

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.

380
382
387
394
396
397



### SYMBOLS



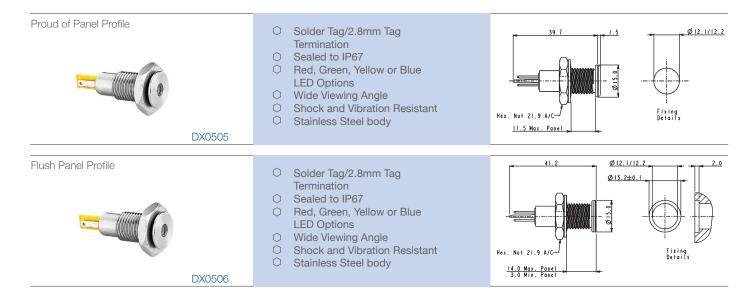
L Wire Leads 200mm long Standard

Solid wires W LED fitted A LED not fitted

Panel thickness Panel hole size

## Vandal Resistant LED Indicators

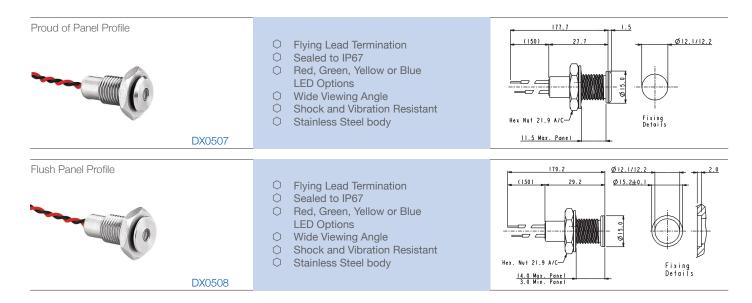




Specifications	DX0505/Col/Voltage	DX0506/Col/Voltage
Terminations: Forward Voltage:	Solder Tab/2.8mm Tab Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V	Solder Tab/2.8mm Tab Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V
Cont. Forward Current: (max)	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA	Red 30mA, 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: Lens: O Ring (external): (internal):	Stainless Steel Polycarbonate UL94V-0 Nitrile Silicone	Stainless Steel Polycarbonate UL94V-0 Nitrile 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 DC), /24 (24V DC) or /00 (no ballast resistor)	/12 (12V DC), /24 (24V DC) or /00 (no ballast resistor)
RoHS	Compliant	Compliant

## Vandal Resistant LED Indicators





Specifications	DX0507/Col/Voltage	DX0508/Col/Voltage
Terminations: Forward Voltage: Cont. Forward Current: (max)	Flying Leads Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA	Flying Leads Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V 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: Lens: O Ring (external): (internal):	Stainless Steel Polycarbonate UL94V-0 Nitrile Silicone	Stainless Steel Polycarbonate UL94V-0 Nitrile 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 DC), /24 (24V DC) or /00 (no ballast resistor)	/12 (12V DC), /24 (24V DC) or /00 (no ballast resistor)
RoHS	Compliant	Compliant

### Indicators 5mm LED Indicators





Specifications	DX0998 Colour/Options	DX1120, DX1121/Colour/Options
Bezel Material:	Brass, Chrome Plated	Glass Filled Nylon
Style:	Recessed (DX0998)	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
RoHS	Compliant	Compliant

See Page 212 for LED options and specifications\*

### Indicators 5mm LED Indicators



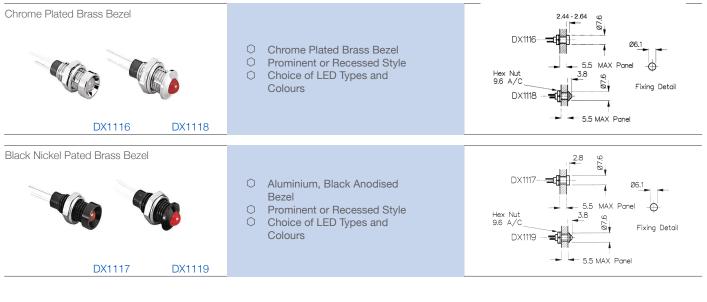


Specifications	DX1090, DX1092/Colour/Options	DX1091, DX1093/Colour/Options
Materials:	Aluminium - Black	Aluminium - Clear
Style:	Recessed (DX1090) Prominent (DX1092)	Recessed (DX1091) Prominent (DX1093)
Operating Temp. Range:	Dependent on LED used	Dependent on LED used
Storage Temperature:	Dependent 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:	0.056 - 0.064Nm (8 - 9ozf.in.)	0.056 - 0.064Nm (8 - 9ozf.in.)
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
RoHS	Compliant	Compliant

See Page 212 for LED options and specifications

## Amm LED Indicators





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)
RoHS	Compliant	Compliant

See Page 213 for LED specifications\*

### Indicators 5mm LED options



### 5mm LEDs STANDARD

Specification	Red	Green	Yellow	Blue	
Luminous Intensity @20mA:	25mcd	20mcd	20mcd	21mcd	27 MIN8.6
Forward voltage:	2.0V	2.0V	2.1V	3.5V	
Cont. Forward Current (max):	30mA	25mA	30mA	30mA	
Power Dissipation:	105mW (	max) @20°C A	mbient	120mW	Ø 5.9 1.5 TVP CATHODE (-)
Reverse Current:	10µA	10µA	10µA	50µA	0.5
Reverse Voltage:	5V (max)	5V (max)	5V (max)	5V (max)	
Operating Temp:	-4	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: Forward voltage: Cont. Forward Current (max):	1.2mcd 2.0-15.0V 10-30mA	20mcd 2.0V 25mA
Power Dissipation: Flash Frequency @ 3V supply: Operating Temp:	2.2H	@ 20°C ambient z (typ) o +70°C
Part No:	/RD/02	/GN/02

### 5mm LEDs TRI COLOUR

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

### 5mm LEDs DUAL COLOUR

Specifications	Red/Green	Red/Amber	Green/Amber	
Luminous Intensity: Forward voltage: Cont. Forward Current: Power Dissipation: Reverse Current: Reverse Voltage: Operating Temp: Part No:	4.5/5mcd 2.2V 30mA/30mA 100mW/100mW 100mA 5V (max) /D1	4.5/4mcd 2.2V 30mA/20mA 100mW/60mW 100mA 5V (max) -40°C to +85°C /D2	4/5mcd 2.2V 30mA/20mA 100mW/60mW 100mA 5V (max) /D3	L.O MIN 2 25.O MIN RED RED RED RED VELLOW YELLOW GREEN
	/D1		/D3	

# Amm LED Options



### 4mm LEDs Standard

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

### Part No Breakdown

DXxxxx	/ xx /	XX	
Bezel Type	LED Colour 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)	LED Options Blank = Standard 02 = Flashing - 5mm (Red or Green only)	

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



### **Key Features**

O Neon, LED, mains LED or filament lamp

- O Bezel sizes from 6.7 to
- 16.3mm diameter O Red, amber, green, blue and clear lenses
- $\bigcirc$ Red, yellow, green, blue and white LEDs
- O Wide choice of styles

### **Colours and voltages:**

NEON

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Available with

Red, Amber,

Green or Clear lenses 100/130V (marked 110V),

(marked 230V)



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AC

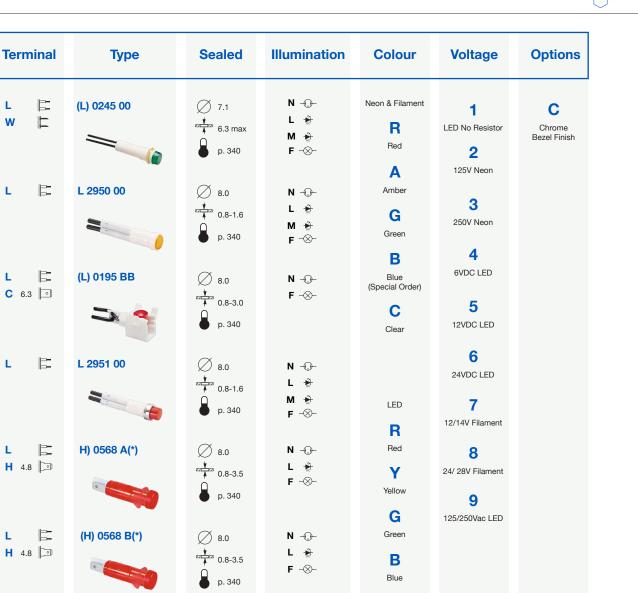
Red, Yellow, Red, Yellow, Green, Blue, White 110-230V AC Green, Blue, White 2.0/2.2V Resistors for other voltages operation. available.



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

Terminal	Туре	Sealed	Illumination	Colour	Voltage	Options
K 2.8 🏳 L 📴	(K) 0566 A	6.0 • • • • • • • • • • • • • • • • • • •	N -@- L <del>\$</del> M <del>\$</del>	Neon & Filament <b>R</b> Red	1 LED No Resistor 2	C Chrome Bezel Finish
K 2.8 🕞	(K) 0566 B	6.0 2.0 max p. 340	N -@- L <del>®</del> - M <del>®</del>	A Amber G Green	125V Neon 3 250V Neon	
K 2.8 📁 L 📑	(K) 0566 C	<ul> <li>Ø 6.0</li> <li>★ 2.0max</li> </ul>	N	B Blue (Special Order) C Clear	4 6VDC LED 5 12VDC LED	
<b>C</b> 6.3 ⊡	(C) 0145 AA	<ul> <li>✓ 5.8</li> <li>✓ 3.0max</li> <li>● p. 340</li> </ul>	N0} L <del>†2</del> - M <del>†2</del> - F -⊗	LED	6 24VDC LED 7	
L 🗄 W L	(L) 1041 00	6.3 6.3 6.3max 9. 340	N -⊕- L #- F -⊗-	R Red Y Yellow	12/14V Filament 8 24/ 28V Filament 9	
L E W L	(L) 1045 00	6.3 • 10.0max • 240	N -@- L ₩ M <del>₩</del> F -⊗-	Green B Blue	125/250VAC LED	

Neon, LED and Filament Lamp



### **Dimensions**

(K) 0566 A



Ø7.0

Ø7.0

Ø7.0

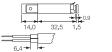




(K) 0566 C



(C) 0145 AA









Ø7.6

Ø7.6





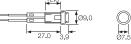




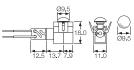




L 2950 00







 $\square$ 

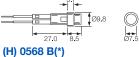
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bulgin





L 2951 00





-2.3 27.5 27.5

Neon, LED and Filament Lamp



#### **Key Features**

#### $\bigcirc$ Neon, LED, mains LED or filament lamp

- $\bigcirc$ Bezel sizes from 6.7 to 16.3mm diameter
- O Red, amber, green, blue and clear lenses
- O Red, yellow, green, blue and white LEDs
- Wide choice of styles

L

L

**C** 6.3 💿

K 2.8 Þ

**H** 4.8

**C** 6.3 💿

K 2.8 Þ

H 4.8 🗇

**C** 6.3 💿

E.

E.

(C) 0275 00

(C) 0275 00

6

### **Colours and voltages:**

NEON

Available with

Green or Clear

(marked 110V),

(marked 230V)

Red, Amber,

lenses 100/130V

200/250V



AC

Red, Yellow, Red, Yellow, Green, Blue, White Green, Blue, White 2.0/2.2V 110-230V AC Resistors for operation. other voltages

available.



FILAMENT

Blue lenses 6V, 12/14V, 24/28V.

Terminal	Туре	Illumination	Colour	Voltage	Options
L 2.8 H 4.8 C 6.3	(C) 0273 00	N -⊕- L <del>∜</del> M <del>∛</del> F -⊗-	Neon & Filament R Red	1 LED No Resistor 2 125V Neon	<b>C</b> Chrome Bezel Finish
L 2.8 H 4.8 C 6.3	(C) 0278 00	N -⊕- L <del>∛</del> M <del>∛</del> F -⊗-	Amber G Green B	3 250V Neon <b>4</b>	
L	(C) 0276 AA	N - <del>0-</del> L <del>\$</del> M <del>\$</del>	Blue (Special Order)	6VDC LED 5	

Clear

LED

R

Red

Υ

Yellow

G

Green В Blue

F -⊗-

N ------

F

۲ L

М 👻

L ٠

М ÷

Ν -0-

F 

12VDC LED 6 24VDC LED

7 12/14V Filament

8 24/28V Filament

9 125/250VAC LED

0.0 **91** KEDA 🕃 Keur 2.0 max Keör p. 340 Kenk **FAL** KEDA 🕼 Ø 9.0 Keur 2.0 max KEDA GR p. 340 Kenk **71** KEMA **()** Ø 9.5 0.8-2.8 Keur Kenk p. 340 Kenk **FL** KEDA **()** 0 10.0 Keur ±212.0 KEDA SE p. 340 KEUA

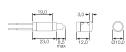
Panel

**Approval** 

Kenk

LE(C) 0276 00NNPNeon & Flament1C $(1,0)$ N $(1,0)$ N<	Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	K 2.8 H 4.8 ⊡	(C) 0276 00	L <del>®</del> M <del>®</del>	R Red	LED No Resistor	Chrome	2.8 max	KEUA <b>R1</b> KEUA
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	K 2.8 H 4.8 ⊡		L <del>®</del> M <del>®</del>	Amber G Green	250V Neon		2 ↓ 12 max	<u>Keda</u>
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	K 2.8 H 4.8 ⊡	(C) 0273 LL	L <del>®</del> M <del>®</del>	(Special Order)	5 12VDC LED		0.6-2.0	KEDA KEDA <b>SD</b>
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	K 2.8 H 4.8 ⊡	(C) 2820 00	L <del>®</del> M <del>®</del>		24VDC LED		0.75-2.0	<u>Keua</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	K 2.8 H 4.8 ⊡	(C) 2821 00	L <del>®</del> M <del>®</del>	Y Yellow	24/28V Filament			KEDA KEDA <b>(K</b>
Dimensions	K 2.8 H 4.8 ⊡	(C) 0586 00	L <del>si</del> M <del>si</del>	в			0.8-1.5	KEUA KEUA <b>S</b>
(L) 0569 AW (C) 0275 00 (C) 0273 LL		10	0275.00		2211			

bulgin



012.2

12.0 Sq.

O 012.0





(C) 0278 00







(C) 0275 00 € 32.0 + 3.5 + 3.0 32.0 32.5 (C) 0276 00

7

Ø13.3

O 015.6

O 012.0

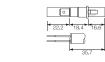
014.6



(C) 0277 00

7





(C) 2820 00

35



08.8

(C) 2821 00



### (C) 0586 00



4 > 15.5 Sq

390 Indicators

## Indicator Lights Neon, LED and Filament Lamp



### **Key Features**

### **Colours and voltages:**

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



(marked 230V)

NEON

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

DC LED



White 110-230V AC operation.

AC MAINS LED

77



FILAMENT

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

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L	(C) 2870 00	N -⊕- L <del>∛</del> M <del>∛</del> F -⊗-	Neon & Filament <b>R</b> Red	1 LED No Resistor 2	C Chrome Bezel Finish	<ul> <li>12.7</li> <li>0.75-2.0</li> <li>P. 340</li> </ul>	N KEEL KEEL KEEL
L E K 2.8 P H 4.8 D C 6.3 D	C) 0589 00	N -⊕- L <del>∜</del> M <del>∜</del> F -⊗-	A Amber G Green	125V Neon 3 250V Neon		<ul> <li>✓ 12.7</li> <li>★ 0.8-1.5</li> <li>▶ p. 340</li> </ul>	KICA CO
LE	L 0081 00	N -⊕- L <del>∜</del> M <del>∜</del> F -⊗-	Blue (Special Order) C Clear	4 6VDC LED 5 12VDC LED		<ul> <li>✓ 12.7</li> <li>→</li> <li>→</li> <li>9.5</li> <li>→</li> <li>p. 340</li> </ul>	KIER GE
L 2.8 H 4.8 C 6.3	(C) 0177 00	N -⊕- L <del>∛</del> M <del>∛</del> F -⊗-	LED R	6 24Vdc LED <b>7</b> 12/14V Filament		<ul> <li>12.7</li> <li>12.0max</li> <li>p. 340</li> </ul>	VI KIE Ø KIE KIE KIE
L 2.8 H 4.8 C 6.3	(C) 0067 00	N - (0)- L <del>10</del> M <del>12</del> F -⊗-	Red Y Yellow	8 24/ 28V Filament 9 125/250VAC LED		<ul> <li>12.7</li> <li>1.14 max</li> <li>p. 340</li> </ul>	KICA KICA KICA KICA
L E	(C) 0180AA	N -⊕- L <del>∜</del> F -⊗-	Green B Blue			<ul> <li>✓ 12.7</li> <li>★ 19.0 max</li> <li>▶ p. 340</li> </ul>	TA KIER @

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L E. C 6.3 0	(C) 0180BB	N -⊕- L <del>≹</del> F -⊗-	Neon & Filament <b>R</b> Red	1 LED No Resistor 2	C Chrome Bezel Finish	<ul> <li>13.5</li> <li>0.9-1.14</li> <li>p. 340</li> </ul>	Ktta 🔇
L 2.8 1 2.8 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	(C) 0579 00	N-⊕- L # M # F-⊗-	A Amber G Green	125V Neon <b>3</b> 250V Neon		<ul> <li>14.0</li> <li>2.5 max</li> <li>p. 340</li> </ul>	<b>FL</b> (KEG) <b>S</b> (KEG) (KEG)
C 6.3	(C) 1092	N	B Blue (Special Order)	4 6VDC LED 5 12VDC LED		<ul> <li>19.0</li> <li>4.0max</li> <li>p. 340</li> </ul>	Ktta)
			Clear LED	6 24VDC LED		• p. 340	
			Red Y Yellow	7 12/14V Filament 8 24/ 28V Filament			
			G Green B Blue	<b>9</b> 125/250VAC LED			

### **Dimensions**

(C) 2870 00



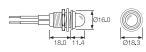


C) 0589 00

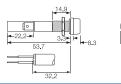




L 0081 00



(C) 0177 00



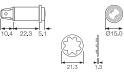




38.1



(C) 0180AA



### (C) 0180BB





10.0











Neon, LED and Filament Lamp



### **Key Features**

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



NEON

(marked 230V)

**Colours and voltages:** 

Red, Yellow, Green, Blue, White 110-230V AC Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for operation. other voltages available.

DC LED



AC MAINS LED

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

FILAMENT

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
LE	L 0234 00 L 0233 00	N - (0-	Neon & Filament R Red A Amber G Green B Uue (Special Order) C Clear LED R Red Y Yellow G Green B	1 LED No Resistor 2 125V Neon 3 250V Neon 4 6Vdc LED 5 12VDC LED 6 24VDC LED 7 12/14V Filament 8 24/ 28V Filament 9 125/250VAC LED	C Chrome Bezel Finish	□       18.2/18.3 ★ 6.2/6.3·         ↓       2.0-3.5         ↓       P. 340         □       9.27/9.50         ↓       7.5 ·         ↓       0.71-1.62         ↓       p. 340         ↓       p. 340	
			Blue				

#### **Dimensions**

### H 0581 AY

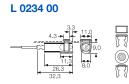




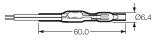








L 0233 00



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

### Low Voltage Lampholders



### **Key Features**

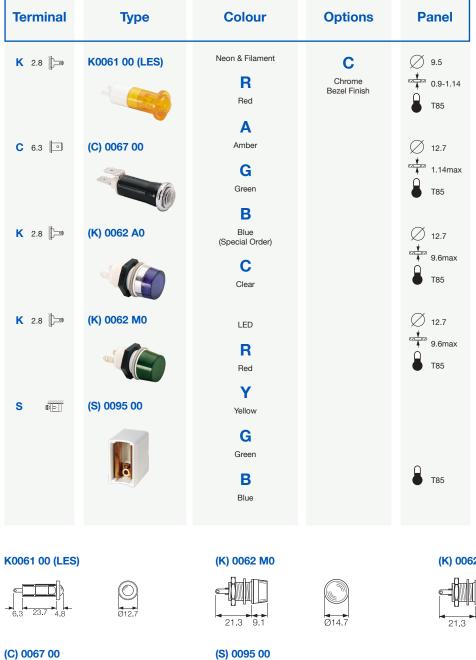
### **Colours and voltages:**

O Up to 50V

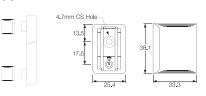
These lampholders are suitable for up to 50V max.

Colours - Red, Amber, Green, (Clear & Blue, check availability).

- O Red, Amber, Green, Blue and Clear
- C Linestra/Philinea lamp holder







(K) 0062 A0





### Large Low Voltage Lampholders





C1090FE - - -

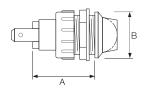


P1090FL - - -

**Key Features** 

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

### **Dimensions and Options**



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

Approvals and specifications

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

These lampholders are suitable for up to 50V max.



Terminal	Туре	Colour	Options	Panel	Lens
C	1090 MES (E10) IMEC (BA9s) (C and S Terminals only)	R Red Yellow Green Blue Clear	C Chrome Bezel Finish	1090 (MES lamps)           Panel Hole Dia         Body Material         Dim A         Dim B         Dim         Dim B         Dim	F Flat
9.1 Screw and Clamp					

Indicators 395

## LED Lamps and LED Lampholders LED Lampholders can be supplied with or without LEDs



### **Key Features**

#### **Colours and voltages:**

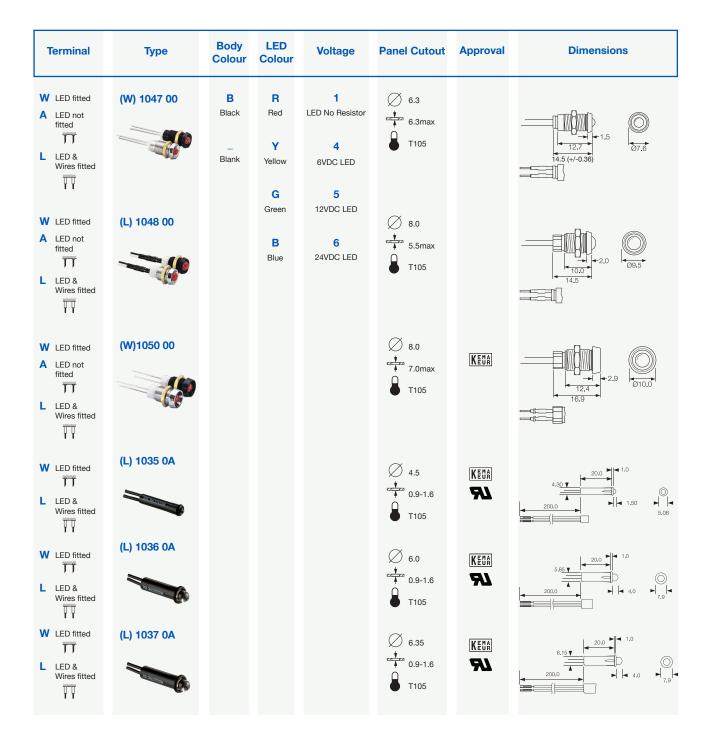
C LED lampholders

O Black or Chrome finish

Colours: Red, Yellow, Green and Blue LEDs (High Intensity is standard. Option of extra super bright). Supplied with or without LEDs

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

For other voltages contact sales.





## Key Features

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LEDs

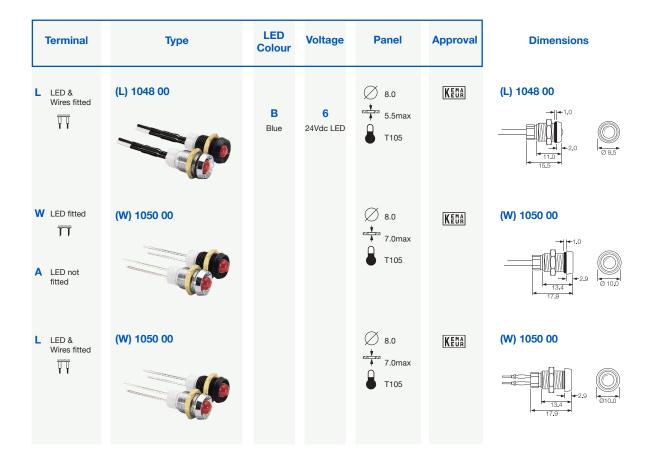
#### **Colours and voltages:**

$\bigcirc$	IP67 from bezel sealing
0	LED lampholders

O Black or Chrome finish

Supplied with or without

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.



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.



### **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



DC LED

DC



 $\bigcirc$  Red, amber, green, blue and

 $\bigcirc$  Red, yellow, green, blue and

clear lenses

white LEDs

O Wide choice of styles

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



Red, Yellow,<br/>Green, Blue,Red, Yellow,<br/>Green, Blue,WhiteWhite2.0/2.2V110-230V ACResistors for<br/>other voltagesoperation.available.



FILAMENT

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

Terminal	Туре	Sealed	Illumination	Colour	Voltage	Option	Panel Cutout	Approval
LE	(L) 1041 OS	<b>S</b> Sealed	N -⊕- L <del>∛</del> M <del>∛</del> F -⊗-	R Red A Amber	1 LED No Resistor <b>2</b> 125V Neon	<b>C</b> Chrome Bezel Finish	<ul> <li>              €.3 ↓</li></ul>	KEUA
LE	(L) 0245 OS		N -⊕- L ∛ M <del>∛</del> F -⊗-	G Green B Blue	<b>3</b> 250V Neon		<ul> <li>         7.1         ★         4.6max     </li> </ul>	KEUR
L 2.8 H 4.8 C 6.3	(C) 0275 OS		N -⊕- L <del>∜</del> M <del>∛</del> F -⊗-	(Special) C Clear	4 6VDC LED 5 12VDC LED		<ul> <li>Ø 10.0</li> <li><sup>e<sup>1</sup>/<sub>4</sub></sup></li> <li>11.15max</li> </ul>	KEUR
L 2.8 H 4.8 C 6.3	(C) 0277 OS		N -⊕- L <del>∛</del> M <del>∜</del> F -⊗-	LED R Red	6 24VDC LED		<ul> <li>✓ 10.0</li> <li>♥</li> <li>● 11.15max</li> </ul>	KECA
L 2.8 H 4.8 C 6.3	(C) 0177 OS		N -⊕- L <del>∛</del> M <del>∛</del> F -⊗-	Y Yellow G Green	7 12/14V Filament 8 24/ 28V Filament		<ul> <li>✓ 12.7</li> <li>▲ 11.15max</li> </ul>	KEUA
				B Blue W White	9 125/250VAC LED			
(L) 1041 OS			(C)	0275 OS		(C) 0177	os	
(L) 0245 OS	↓ 4.5 Ø9.5			32.0 32.2	.5	+-22.2+ +-53.7		014.6
	5 9.5		(C)	0277 OS	.3 014.6			

### Technical Information - Indicators



The majority of Arcolectric indicator lights can be supplied with alternative light sources: Neon, Fluorescent, Filament lamp or LED

### NEON and FLUORESCENT LAMPS Colours

Available with Red, Amber, Green, Blue or Clear lenses.

### Maximum striking voltages

Standard brightness types 65VAC 90VDC. High brightness types 85VAC 135VDC. High brightness types are usually fitted.

### Life

Typically 25,000 hours (Green fluorescent lamps 20,000 hours). (Measured to a point when the light output of the lamp is half its original level.) The end of life for a neon lamp is not usually a sudden failure.

### False signals due to long wiring

It is possible for neon or fluorescent tubes to glow when they should be off. Thefalse signal is caused by the capacitance effect of fairly long wiring to the indicator being adjacent to other live cables. This effect can be prevented in most cases by fitting a 100k resistor across the supply wires close to the indicator assembly.

### MATERIALS

### **TEMPERATURE RATING**

Authority	with Terminals	with Wire leads		
		PVC	SILICONE	
European	T105°C	T105°C T105°C		
UL	T65/75°C	T65/75°C		

### FILAMENT LAMPS

#### Colours

Available with Red, Amber, Green, Clear or Blue lenses

LEDs - DC Colours

Red, Yellow, Green, Blue and White.

### Voltage

Basic voltage 2.0/2.2V. Some items are available with integral resistors for 12V use. For details of resistors required for higher voltages, please call sales.

Current

Maximum continuous forward current 20mA

Life >100,000hrs

### LEDs - AC

Colours Red, Yellow, Green, Blue and White.

Voltage Rated up to 230V AC, suitable for use at 110V and 230V AC.

Current <3mA

Life >100,000hrs