS COLOR	YC- Yellow
							<b>Translucent</b>
							AT- Amber
							BT- Blue
							GT- Green
							RT- Red
							WT- White
							YT- Yellow