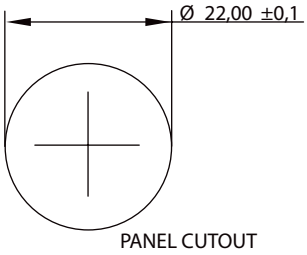
Q-SERIES 22mmØ Panel Mounting LED Indicator
Product Specification

Distinctive Features and Specifications

- 22mm panel mounting LED indicator
- 18mm coloured diffused epoxy lens
- Bright chrome, black chrome and satin grey, plated brass bezel finish
- Bright chrome, satin grey, gold and black ABS plastic bezel finish
- Prominent and flush bezel styles
- 5.5VDC – 220VAC
- (2.8 x 0.8) terminals, pins or (200mm long) wire terminations
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

NB: UL Recognised Component



TECHNICAL SPECIFICATIONS

Switch Voltage	**Operating Voltage Vop** (Min to Max)	**Operating Current Iop** (Typical All Types)
5.5VDC (No Resistor)	5.0 to 6.0VDC	40mA
12VDC	10.8 to 13.2VDC	40mA
24VDC	21.6 to 26.4VDC	40mA
28VDC	25.2 to 30.8VDC	40mA
110VAC	99 to 121VAC	5mA
230VAC	207 to 253VAC	3mA

Intensity (Typical) at Iop Standard	**Prominent** (all voltages)	**Flush** (all voltages)	**Forward Voltage**
HE Red	80mcd	70mcd	5.7V
Green	95mcd	70mcd	5.9V
Yellow	60mcd	60mcd	5.9V
Blue	120mcd	100mcd	9.9V
White	350mcd	200mcd	3.6V
Bi-colour (Typical) (Red/Green)	80/50mcd	80/50mcd	2.0V/2.2V
Tri-colour (Typical) (Red/Green/Yellow)	80/50/50mcd	80/50/50mcd	2.0V/2.2V/2.1V

Bi-colour - The colour is changed by reversing the polarity of the supply voltage.

Tri-colour - The indicator has red and green LEDs, when both connected yellow is produced.

Super Bright	**Prominent** (all voltages)	**Flush** (all voltages)	**Forward Voltage**
HE Red	1,230mcd	885mcd	5.85V
Green	1,060mcd	980mcd	9.0V
Yellow	1,780mcd	1,250mcd	6.0V

Luminous intensity will be reduced with lower operating current.

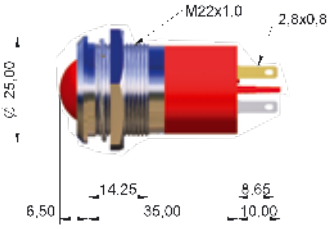
Max Reverse Voltage: 5V
Viewing Angle: 100° (dependant on model)
Life Expectancy: 100,000 hours
Operating Temperature Range: –40 to +85°C

Note: The operating voltage must not be exceeded by more that 10% as this will result in reduced life expectancy.
The company reserves the right to change specifications without notice.

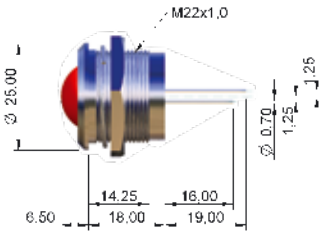
Q-SERIES 22mmØ Panel Mounting LED Indicator
Technical Drawings

PROMINENT BEZEL

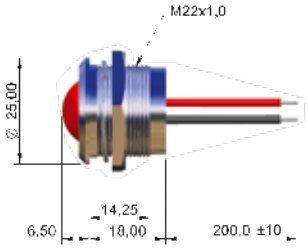
SOLDER LUG/FASTONS



PINS (Epoxy Filled)

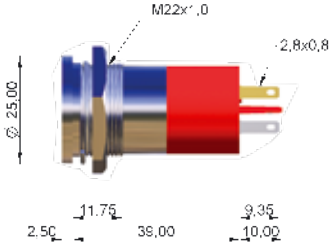


WIRES (Epoxy Filled)



FLUSH BEZEL

SOLDER LUG/FASTONS



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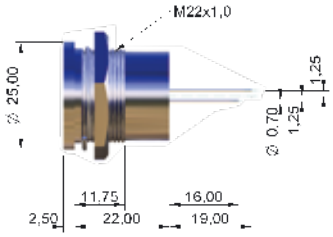

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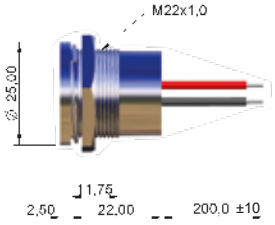

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Q-SERIES 22mmØ Panel Mounting LED Indicator
Ordering Overview

STANDARD OPTIONS

The Q22 Series is available with a range of standard options, to specify your LED, simply choose one option from each column. An example is shown below.

Q	22	F	1	BP	XX	W	28	E	DL
SERIES	MOUNTING HOLE	BEZEL STYLE	TERMINALS	BEZEL FINISH	TYPE OF ILLUMINATION	LED COLOUR	VOLTAGE	SEALING	OPTIONS
Q	22 = Ø22mm	Metal	1 = Solder Lugs/Fastons (2.8 x 0.8)	Metal	XX = Fixed Light	R = Red	05 = 5VDC*	(Blank) = Unsealed	DL = Daisy Chain
		P = Prominent	4 = Pins	C = Bright Chrome	KK = Flashing Light (only up to 12VDC)	G = Green	12 = 12VDC	E = IP67	LT = Lamp Test
		F = Flush	5 = Wires	B = Black Chrome	YY = Bi-colour	Y = Yellow	12A = 12VAC/DC		
		Plastic		G = Satin Grey	ZZ = Tri-colour	B = Blue	24 = 24VDC		
		PP = Prominent		Plastic		W = White	24A = 24VAC/DC		
		FP = Flush		CP = Bright Chrome			28 = 28VDC		
				BP = Black		SR = Super Bright Red	28A = 28VAC/DC		
				GP = Satin Grey		SG = Super Bright Green	110 = 110VAC		
				AU = Gold		SY = Super Bright Yellow	220 = 220VAC		
						RG = Red/Green			
						RY = Red/Yellow			
						GY = Green/Yellow			
						RYG = Red/Yellow/ Green			

*Supplied without a resistor

Example Q22FP1BPXXW28EDL
Ø22mm, flush bezel, solder lug terminals, black plastic finish, fixed light, white, 28volt DC LED, IP67 Panel Seal, Daisy Chain

- Gold Faston terminal denotes Anode (+), silver terminal denotes Cathode (-)
- Standard wire length is 200mm, 22AWG, red wire denotes Anode (+), black wire denotes Cathode (-) for other wire lengths consult APEM
- For LEDs with alternate voltages consult APEM
- Bi-colour LEDs, by connecting the gold Faston (+) one colour is produced, by reversing the supply voltage another colour is produced – Bi-colours are available up to 28VDC
- Take care when soldering to the Faston terminals
- Pin and Wire options are epoxy sealed at the rear of the bezels
- The Tri-colour LED has red and green LEDs when both are connected yellow is produced
- Standard Tri-colour Faston terminals are two Anodes (+) and one Cathode (-)
- Tri-colour wires are one red (+) and one green (+) Anode and one black (-) Cathode
- Tri-colour pins are centre (–) cathode, shortest (+) anode pin green, longest (+) anode pin red
- Maximum panel thickness: Prominent = 12mm, Flush = 10mm
- Plastic bezel material: ABS
- Daisy chaining option - has negative (Cathode) terminals linked (3 x Fastons), solder lugs only
- Lamp test facility option (4 x Faston), solder lugs only
- We recommend using Superbright LEDs for use at 220VAC
- For resistorless versions (05) please pay attention to the forward voltage
- For multi-voltage options please consult Apem