

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.

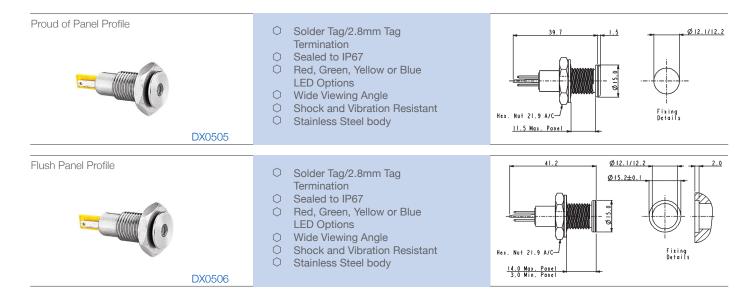
The vandal resistant LED indicators are designed to complement the vandal resistant switches (see the Switch Section), they have similar profiles with stainless steel bodies, sealing to IP66 & 68 and are built to withstand harsh environments.

345-346
347-351
352-358
359-360
361
362-364



Vandal Resistant LED Indicators

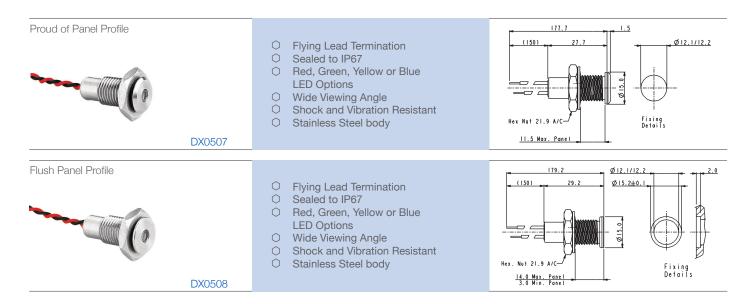




Specifications	DX0505/Col/Voltage	DX0506/Col/Voltage
Terminations: Forward Voltage:	Solder Tab/2.8mm Tab Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V	Solder Tab/2.8mm Tab Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V
Cont. Forward Current: (max)	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA	Red 30mA, 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:	Stainless Steel Polycarbonate UL94V-0	Stainless Steel Polycarbonate UL94V-0
O Ring (external): (internal):	Nitrile Silicone	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



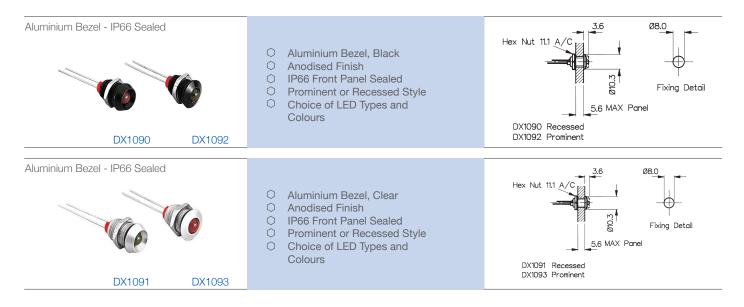


Specifications	DX0998 Colour/Options	DX1120, DX1121/Colour/Options
Bezel Material:	Brass, Chrome Plated	Glass Filled Nylon
Style:	Recessed (DX0998)	Recessed (DX1120) Prominent (DX1121)
Operating Temp. Range:	Dependent on LED used	Dependent on LED used
Storage Temperature:	Dependent on LED used	Dependent 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:	0.056Nm (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	27 MIN 8.6
Forward voltage:	2.0V	2.0V	2.1V	3.5V	
Cont. Forward Current (max):	30mA	25mA	30mA	30mA	3ANODE (+)
Power Dissipation:	105mW (max) @20°C A	mbient	120mW	
Reverse Current:	10µA	10µA	10µA	50µA	05
Reverse Voltage:	5V (max)	5V (max)	5V (max)	5V (max)	SQUARE SPILLS
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	HIN RED RED RED RED VELLOW VELLOW VELLOW VELLOW VELLOW VELLOW VELLOW VELLOW VELLOW VELLOW

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

Colours and voltages:



O Red, amber, green, blue and clear lenses

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

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

NEON

1 DC Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages

available.

DC LED

11 AC

AC MAINS LED

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



Available with 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	6.0 2.0 max p. 340	N -⊕- L ∛ M ∛	Neon & Filament R Red	1 LED No Resistor 2	C Chrome Bezel Finish
B 2.8 Þ L 📴	(B) 0566 B	6.0 2.0 max p. 340	N L 	A Amber G Green	125V Neon 3 250V Neon	
B 2.8)⊐ L =	(B) 0566 C	6.0 2.0max	N L 12 M 12	B Blue (Special Order) Clear	4 6Vdc LED 5 12Vdc LED	
C 6.3 问	(C) 0145 AA	5.8 5.8 3.0max p. 340	N -⊕- L ⊉ M ⊉ F -⊗-	LED	6 24Vdc LED 7	
L E W L	(L) 1041 00	6.3 6.3max p. 340	N -⊕- L ∜ F -⊗-	R Red Y Yellow	12/14V Filament 8 24/ 28V Filament 9	
L H W L	(L) 1045 00	6.3 10.0max p. 340	N -⊕- L ∛ M ∛ F -⊗-	G Green B Blue	125/250Vac LED	

Indicator Lights



Terminal	Туре	Sealed	Illumination	Colour	Voltage	Options
L H W L	(L) 0245 00	 7.1 6.3 max 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	 Ø 8.0 Ø 0.8-1.6 Ø p. 340 	N -⊕- L ≹ M ≹ F -⊗-	Amber G Green	3 250V Neon 4	
L	(L) 0195 BB	 Ø 8.0 Ø 0.8-3.0 Ø p. 340 	N -⊕- F -⊗-	B Blue (Special Order) C Clear	6Vdc LED 5 12Vdc LED	
LE	L 2951 00	 Ø 8.0 ♥ 0.8-1.6 ● p. 340 	N -⊕- L ∛ M ∛ F -⊗-	LED R	6 24Vdc LED 7 12/14V Filament	
L E H 4.8 0	H) 0568 A(*)	 8.0 0.8-3.5 p. 340 	N -⊕- L ‡ F -⊗-	Red Y Yellow	8 24/ 28V Filament 9 125/250Vac LED	
L	(H) 0568 B(*)	 Ø 8.0 Ø 0.8-3.5 Ø p. 340 	N -⊕- L ≹ F -⊗-	Green B Blue	123/230Vac LED	

Dimensions





07.0

Ø7.0

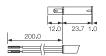
Ø7.0

Ø6.7

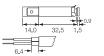




(B) 0566 C



(C) 0145 AA







Ø7.6

Ø7.6

Ø7.6

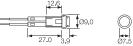




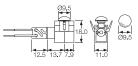




L 2950 00







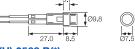
 \square

Ø9.5

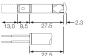
H) 0568 A(*)



L 2951 00



(H) 0568 B(*)





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
- 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)



**

AC

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



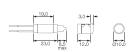
FILAMENT

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

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L	(C) 0273 00	N -⊕- L ‡ M * F -⊗-	Neon & Filament R Red	1 LED No Resistor 2 125V Neon	C Chrome Bezel Finish	9.0 2.0 max p. 340	RL KEER KEER KEER KEER
L 2.8 H 4.8 C 6.3	(C) 0278 00	N -⊕- L ∛ F -⊗-	Amber G Green	3 250V Neon 4		9.0 2.0 max p. 340	RU Kit Kit Kit Kit Kit
L 2.8 H 4.8 C 6.3	(C) 0276 AA	N -⊕- L ∜ M ∜ F -⊗-	B Blue (Special Order) C Clear	4 6Vdc LED 5 12Vdc LED		9.5 0.8-2.8 p. 340	Kiid Kiid Kiid Kiid
L 2.8 H 4.8 C 6.3	(C) 0275 00	N -⊕- L ⊉ M ⊉ F -⊗-	LED	6 24Vdc LED 7 12/14V Filament		 ✓ 10.0 ♥ ♥ ■ 12.0 ● p. 340 	RU Kiin G Kiin Kiin G Kiin
L 2.8 H 4.8 C 6.3	(C) 0275 00	N -⊕- L * M * F -⊗-	R Red Y Yellow G Green B Blue	8 24/ 28V Filament 9 125/250Vac LED		 10.0 11.5 max p. 340 	RL KEEL O KEEL KEEL KEEL

Indicator Lights

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	 Ø 10.0 ♥ 2.8 max ● p. 340 	R Keen G Keen G R Keen G Keen
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 	RL KEER () Keer Keer
L 2.8 H 4.8 C 6.3	(C) 0273 LL	N -⊕- L ∜ M ∜ F -⊗-	Blue (Special Order) Clear	6Vdc LED 5 12Vdc LED 6		 ✓ 10.0 ♥ 0.6-2.0 ● p. 340 	KEDD SS KEDD SS KEDD SS KEDD SS
L 2.8 H 4.8 C 6.3	(C) 2820 00	N -⊕- L ∛ M ∛ F -⊗-	LED R	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	8 24/ 28V Filament 9 125/250Vac LED		 ✓ 12.0or12 ^{o12.0} _{0.8-2.5} _{o12.7} _{0.8-2.5} _{p1.340} 	.7 FL KEED S KEED S KEED S KEED S
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 	KEDE (B KEDE KEDE
Dimensions (L) 0569 AW	(C) 0275 00	(C) 027	3 LL			



012.2

12.0 Sc

O 012.0





(C) 0278 00



(C) 0276 AA







32,5 2

0

Ø13.3

015.6

Ø12.0

014.6

(C) 0277 00





08.8

15.5 Sq

(C) 2820 00



(C) 2821 00



(C) 0586 00

bulgin

Indicator Lights Neon, LED and Filament Lamp



Key Features

Colours and voltages:

- Neon, LED, mains LED or filament lamp \bigcirc
- O Bezel sizes from 6.7 to 16.3mm diameter
- O Red, amber, green and clear lenses
- 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 2.8 H 4.8 C 6.3	(C) 2870 00	N -⊕- L ∛ M ∛ F -⊗-	Neon & Filament R Red	1 LED No Resistor 2 125V Neon	C Chrome Bezel Finish	 ✓ 12.7 ✓ 0.75-2.0 P. 340 	King King King
L 2.8 H 4.8 C 6.3	C) 0589 00	N -⊕- L ∛ M ∛ F -⊗-	Amber G Green B	3 250V Neon 4		 12.7 0.8-1.5 p. 340 	Kich Kich
LE	L 0081 00	N -⊕- L ⊉ M ⊉ F -⊗-	Blue (Special Order) Clear	6Vdc LED 5 12Vdc LED		 12.7 9.5 p. 340 	KICH CO
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 KEE S
L 2.8 H 4.8 C 6.3	(C) 0067 00	N -⊕- L ∛ M ∛ F -⊗-	Red Y Yellow	8 24/ 28V Filament 9 125/250Vac LED		 12.7 1.14 max p. 340 	Kich Kich Kich
L	(C) 0180AA	N -⊕- L #ੇ F -⊗-	Green B Blue			 12.7 19.0 max p. 340 	Kich (

Indicator Lights

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L E C 6.3	(C) 0180BB	N -⊕- L ∛ F -⊗-	Neon & Filament R Red	1 LED No Resistor 2	C Chrome Bezel Finish	 13.5 0.9-1.14 p. 340 	KEE 🔮
L	(C) 0579 00	N -⊕- L ≋ M * F -⊗-	A Amber G Green	125V Neon 3 250V Neon		 14.0 2.5 max p. 340 	N KEED 🔮 KEED
C 6.3	(C) 1092	N -@-	B Blue (Special Order)	4 6Vdc LED 5 12Vdc LED		 19.0 4.0max p. 340 	(KESA)
			Clear LED	6 24Vdc LED 7		•	
			Red Y Yellow	12/14V Filament 8 24/ 28V Filament			
			G Green B Blue	9 125/250Vac LED			

Dimensions

(C) 2870 00



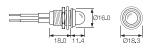


C) 0589 00

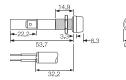




L 0081 00



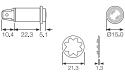








(C) 0180AA



(C) 0180BB

0.4

10.0



(C) 0579 00





bulgin

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



NEON

lenses

100/130V

(marked 110V), 200/250V

(marked 230V)

Colours and voltages:

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

DC LED

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

AC MAINS LED

77



FILAMENT

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

Terr	ninal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L	ninal	Type L 0234 00 L 0233 00	Illumination	Colour Neon & Filament R Red A Amber G Green B Blue (Special Order) Clear LED R Red Y	Voltage 1 LED No Resistor 2 125V Neon 3 250V Neon 4 6Vdc LED 5 12Vdc LED 6 24Vdc LED 7 12/14V Filament	Options C Chrome Bezel Finish	Panel	
				Yellow G Green B Blue	8 24/ 28V Filament 9 125/250Vac LED			

Dimensions

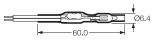
H 0581 AY







L 0233 00



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

Low Voltage Lampholders



Key Features

Colours and voltages:

O Up to 50V

These lampholders are suitable for up to 50V max.

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

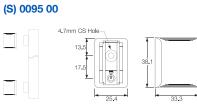
- \bigcirc Red, Amber, Green, Blue and Clear
- C Linestra/Philinea lamp holder







(C) 0067 00



Indicators 359

Large Low Voltage Lampholders





C1090FE - - -

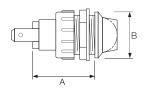


P1090FL - - -

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 $ \begin{array}{c} $	1090 MES (E10) Image: MES (E10) Image: MES (E10) MES (BA9s) (C and S Terminals only)	R Red Y Yellow G Green B Blue C Clear	C Chrome Bezel Finish	ID90 (MES lamps) Panel Hole Dia Body Material Dim A Dim B Dim Material Dim Material Dim A Dim B Dim B Dim B Dim B Dim B Brass 36.0 22.0	F Flat
S					

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



Key Features

Colours and voltages:

C LED lampholders

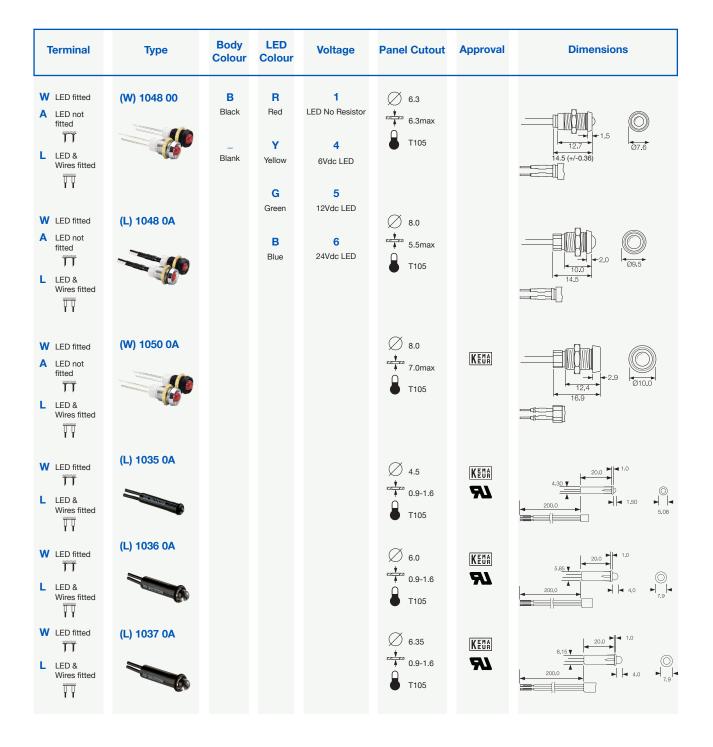
O Black or Chrome finish

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

 \bigcirc

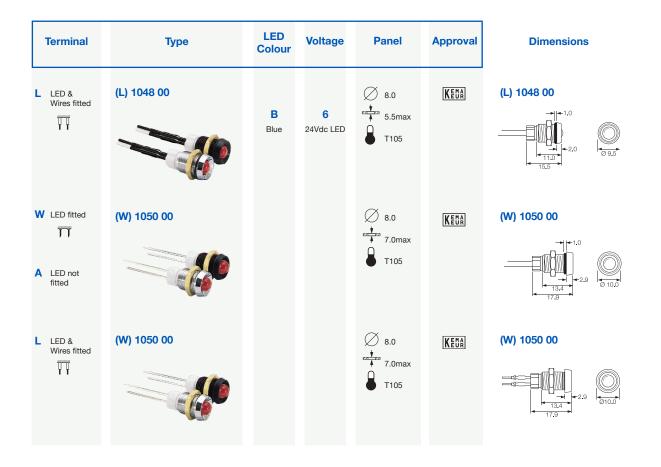
Colours and voltages:

\bigcirc	IP67 from bezei sealing
\bigcirc	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.

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
- \bigcirc Neon, LED, mains LED or filament lamp
- Bezel sizes from 7.6 to \bigcirc 22.9mm diameter



DC LED

DC

Green, Blue, White



Available with Red, Amber, Green or Clear White 2.0/2.2V Resistors for other voltages available. lenses 100/130V (marked 110V), 200/250V (marked 230V)



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



FILAMENT

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

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Terminal	Туре	Sealed	Illumination	Colour	Voltage	Option	Panel Cutout	Approval
L L L (1) (225 OS $N \rightarrow 0^{-1}$ Green 3 L $H \rightarrow B$ 260/ Noon $H \rightarrow 4.6$ max $M \rightarrow B$ 260/ Noon $H \rightarrow 4.6$ max L $H \rightarrow B$ 260/ Noon $H \rightarrow 4.6$ max L $H \rightarrow B$ 260/ Noon $H \rightarrow 4.6$ max L $H \rightarrow B$ 260/ Noon $H \rightarrow 4.6$ max L $H \rightarrow B$ 260/ Noon $H \rightarrow 4.6$ max L $H \rightarrow B$ 260/ Noon $H \rightarrow 4.6$ 20/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 261 LD $H \rightarrow 11.15$ max L $H \rightarrow B$ 24/ 260 Homent L $H \rightarrow B$ 24/ 260 Homent B Blue 9 W W When $H \rightarrow B$ 24/ 260 Homent L $H \rightarrow 125/250$ Mc LD $H \rightarrow 125/250$ Mc LD $H \rightarrow 11.15$ max (1) 1041 05 (C) 0275 OS (C) $H \rightarrow 11.15$ max (1) 1041 05 (C) 0275 OS (C) $H \rightarrow 11.15$ max (1) 0245 OS (C) 0277 OS $H \rightarrow 11.15$ max (1) 0245 OS (C) 0277 OS $H \rightarrow 11.15$ max (1) 0245 OS (C) 0277 OS $H \rightarrow 11.15$ max (1) 0245 OS $H \rightarrow 11.15$ max (2) 0277 OS $H \rightarrow 11.15$ max (3) $H \rightarrow 11.15$ max (4) $H \rightarrow 12$ $H \rightarrow 11.15$ max (5) $H \rightarrow 11.15$ max (6) $H \rightarrow 11.15$ max (7) $H \rightarrow 11.15$ max (9) $H \rightarrow 11.15$ max (9) $H \rightarrow 11.15$ max (1) 105 (C) 0277 OS (C) $H \rightarrow 11.15$ max (1) 105 (C) 0277 OS (C) $H \rightarrow 11.15$ max (1) 105 (C) 0277 OS (C) $H \rightarrow 11.15$ max (1) 105 (C) 0277 OS (C) $H \rightarrow 11.15$ max (2) 100 (C) 0277 OS (C) $H \rightarrow 11.15$ max (3) 100 (C) 027 OS (C) $H \rightarrow 11.15$ max (4) 100 (C) $H \rightarrow 11.15$ max (5) 100 (C) 0277 OS (C) $H \rightarrow 11.15$ max (6) 100 (C) 0277 OS (C) $H \rightarrow 11.15$ max (7) 100 (C) 027 OS (C) $H \rightarrow 11.15$ max (8) 100 (C) 027 OS (C) $H \rightarrow 11.15$ max (9) 100 (C) $H \rightarrow 11.15$ max (1) 100 (C) $H \rightarrow 11.15$ max (2) 100 (C) $H \rightarrow 11.15$ max (3) 100 (C) $H \rightarrow 11.15$ max (4) 100 (C) $H \rightarrow 11.15$ max (5) 100 (C) $H \rightarrow 11.15$ max (6) 100 (C) $H \rightarrow 11.15$ max (7) 100 (C) $H \rightarrow 11.15$ m	LE			L M 👻	Red	LED No Resistor 2	Chrome Bezel		KEUA
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	LE	-		L 👻 M 👻	Green B Blue	250V Neon			KEUR
$ \begin{array}{c} C & 6.3 \\ K & 2.8 \\ H & 4.8 \\ \hline \\ H & 5 \\ \hline \\ \hline \\ \hline \\ H & 5 \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ H & 5 \\ \hline \\$	C 6.3 K 2.8 ⊡	(C) 0275 OS		L 👻 M Š	с	6Vdc LED		~	KEUR
$ \begin{array}{c} L & 6.3 \\ C & 4.8 \\ K & 2.8 \\ H \end{array} \begin{array}{c} \hline \\ H \end{array} \begin{array}{c} \hline \\ \hline $	C 6.3 K 2.8 □			L ê M ê	R Red	24Vdc LED		<i>,</i> <u>,</u> <u>,</u>	KEUA
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	C 4.8 K 2.8 ⊡	677		L M য	Yellow G	12/14V Filament 8		/0	KEUR
(L) 0245 OS $(L) 0245 OS$ $(C) 0277 OS$					Blue W				
(L) 0245 OS $(C) 0277 OS$	(L) 1041 OS			(C)	0275 OS		(C) 0177	os	
(C) 0277 OS	(L) 0245 OS	▲4.5 Ø9.5			32.0	.5			014.6
				(C)		.3 014.6			

Low Voltage Lamp Holders - Sealed to IP67



Key Features

IP67 Panel Sealing

- O Bezel sizes from 7.6 to

Colours and voltages:

- Supplied complete with gaskets/'O' rings
- 22.9mm diameter O Red, amber, green, blue

and clear lenses

- These lampholders are suitable for up to 50V max.
- Colours Red, Amber, Green, (Clear & Blue, check availability).

Field installable filament lamps. See each series for the appropriate type.

Terminal	Туре	Sealed	Colour	Options	Panel	Approvals	Dimensions
C 6.3	C1090 FPS (MES)	S Sealed	R Red A Amber	Chrome Bezel Finish	 19.0 4.0max T85 	KEUA	0 0.2 12.5 max
C 6.3	C1091 FQS (MBC)		G Green B Blue (Special)		7.1	KEMA	36.0 12.5 max
T	T0062 AOS (Midget flange) Chrome bezel T0063 AOS (LES) Chrome bezel		C Clear		⊘ 10.0 11.15max	KEMA	21.3 9.1 Ø14.7
T 🏳	T0062 MOS (LES & Midget flange) T0063 MOS (LES)					Kena	21.3 9.5 Ø14.7

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

Life >100,000hrs

Panel hole size



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bulgin:

DX1128 DX1129 DX1133 DX1130 DX1131