

# Technical & Order Information - Indicators

The majority of Arcoelectric indicator lights can be supplied with alternative light sources: **Neon, Incandescent lamp or LED.**

## COLORS

- NL** Neon Lamp: Red, Amber, Clear and Green.
- LE** LED: Red, Yellow, and Green.
- FL** Incandescent Lamp: Red, Amber, Green.  
(Clear & Blue, limited availability).
- LH** Lamp Holder: Red, Amber, Clear, Green and Blue.

## NEON LAMPS

**Estimated Life hrs.**  
Typically 25,000 hrs at 1.2-1.9mA (Green 20,000 hrs).  
(Measured to a point when light output is half its original level.)

## INCANDESCENT LAMPS

**Estimated Life hrs.**  
15,000 hrs at 80mA\* 12Vac or 7,000 hrs at 40mA\* 28Vac.  
The end of life of a incandescent lamp is sudden and unpredictable. It is dramatically reduced by shock and vibration. Assemblies with wired lamps require extraction from panels and complete replacement in the event of a lamp failure. (\*Approximate values)

**AC and DC estimated life**  
For Neon and Incandescent Lamps, DC life is approx half of AC life.

**LEDs** (Additional information on page 53)

### Estimated Life

>100,000hrs.

### Current

Maximum continuous forward current 30mA.

### Voltage

Basic voltage 1.7/2.2V. Some items are available with integral resistors for other voltages. For details please contact the factory.

## Terminals

5 inch minimum wire length, 1/4 inch standard strip.  
Neon and filament standard color is black, LEDs red and black.  
Alternative colors, length and strip available.  
UL 1015. CSA TEW105C, 18AWG stranded unless specified.

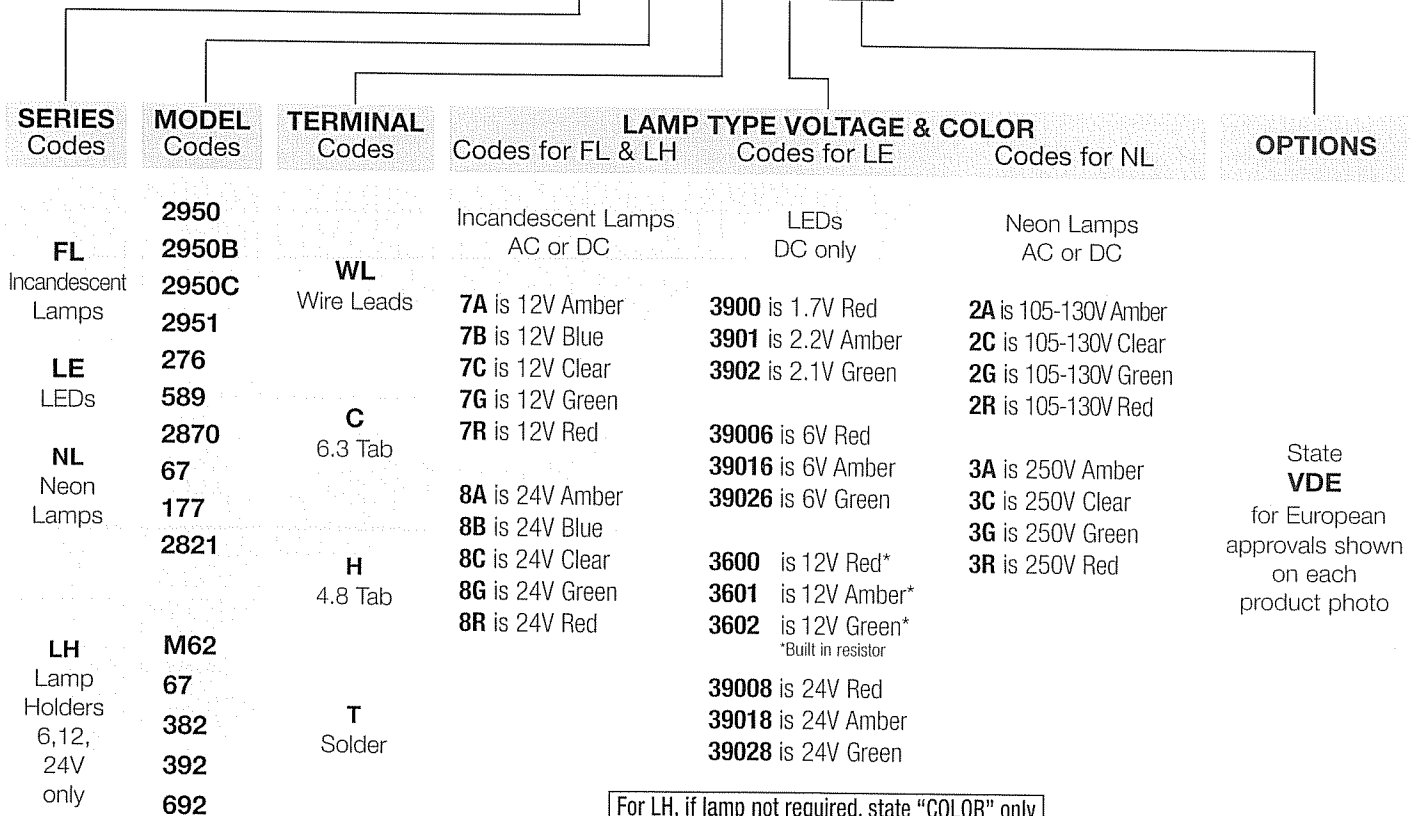
Authority	Terminals	Wire leads	
		PVC	SILICONE
All European	T125°C	T105°C	T125°C
UL made in UK	T65/75°C	T65/75°C	
UL made in US	T80°C	T80°C	

## SYMBOLS

- Terminals  
C 6.3, H 4.8, T Solder
- Wire leads
- Solid wires  
LED only
- Panel hole size
- Panel thickness
- Temperature rating

## ORDER FORMAT (EXAMPLE)

**NL 589 WL 2G VDE**



For LH, if lamp not required, state "COLOR" only

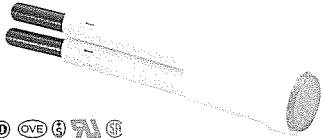

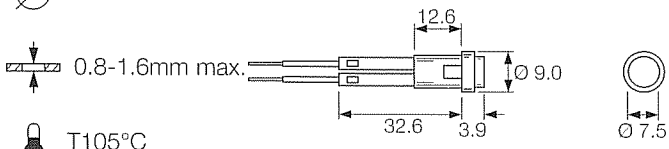
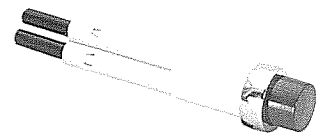

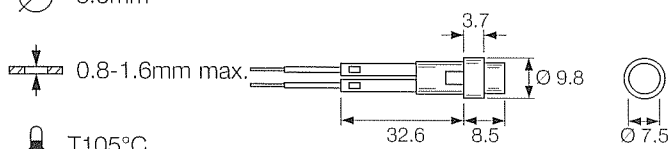
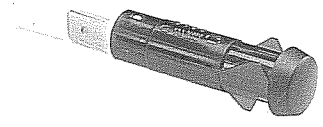



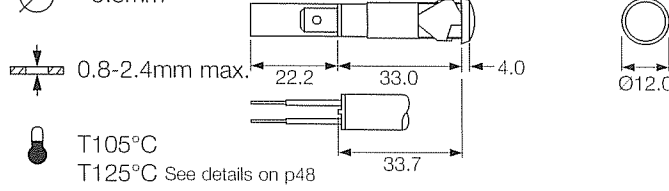
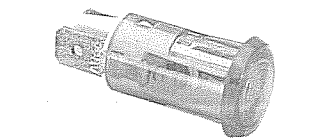



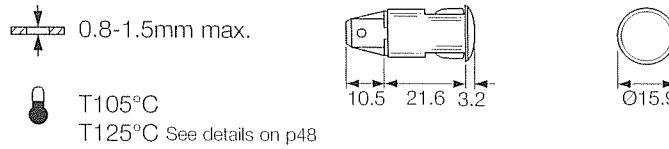
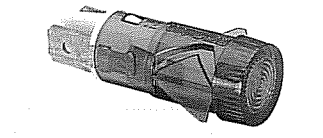



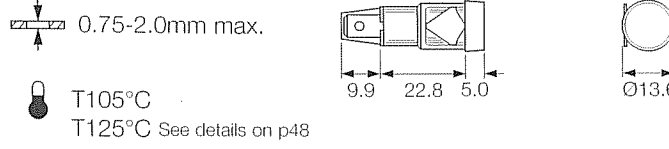
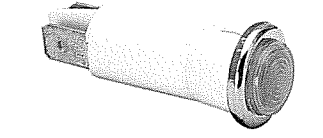



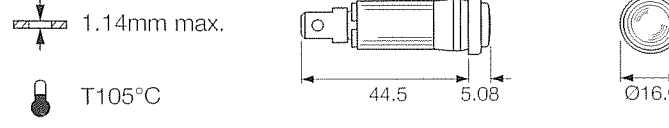
# Indicator Lights (Neon, LED and Filament Lamp)



UL E63363 & E78783 CSA LR29381 & LR47253

approvals not applicable to LH series

ORDER FORMAT example **NL 2950 WL 2A ---** To order also see page 48

SERIES	MODEL	TERM	VOLTAGE & COLOR see p48	OPTIONS see p48
FL Filament LE LED NL Neon	<b>2950</b> 2950B 2950C 	White bezel Black bezel Chrome bezel <b>WL</b> 	8.0mm 0.8-1.6mm max. T105°C	
FL Filament LE LED NL Neon	<b>2951</b> 	<b>WL</b> 	8.0mm 0.8-1.6mm max. T105°C	
FL Filament LE LED NL Neon	<b>276</b> 	<b>C</b>  6.3 <b>H</b>  4.8 <b>WL</b> 	9.5mm 0.8-2.4mm max. T105°C T125°C See details on p48	
FL Filament LE LED NL Neon	<b>589</b> 	<b>C</b>  6.3 <b>H</b>  4.8 <b>WL</b> 	12.7mm 0.8-1.5mm max. T105°C T125°C See details on p48	
FL Filament LE LED NL Neon	<b>2870</b> 	<b>C</b>  6.3 <b>H</b>  4.8 <b>WL</b> 	12.7mm 0.75-2.0mm max. T105°C T125°C See details on p48	
FL Filament LE LED NL Neon	<b>67</b> 	<b>C</b>  6.3 <b>H</b>  4.8 <b>WL</b> 	12.7mm 1.14mm max. T105°C	

# Indicator Lights (Neon, LED and Filament Lamp)








 UL E63363 & E78783 CSA LR29381 & LR47253  
 approvals not applicable to LH series

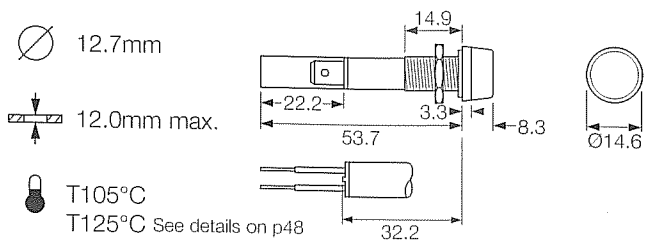
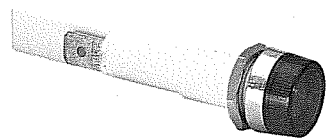
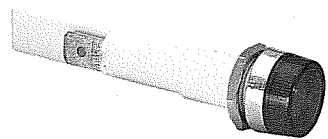

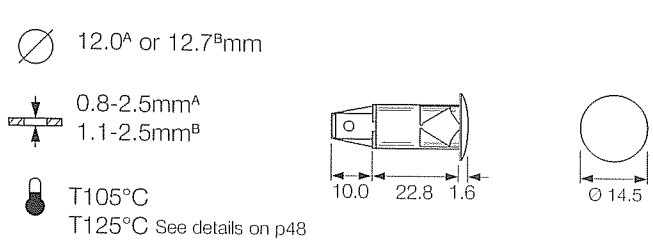
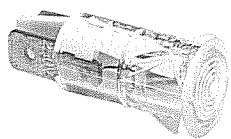
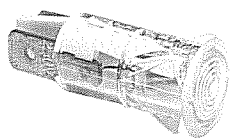

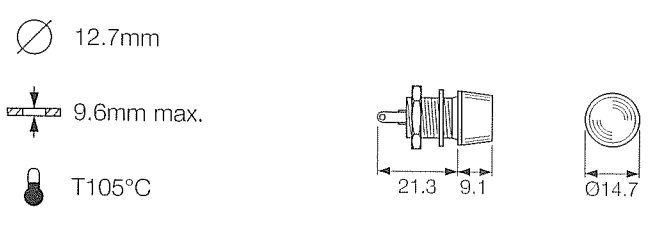
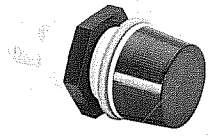
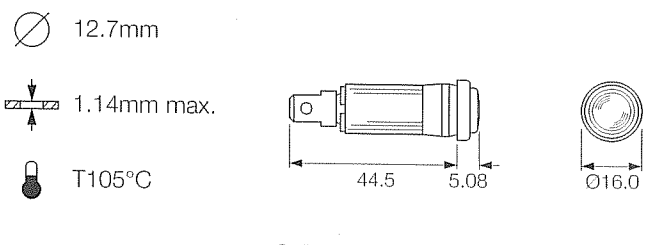
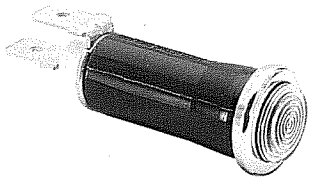
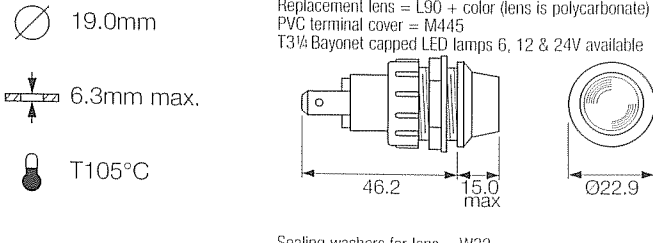
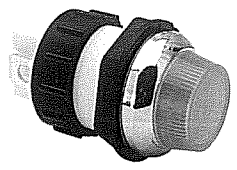
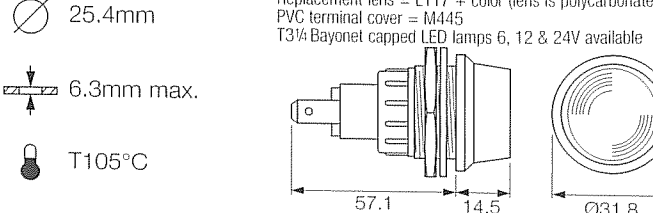
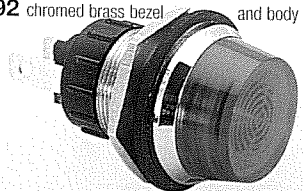
## ORDER FORMAT

example

NL 177 C 2G ---

To order also see page 48



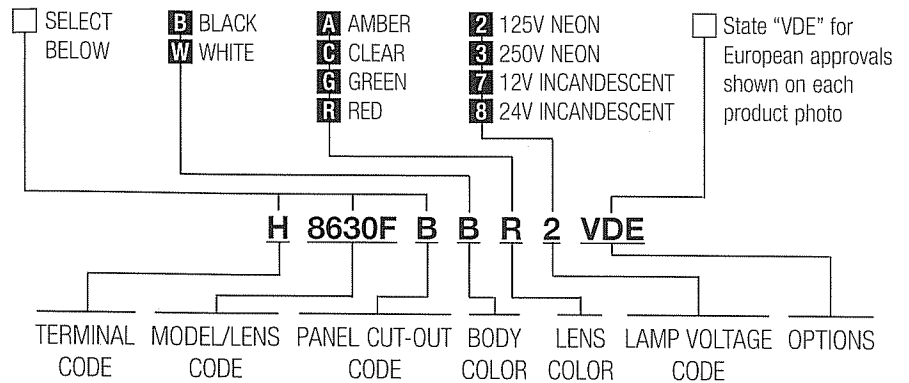
SERIES	MODEL	TERM	VOLTAGE & COLOR see p48	OPTIONS see p48
FL Filament	177	C	12.7mm	
LE LED		H	12.0mm max.	
NL Neon		WL	T105°C T125°C See details on p48	
				
FL Filament	2821	C	12.0 <sup>A</sup> or 12.7 <sup>B</sup> mm	
LE LED		H	0.8-2.5mm <sup>A</sup> 1.1-2.5mm <sup>B</sup>	
NL Neon		WL	T105°C T125°C See details on p48	
				
LH Lampholder	M62	T	12.7mm	
T1 3/4 Midget flange			9.6mm max.	
6,12, 24V bulbs available			T105°C	
Up to 50 volt only	Front of panel bulb replacement			
LH Lampholder	67 chrome bezel	C	12.7mm	
T2 Bayonet			1.14mm max.	
6,12, 24V bulbs available			T105°C	
Up to 50 volt only	Rear of panel bulb replacement			
LH Lampholder	392 chrome bezel 382 nylon bezel	C	19.0mm	
T3 1/4 Bayonet			6.3mm max.	
6,12, 24V Capped LED available			T105°C	Sealing washers to IP66 - for panel = W23, for lens = W24 Replacement lens = L90 + color (lens is polycarbonate) PVC terminal cover = M445 T3 1/4 Bayonet capped LED lamps 6, 12 & 24V available
Up to 50 volt only	Front or rear of panel bulb replacement			
LH Lampholder	692 chromed brass bezel and body	C	25.4mm	
T3 1/4 Bayonet			6.3mm max.	
6,12, 24V Capped LED available			T105°C	Sealing washers for lens = W32 Replacement lens = L117 + color (lens is polycarbonate) PVC terminal cover = M445 T3 1/4 Bayonet capped LED lamps 6, 12 & 24V available
Up to 50 volt only	Front or rear of panel bulb replacement			

# Indicator Lights *(Neon and Incandescent Lamp)*

UL E45221 CSA LR29381

**All these indicators are for Snap-in fixing**  
Cut-outs must be punched in the same direction as the unit is to be fitted.

All are fitted with non-replaceable wire ended bulbs.

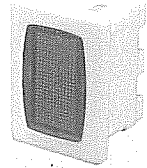


## ORDER FORMAT

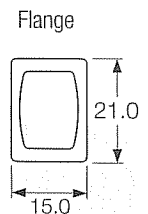
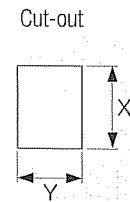
### TERM    MODEL / LENS    PANEL CUT-OUT & FLANGE

**H** 4.8

**8630F**

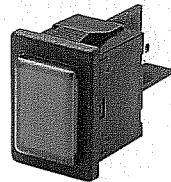


Panel thickness	Cut-out	
	X	Y
<b>B</b> 0.75-1.25	19.1/19.2	12.9/13.0
1.25-2.0	19.3/19.4	12.9/13.0
2.0-3.0	19.7/19.8	12.9/13.0

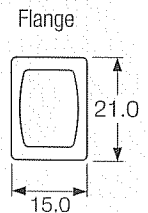
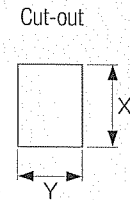


**H** 4.8

**8580A**

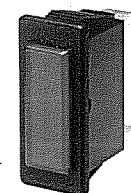


Panel thickness	Cut-out	
	X	Y
<b>B</b> 0.75-1.25	19.1/19.2	12.9/13.0
1.25-2.0	19.3/19.4	12.9/13.0
2.0-3.0	19.7/19.8	12.9/13.0

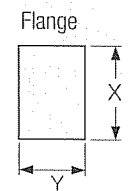
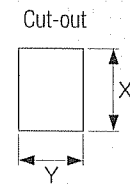


**C** 6.3

**430A**



	Cut-out		Flange	
	Y	X	Y	X
<b>A</b>	12.2/12.3	27.2/27.3	14.0	30.2
<b>B</b>	11.0/11.1	30.0/30.1	14.0	33.4
<b>L</b>	11.0/11.1	30.0/30.1	14.0	31.9
<b>R</b>	14.0/14.1	28.5/28.6	17.0	31.5



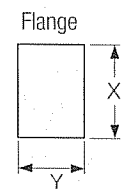
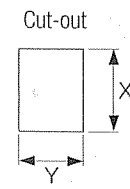
For panel thickness and full range of cut-outs see page 13

**C** 6.3

**480A**



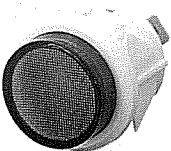
	Cut-out		Flange	
	Y	X	Y	X
<b>A</b>	22.3/22.4	27.2/27.3	25.0	30.2
<b>B</b>	22.1/22.2	30.0/30.1	25.0	33.4
<b>L</b>	22.1/22.2	30.0/30.1	25.0	32.0
<b>R</b>	23.0/25.4	28.4/28.6	28.9	33.2



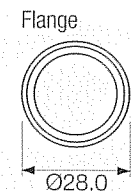
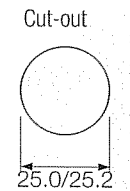
For panel thickness and full range of cut-outs see page 17

**C** 6.3

**7030A**



	Cut-out	Flange
<b>H</b>	Ø 25.0/25.2	Ø 28.0

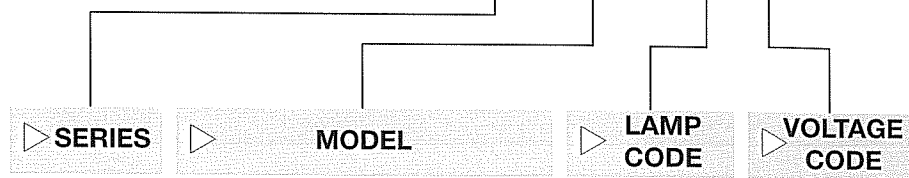


For panel thickness and full range of cut-outs see pages 38-39

# LED Lamps and LED Lampholders

Lampholders can be supplied with or without lamps

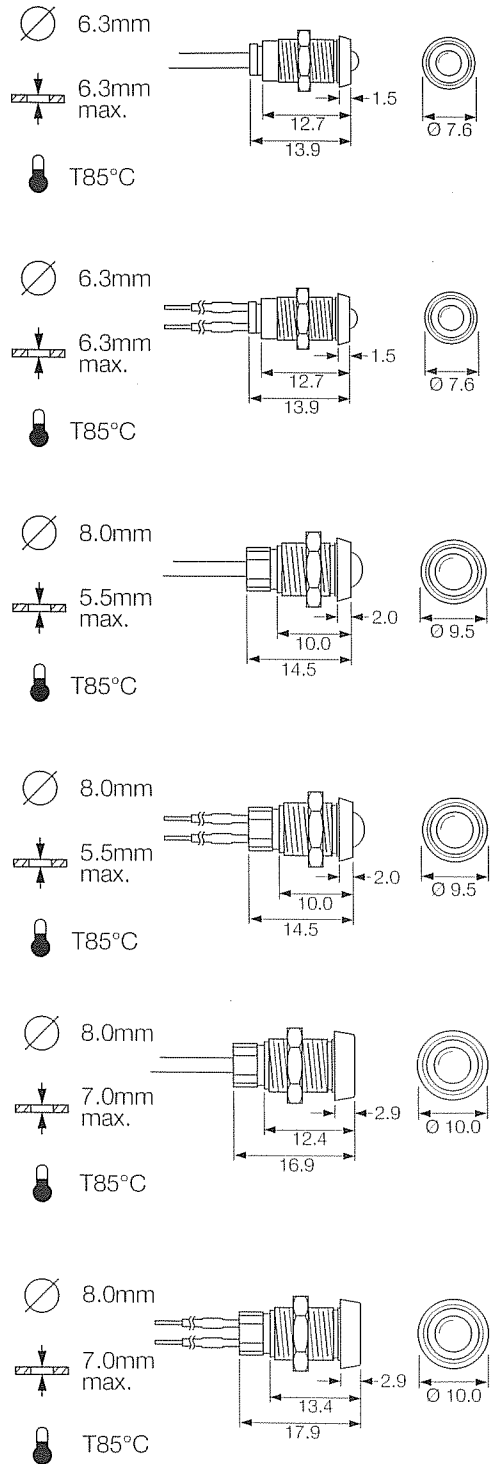
▷ ORDER FORMAT example **LH 1048WL 3700 7**



▷ SERIES    ▷ MODEL    ▷ LAMP CODE    ▷ VOLTAGE CODE

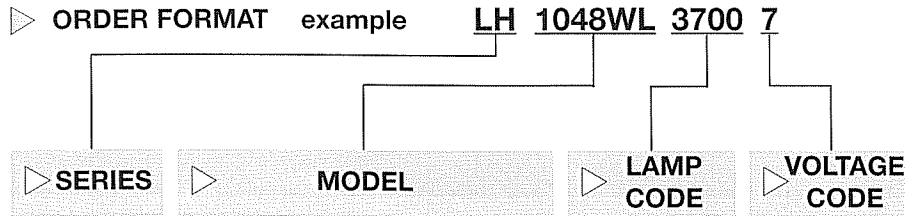
SERIES	MODEL	LAMP CODE	VOLTAGE CODE
LH Lampholder	1047 chrome    1047B black	No lamp - <b>Blank</b> Red - <b>4700</b> Yellow - <b>4701</b> Green - <b>4702</b>	No lamp - <b>Blank</b> For 2.2Vdc LED w/o resistor leave code <b>Blank</b>
	1047WL chrome    1047BWL black	Red - <b>4700</b> Yellow - <b>4701</b> Green - <b>4702</b>	6Vdc - <b>6</b> 12Vdc - <b>*</b> 24Vdc - <b>8</b> * see note on page 53
	1048 chrome    1048B black	No lamp - <b>Blank</b> Red - <b>3700</b> Yellow - <b>3701</b> Green - <b>3702</b>	No lamp - <b>Blank</b> For 2.2Vdc LED w/o resistor leave code <b>Blank</b>
LH Lampholder	1048WL chrome    1048BWL black	Red - <b>3700</b> Yellow - <b>3701</b> Green - <b>3702</b>	6Vdc - <b>6</b> 12Vdc - <b>*</b> 24Vdc - <b>8</b> * see note on page 53
	1050 chrome    1050B black	No lamp - <b>Blank</b> Red - <b>3700</b> Yellow - <b>3701</b> Green - <b>3702</b>	No lamp - <b>Blank</b> For 2.2Vdc LED w/o resistor leave code <b>Blank</b>
LH Lampholder	1050WL chrome    1050WLB black	Red - <b>3700</b> Yellow - <b>3701</b> Green - <b>3702</b>	6Vdc - <b>6</b> 12Vdc - <b>*</b> 24Vdc - <b>8</b> * see note on page 53

## Dimensions



# LED Lamps, LED Lampholders Sealed to IP66

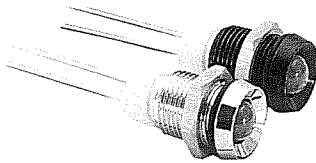
Lampholders can be supplied with or without lamps



## Dimensions

**LH**  
Lampholder

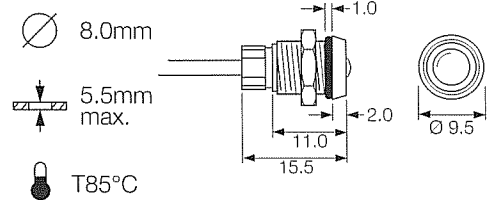
**1048S** chrome    **1048SB** black



No lamp - **Blank**    No lamp - **Blank**

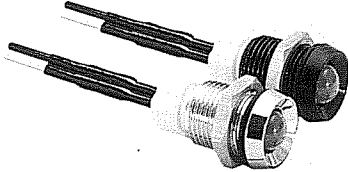
Red - **3700**  
Yellow - **3701**  
Green - **3702**

For 2.2Vdc LED  
w/o resistor  
leave code  
**Blank**



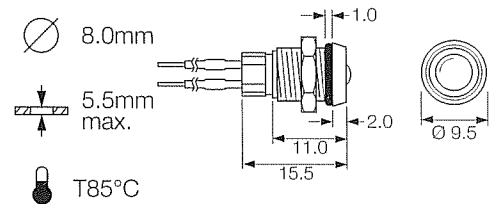
**LH**  
Lampholder

**1048SWL** chrome    **1048SBWL** black



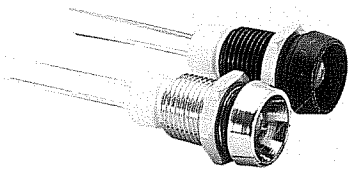
Red - **3700**  
Yellow - **3701**  
Green - **3702**

6Vdc - **6**  
12Vdc - **\***  
24Vdc - **8**  
\* see note below



**LH**  
Lampholder

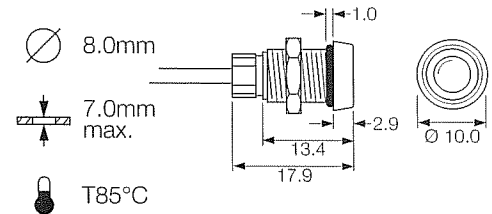
**1050S** chrome    **1050SB** black



No lamp - **Blank**    No lamp - **Blank**

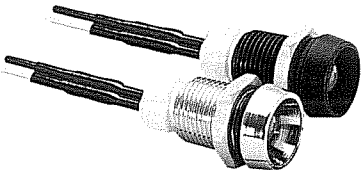
Red - **3700**  
Yellow - **3701**  
Green - **3702**

For 2.2Vdc LED  
w/o resistor  
leave code  
**Blank**



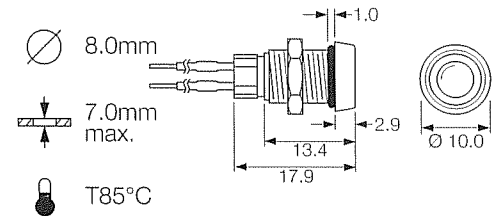
**LH**  
Lampholder

**1050SWL** chrome    **1050SWLB** black



Red - **3700**  
Yellow - **3701**  
Green - **3702**

6Vdc - **6**  
12Vdc - **\***  
24Vdc - **8**  
\* see note below



## Technical information

### LEDs

Red, yellow and green.

### Estimated Life

>100,000hrs

### Current

Maximum continuous forward current 30mA. See also page 48.

### Voltage

Basic voltage 1.7/2.2V.

\* **Note** - External resistors are not required for 12V LEDs.

Use the following suffix for 12V versions only:-

Red **3600**, Yellow **3601**, Green **3602**

### Example

LH1048WL3600 - LED indicator with PVC wire leads & red lamp for 12Vdc.

### Materials

**Body:** Chrome plated brass or Black anodised aluminium.

**Base:** Nylon 6/6. The base moldings are polarity marked.

### Terminals

LED wires or wire tails

(5 inch min wire length, 1/4 inch standard strip) red and black.

Alternative colors, length and strip available.

UL 1007. CSA TR64, 24AWG stranded unless specified.

Additional information on this product range is shown on page 48.