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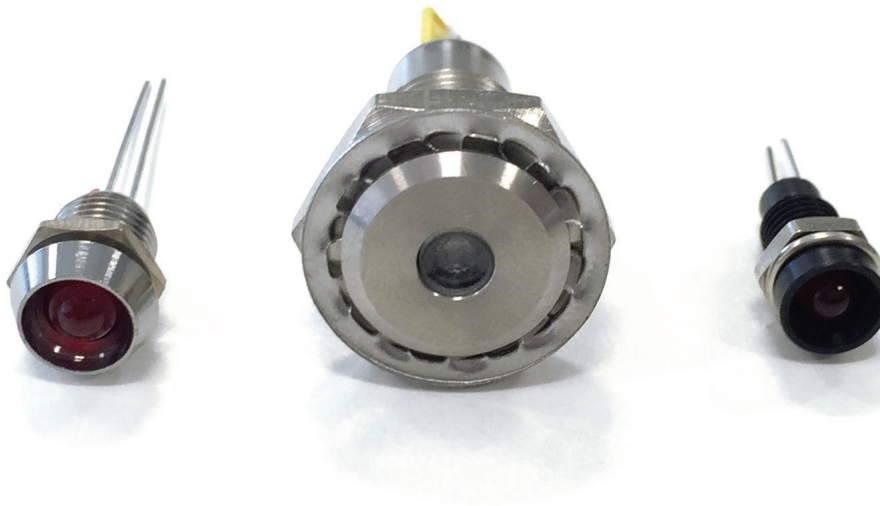
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



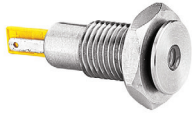
This range of panel mounting LED indicators consists of many different bezel styles, types of LED's and colours. The range has developed to meet the different needs of panel design including IP66 and IP67 environmentally sealed versions for use where a front panel seal is needed.

The vandal resistant LED indicators are designed to complement the vandal resistant switches (see the Switch Section), they have similar profiles with stainless steel bodies, sealing to IP66 & 68 and are built to withstand harsh environments.

Vandal Resistant LED	317-318
LED Bezel	319-323
Indicator Lights	324-330
Low Voltage Lampholders	331-332
LED Lampholders	333-334
Indicator Lights IP67	335

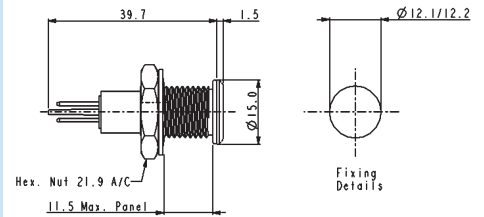


## Proud of Panel Profile



DX0505

- Solder Tag/2.8mm Tag Termination
- Sealed to IP67
- Red, Green, Yellow or Blue LED Options
- Wide Viewing Angle
- Shock and Vibration Resistant
- Stainless Steel body

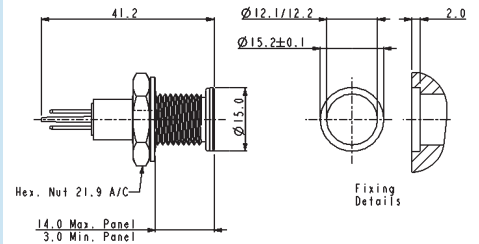


## Flush Panel Profile



DX0506

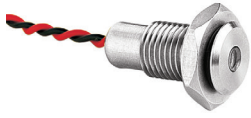
- Solder Tag/2.8mm Tag Termination
- Sealed to IP67
- Red, Green, Yellow or Blue LED Options
- Wide Viewing Angle
- Shock and Vibration Resistant
- Stainless Steel body



Specifications	DX0505/Col/Voltage	DX0506/Col/Voltage
Terminations:	Solder Tab/2.8mm Tab	Solder Tab/2.8mm Tab
Forward Voltage:	Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V	Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V
Cont. Forward Current: (max)	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA
Power Dissipation:	Red 100mW, Green 105mW, Yellow 125mW, Blue 120mW	Red 100mW, Green 105mW, Yellow 125mW, Blue 120mW
Reverse Current: (@Vr = 5V)	Red 10µA max., Green 10µA max., Yellow 10µA max., Blue 50µA max.	Red 10µA max., Green 10µA max., Yellow 10µA max., Blue 50µA max.
LED Luminous Intensity:	Red 2000mcd, Green 100mcd, Yellow 400mcd, Blue 1600mcd (typ)	Red 2000mcd, Green 100mcd, Yellow 400mcd, Blue 1600mcd (typ)
Operating Temp. Range:	-40°C to +80°C	-40°C to +80°C
Storage Temperature:	-40°C to +85°C	-40°C to +85°C
Sealing (Front of panel):	Protection Classification IP67 to EN60529:1992+A2:2013	Protection Classification IP67 to EN60529:1992+A2:2013
Materials		
Body:	Stainless Steel	Stainless Steel
Lens:	Polycarbonate UL94V-0	Polycarbonate UL94V-0
O Ring (external):	Nitrile	Nitrile
(internal):	Silicone	Silicone
Tightening Torque	0.5Nm - 0.9Nm (4.4lbf.in. - 8.0lbf.in.)	0.5Nm - 0.9Nm (4.4lbf.in. - 8.0lbf.in.)
Thread Size:	M12 x 1.25-6g	M12 x 1.25-6g
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow) /BL (Blue), with colour coded insulator	/RD (Red), /GN (Green), /YL (Yellow) /BL (Blue), with colour coded insulator
LED Voltage:	/12 (12V d.c.), /24 (24V d.c.) or /00 (no ballast resistor)	/12 (12V d.c.), /24 (24V d.c.) or /00 (no ballast resistor)
RoHS	Compliant	Compliant

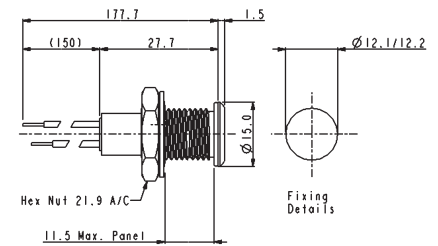


## Proud of Panel Profile

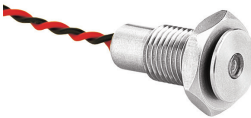


DX0507

- Flying Lead Termination
- Sealed to IP67
- Red, Green, Yellow or Blue LED Options
- Wide Viewing Angle
- Shock and Vibration Resistant
- Stainless Steel body

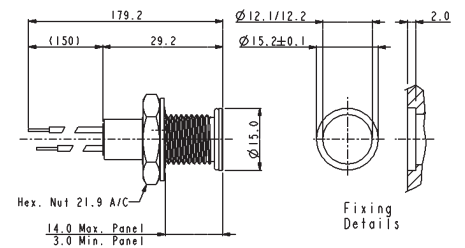


## Flush Panel Profile



DX0508

- Flying Lead Termination
- Sealed to IP67
- Red, Green, Yellow or Blue LED Options
- Wide Viewing Angle
- Shock and Vibration Resistant
- Stainless Steel body



Specifications	DX0507/Col/Voltage	DX0508/Col/Voltage
Terminations:	Flying Leads	Flying Leads
Forward Voltage:	Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V	Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V
Cont. Forward Current: (max)	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA
Power Dissipation:	Red 100mW, Green 105mW, Yellow 125mW, Blue 120mW	Red 100mW, Green 105mW, Yellow 125mW, Blue 120mW
Reverse Current: (@Vr = 5V)	Red 10µA max., Green 10µA max., Yellow 10µA max., Blue 50µA max.	Red 10µA max., Green 10µA max., Yellow 10µA max., Blue 50µA max.
LED Luminous Intensity:	Red 2000mcd, Green 100mcd, Yellow 400mcd, Blue 1600mcd (typ)	Red 2000mcd, Green 100mcd, Yellow 400mcd, Blue 1600mcd (typ)
Operating Temp. Range:	-40°C to +80°C	-40°C to +80°C
Storage Temperature:	-40°C to +85°C	-40°C to +85°C
Sealing (Front of panel):	Protection Classification IP67 to EN60529:1992+A2:2013	Protection Classification IP67 to EN60529:1992+A2:2013
Materials		
Body:	Stainless Steel	Stainless Steel
Lens:	Polycarbonate UL94V-0	Polycarbonate UL94V-0
O Ring (external):	Nitrile	Nitrile
(internal):	Silicone	Silicone
Tightening Torque	0.5Nm - 0.9Nm (4.4lbf.in. - 8.0lbf.in.)	0.5Nm - 0.9Nm (4.4lbf.in. - 8.0lbf.in.)
Thread Size:	M12 x 1.25-6g	M12 x 1.25-6g
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow) /BL (Blue), with colour coded insulator	/RD (Red), /GN (Green), /YL (Yellow) /BL (Blue), with colour coded insulator
LED Voltage:	/12 (12V d.c.), /24 (24V d.c.) or /00 (no ballast resistor)	/12 (12V d.c.), /24 (24V d.c.) or /00 (no ballast resistor)
RoHS	Compliant	Compliant

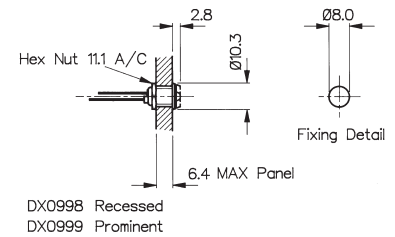
Chrome Plated Brass Bezel



DX0998

DX0999

- Chrome Plated Brass Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours



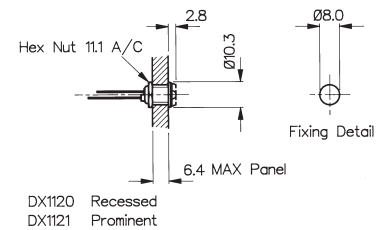
Nylon Bezel



DX1120

DX1121

- Glass Filled Nylon Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours



Specifications	DX0998, DX0999/Colour/Options	DX1120, DX1121/Colour/Options
Bezel Material:	Brass, Chrome Plated	Glass Filled Nylon
Style:	Recessed (DX0998) Prominent (DX0999)	Recessed (DX1120) Prominent (DX1121)
Operating Temp. Range:	Dependent on LED used	Dependent on LED used
Storage Temperature:	Dependent on LED used	Dependent on LED used
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue), /TR (Tri Colour), /D1 (Dual Colour - Red/Green), /D2 (Dual Colour - Red/Amber), /D3 (Dual Colour - Green/Amber)	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue), /TR (Tri Colour), /D1 (Dual Colour - Red/Green), /D2 (Dual Colour - Red/Amber), /D3 (Dual Colour - Green/Amber)
LED Options:	/02 (Flashing, Green or Red only)	/02 (Flashing, Green or Red only)
Thread Size:	0.312" x 32TPI	0.312" x 32TPI
<b>RoHS</b>	Compliant	Compliant

See Page 212 for LED options and specifications\*

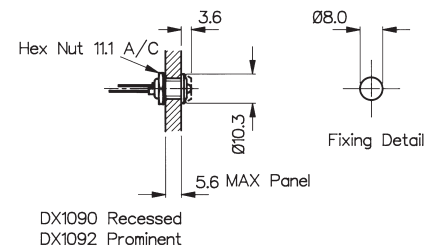
Aluminium Bezel - IP66 Sealed



DX1090

DX1092

- Aluminium Bezel, Black
- Anodised Finish
- IP66 Front Panel Sealed
- Prominent or Recessed Style
- Choice of LED Types and Colours



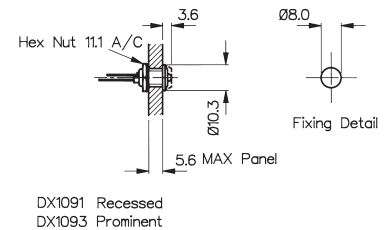
Aluminium Bezel - IP66 Sealed



DX1091

DX1093

- Aluminium Bezel, Clear
- Anodised Finish
- IP66 Front Panel Sealed
- Prominent or Recessed Style
- Choice of LED Types and Colours



Specifications	DX1090, DX1092/Colour/Options	DX1091, DX1093/Colour/Options
Materials:	Aluminium - Black	Aluminium - Clear
Style:	Recessed (DX1090) Prominent (DX1092)	Recessed (DX1091) Prominent (DX1093)
Operating Temp. Range:	Dependent on LED used	Dependent on LED used
Storage Temperature:	Dependent on LED used	Dependent on LED used
Sealing (Front of panel):	Protection Classification IP66 to EN60529:1992+A2:2013	Protection Classification IP66 to EN60529:1992+A2:2013
Tightening Torque:	0.056Nm (8ozf.in.) min	0.056Nm (8ozf.in.) min
Lead Solder Time:	260°C for 5 seconds max.	260°C for 5 seconds max.
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue), /TR (Tri Colour), /D1 (Dual Colour - Red/Green), /D2 (Dual Colour - Red/Amber), /D3 (Dual Colour - Green/Amber)	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue), /TR (Tri Colour), /D1 (Dual Colour - Red/Green), /D2 (Dual Colour - Red/Amber), /D3 (Dual Colour - Green/Amber)
Thread Size:	0.312" x 32TPI	0.312" x 32TPI
<b>RoHS</b>	Compliant	Compliant

See Page 212 for LED options and specifications

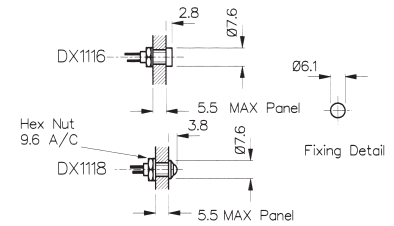
Chrome Plated Brass Bezel



DX1116

DX1118

- Chrome Plated Brass Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours



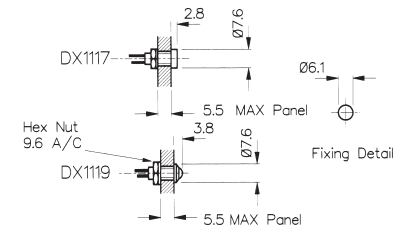
Black Nickel Pated Brass Bezel



DX1117

DX1119

- Aluminium, Black Anodised Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours

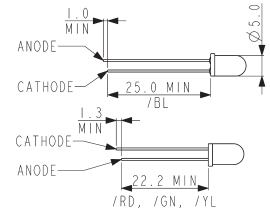


Specifications	DX1116, DX1118/Colour	DX1117, DX1119/Colour
Bezel Materials:	Brass, Chrome Plated	Aluminium, Black Anodised
Style:	Recessed (DX1116) Prominent (DX1118)	Recessed (DX1117) Prominent (DX1119)
Operating Temp. Range:	Dependent on LED used	Dependent on LED used
Storage Temperature:	Dependent on LED used	Dependent on LED used
Lead Solder Time:	260°C for 5 seconds max.	260°C for 5 seconds max.
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue)	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue)
<b>RoHS</b>	Compliant	Compliant

See Page 213 for LED specifications\*

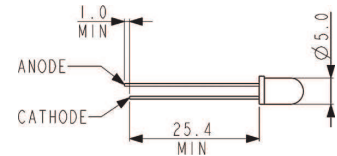
**5mm LEDs STANDARD**

Specification	Red	Green	Yellow	Blue
Luminous Intensity @20mA:	25mcd	20mcd	20mcd	21mcd
Forward voltage:	2.0V	2.0V	2.1V	3.5V
Cont. Forward Current (max):	30mA	25mA	30mA	30mA
Power Dissipation:	105mW (max) @20°C Ambient			120mW
Reverse Current:	10µA	10µA	10µA	50µA
Reverse Voltage:	5V (max)	5V (max)	5V (max)	5V (max)
Operating Temp:	-40°C to +85°C			-20°C to +80°C
Part No:	/RD	/GN	/YL	/BL



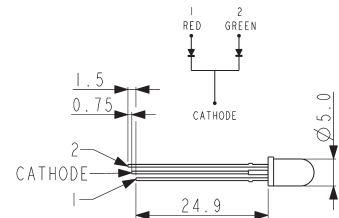
**5mm LEDs FLASHING**

Specification	Red	Green
Luminous Intensity @20mA:	1.2mcd	20mcd
Forward voltage:	2.0-15.0V	2.0V
Cont. Forward Current (max):	10-30mA	25mA
Power Dissipation:	200mW (max) @ 20°C ambient	
Flash Frequency @ 3V supply:	2.2Hz (typ)	
Operating Temp:	0°C to +70°C	
Part No:	/RD/02	/GN/02



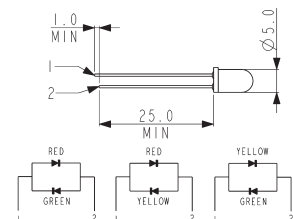
**5mm LEDs TRI COLOUR**

Specification	Red/Green/Amber
Luminous Intensity @20mA:	2.5mcd
Forward voltage:	2.4V
Cont. Forward Current (max):	30mA (max)
Power Dissipation:	150mW (max) @ 20°C Ambient
Reverse Current:	100µA
Reverse Voltage:	5V (max)
Operating Temp:	-40°C to +70°C
Part No:	/TR



**5mm LEDs DUAL COLOUR**

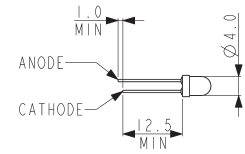
Specifications	Red/Green	Red/Amber	Green/Amber
Luminous Intensity:	4.5/5mcd	4.5/4mcd	4/5mcd
Forward voltage:	2.2V	2.2V	2.2V
Cont. Forward Current:	30mA/30mA	30mA/20mA	30mA/20mA
Power Dissipation:	100mW/100mW	100mW/60mW	100mW/60mW
Reverse Current:	100mA	100mA	100mA
Reverse Voltage:	5V (max)	5V (max)	5V (max)
Operating Temp:	-40°C to +85°C		
Part No:	/D1	/D2	/D3





**4mm LEDs Standard**

Specifications	Red	Green	Yellow	Blue
Luminous Intensity @10mA:	2.5mcd	2.5mcd	2.5mcd	50mcd
Forward voltage:	2.0V	2.1V	2.0V	3.8V
Cont. Forward Current (max):	30mA	30mA	20mA	30mA
Power Dissipation (max) @ 20°C Ambient:	100mW	100mW	85mW	120mW
Reverse Current:	10µA	10µA	10µA	50µA
Reverse Voltage:	5V (max)	5V (max)	5V (max)	5V (max)
Part No:	/RD	/GN	/YL	/BL



**Part No Breakdown**

DXxxxx	/	XX	/	XX
<b>Bezel Type</b>		<b>LED Colour</b> RD = Red GN = Green YL = Yellow BL = Blue D1 = Dual Colour - 5mm (Red/ Green) D2 = Dual Colour - 5mm (Red/ Amber) D3 = Dual Colour - 5mm (Green/ Amber) TR = Tri Colour - 5mm (Red/ Green/Amber)		<b>LED Options</b> Blank = Standard 02 = Flashing - 5mm (Red or Green only)

**Example:**  
DX1092/RD/02 = Black Aluminum IP66 Prominent Bezel, with Red flashing LED

# Indicator Lights

Neon, LED and Filament Lamp



## Key Features

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green, blue and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

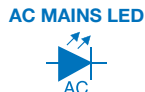
## Colours and voltages:



Available with Red, Amber, Green or Clear lenses  
100/130V (marked 110V),  
200/250V (marked 230V)



Red, Yellow, Green, Blue, White  
2.0/2.2V  
Resistors for other voltages available.



Red, Yellow, Green, Blue, White  
110-230V ac operation.



Available with Red, Amber, Green, Clear or Blue lenses  
6V, 12/14V, 24/28V.

Terminal	Type	Sealed	Illumination	Colour	Voltage	Options
<b>B</b> 2.8	<b>(B) 0566 A</b> 	6.0 2.0 max page 6	<b>N</b> <b>L</b> <b>M</b>	Neon & Filament <b>R</b> Red <b>A</b> Amber <b>G</b> Green <b>B</b> Blue (Special Order) <b>C</b> Clear	<b>1</b> LED No Resistor <b>2</b> 125V Neon <b>3</b> 250V Neon <b>4</b> 6Vdc LED <b>5</b> 12Vdc LED	<b>C</b> Chrome Bezel Finish
<b>B</b> 2.8	<b>(B) 0566 B</b> 	6.0 2.0 max page 6	<b>N</b> <b>L</b> <b>M</b>	<b>B</b> Blue (Special Order) <b>C</b> Clear	<b>6</b> 24Vdc LED <b>7</b> LED 12/14V Filament	
<b>B</b> 2.8	<b>(B) 0566 C</b> 	6.0 2.0max 	<b>N</b> <b>L</b> <b>M</b>	<b>R</b> Red <b>Y</b> Yellow <b>G</b> Green <b>B</b> Blue	<b>8</b> 24/ 28V Filament <b>9</b> 125/250Vac LED	
<b>C</b> 6.3	<b>(C) 0145 AA</b> 	5.8 3.0max page 6	<b>N</b> <b>L</b> <b>M</b> <b>F</b>			
<b>L</b>	<b>(L) 1041 00</b> 	6.3 6.3max page 6	<b>N</b> <b>L</b> <b>F</b>			
<b>L</b>	<b>(L) 1045 00</b> 	6.3 10.0max page 6	<b>N</b> <b>L</b> <b>M</b> <b>F</b>			

# Indicator Lights

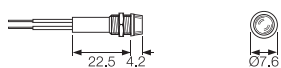
Neon, LED and Filament Lamp



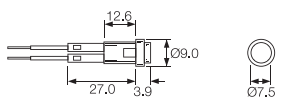
Terminal	Type	Sealed	Illumination	Colour	Voltage	Options
L W	(L) 0245 00 	7.1 6.3 max page 6	N L M F	Neon & Filament <b>R</b> Red <b>A</b> Amber <b>G</b> Green <b>B</b> Blue (Special Order) <b>C</b> Clear	<b>1</b> LED No Resistor <b>2</b> 125V Neon	<b>C</b> Chrome Bezel Finish
L	L 2950 00 	8.0 0.8-1.6 page 6	N L M F		<b>3</b> 250V Neon <b>4</b> 6Vdc LED	
L C 6.3	(L) 0195 BB 	8.0 0.8-3.0 page 6	N F		<b>5</b> 12Vdc LED	
L	L 2951 00 	8.0 0.8-1.6 page 6	N L M F	LED <b>R</b> Red <b>Y</b> Yellow <b>G</b> Green <b>B</b> Blue	<b>6</b> 24Vdc LED <b>7</b> 12/14V Filament <b>8</b> 24/ 28V Filament <b>9</b> 125/250Vac LED	
L H 4.8	H) 0568 A(*) 	8.0 0.8-3.5 page 6	N L F			
L H 4.8	(H) 0568 B(*) 	8.0 0.8-3.5 page 6	N L F			

## Dimensions

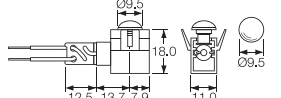
(B) 0566 A



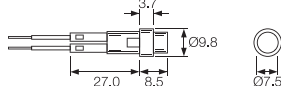
(B) 0566 B



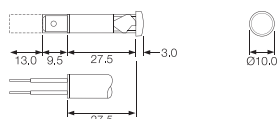
(B) 0566 C



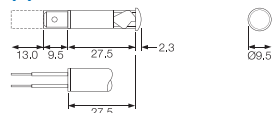
(C) 0145 AA



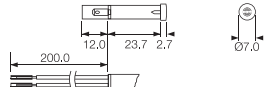
(L) 1041 00



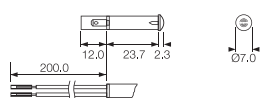
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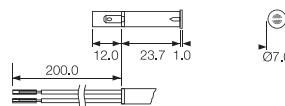
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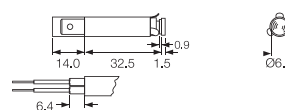
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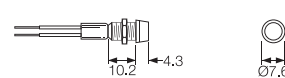
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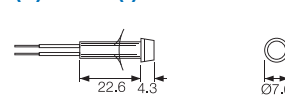
H) 0568 A(\*)



L 2951 00



(H) 0568 B(\*)



# Indicator Lights

Neon, LED and Filament Lamp



## Key Features

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green, blue and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

## Colours and voltages:

NEON	DC LED	AC MAINS LED	FILAMENT
Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)	Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.	Red, Yellow, Green, Blue, White 110-230V ac operation.	Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
L	(L) 0569 AW 	N L M F	Neon & Filament  <b>R</b> Red  <b>A</b> Amber  <b>G</b> Green  <b>B</b> Blue (Special Order)  <b>C</b> Clear	<b>1</b> LED No Resistor  <b>2</b> 125V Neon	<b>C</b> Chrome Bezel Finish	9.0 0.8-2.5 Call sales	
L K 2.8 H 4.8 C 6.3	(C) 0273 00 	N L M F	<b>B</b> Blue (Special Order)  <b>C</b> Clear	<b>3</b> 250V Neon		9.0 2.0 max page 6	
L K 2.8 H 4.8 C 6.3	(C) 0278 00 	N L M F	<b>B</b> Blue (Special Order)  <b>C</b> Clear	<b>4</b> 6Vdc LED		9.0 2.0 max page 6	
L K 2.8 H 4.8 C 6.3	(C) 0276 AA 	N L M F	<b>R</b> Red	<b>6</b> 24Vdc LED		9.5 0.8-2.8 page 6	
L K 2.8 H 4.8 C 6.3	(C) 0275 00 	N L M F	<b>R</b> Red  <b>Y</b> Yellow  <b>G</b> Green  <b>B</b> Blue	<b>7</b> 12/14V Filament  <b>8</b> 24/ 28V Filament  <b>9</b> 125/250Vac LED		10.0 12.0 page 6 11.5 max page 6	
L K 2.8 H 4.8 C 6.3	(C) 0275 00 	N L M F	<b>G</b> Green  <b>B</b> Blue			10.0 11.5 max page 6	

# Indicator Lights

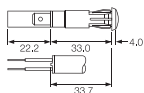
Neon, LED and Filament Lamp



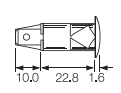
Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
<b>L</b> <b>K</b> 2.8 <b>H</b> 4.8 <b>C</b> 6.3	<b>(C) 0276 00</b> 	<b>N</b> <b>L</b> <b>M</b> <b>F</b>	Neon & Filament	<b>1</b> LED No Resistor	<b>C</b> Chrome Bezel Finish	 10.0 2.8 max page 6	
			<b>R</b> Red	<b>2</b> 125V Neon			
			<b>A</b> Amber	<b>3</b> 250V Neon			
			<b>G</b> Green	<b>4</b> 6Vdc LED			
			<b>B</b> Blue (Special Order)	<b>5</b> 12Vdc LED			
<b>L</b> <b>K</b> 2.8 <b>H</b> 4.8 <b>C</b> 6.3	<b>(C) 0277 00</b> 	<b>N</b> <b>L</b> <b>M</b> <b>F</b>	<b>C</b> Clear	<b>6</b> 24Vdc LED	 10.0 12 max page 6		
			<b>R</b> Red	<b>7</b> 12/14V Filament			
			<b>Y</b> Yellow	<b>8</b> 24/ 28V Filament			
			<b>G</b> Green	<b>9</b> 125/250Vac LED			
			<b>B</b> Blue				
<b>L</b> <b>K</b> 2.8 <b>H</b> 4.8 <b>C</b> 6.3	<b>(C) 0273 LL</b> 	<b>N</b> <b>L</b> <b>M</b> <b>F</b>			 10.0 0.6-2.0 page 6		
<b>L</b> <b>K</b> 2.8 <b>H</b> 4.8 <b>C</b> 6.3	<b>(C) 2820 00</b> 	<b>N</b> <b>L</b> <b>M</b> <b>F</b>			 12.0 0.75-2.0 page 6		
<b>L</b> <b>K</b> 2.8 <b>H</b> 4.8 <b>C</b> 6.3	<b>(C) 2821 00</b> 	<b>N</b> <b>L</b> <b>M</b> <b>F</b>			 12.0or12.7 ø12.0 = 0.8-2.5 ø12.7 = 1.1-2.5 page 6		
<b>L</b> <b>K</b> 2.8 <b>H</b> 4.8 <b>C</b> 6.3	<b>(C) 0586 00</b> 	<b>N</b> <b>L</b> <b>M</b> <b>F</b>			 12.5 0.8-1.5 page 6		

## Dimensions

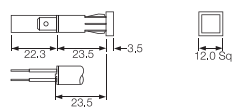
### (L) 0569 AW



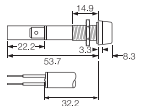
### (C) 0275 00



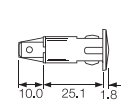
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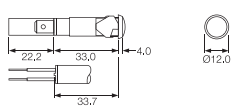
### (C) 0273 00



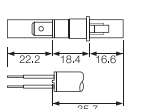
### (C) 0275 00



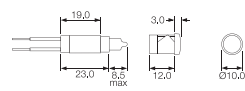
### (C) 2820 00



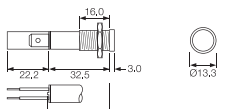
### (C) 0278 00



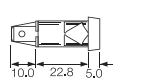
### (C) 0276 00



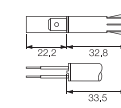
### (C) 2821 00



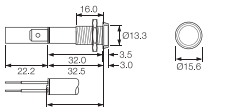
### (C) 0276 AA



### (C) 0277 00



### (C) 0586 00





# Indicator Lights

Neon, LED and Filament Lamp



## Key Features

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

## Colours and voltages:

<b>NEON</b>	<b>DC LED</b>	<b>AC MAINS LED</b>	<b>FILAMENT</b>
Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)	Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.	Red, Yellow, Green, Blue, White 110-230V ac operation.	Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
L K 2.8 H 4.8 C 6.3	<b>(C) 2870 00</b> 	N L M F	Neon & Filament	<b>1</b> LED No Resistor	<b>C</b> Chrome Bezel Finish	12.7 0.75-2.0 Page 6	
			<b>R</b> Red	<b>2</b> 125V Neon			
L K 2.8 H 4.8 C 6.3	<b>(C) 0589 00</b> 	N L M F	Amber	<b>3</b> 250V Neon	<b>C</b> Chrome Bezel Finish	12.7 0.8-1.5 page 6	
			<b>G</b> Green	<b>4</b> 6Vdc LED			
L	<b>L 0081 00</b> 	N L M F	Blue (Special Order)	<b>5</b> 12Vdc LED	<b>C</b> Chrome Bezel Finish	12.7 9.5 page 6	
			<b>C</b> Clear	<b>6</b> 24Vdc LED			
L K 2.8 H 4.8 C 6.3	<b>(C) 0177 00</b> 	N L M F	LED	<b>7</b> 12/14V Filament	<b>C</b> Chrome Bezel Finish	12.7 12.0max page 6	
			<b>R</b> Red	<b>8</b> 24/ 28V Filament			
L K 2.8 H 4.8 C 6.3	<b>(C) 0067 00</b> 	N L M F	Yellow	<b>9</b> 125/250Vac LED	<b>C</b> Chrome Bezel Finish	12.7 1.14 max page 6	
			<b>Y</b>				
L C 6.3	<b>(C) 0180AA</b> 	N L F	Green		<b>C</b> Chrome Bezel Finish	12.7 19.0 max page 6	
			<b>B</b> Blue				

# Indicator Lights

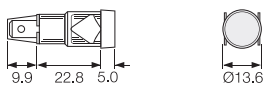
Neon, LED and Filament Lamp



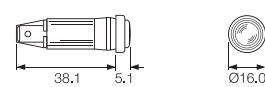
Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
L C 6.3	(C) 0180BB 	N L F	Neon & Filament  <b>R</b> Red  <b>A</b> Amber  <b>G</b> Green  <b>B</b> Blue (Special Order)  <b>C</b> Clear  LED  <b>R</b> Red  <b>Y</b> Yellow  <b>G</b> Green  <b>B</b> Blue	<b>1</b> LED No Resistor  <b>2</b> 125V Neon  <b>3</b> 250V Neon  <b>4</b> 6Vdc LED  <b>5</b> 12Vdc LED  <b>6</b> 24Vdc LED  <b>7</b> 12/14V Filament  <b>8</b> 24/ 28V Filament  <b>9</b> 125/250Vac LED	<b>C</b> Chrome Bezel Finish	 13.5  0.9-1.14 page 6  14.0  2.5 max page 6  19.0  4.0max page 6	
L K 2.8 H 4.8 C 6.3	(C) 0579 00 	N L M F					
C 6.3	(C) 1092 	N					

## Dimensions

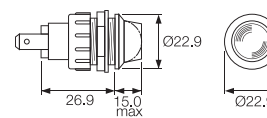
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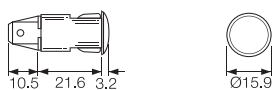
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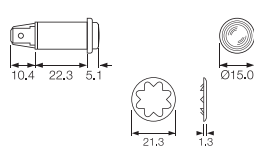
(C) 1092



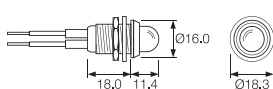
(C) 0589 00



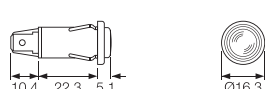
(C) 0180AA



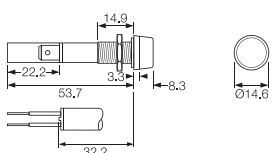
L 0081 00



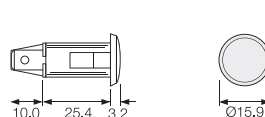
(C) 0180BB



(C) 0177 00



(C) 0579 00



# Indicator Lights

Neon, LED and Filament Lamp



## Key Features

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

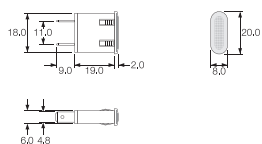
## Colours and voltages:

NEON	DC LED	AC MAINS LED	FILAMENT
Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)	Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.	Red, Yellow, Green, Blue, White 110-230V ac operation.	Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

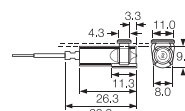
Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
H 4.8	<b>H 0581 AY</b> 	N F	Neon & Filament	<b>1</b> LED No Resistor	<b>C</b> Chrome Bezel Finish	 18.2/18.3 x 6.2/6.3 2.0-3.5 Page 6	
			<b>R</b> Red	<b>2</b> 125V Neon			
			<b>A</b> Amber	<b>3</b> 250V Neon			
			<b>G</b> Green	<b>4</b> 6Vdc LED			
			<b>B</b> Blue (Special Order)	<b>5</b> 12Vdc LED			
			<b>C</b> Clear	<b>6</b> LED 24Vdc LED			
			<b>R</b> Red	<b>7</b> 12/14V Filament			
			<b>Y</b> Yellow	<b>8</b> 24/ 28V Filament			
			<b>G</b> Green	<b>9</b> 125/250Vac LED			
<b>B</b> Blue							
L	<b>L 0234 00</b> 	N	<b>G</b> Green	<b>3</b> 250V Neon	 9.27/9.50 x 4.75 0.71-1.62 page 6		
			<b>B</b> Blue	<b>4</b> 6Vdc LED			
L	<b>L 0233 00</b> 	N	<b>C</b> Clear	<b>5</b> 12Vdc LED	 page 6		

## Dimensions

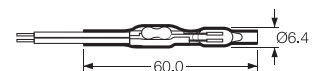
### H 0581 AY



### L 0234 00



### L 0233 00








Neon tube, resistor and flexible lead assembly, protected by "shrunk on" transparent sleeving.

## Key Features

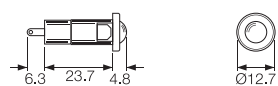
- ⬡ Up to 50V
- ⬡ Red, Amber, Green, Blue and Clear
- ⬡ Linestra/Philinea lamp holder

## Colours and voltages:

These lampholders are suitable for up to 50V max. Bulbs will be supplied (dependent on order quantity) if a voltage is specified.  
Colours - Red, Amber, Green, (Clear & Blue, check availability).

Terminal	Type	Sealed	Illumination	Colour	Voltage	Options	Panel
T	<b>T0061 00 (LES)</b> 	<b>S</b> Sealed	<b>N</b> Neon	Neon & Filament <b>R</b> Red	<b>1</b> LED No Resistor	<b>C</b> Chrome Bezel Finish	9.5 0.9-1.14 T85
C	<b>(C) 0277 00</b> 		<b>L</b> DC LED	Amber <b>A</b>	<b>2</b> 125V Neon		12.7 1.14max T85
T 6.3	<b>(C) 0273 LL</b> 		<b>M</b> Mains AC LED	Green <b>G</b>	<b>3</b> 250V Neon		12.7 9.6max T85
T	<b>(C) 2820 00</b> 		<b>F</b> Mains AC LED	Blue (Special Order) <b>B</b>	<b>4</b> 6Vdc LED		12.7 9.6max T85
S	<b>(C) 2821 00</b> 			Clear <b>C</b>	<b>5</b> 12Vdc LED		12.7 9.6max T85
				LED <b>R</b> Red	<b>6</b> 24Vdc LED		12.7 9.6max T85
				Yellow <b>Y</b>	<b>7</b> 12/14V Filament		
				Green <b>G</b>	<b>8</b> 24/ 28V Filament		
				Blue <b>B</b>	<b>9</b> 125/250Vac LED		T85

**T0061 00 (LES)**



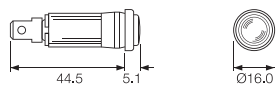
**(C) 2820 00**



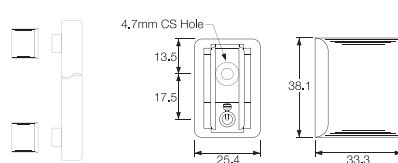
**(C) 0273 LL**



**(C) 0277 00**



**(C) 2821 00**





C1090FE ---



P1090FL ---

## Key Features

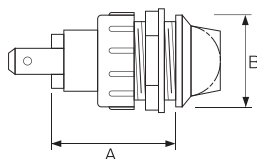
- Up to 50V
- MES or MBC bulb
- Flat and domed lens
- Brass or nylon bodies
- Red, Amber, Green, Blue and Clear lenses

## Approvals and specifications

Bulbs will be supplied (dependant on order quantity) if a voltage is specified. These lampholders are suitable for up to 50V max.

Colours - Red, Amber, Green, (Clear & Blue, check availability).  
Brass bodies have polished chrome finish.

## Dimensions and Options



F0445 MO  
P.V.C. Insulating terminal cover.



Terminal	Type	Colour	Bulb Voltage	Options	Panel	Lens																																			
<b>C</b> 	<b>1090</b> MES (E10)	<b>R</b> Red	<b>6</b> 6V	<b>C</b> Chrome Bezel Finish	<b>1090 (MES lamps)</b> <table border="1"> <thead> <tr> <th></th> <th>Panel Hole Dia</th> <th>Body Material</th> <th>Dim A</th> <th>Dim B</th> </tr> </thead> <tbody> <tr> <td><b>A</b></td> <td>19.0</td> <td>Brass</td> <td>35.0</td> <td>22.0</td> </tr> <tr> <td><b>D</b></td> <td>19.0</td> <td>Brass</td> <td>30.2</td> <td>22.0</td> </tr> <tr> <td><b>E</b></td> <td>19.0</td> <td>Nylon with chrome bezel</td> <td>30.2</td> <td>22.0</td> </tr> <tr> <td><b>G</b></td> <td>19.0</td> <td>Brass</td> <td>24.6</td> <td>22.0</td> </tr> <tr> <td><b>H</b></td> <td>19.0</td> <td>Nylon with chrome bezel</td> <td>24.6</td> <td>22.0</td> </tr> <tr> <td><b>L</b></td> <td>25.4</td> <td>Brass</td> <td>26.0</td> <td>31.5</td> </tr> </tbody> </table>		Panel Hole Dia	Body Material	Dim A	Dim B	<b>A</b>	19.0	Brass	35.0	22.0	<b>D</b>	19.0	Brass	30.2	22.0	<b>E</b>	19.0	Nylon with chrome bezel	30.2	22.0	<b>G</b>	19.0	Brass	24.6	22.0	<b>H</b>	19.0	Nylon with chrome bezel	24.6	22.0	<b>L</b>	25.4	Brass	26.0	31.5	<b>F</b> Flat
			Panel Hole Dia			Body Material	Dim A	Dim B																																	
		<b>A</b>	19.0			Brass	35.0	22.0																																	
		<b>D</b>	19.0			Brass	30.2	22.0																																	
		<b>E</b>	19.0			Nylon with chrome bezel	30.2	22.0																																	
<b>G</b>	19.0	Brass	24.6	22.0																																					
<b>H</b>	19.0	Nylon with chrome bezel	24.6	22.0																																					
<b>L</b>	25.4	Brass	26.0	31.5																																					
<b>Y</b> Yellow	<b>12</b> 12V																																								
<b>G</b> Green	<b>24</b> 24V																																								
<b>B</b> Blue	Max of 50V																																								
<b>C</b> Clear																																									
<b>T</b> 	<b>1091</b> MBC (BA9s) (C and S Terminals only)				<b>1091 (MBC lamps)</b> <table border="1"> <thead> <tr> <th></th> <th>Panel Hole Dia</th> <th>Body Material</th> <th>Dim A</th> <th>Dim B</th> </tr> </thead> <tbody> <tr> <td><b>B</b></td> <td>19.0</td> <td>Brass</td> <td>36.0</td> <td>22.0</td> </tr> <tr> <td><b>C</b></td> <td>19.0</td> <td>Nylon</td> <td>36.6</td> <td>22.0</td> </tr> <tr> <td><b>Q</b></td> <td>19.0</td> <td>Nylon (Chrome twin)</td> <td>36.6</td> <td>22.8</td> </tr> <tr> <td><b>M</b></td> <td>25.4</td> <td>Brass</td> <td>38.1</td> <td>31.5</td> </tr> </tbody> </table>		Panel Hole Dia	Body Material	Dim A	Dim B	<b>B</b>	19.0	Brass	36.0	22.0	<b>C</b>	19.0	Nylon	36.6	22.0	<b>Q</b>	19.0	Nylon (Chrome twin)	36.6	22.8	<b>M</b>	25.4	Brass	38.1	31.5	<b>V</b> MES (E10)										
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			<b>L</b> No lens																																						
<b>S</b> 																																									



# LED Lamps and LED Lampholders

LED Lampholders can be supplied with or without LEDs



## Key Features

- ⬡ LED lampholders
- ⬡ Supplied with or without LEDs
- ⬡ Black or Chrome finish

## Colours and voltages:

Colours: Red, Yellow, Green and Blue LEDs  
(High Intensity is standard. Option of extra super bright).

Voltages: LEDs are available for direct connection to 2.0/2.2V or 12Vdc

For other voltages contact sales.

Terminal	Type	Body Colour	LED Colour	Voltage	Panel Cutout	Approval	Dimensions
<b>W</b> LED fitted <b>A</b> LED not fitted <b>L</b> LED & Wires fitted	<b>(W) 1048 00</b> 	<b>B</b> Black  — Blank	<b>R</b> Red  <b>Y</b> Red  <b>G</b> Green	<b>1</b> LED No Resistor  <b>4</b> 6Vdc LED  <b>5</b> 12Vdc LED	 6.3 6.3max T105		 12.7 14.5 (+/-0.36) 1.5 Ø7.6
<b>W</b> LED fitted <b>A</b> LED not fitted <b>L</b> LED & Wires fitted	<b>(L) 1048 0A</b> 		<b>B</b> Blue	<b>6</b> 24Vdc LED	 8.0 5.5max T105		 10.0 14.5 2.0 Ø9.5
<b>W</b> LED fitted <b>A</b> LED not fitted <b>L</b> LED & Wires fitted	<b>(W) 1050 0A</b> 				 8.0 7.0max T105	 	 12.4 16.9 2.9 Ø10.0
<b>W</b> LED fitted <b>L</b> LED & Wires fitted	<b>(L) 1035 0A</b> 				 4.5 0.9-1.6 T105	 	 4.30 20.0 1.0 200.0 1.50 5.08
<b>W</b> LED fitted <b>L</b> LED & Wires fitted	<b>(L) 1036 0A</b> 				 6.0 0.9-1.6 T105	 	 5.85 20.0 1.0 200.0 4.0 7.9
<b>W</b> LED fitted <b>L</b> LED & Wires fitted	<b>(L) 1037 0A</b> 				 6.35 0.9-1.6 T105	 	 6.15 20.0 1.0 200.0 4.0 7.9




















## Key Features

- ⊞ IP67 front bezel sealing
- ⊞ LED lampholders
- ⊞ Supplied with or without LEDs
- ⊞ Black or Chrome finish

## Colours and voltages:

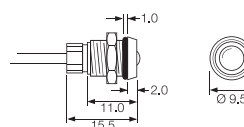
Colours:  
Red, Yellow Green and Blue LEDs.  
(High Intensity is standard. Option of extra super bright).

Voltages:  
LEDs are available for direct connection to 2.0/2.2V or 12Vdc.  
For other voltages contact sales.

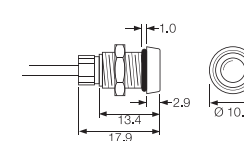
Terminal	Type	LED Colour	Voltage	Panel	Approval
<b>L</b> LED & Wires fitted 	<b>(L) 1048 00</b> 	<b>B</b> Blue	<b>6</b> 24Vdc LED	 8.0  5.5max  T105	
<b>W</b> LED fitted 	<b>(W) 1050 00</b> 			 8.0  7.0max  T105	
<b>A</b> LED not fitted 					
<b>L</b> LED & Wires fitted 	<b>(W) 1050 00</b> 			 8.0  7.0max  T105	

## Dimensions

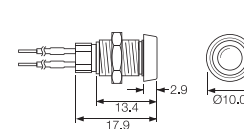
### (L) 1048 00



### (W) 1050 00



### (W) 1050 00



## Properties

### Sealing

O-ring sealing equivalent to IP67, of both the LED to bezel, and bezel to panel is available where shown.

### Polarity

The nylon base mouldings are polarity marked.

### Body Material and Finish

Chromed brass or Black oxide coated brass.

### Lampholders only

Items prefixed 'A' are supplied without LEDs.

### LED wires or PVC covered wire leads

125mm min length wires, 6.3mm standard strip.  
Alternative colours, length and strip available.

# Indicator Lights - Sealed to IP67



## Key Features

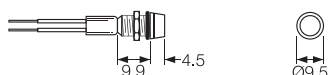
- IP67 Panel Sealing
- Supplied complete with gaskets/'O' rings
- Neon, LED, mains LED or filament lamp
- Bezel sizes from 7.6 to 22.9mm diameter
- Red, amber, green, blue and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

## Colours and voltages:

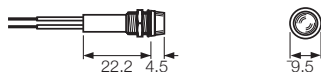
<b>NEON</b>  Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)	<b>DC LED</b>  Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.	<b>AC MAINS LED</b>  Red, Yellow, Green, Blue, White 110-230V ac operation.	<b>FILAMENT</b>  Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.
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Terminal	Type	Sealed	Illumination	Colour	Voltage	Option	Panel Cutout	Approval
L	<b>(L) 1041 OS</b> 	<b>S</b> Sealed	N L M F	<b>R</b> Red <b>A</b> Amber	<b>1</b> LED No Resistor <b>2</b> 125V Neon	<b>C</b> Chrome Bezel Finish	6.3 5.3max	
L	<b>(L) 0245 OS</b> 		N L M F	<b>G</b> Green <b>B</b> Blue (Special)	<b>3</b> 250V Neon		7.1 4.6max	
L C 6.3 K 2.8 H 4.8	<b>(C) 0275 OS</b> 		N L M F	<b>C</b> Clear	<b>4</b> 6Vdc LED <b>5</b> 12Vdc LED		10.0 11.15max	
L C 6.3 K 2.8 H 4.8	<b>(C) 0277 OS</b> 		N L M F	LED <b>R</b> Red	<b>6</b> 24Vdc LED		10.0 11.15max	
L C 4.8 K 2.8 H	<b>(C) 0177 OS</b> 		N L M F	<b>Y</b> Yellow <b>G</b> Green	<b>7</b> 12/14V Filament <b>8</b> 24/ 28V Filament		12.7 11.15max	
L C 6.3	<b>(C) 1092 FFS</b> 		N	<b>B</b> Blue <b>W</b> White	<b>9</b> 125/250Vac LED		19.0 4.0 max	

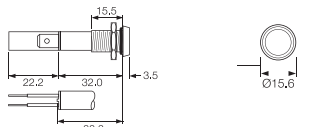
**(L) 1041 OS**



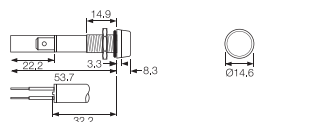
**(L) 0245 OS**



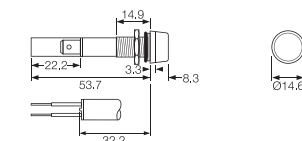
**(C) 0275 OS**



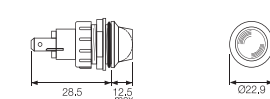
**(C) 0277 OS**



**(C) 0177 OS**



**(C) 1092 FFS**



# Low Voltage Lamp Holders - Sealed to IP67




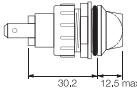

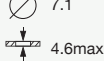

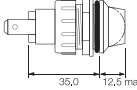

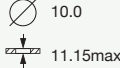




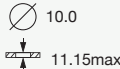



## Key Features

- ⊖ IP67 Panel Sealing
- ⊖ Supplied complete with gaskets/'O' rings
- ⊖ Neon, LED, mains LED or filament lamp
- ⊖ Bezel sizes from 7.6 to 22.9mm diameter
- ⊖ Red, amber, green, blue and clear lenses
- ⊖ Red, yellow, green, blue and white LEDs

## Colours and voltages:

These lampholders are suitable for up to 50V max. Bulbs will be supplied (dependent on order quantity) if a voltage is specified. Colours - Red, Amber, Green, (Clear & Blue, check availability).

Terminal	Type	Sealed	Colour	Bulb Voltage	Options	Panel	Approvals	Dimensions
C 6.3	<b>C1090 FPS (MES)</b> 	S Sealed	R Red	6 6V	C Chrome Bezel Finish	 19.0 4.0max T85		 30,2 12,5 max
			A Amber	12 12V				
C 6.3	<b>C1091 FQS (MBC)</b> 		G Green	24 24V		 7.1 4.6max		 35,0 12,5 max
			B Blue (Special)					
T	<b>T0062 AOS (Midget flange)</b> Chrome bezel <b>T0063 AOS (LES) Chrome bezel</b> 		C Clear			 10.0 11.15max		 21,3 9,1  Ø14,7
T	<b>T0062 MOS (LES &amp; Midget flange)</b> <b>T0063 MOS (LES)</b> 					 10.0 11.15max		

**F0445 MO**  
P.V.C. Insulating terminal cover.  
For use with C1090 & C1091

