



#### **ORDERTERMS & CONDITIONS**

Minimum OEM Order Value: \$500.00 \$250.00 Minimum Distributor Order Value:

25 Piece Line Item Minimum for Standard Products, Contact Factory For Special Products

PaymentTerms: Net 30 Days (with approved credit)

Scheduled Orders:

Full order quantity must be scheduled when order is placed.

Minimum order quantity for scheduled releases is 1,000 pieces per line item. Minimum release quantity is 500 pieces. Changes to scheduled quantities or release dates may incur additional charges or delays in production. Orders in production may not be rescheduled.

We reserve the right to over- or under-ship by 5% of order or scheduled release quantities.

Returns for defective materials are accepted after receipt of samples, and issuance of a Return Material Authorization (RMA) Number. RMAs are valid for 30 days , and all returns must be accomplished within that time frame. All parts must be in the original packaging.

Order Acknowledgments with our Sales Order number are issued to confirm order quantity. pricing, scheduled ship dates. Please review them. If you need to call to check the status of an order, please have our Sales Order number available.

SoLiCo's sales and engineering personnel will help you determine the best indicator for your application, or help you with a custom design. As our products may be used in a wide variety of applications, the final responsibility in determining the suitability of our products for a specific application rests with you.

It may be possible to build a part number from this catalog that cannot be manufactured. We have included information for each series noting construction limitations. Certain constructions may require components in the lead wires.

We strongly recommend potting for all incandescent lamp Incandescent Lamps / Potting applications, especially where vibration is a factor. See page 24 for additional information.

We reserve the right to make changes to our products, without prior notice, to improve performance or take advantage of new technologies. The limit of our responsibility under these circumstances is to maintain product fit, function and performance.

Wire length tolerance is:  $\pm \frac{1}{4}$  on leads less than 12"  $\pm \frac{1}{2}$ " on leads 12" to 36"  $\pm 1$ " on leads greater than 36"

Strip length tolerance is: ± 1/32

LEDS: Due to rapidly changing LED technology, not all devices listed in our catalog may be available as described. We reserve the right to supply the closest equivalent device in appearance and performance.

Sorenson Lighted Controls, Inc. 100 Shield St. West Hartford, CT 06110

TEL: (860) 527-3092 1-800-275-7089 (860) 527-6047 1-800-275-7092 FAX:

website: www.solico.com

# Please See The Website For The Latest Product Changes And Updates www.solico.com

# PRODUCT SERIES **PAGE Round Indicator Lights** 18, 21 & 24 ...... 2 19......4 31......8 35...... 5 65......9 Rectangular Indicator Lights 16 & 17...... 16 25, 26 & 27....... 17 33 & 34...... 14 36 & 37, 39 & 40 ...... 12 (NEW) Flex Light (Unsealed) .......24 **Rear Mount Indicator** 10, 11 & 60....... 18 Additional Items Mounting Clips **Agency Approvals:** The majority of our indicators carry Agency approvals.

Agency Approvals: The majority of our indicators carry Agency approvals Please contact us for the latest Agency information for the specific series and voltages you require.









#### SoLiCo Facilities:

Hartford, Connecticut Brownsville, Texas Matehuala, Mexico

Catalog 12.9 December 2007 **UL Information** File # E36730(M)

**TUV Information** 

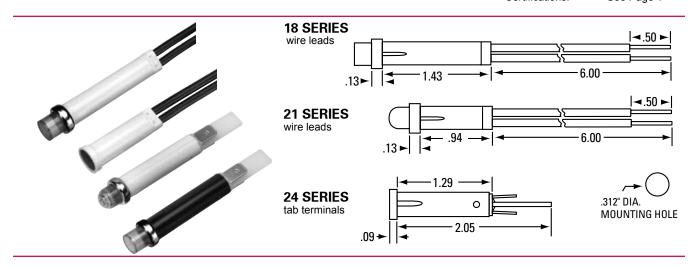
EN:60598-1 EN:60598-2-1

# 18, 21 & 24

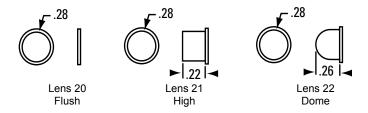
- Press fits into 0.312" panel hole
- LED, incandescent, and neon illumination
- Three lens styles available

### **SPECIFICATIONS**

Body Material: Nylon Lens Material: Pólycarbonate Bezel Material: Brass (Plated) 18 ga. 1/2" Wire Gauge: Wire Strip: .187 QC Terminals: 0.030" min See Page 1 Panel Thickness: Certifications:



Series		Lamp		Termin	ation_	Ba	se	Bez	<u>el</u>		Lens		
XX		XX	-	<u>X</u>		- X		<u>X</u>	. '	- XXX		X	0
18	Voltage	e Type	Code	Style	Code	Color	Code	Finish	Code	Style	Code	Color	Code
21	2	LED	10	6" Wire	1	White	1	None	0	Flush Translucent <sup>3,5</sup>	201	Red	1
24	6	LED	11	.187 Tabs	s <sup>6</sup> 3	Black	2	Chrome	2	Flush Diamond⁵	203	Amber	2
	14	LED	12					Black	3	High Translucent <sup>2,3</sup>	211	Clear⁴	3
	28	LED	13	Special	Χ					High Rings <sup>2</sup>	216	Green	4
	125 <sup>1</sup>	LED	15							Dome Translucent <sup>2,3</sup>	221	Blue	5
										Dome Rings <sup>2</sup>	226	White	6
	6	<b>INCAND</b>	32							· ·			
	14	<b>INCAND</b>	35								White lens is	Transluc	ent
	28	INCAND	39								Clear lens is	Transpar	rent
	125	NEON	50										
	250	NEON	52										
		Special	XX										



ADDITIONAL OPTIONS (see Pricing Adders)
Terminals attached to wire leads Blue / White LEDs Retaining clips Potted lamp High Temperature wire leads Additional voltages are available Green / Blue Neon Lamps

- 1. Series 18 Only
- 2. Bezel Required
- Translucent Lens is not recommended for use with LED
   Specify LED Color if applicable
- 5. Components provided in leads when lens 20 is specified with lamp codes 11 through 15
- 6. Series 24 only

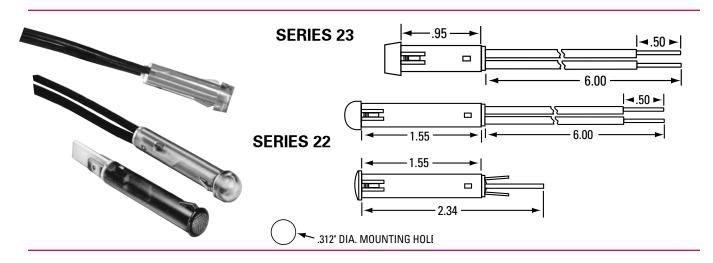
# 22, 23

- Snap fits into 0.312" panel hole
- Body and lens are one piece design
- · LED, incandescent and neon illumination

#### **SPECIFICATIONS**

Body Material: Polycarbonate Lens Material: Polycarbonate Wire Gauge: 18 ga. Wire Strip: 1/2"

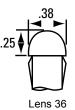
Panel Thickness: 0.025" to 0.060" Certifications: See Page 1



Series		Lamp		Termin	ation	Ba	se	Bez	el		Lens		
XX		XX	-	X	-	- X		<u>X</u>		XXX		X	0
22 23 <sup>2</sup>	Voltag  2  6 14 28 125 <sup>4</sup> 6 14 28	LED LED LED LED LED LED LED INCAND INCAND INCAND NEON	Code 10 11 12 13 15 32 35 39 50 52	Style 6" Wire .187 Tabs Special	Code 1 5 <sup>3</sup> 3 X	<u>Color</u> N/A	<u>Code</u> 0	Finish None	Code 0	Style Semi- Dome Diamonds Cylinder Rings Dome Plain	Code 343 356 362	Color Red Amber Clear <sup>1</sup> Green Blue	<u>Code</u> 1 2 3 4 5
		Special	XX										







## ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads High temperature wire leads Additional voltages are available Green / Blue Neon Lamps Blue / White LEDs

- 1. Specify LED Color if applicable
- Components provided in leads when Series 23 is specified with lamp codes 11 through 13
- Available with LED (2V) and incandescent lamps only, contact factory for additional information.
- 4. Available with Wire Leads only.

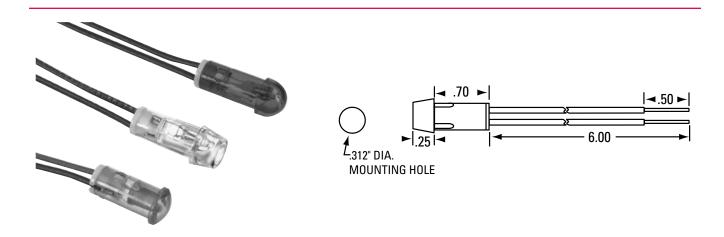
- Press fits into 0.312" panel hole
- · Body and lens are one piece design
- · LED, incandescent, and neon illumination

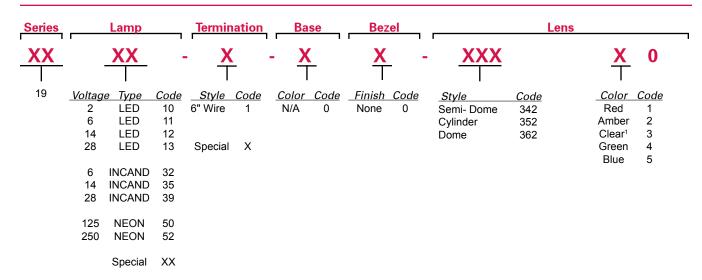
#### **SPECIFICATIONS**

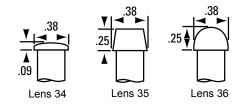
Certifications:

Body Material: Polycarbonate
Lens Material: Polycarbonate
Wire Gauge: 22 ga.
Wire Strip: 1/2"
Panel Thickness: 0.030" min.

See Page 1







## ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads
High temperature wire leads
Retaining Clips
Additional voltages are available
Green / Blue Neon Lamps

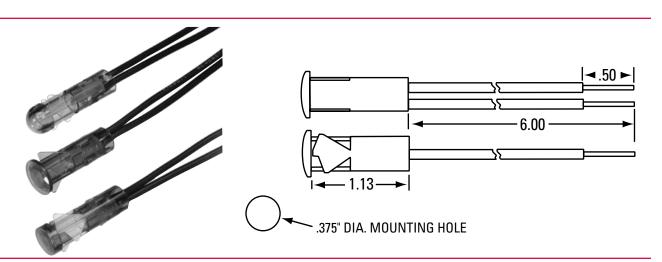
1. Specify LED Color if applicable

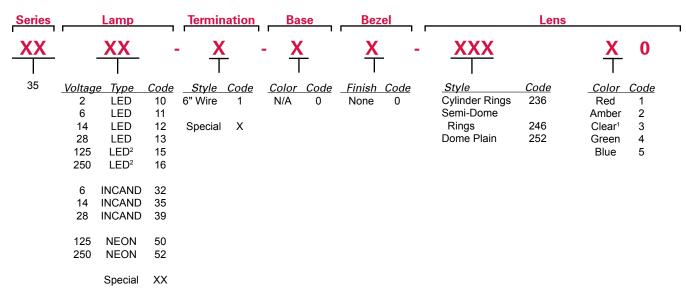
- Snap fits into 0.375" panel hole
- · Body and lens are one piece design
- · LED, incandescent, and neon illumination
- · Three lens styles available
- Splashproof

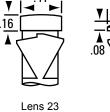
#### **SPECIFICATIONS**

Body Material: Polycarbonate Lens Material: Polycarbonate Wire Gauge: 20 ga.

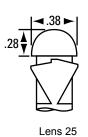
Wire Strip: 1/2"
Panel Thickness: 0.032" to 0.094"
Certifications: See Page 1











ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads Blue / White LEDs High temperature wire leads Potted lamp Additional voltages are available

- 1. Specify LED Color if applicable
- 2. Requires components in wire leads



Green / Blue Neon Lamps

# 28 & 29

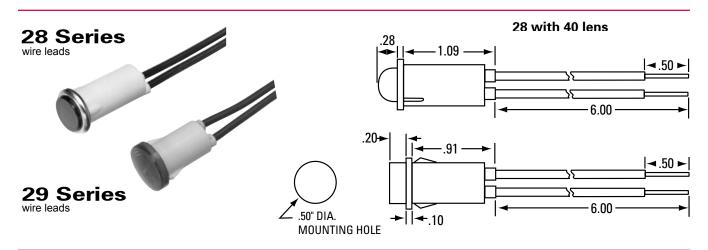
- Fits into 0.500" panel hole
- LED, incandescent, and neon illumination
- · Many lens styles available

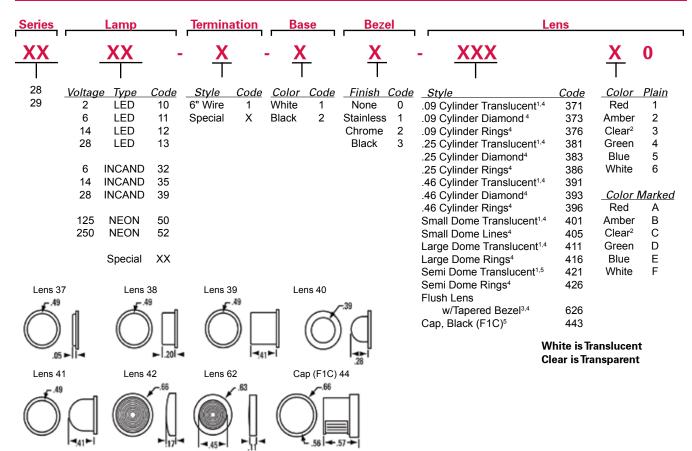
#### **SPECIFICATIONS**

Body Material: Nylon
Lens Material: Polycarbonate
Bezel Material: Stainless Steel
or Plated Brass

Wire Gauge: 18 ga. Wire Strip: 1/2"

Panel Thickness: 0.030" to 0.093" Certifications: See Page 1





### ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads Custom Marking
Retaining clips Green / Blue Neon Lamps
High temperature wire leads Blue / White LEDs

Potted lamp
Additional voltages are available

- 1. Translucent Lens is not recommended for use with LED
- 2. Specify LED Color if applicable
- 3. Polished Bezel only use code 2
- 4. Bezel not available



- Snap fits into 0.500" panel hole
- · LED, incandescent, and neon illumination
- Many lens styles available

#### **SPECIFICATIONS**

Body Material: Nylon

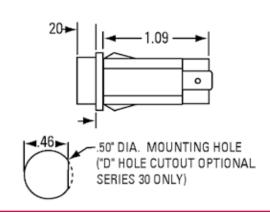
Lens Material: Polycarbonate
Bezel Material: Stainless Steel
or Plated Brass

Panel Thickness: 0.030" to 0.093"
Certifications: See Page 1

# 30 with 43 lens



30 Series tab terminals



Series		Lamp		Termina	tion	Ba	se	Beze	<u> </u>	<u> </u>	ens		
XX		XX	-	<u>X</u>		- X	<u> </u>	X		- XXX		<u>X</u>	0
30	Voltag	e Type	Code	Style	Code	Color	Code	Finish (	Code	Style	Code	Color	Plain
	2	LED	10	.187 Tabs	3	White	1	None	0	.09 Cylinder Translucent <sup>1,4</sup>	371	Red	1
	6	LED	11	.250 Tabs	4	Black	2	Stainless	1	.09 Cylinder Diamond⁴	373	Amber	2
	14	LED	12					Chrome	2	.09 Cylinder Rings4	376	Clear <sup>2</sup>	3
	28	LED	13					Black	3	.25 Cylinder Translucent <sup>1,4</sup>	381	Green	4
										.25 Cylinder Diamond⁴	383	Blue	5
	6	INCAND	32							.25 Cylinder Rings⁴	386	White	6
	14	INCAND	35							.46 Cylinder Translucent <sup>1,4</sup>	391		
	28	INCAND	39							.46 Cylinder Diamond⁴	393	<u>Color I</u>	
										.46 Cylinder Rings⁴	396	Red	Α
	125	NEON	50							Small Dome Translucent <sup>1,4</sup>	401	Amber	В
	250	NEON	52							Small Dome Lines⁴	405	Clear <sup>2</sup>	С
										Large Dome Translucent <sup>1,4</sup>	411	Green	D
		Special	XX							Large Dome Rings⁴	416	Blue	E
										Semi Dome Translucent <sup>1,5</sup>	421	White	F
Lens 37	7	Lens 3	8	Lens 39		Lens	s 40			Semi Dome Rings⁴	426		
49. ــي		49. سي		.49			<b>-39</b>			Flush Lens			
	П				$\Box$	1 /	≈(‴.	<b>√</b> 1		w/Tapered Bezel <sup>3,4</sup>	626		
(( ))	Ш	(( ))		(( ))		l ((	)) (			Cap, Black (F1C)⁵	443		
Lens 4		Lens 4	2 66	Lens 62	- <sub>41</sub> -	Cap	(F1C) 44					nslucent nsparent	-
	<b>41</b> ►		<u> </u>	-4.45F	∐ ,,,,⊲		6 ← .57 →	-					

### ADDITIONAL OPTIONS (see Pricing Adders)

Potted lamp Custom Marking Green / Blue Neon Lamps Blue / White LEDs Additional voltages are available

- 1. Translucent Lens is not recommended for use with LED
- 2. Specify LED Color if applicable
- 3. Polished Bezel only use code 2
- 4. Bezel Required
- 5. Bezel not available

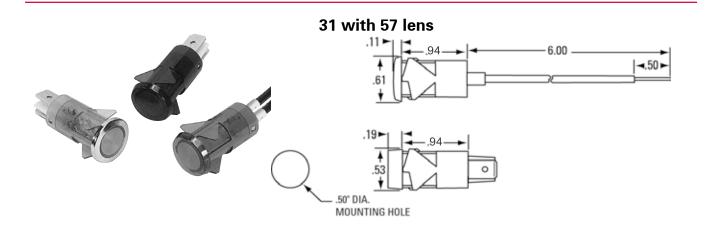


- Snap fits into 0.50" panel hole
- · Body and lens are one piece design
- · LED, incandescent, and neon illumination
- Splashproof

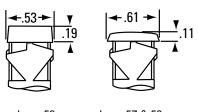
#### **SPECIFICATIONS**

Body Material: Polycarbonate Lens Material: Polycarbonate Wire Gauge: 20 ga. Wire Strip: 1/2"

Panel Thickness: 0.040" to 0.110" Certifications: See Page 1



Series	Lamp	Termination	Base	Bezel		Lens	
XX	XX	- <u>X</u>	- <u>X</u>	<u>X</u> -	XXX		<u>X</u> 0
31 <u>Volta</u> , 2 6 14 28 6 14 28 125 250	LED 10 LED 11 LED 12 LED 13 INCAND 32 INCAND 35 INCAND 39 NEON 50	6" Wire 1 .187 Tabs 3 .250 Tabs 4 Special X	Color Code N/A 0	Finish Code None 0 Chrome² 2 Black² 3	Style Semi-Dome Rings Semi -Dome Rings W/ Bezel Cylinder Rings	Code 576 586 596	Color Code  Red 1  Amber 2  Clear¹ 3  Green 4  Blue 5



Lens 59

Lens 57 & 58

## ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads High temperature wire leads Additional voltages are available Green / Blue Neon Lamps Blue / White LEDs

- 1. Specify LED Color if applicable
- 2. Available with lens 58 only

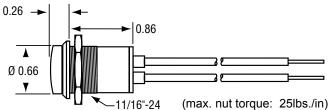
- Threaded mount secured with hex nut and lock washer
- LED cluster lighting
- Daylight visible
- Splashproof design

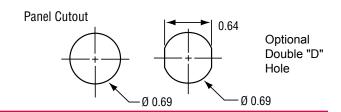
#### **SPECIFICATIONS**

Body Material: Nylon
Lens Material: Polycarbonate
Wire Gauge: 20 ga.
Wire Strip: 1/2"

Panel Thickness: 0.050" to 0.25" Certifications: See Page 1







Series	Lamp		Termination Base		Bezel		Lens			
XX	· _	XX	-	X	- <u>X</u>	<u>X</u> -	XXX		X	0
				T	T					
65	<u>Voltage</u>	Туре	Code	Style Code	Color Code	Finish Code	Style	<u>Code</u>	Color	<u>Code</u>
	14	LED	12	6" Wire 1	White 1	None 0	Translucent	421	Red	1
	28	LED	13	.187 Tabs 3	Black 2		Transparent Rings	426	Amber	2
	125	LED	15¹	.250 Tabs 4			Transparent Rings		Clear	32,3
							with Diffuser	42A	Green	4
							Faceted Dome	662	Blue	5
							Faceted Dome	66A	White	64
							with diffuser		Yellow	<b>8</b> <sup>5</sup>

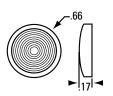
White is Translucent Clear is Transparent

### LED Light Output (mcd)

Red	10k typ.
Green	15k typ.
Blue	7k typ.
White	12k typ.
Yellow	8k typ.







Lens 662

Lens 42

## ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads Flat Gasket panel seal 24 ga. wire leads Lock Washer

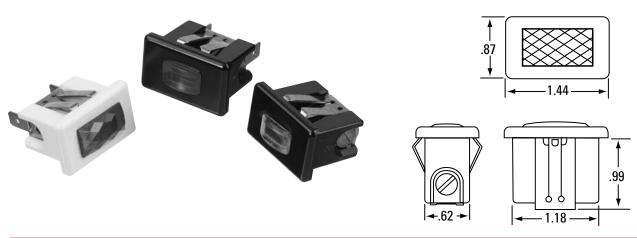
- 1. Reduced intensity
- 2. Transparent
- 3. Specify LED color for clear lens
- 4. Translucent only
- 5. Lens 42 only

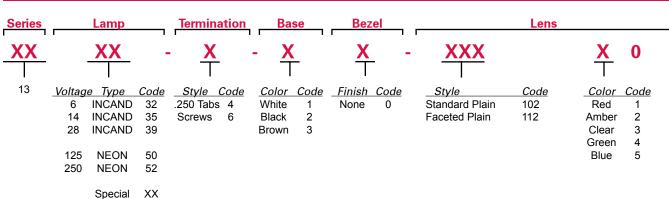


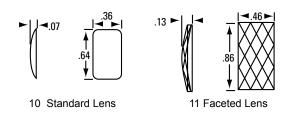
- Snap fits into 1.200" x .640" panel cutout
- Neon & incandescent illumination
- · Two lens styles available
- Suggested for High Temperature applications
- · Two termination styles available

#### **SPECIFICATIONS**

Body Material: Phenolic
Lens Material: Polycarbonate
Panel Thickness: 0.045" to 0.065"
Certifications: See Page 1







## ADDITIONAL OPTIONS (see Pricing Adders)

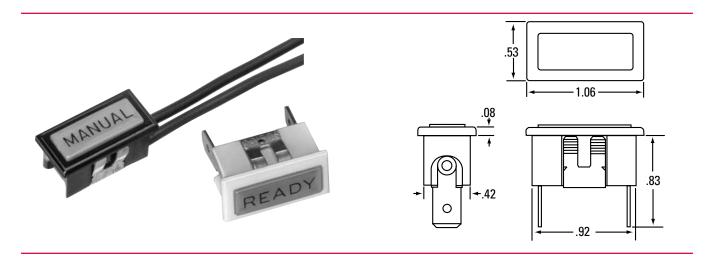
Additional voltages are available Green / Blue Neon Lamps

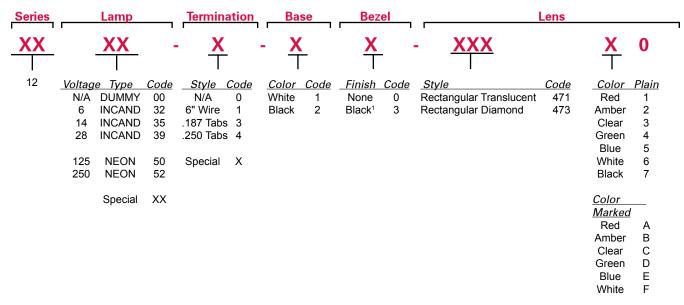
- Snap fits into 0.940" x 0.440" panel cutout
- Incandescent and neon illumination
- Dummy (hole plugs) available

#### **SPECIFICATIONS**

Body Material: Polycarbonate Lens Material: Polycarbonate Wire Gauge: 18 ga.

0.031" to 0.093" Panel Thickness: Certifications: See Page 1





White is Translucent Clear is Transparent

## ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads Green / Blue Neon Lamps High temperature wire leads Potted lamp **Custom Marking** Additional voltages are available

1. Metal bezel



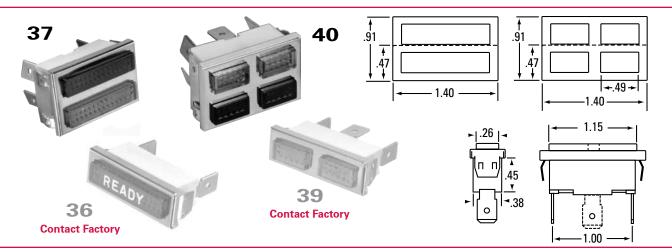
# 36, 37, 39, 40

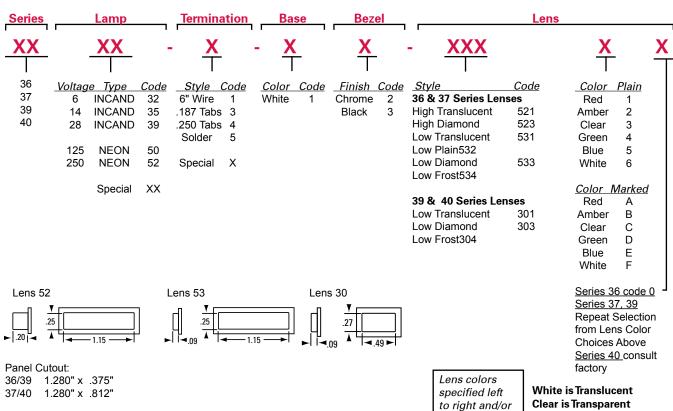
- · Snap fits into panel cutout
- Incandescent and neon illumination
- · Several lens patterns available
- · Four Termination styles

#### **SPECIFICATIONS**

Body Material: Nylon
Lens Material: Polycarbonate
Bezel Material: Plated Steel
Wire Gauge: 18 ga.

Panel Thickness: 0.030" to 0.090"
Certifications: See Page 1





### ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads Green / Blue Neon Lamps High temperature wire leads Potted lamp(s) Custom Marking Additional voltages are available



top to bottom

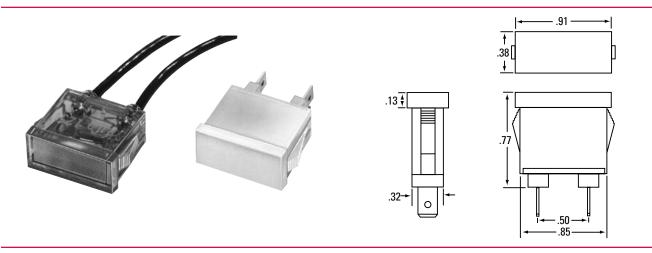
- Snap fits into .330" x .865" panel cutout
- Body and lens are one piece design
- Incandescent and neon illumination

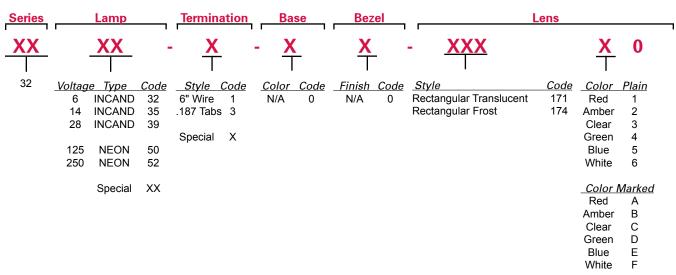
#### **SPECIFICATIONS**

Body Material: Polycarbonate Lens Material: Polycarbonate Wire Gauge: 18 ga.

Wire Strip: 1/2"

Panel Thickness: 0.025" to 0.125" Certifications: See Page 1





White is Translucent Clear is Transparent

## ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads Green / Blue Neon Lamps High temperature wire leads Potted lamp Custom Marking Additional voltages are available



# 33, 34

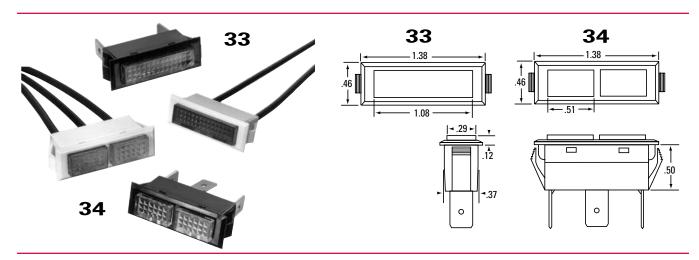
- Snap fits into .375" x 1.28" panel cutout
- Incandescent and neon illumination
- Many lens styles available
- · Dummy (hole plugs) available

#### **SPECIFICATIONS**

Body Material: Nylon Lens Material: Polycarbonate Wire Gauge: 18 ga.

Wire Gauge: 18 ga. Wire Strip: 1/2"

Panel Thickness: 0.030" to 0.100" Certifications: See Page 1



Series		Lamp		Termina	tion	Ва	se	Bez	el		ens		
XX	,	XX	-	X		- <u>X</u>	<u>.</u>	X		- XXX		X	X
33	Voltag	е Туре	Code	Style	Code	Color	Code	Finish	Code	Style	Code	Color	Plain
34	N/A	DUMMY	00	N/A	0	White	1	None	0	33 Series Lenses		Red	1
	6	INCAND	32	6" Wire	1	Black	2	Stainless	: 1	Rectangular Translucent	181	Amber	2
	14	INCAND	35	.250" Tabs	4					Rectangular Plain	182	Clear	3
	28	INCAND	39							Rectangular Diamond	183	Green	4
										Rectangular Frost	184	Blue	5
	125	NEON	50	Special	X					Rectangular Lines	185	White	6
	250	NEON	52									Black	7
										34 Series Lenses			
		Special	XX							Rectangular Translucent	191		<u>Marked</u>
										Rectangular Diamond	193	Red	A
										Rectangular Frost	194	Amber	В
										Rectangular Lines	195	Clear	С
												Green	D
												Blue	E
												White	F
												Series 3	33 code 0 34
												Repeat	Selection
												from Le	ens Color
												Choices	s Above

### White is Translucent Clear is Transparent

## ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads Green / Blue Neon Lamps High temperature wire leads Potted lamp Custom Marking Additional voltages are available

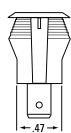


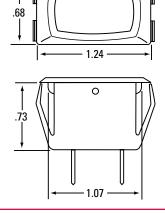
- Snap fits into .550" x 1.125" panel cutout
- · LED, Incandescent, and neon illumination
- · Matte Finish
- · Dummy (hole plugs) available

### **SPECIFICATIONS**

Body Material: Nylon
Lens Material: Polycarbonate
Panel Thickness: 0.025" to 0.187"
Certifications: See Page 1







Series		Lamp		Termin	ation	Ba	se	Bez	el		Lens		
XX		XX	-	X		- X		X	-	XXX		X	0
15	Voltag N/A 2 6 14 28 125 250	e Type DUMMY LED INCAND INCAND INCAND INCAND NEON	35	Style N/A .250 Tab	0	<u>Color</u> White Black	<u>Code</u> 1 2	<u>Finish</u> N/A	<u>Code</u> 0	Style Flush Translucent <sup>1</sup> Flush Frost	<u>Code</u> 121 124	Red Amber Clear <sup>2</sup> Green Blue White Black	Plain 1 2 3 4 5 6 7
		Special	XX									Marked Red Amber Clear <sup>2</sup> Green Blue White	A B C D E F

White is Translucent Clear is Transparent

## ADDITIONAL OPTIONS (see Pricing Adders)

Potted lamp Custom Marking Additional voltages are available Blue / White LEDs Green / Blue Neon Lamps

<sup>1.</sup> Translucent Lens is not recommended for use with LED

<sup>2.</sup> Specify LED Color if applicable

# 16, 17

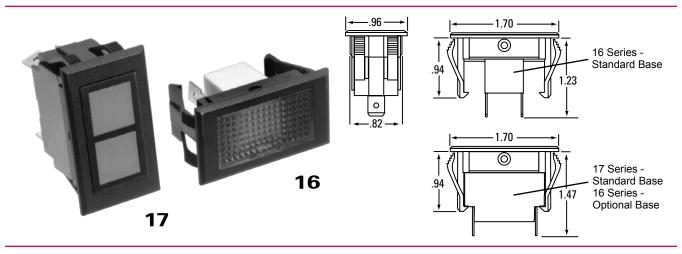
- Snap fits into .830 x 1.450" panel cutout
- Incandescent and neon illumination
- · Single or dual lenses
- · Dummy (hole plugs) available

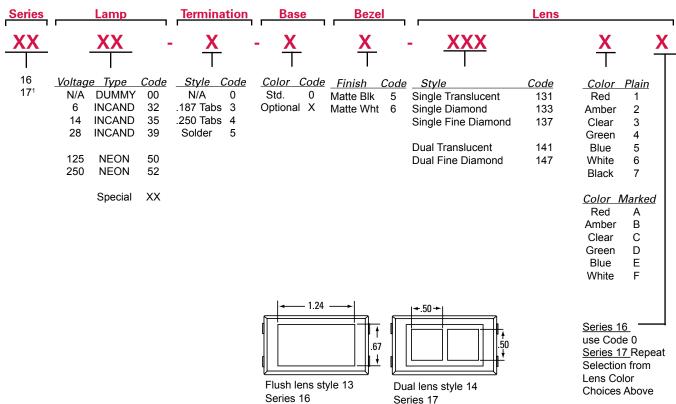
#### **SPECIFICATIONS**

Body Material: Nylon
Lens Material: Polycarbonate
Wire Gauge: 18 ga.

Panel Thickness: 0.030" to 0.240" Certifications: See Page 1

> White is Translucent Clear is Transparent





### ADDITIONAL OPTIONS (see Pricing Adders)

Potted lamp (s) - Standard on 17 (dual lens) series Custom Marking Dual Lamps available with single lens. Consult factory. Additional voltages are available Green / Blue Neon Lamps



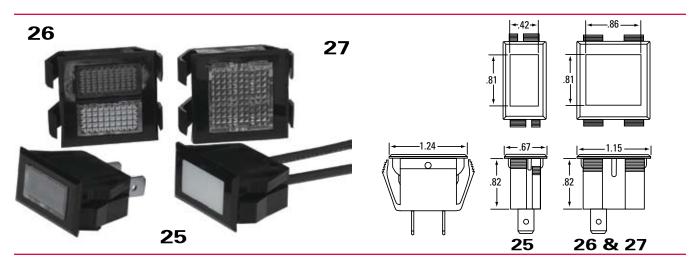
# 25, 26, 27

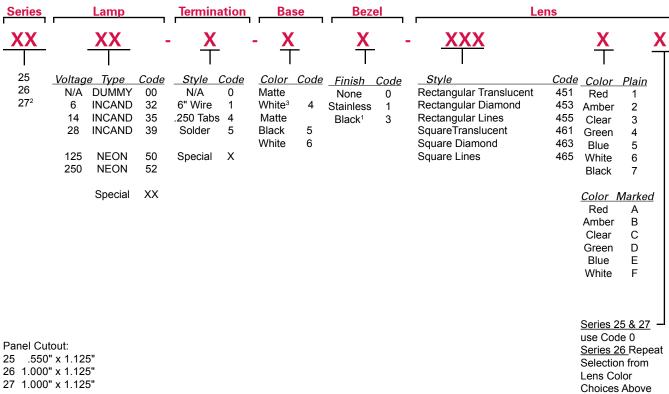
- Snap fits into panel cutout
- Incandescent and neon illumination
- · Single or dual lenses, many combinations available
- · Dummy (hole plugs) available

#### **SPECIFICATIONS**

Body Material: Nylon Lens Material: Polycarbonate Wire Gauge: 18 ga.

Panel Thickness: 0.020" to 0.250" Certifications: See Page 1





## ADDITIONAL OPTIONS (see Pricing Adders)

Terminals attached to wire leads Green / Blue Neon Lamps High temperature wire leads Black Bezel Potted lamp (s)

- 1. Series 25 only
- 2. No bezel available for 27
- Series 26 & 27 white base contact factory



Additional voltages are available

**Custom Marking** 

White is Translucent Clear is Transparent

# 10, 11 & 60

- Lens mounts from front, indicator from behind panel
- Incandescent and neon illumination
- 10 Series has wire leads only
- 11 Series has tab terminals only
- 60 Series available with wire leads or tab terminals

#### **SPECIFICATIONS**

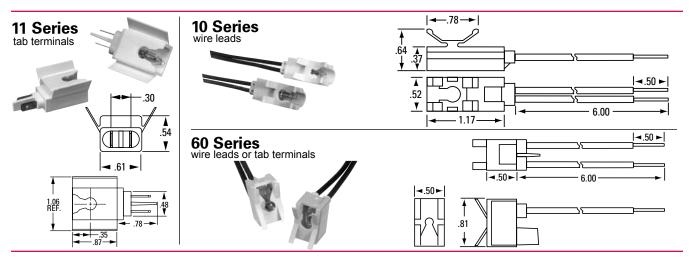
Body Material: Nylon

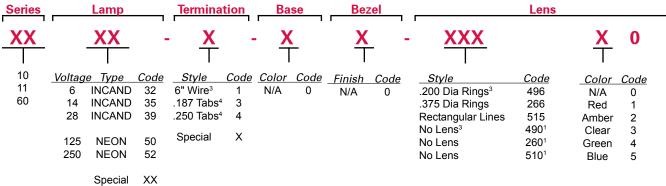
Polycarbonate Lens Material: Wire Gauge: 20 ga. Series 10

18 ga. Series 60

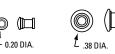
Wire Strip: 1/2"

Panel Thickness: .031"-.078"2 See Page 1 Certifications:





Lens 49 mounting hole .180" dia Lens 26 mounting hole .312 " dia. Lens 51 mounting hole .300" x .690"







Lens 493 Lens 26

## Lens 51

### ADDITIONAL OPTIONS (see Pricing Adders)

Potted lamp Additional voltages are available Green / Blue Neon Lamps Terminals attached to wire leads High temperature wire leads

- 1. If Ordered without lens, lens style must still be specified, Pattern and color are "0".
- 2. Nominal range. Alternate lenses (style 26) are available to fit thicker panels. Please consult factory.
- 3. Not Available on Series 11
- 4. Not Available on Series 10

# 43, 44, 45

- Series 43 T-1 size LED
- Series 44 & 45 T-1<sup>3</sup>/<sub>4</sub> size LED
- Press fit

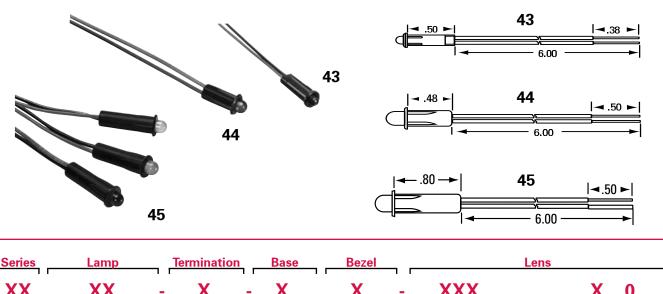
#### **SPECIFICATIONS**

Body Material: Nylon

Wire Gauge: 43 series 26 ga.

44 & 45 series 24 ga.

Wire Strip: 1/2"
Certifications: See Page 1



Series		Lamp		Termin	ation	Ba	se	Bez	zel	Г	Lens		
XX	-	XX		- <u>X</u>	<u> </u>	- X		X	-	XXX		X	0
43 44 45	Voltage 2 6 14 28 125 250	E Type  LED  LED  LED  LED  LED  LED  LED  LE	10 11 12 13 15 16	Style 6" Wire Special	Code 1 X	<u>Color</u> Black	Code 2	Finish N/A	<u>Code</u> 0	<u>Style²</u> Diffused Color Clear Water Clear	Code 010 030 050	Color Red Amber Green Blue White Yellow	<u>Plain</u> 1 2 4 5⁴ 6 8
		Special	XX										

43 Series Mounting hole 0.173" dia 44 & 45 Series Mounting hole 0.250" dia



<sup>1.</sup> For voltages greater than 2V the appropriate external resistor will be provided in the lead.

<sup>2.</sup> Subject to availability.

<sup>3.</sup> Not available on Series 43.

<sup>4.</sup> Water clear blue only

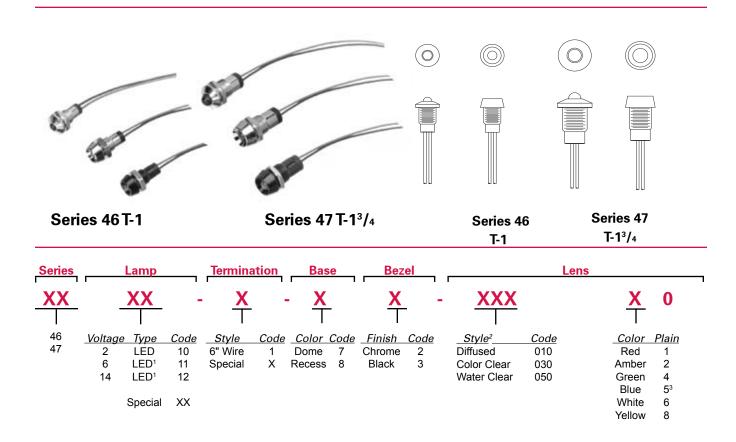
# 46, 47

- T-1 or T-1 <sup>3</sup>/<sub>4</sub> LED
- Threaded body secured with lock washer & nut
- · Black or chrome finish

#### **SPECIFICATIONS**

Body Material: Wire Gauge:

Brass (Plated) 26 ga bonded



Series 46 T-1 size mounting hole .24" Series 47 T-1 3/4 size mounting hole .31"

- 2. Subject to availability
- 3. Water clear blue only

Voltages greater than 2V require components in lead wire(s)

# NEW

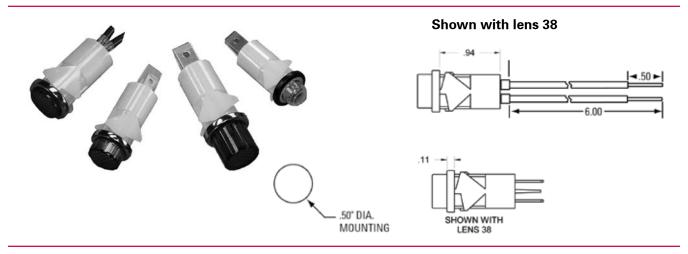
# 68 Series

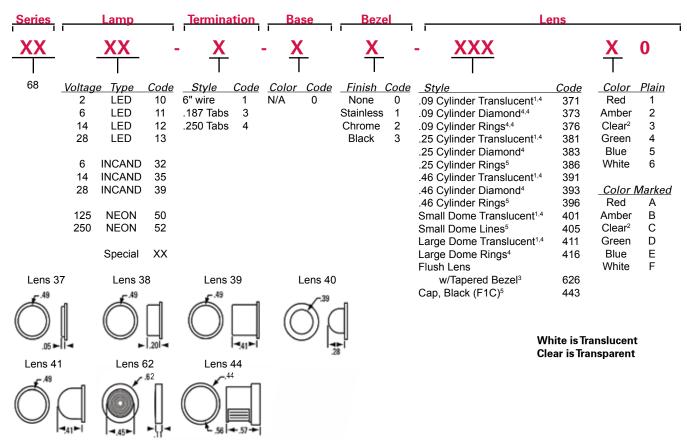
- Snap fits into 0.500" panel hole
- · LED, incandescent, and neon illumination
- Many lens styles available

#### **SPECIFICATIONS**

Body Material: Polycarbonate
Lens Material: Polycarbonate
Bezel Material: Stainless Steel
or Plated Brass

Panel Thickness: 0.030" to 0.093" Certifications: See Page 1





#### ADDITIONAL OPTIONS (see Pricing Adders)

Potted lamp Custom Marking Green / Blue Neon Lamps Blue / White LEDs Additional voltages are available

- 1. Translucent Lens is not recommended for use with LED
- 2. Specify LED Color if applicable
- 3. Polished bezel only use code 2
- 4. Bezel required
- 5. Bezel not available



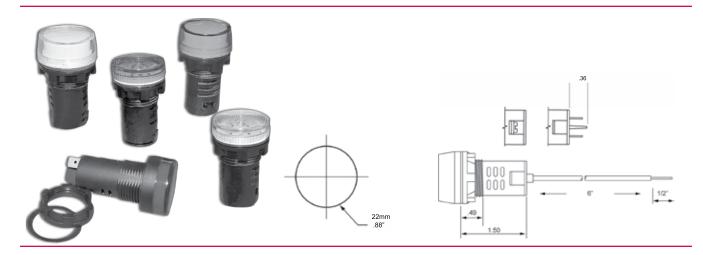
# NEW

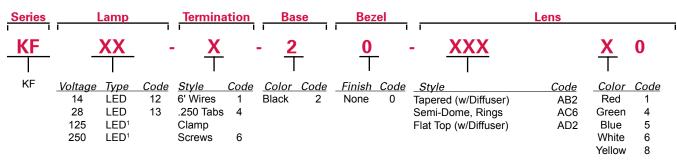
# **KF Series**

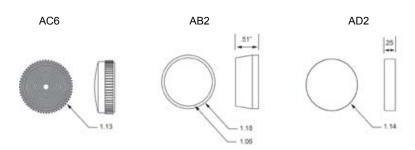
- Mounts in 22mm panel hole
- Hex nut + panel seal supplied
- Three lens styles available

### **SPECIFICATIONS**

Housing: PBT w/ 20% glass
Lens: Polycarbonate
Deffuser: POM (polyacetal)
Hex Nut: Polycarbonate







### APPLICATIONS:

Emergency Vehicles Industrial Machinery Marine Panels Medical Equipment Lab Equipment 1. Contact factory

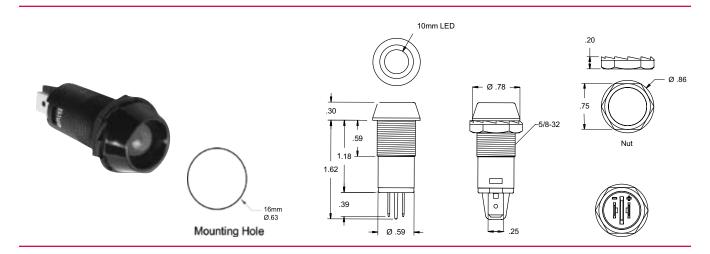
# **NEW**

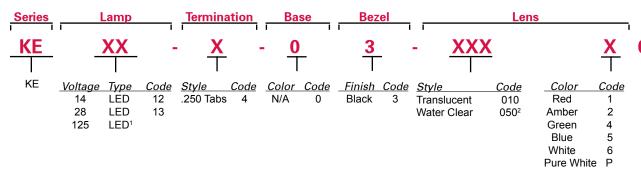
# **KE Series**

- 16mm mounting hole
- 10mm ultra-bright LED
- Supplied with nylon hex nut

### **SPECIFICATIONS**

Body Material: Nylon 66 (UL 94V-2) Nut Material: Nylon 66 (UL 94V-2) Terminal Material: Nickel over Brass -20°C to+85°C Operating Temp:





#### LED Veiwing Angle 120° **LED Light Output (mcd)**

Ligit Gat	pat (iiioa
Red	250
Amber	200
Green	700
Blue	300
White	500
P White	4000

### APPLICATIONS:

**Emergency Vehicles** Industrial Machinery Marine Panels Medical Equipment Lab Equipment



<sup>1.</sup> Consult Factory 2. Pure White Only



# **RF Series**

- Mounting: 3M double back tape unsealed
- All measurements in inches
- Cut length every 2"

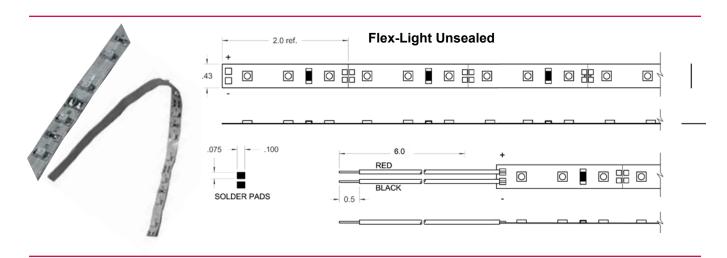
### **SPECIFICATIONS**

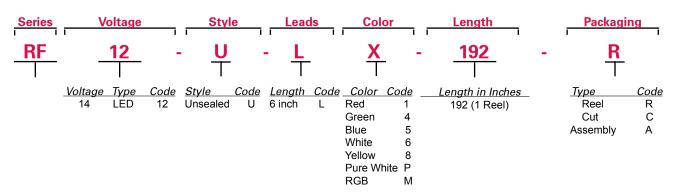
Input Voltage: 12VDC

Flexible pc board

Surface mount components

Operating Temperature: -40°C to +85°C





### LED Viewing Angle 120° LED Light Output (mcd)

Red	250
Amber	200
Green	700
Blue	300
White	500
P White	4000

Contact Factory for cutting and assembly instructions



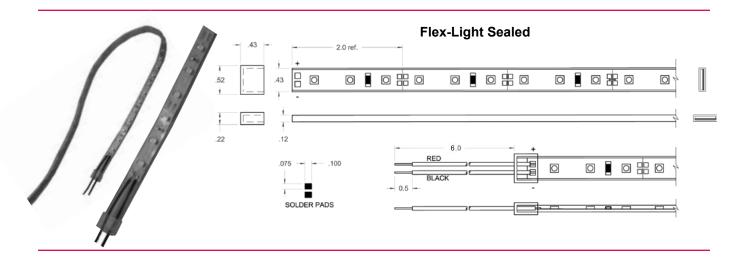
- Mounting/termination accessories available
- Splash proof construction IP65
- All measurements in inches
- Cut length every 2"

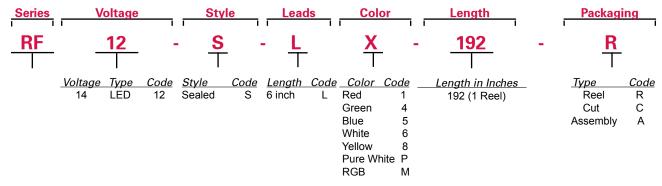
#### **SPECIFICATIONS**

Input voltage: 12VDC

Housing: Silicone Rubber Over Flex Circuit

Operating Temp: -40°C to +85°C





### **Single Color Accessories**



LED Viewing Angle 120°

 LED Light Output (mcd)

 Red
 250

 Amber
 200

 Green
 700

 Blue
 300

 White
 500

 P White
 4000

#### **RGB Accessories**



Contact Factory for cutting and assembly instructions

# Lamps & LEDs

## Neon Lamps (AC)

Neon lamps are constructed of a glass envelope, containing two electrodes and a mixture of inert gases. When a voltage is applied, above the "breakdown" voltage, the gas between the electrodes ionizes, creating the familiar orange-red "glow". They are rugged, reliable, cost effective and generate little heat. While light output is lower than incandescent lamps, neons are the most widely used light sources for indicators used at line voltages. Normally lighting with a red-orange glow, neons are also available in both green and blue by using special gasses and phosphorescent coatings inside the glass envelope.

CATALOG NUMBER	COLOR	VOLTS	LIFE HOURS
50	AMBER	125V	25,000
52	AMBER	250V	25,000
50	GREEN	125V	15,000
52	GREEN	250V	15,000
50	BLUE	125V	10,000
52	BLUE	250V	10,000

Please Note: All neon-illuminated indicator lights ordered with a green lens will be provided with a green neon lamp; blue lenses will be provided with a blue neon lamp.

All neon lamps require a current limiting resistor in series with the lamp. The value of this resistor is determined by three criteria: the manufacturer's specified operating characteristics, the desired brightness, and the required lamp life. While neon lamps have a typical life of 25,000 hours, this is directly proportional to the operating current. Higher current gives greater brightness, but shorter life. Although suited to both AC and DC operation, life when operated on DC is approximately 60% that of AC operation.

## Incandescent Lamps (AC/DC)

Incandescent lamps are best known for their bright white light output. When an electrical current is passed through the filament, it glows "white hot" creating light. The tradeoff in incandescent lamps is their susceptibility to physical shock and vibration, as the filament becomes very fragile at its elevated operating temperatures. We recommend mounting the indicator away from any vibration source, and / or cushioning the lamp within the indicator assembly with a resilient potting compound.

CATALOG NUMBER	VOLTS	SIZE	AMPS	LIFE HOURS
32	6.3V	T - 13/ <sub>4</sub>	.04	50,000
33	10V	T - 13/4	.04	5,000
35	14V	T - 13/4	.08	50,000
39	28V	T - 13/4	.04	25,000

Incandescent lamps can also generate significant heat, which should be considered in your application. Similar to neon lamps, operating an incandescent lamp at less than rated current will significantly increase its useful life. Using a 14 volt incandescent lamp in a 12 volt circuit will reduce the light output by about 30%, but will increase its life by a factor of four.

### LEDs (DC)

Light Emitting Diodes, or LEDs as they are more commonly known, are cousins to the semiconductor devices like transistors and integrated circuits, and are fabricated with similar processes. The color of the LED is determined by the combination of materials used during the fabrication process. LED's are now available in a wide variety of colors including white, and in intensities approaching that of incandescent lamps. Bi-color LEDs are available in several color combinations.

LEDs are available in three primary styles; water clear lens for highest brightness but smallest viewing angle, color clear lens for increased viewing angle at a somewhat reduced light output, and color diffused lens for the widest viewing angle at greater reduction in light output. Light output for LEDs is measured in millicandellas (mcd) and is specified by minimum and typical values.

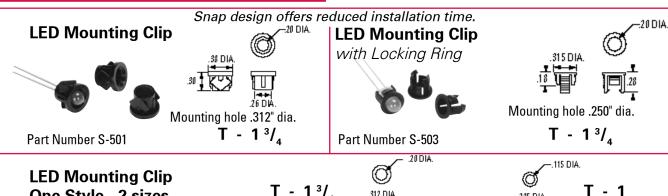
LEDs are DC (direct current) devices, although SoLiCo can provide a number of our products configured to use LEDs as AC (alternating current) devices.

The technology of LEDs is evolving very rapidly these days, to the point that any specifics we print in our catalog may be obsolete or superceded almost immediately.

Please contact us to discuss your specific LED indicator requirements. We have the experience and technical knowledge to find your solution.

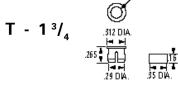


# OTHER OPTIONS

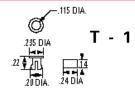


# One Style - 2 sizes

Clip mounts from panel front, LED from rear.



Mounting hole .250" dia. Part Number S-506



Mounting hole .173" dia. Part Number S-301

Material Specifications	Operating Temperature	UL Rating
High-Temperature Nylon (bases)	140°C	94V-2
Polycarbonate (lenses and bases)	135°C	94V-2

# **IMPRINTING**

### **HOT STAMPING**

Hot stamping uses a heated metal die, engraved with the required legend, under pressure to force ink into a plastic surface, offering excellent durability. Hot stamping is normally done in black or white, and is best suited to text and simple line art. If no ink color is specified, hot stamping will be done in black, and the orientation of the imprint will be horizontal.

Hot stamp charges are "per imprint", which is defined as a marking applied in one operation. The Tooling charge for a Hot Stamp Die (not already available) is \$150.00 per die. Minimum quantity is 100 pieces. A set-up charge of \$25.00 will apply to quantities of less than 500 pieces per legend.

#### **PAD PRINTING**

Pad printing (also known as transfer printing), a soft rubber pad to pick up ink from an engraved plate and transfers it to the

to be marked. Pad printing is normally done in black or white, but can be done in any color for which ink is available. If no ink color is specified, white ink will be used. Text and images can be very accurately reproduced with this method. For additional durability in abrasive or high-wear applications, a clear overcoat can be applied over the marking.

Pad print charges are "per hit", which is defined as a marking applied in one operation. The artwork and plate charge for a pad print plate (not already available) is \$150.00. Depending on size and complexity, multiple legends can be accommodated on a single plate, please contact the sales department for details. Minimum quantity is 50 pieces per legend. A set up charge of \$25.00 will apply to quantities of less than 500 pieces.

#### **Imprinting** Orientation Vertical Lens Series 27 Vertical Printing Standard Vertical Lens Horizontal Lens Orientation **Horizontal Printing Horizontal Printing** HORIZ HORIZONTAI

# **MARKING DEPARTMENT**

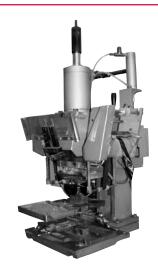
## **Pad Printing**

SoLiCo has the capability of pad printing on almost any of our product surfaces. Pad printing, sometimes referred to as transfer printing, is especially well suited for curved or irregular surfaces. Our equipment can produce high resolution results on convex, concave, and flat caps as well as all lenses and most switch accessories. We can produce a variety of text and custom symbols. If a specific symbol or word is not available we can produce the cliché to accommodate almost any request that can physically fit on the product surface. Standard ink color is white, black is optional, and custom ink colors are available as special purchase options.



# **Hot Stamp**

Hot stamping, while one of the oldest technologies, still offers a cost-effective permanent marking. A heated die, with the image to be marked, and a special foil (ribbon) are pressed onto a plastic surface, depositing the "ink" into the surface. Hot stamping is best suited for text, and low-resolution graphics. As the pigment is actually "melted" into the surface, it provides excellent durability, and good visual contrast.



### **YAG Laser**

SoLiCo's most recent addition to our marking department is our YAG Laser. It is a high-power, high-speed unit with the ability to produce extremely high-resolution graphics. It has a 12" x 12" stage, allowing multiple parts to be marked with a single set-up. Depending on the base material, it is suitable for direct imaging, or using an opaque overcoat, producing a reverse-image style of marking.





# Other SoLiCo Products





**100 Shield St, West Hartford, CT** (860)527-3092 fax (860)527-6047 solico.com

1-800-275-7089