

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.

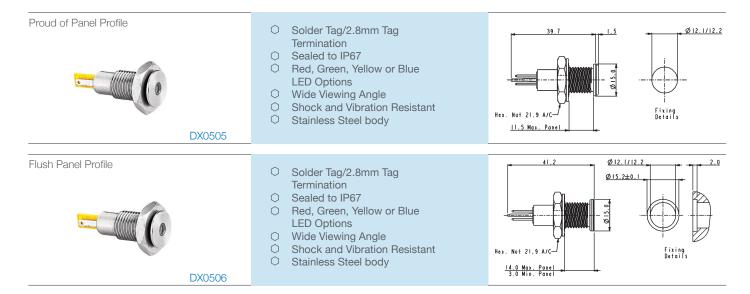
The vandal resistant LED indicators are designed to complement the vandal resistant switches (see the Switch Section), they have similar profiles with stainless steel bodies, sealing to IP66 & 68 and are built to withstand harsh environments.

Vandal Resistant LED	317-318
LED Bezel	319-323
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LED Lampholders	333-334
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Vandal Resistant LED Indicators

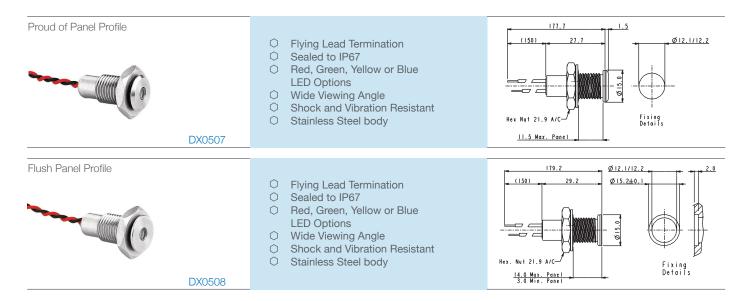




Specifications	DX0505/Col/Voltage	DX0506/Col/Voltage
Terminations: Forward Voltage:	Solder Tab/2.8mm Tab Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V	Solder Tab/2.8mm Tab Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V
Cont. Forward Current: (max)	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA	Red 30mA, 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 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

Vandal Resistant LED Indicators





Specifications	DX0507/Col/Voltage	DX0508/Col/Voltage
Terminations: Forward Voltage:	Flying Leads Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V	Flying Leads 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 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

Indicators 5mm LED Indicators



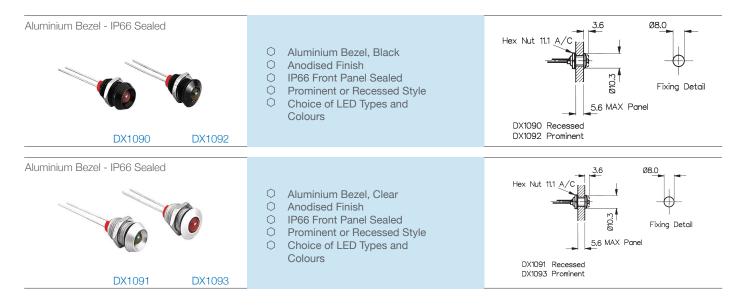


Specifications	DX0998, DX0999/Colour/Options	DX1120, DX1121/Colour/Options
Bezel Material:	Brass, Chrome Plated	Glass Filled Nylon
Style:	Recessed (DX0998) Prominent (DX0999)	Recessed (DX1120) Prominent (DX1121)
Operating Temp. Range:	Dependent on LED used	Dependent on LED used
Storage Temperature:	Dependent 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
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:	0.056Nm (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
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
Forward voltage:	2.0V	2.0V	2.1V	3.5V
Cont. Forward Current (max):	30mA	25mA	30mA	30mA
Power Dissipation:	105mW (i	max) @20°C A	mbient	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: 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 YELLOW YELLOW GREEN

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

Indicator Lights Neon, LED and Filament Lamp



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

(,)

Available with

Red, Amber,

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

(marked 230V)



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

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AC



FILAMENT

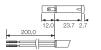
Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Туре	Sealed	Illumination	Colour	Voltage	Options
B 2.8 ⊨ L ⊨	(B) 0566 A	 Ø 6.0 Ø 2.0 max Ø p. 340 	N L ∛ M ∛	Neon & Filament R Red	1 LED No Resistor 2	C Chrome Bezel Finish
B 2.8 ⊨ L ⊨	(B) 0566 B	6.0 2.0 max p. 340	N -@- L # M #	A Amber G Green	125V Neon 3 250V Neon	
B 2.8 ⊨ L ⊨	(B) 0566 C	6.0	N L & M & -	B Blue (Special Order) C Clear	4 6Vdc LED 5 12Vdc LED	
C 6.3	(C) 0145 AA	5.8 * * * * * * * *	N -⊕- L †/ M †/ F -⊗-	LED	6 24Vdc LED 7 12/14V Filament	
L H	(L) 1041 00	 ✓ 6.3 ✓ 6.3max ✓ p. 340 	N -⊕- L ≹ F -⊗-	R Red Y Yellow	8 24/ 28V Filament 9	
L 114	(L) 1045 00	6.3 10.0max p. 340	N -⊕- L ∛ M ∛ F -⊗-	G Green B Blue	125/250Vac LED	

Terminal	Туре	Sealed	Illumination	Colour	Voltage	Options
L ⊫ W L	(L) 0245 00	 Ø 7.1 Ø 7.1 Ø 6.3 max Ø p. 340 	N -⊕- L ∯ M ∯ F -⊗-	Neon & Filament R Red	1 LED No Resistor 2 125V Neon	C Chrome Bezel Finish
LE	L 2950 00	8.0 0.8-1.6 p. 340	N -⊕- L ∯ M ∯ F -⊗-	A Amber G Green	3 250V Neon	
L E. C 6.3 D	(L) 0195 BB	8.0 0.8-3.0 p. 340	N -⊕- F -⊗-	Blue (Special Order) Clear	4 6Vdc LED 5 12Vdc LED	
LE	L 2951 00	8.0 0.8-1.6 p. 340	N - ()- L # M # F -&-	LED	6 24Vdc LED 7 12/14V Filament	
L 📴	H) 0568 A(*)	8.0 • 0.8-3.5 • p. 340	N -⊕- L ∜ F -⊗-	R Red Y Yellow	8 24/ 28V Filament 9	
L E	(H) 0568 B(*)	 Ø 8.0 Ø 0.8-3.5 Ø p. 340 	N -⊕- L ĝ F -⊗-	G Green B Blue	125/250Vac LED	

Dimensions





07.0

Ø7.0

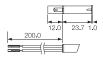
Ø7.0

Ø6.7

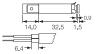




(B) 0566 C



(C) 0145 AA









Ø7.6

Ø7.6

Ø7.6

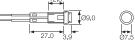




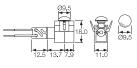












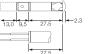
H) 0568 A(*)



L 2951 00







Ø9.5

bulgin



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
- O Red, yellow, green, blue and white LEDs
- Wide choice of styles

Colours and voltages:

NEON

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 110-230V ac Resistors for other voltages operation.

available.



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

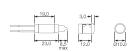
FILAMENT

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approva
LE	(L) 0569 AW	N L #	Neon & Filament	1	С	Ø 9.0	KENA S
		L ≋ M ∛ F−⊗-	R Red	LED No Resistor 2	Chrome Bezel Finish	Call sales	REDA KEDA
. *			Α	125V Neon		\sim	
L 2.8 H 4.8 C 6.3	(C) 0273 00	N -⊕- L ⊉ M ≹ F -⊗-	Amber G Green	3 250V Neon		9.0 2.0 max p. 340	KEUA KEUA KEUA
L	(C) 0278 00	r ⊗ N -⊕- L ∛	B Blue (Special Order)	4 6Vdc LED		9.0	RL Keta G
H 4.8 🗐 C 6.3 🖸		⊢ ∞ M ∜ F −⊗-	C Clear	5 12Vdc LED		↓ 2.0 max	Kena Kena
L 2.8 H 4.8	(C) 0276 AA	N L -2		6 24Vdc LED		9.5 • 0.8-2.8	RA KENA O
C 6.3		M ∲ F -⊗-	LED R	7 12/14V Filament		p. 340	Këda
L	(C) 0275 00	N L #	Red	8 24/ 28V Filament		 ✓ 10.0 [★] 12.0 	Keda Co Keda
H 4.8 □ C 6.3 □		M ∲ F -⊗-	Yellow	9		p. 340	KEUA
	(C) 0275 00	N -@-	G Green	125/250Vac LED		0.0	RI KEUA Ø
K 2.8 H 4.8 C 6.3		L ® M ® F −⊗-	Blue			p. 340	KEDA KEDA

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L	(C) 0276 00	N -⊕- L ∛ M ∛ F -⊗-	Neon & Filament R Red	1 LED No Resistor 2 125V Neon	C Chrome Bezel Finish	 ✓ 10.0 ✓ 2.8 max ✓ p. 340 	RL KEEB Ø KEEB KEEB
L 2.8 H 4.8 C 6.3	(C) 0277 00	N -⊕- L ∛ M ∜ F ⁻ ⊗-	Amber G Green B	3 250V Neon 4		 10.0 12 max p. 340 	KEDD KEDD KEDD KEDD
L 2.8 H 4.8 C 6.3 C 6.3 C	(C) 0273 LL	N -⊕- L ∛ M ∛ F -⊗-	Blue (Special Order) Clear	6Vdc LED 5 12Vdc LED		 ✓ 10.0 ★ 0.6-2.0 ● p. 340 	RL KEAA Ø KEAA KEAA
L E. K 2.8)→ H 4.8)→ C 6.3)→	(C) 2820 00	N -⊕- L ≹ M ≹ F -⊗-	LED R	6 24Vdc LED 7 12/14V Filament		 ✓ 12.0 ★ 0.75-2.0 ▶ p. 340 	RL KEDD () KEDD KEDD KEDD
L 2.8 H 4.8 C 6.3	(C) 2821 00	N -⊕- L ∜ M ∜ F -⊗-	Red Y Yellow G	8 24/ 28V Filament 9 125/250Vac LED		↓ 12.0or12 • 0.8-2.5 • 0.8-2.5 • 0.8-2.5 • 0.1-2.5 p. 340	.7 P. Ked & Keda Keda Keda
L 2.8 H 4.8 C 6.3	(C) 0586 00	N -⊕- L ∛ M ∜ F -⊗-	Green B Blue			 ✓ 12.5 ★ 0.8-1.5 ▶ p. 340 	FL Kibb G Kibb Kibb
Dimensions							

bulgin

(L) 0569 AW



012.2

12.0 Sc

O ∅12.0





(C) 0278 00



(C) 0276 AA



32.0 32.5 32.7 (C) 0276 00



(C) 0275 00

(C) 0275 00

0

32.5 2 Ø13.3

015.6

Ø12.0

014.6

(C) 0277 00

3





15.5 Sq

(C) 2820 00



(C) 2821 00



(C) 0586 00



327 Indicators

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



DC LED

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

AC MAINS LED

77



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

FILAMENT

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L	(C) 2870 00	N -⊕- L ∛ M ∜ F -⊗- N -⊕- L ∛	Neon & Filament R Red A Amber G	1 LED No Resistor 2 125V Neon 3	C Chrome Bezel Finish	$() 12.7 \\ + \frac{1}{4} 0.75 - 2.0 \\ () P. 340 \\ () 12.7 \\ + \frac{1}{4} 0.8 - 1.5 \\ () 12.7 \\ + 1.5 \\ + 1.5 \\ () 12.7 \\ + 1.5$	
H 4.8 💭 C 6.3 🖸	L 0081 00	M ∜ F -⊗- N -⊕-	Green B Blue	250V Neon 4 6Vdc LED		p. 340	(KEGA)
• =-		L ∜ M ∜ F −⊗−	(Special Order)	5 12Vdc LED		 12.7 9.5 p. 340 	KICA GE
L 2.8 H 4.8 C 6.3	(C) 0177 00	N -⊕- L ∛ M ∛ F -⊗-	LED R	6 24Vdc LED 7 12/14V Filament		 12.7 12.0max p. 340 	N KEER G KEER KEER G
L 2.8 H 4.8 C 6.3	(C) 0067 00	N -⊕- L † M † F -⊗-	Red Y Yellow G	8 24/ 28V Filament 9 125/250Vac LED		 12.7 1.14 max p. 340 	KICA KICA KICA
L E	(C) 0180AA	N -⊕- L ∜ F -⊗-	Green B Blue			 ✓ 12.7 → 19.0 max → p. 340 	FN KEER S

Indicator Lights Neon, LED and Filament Lamp

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L E C 6.3 🏳	(C) 0180BB	N -0- L ∜ F -⊗-	Neon & Filament R Red	1 LED No Resistor 2 125V Neon	C Chrome Bezel Finish	 ✓ 13.5 ² → 20 → 0.9-1.14 → p. 340 	KEER S
L 2.8 H 4.8 C 6.3	(C) 0579 00	N -⊕- L ⊉ M ⊉ F -⊗-	A Amber G Green	3 250V Neon 4		 14.0 2.5 max p. 340 	REAL CONTRACTOR
C 6.3	(C) 1092	N -@-	Blue (Special Order) C Clear	6Vdc LED 5 12Vdc LED		 19.0 4.0max p. 340 	K₹52
			LED R Red	6 24Vdc LED 7			
			Y Yellow G	12/14V Filament 8 24/ 28V Filament			
Dimensions			Green B Blue	9 125/250Vac LED			

Dimensions

(C) 2870 00



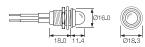


C) 0589 00

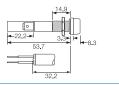




L 0081 00







329 Indicators

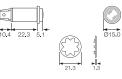






(C) 0180AA

38.1



(C) 0180BB

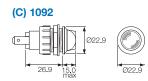


(C) 0579 00

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Indicator Lights 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
- Red, yellow, green, blue and
- white LEDs
- O Wide choice of styles

NEON DC LED

Available with Red, Amber,

Green or Clear lenses 100/130V

(marked 110V), 200/250V

(marked 230V)

Colours and voltages:

White 2.0/2.2V



Red, Yellow, Green, Blue, White 110-230V ac Red, Yellow, Green, Blue, Resistors for operation. other voltages available.

×,

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

FILAMENT

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
H 4.8	H 0581 AY	N -@- F -⊗-	Neon & Filament R Red	1 LED No Resistor 2 125V Neon	C Chrome Bezel Finish	18.2/18.3 × 6.2/6.3 2.0-3.5 P. 340	RICH G
LE	L 0234 00	N -@-	Amber G Green B	3 250V Neon 4		9.27/9.50 × 4 . 7 5 • • 0.71-1.62 • p. 340	N III 3
LÈ	L 0233 00	N -@-	Blue (Special Order) C Clear	6Vdc LED 5 12Vdc LED		p . 340	KEEE
			LED R Red Y Yellow G Green B Blue	6 24Vdc LED 7 12/14V Filament 8 24/ 28V Filament 9 125/250Vac LED			

Dimensions

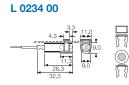
H 0581 AY



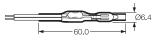








L 0233 00



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

Low Voltage Lampholders



Key Features

Colours and voltages:

Up to 50VRed, Amber, Green, Blue and

Clear

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).

C Linestra/Philinea lamp holder

Terminal	Туре	Sealed	Illumination	Colour	Voltage	Options	Panel
T 🎾	T0061 00 (LES)	S Sealed	N Neon	Neon & Filament R Red	1 LED No Resistor 2 125V Neon	Chrome Bezel Finish	9.5 0.9-1.14 185
C 💿 T 6.3 🏓	(C) 0067 00		DC LED	Amber G Green B Blue	3 250V Neon 4 6Vdc LED		 12.7 1.14max T85 12.7
			F Mains AC LED	(Special Order)	5 12Vdc LED 6		9.6max T85
T	(C) 0062 M0			LED R Red	24Vdc LED 7 12/14V Filament		 12.7 9.6max T85
S OTEL	(S) 0095 00			Yellow G Green B Blue	8 24/ 28V Filament 9 125/250Vac LED		Б тв5
T0061 00 (LES)	012.7	(C) 0062 N			T) 0062 A0	Ø14.7	
	016.0	(S) 0095 0	4.7mm CS Hole 13.5 17.5 25.4	33.3			

Large Low Voltage Lampholders





C1090FE - - -

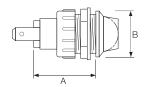


P1090FL - - -

Key Features

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

Dimensions and Options



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.

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



Terminal	Туре	Colour	Bulb Voltage	Options	Panel	Lens
C 0	1090 MES (E10)	R Red Y Yellow Green	6 6V 12 12V 24 24V	C Chrome Bezel Finish	1090 (MES lamps) Panel Hole Body Dim Dim Dia Material A B A 19.0 Brass 35.0 22.0 D 19.0 Brass 30.2 22.0 E 19.0 Nylon with 30.2 22.8 G 19.0 Brass 24.6 22.0 H 19.0 Nylon with 24.6 22.0	F Flat
T 02.0	1091 MBC (BA9s) (C and S Terminals only)	B Blue C Clear	Max of 50V		chrome bezel 24.6 22.8 L 25.4 Brass 26.0 31.5	MES (E10)
Solder					Panel Hole Dia Body Material Dim A Dim B B 19.0 Brass 36.0 22.0 C 19.0 Nylon 36.6 22.0 Q 19.0 Nylon (Chrome twin) 36.6 22.8 M 25.4 Brass 38.1 31.5	L No lens
9,1 Screw and Clamp						

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



Key Features

Colours and voltages:

C LED lampholders

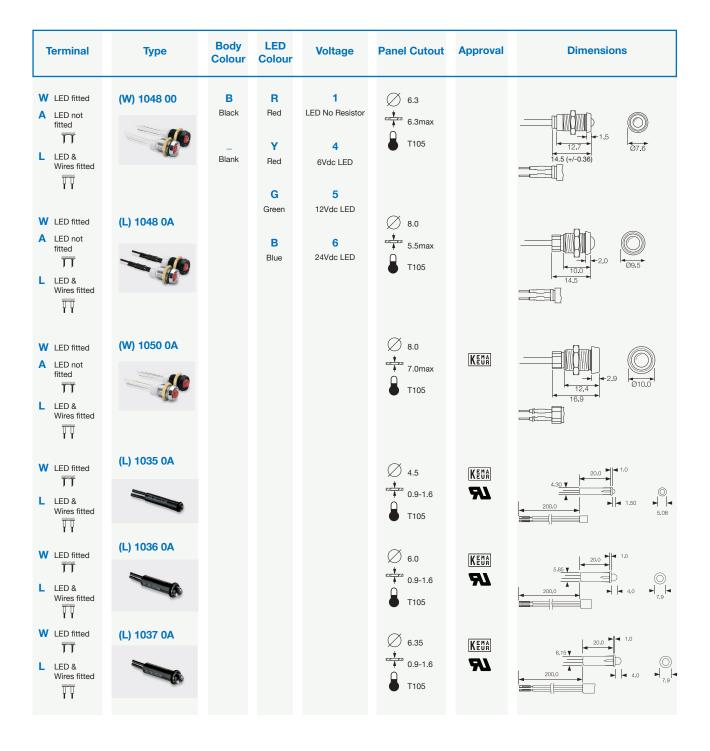
O Black or Chrome finish

Supplied with or without LEDs

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.





Key Features

LEDs

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Colours and voltages:

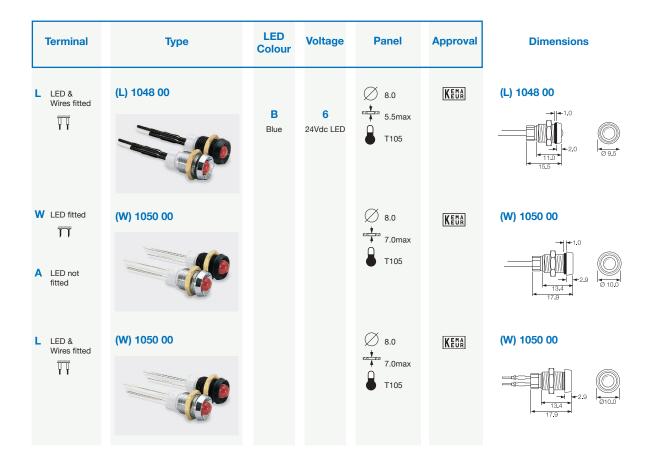
Colours:

\bigcirc	IP67 from bezei sealing
\bigcirc	LED lampholders

O Black or Chrome finish

Supplied with or without

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.

Indicator Lights - Sealed to IP67

○ Red, amber, green, blue and

 \bigcirc Red, yellow, green, blue and

clear lenses

white LEDs

O Wide choice of styles



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



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



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



Available with 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	S Sealed	N -⊕- L ∜ M ∜ F -⊗-	R Red A Amber	1 LED No Resistor 2 125V Neon	C Chrome Bezel Finish	 6.3	KENA
LE	(L) 0245 OS		N -⊕- L ∛ M * F -⊗-	G Green B Blue	3 250V Neon		 7.1 ★ 4.6max 	KEMA
L 5.3 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4	(C) 0275 OS		N -⊕- L ∜ M ∜ F -⊗-	(Special) C Clear	4 6Vdc LED 5 12Vdc LED		 ✓ 10.0 ⁺/₄ 11.15max 	KEMA
L 5.3 5.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	(C) 0277 OS		N -⊕- L ∛ M ∜ F -⊗-	LED R Red	6 24Vdc LED		 ✓ 10.0 ♥ ● 11.15max 	KEUA
L 6.3 C 4.8 F 2.8 □ H □	(C) 0177 OS		N -⊕- L ® M ® F -⊗-	Y Yellow G Green	7 12/14V Filament 8 24/ 28V Filament		 ✓ 12.7 ▲ ▲ ↓ ↓<	KEUA
L 6.3	(C) 1092 FFS		N -0-	B Blue W White	9 125/250Vac LED		 ✓ 19.0 ↓ 4.0 max 	KEUA
(L) 1041 OS			(C)	0275 OS		(C) 0177	OS	
(L) 0245 OS	▲4.5 Ø9.5				3.5 J	+-22.2+ +-53.7		0
22.2 4.			(C)	0277 OS	.3 O14.6	(C) 1092		

Low Voltage Lamp Holders - Sealed to IP67



Key Features

 \bigcirc

gaskets/'O' rings

filament lamp

Neon, LED, mains LED or

Colours and voltages:

- IP67 Panel Sealing Supplied complete with
- \bigcirc Bezel sizes from 7.6 to 22.9mm diameter

clear lenses

 \bigcirc Red, amber, green, blue and

C Red, yellow, green, blue and white LEDs

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	Туре	Sealed	Colour	Bulb Voltage	Options	Panel	Approvals	Dimensions
C 6.3	C1090 FPS (MES)	S Sealed	R Red A Amber	6 6V 12 12V	C Chrome Bezel Finish	 19.0 4.0max T85 	KENA	50.2 12.5 max
C 6.3	C1091 FQS (MBC)		G Green B Blue (Special)	24 24V		 	KEUA	35.0 12.5 max
TÞ	T0062 AOS (Midget flange) Chrome bezel T0063 AOS (LES) Chrome bezel		C Clear			 [→] 10.0 ² ⁺ ⁺ ² ⁺ ⁺ ^{11.15max} ^{11.15max} ^{11.15max} ^{11.15max} ^{11.15max} 	KEUR	21.3 9.1 Ø14.7
T	T0062 MOS (LES & Midget flange) T0063 MOS (LES)						KEUR	

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



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

Moulded bodies and bases Nylon 6.6
Metal bodies and bezels Chrome plated brass (except #)
Lenses
Terminals (most types) Brass (electro-tin plated)
Terminals (exceptions) Brass (flash silver* or nickel** plated)
Threaded metal nuts Brass (nickel plated on 0275/7)
Other fixings
* R9, 0061, 0062, 0430, 0480, 1090, 1091, 6030, 7030, 8630, 8580
** # 3130, 3160, 3161, 3221 have nickel plated terminals with steel screws
and plated polyamide bezel trims

TEMPERATURE RATING

Authority	with Terminals	with Wire leads	
		PVC	SILICONE
European	T125°C	T105°C	T125°C
UL	T65/75°C	T65/75°C	

SYMBOLS

Terminals C 6.3, H 4.8, K 2.8 Wire leads 200mm long Standard

Solid wires LED only 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

< on A

Life >100,000hrs

Panel hole size



Temperature rating