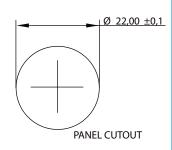
## Q-SERIES 22mmØ Panel Mounting LED Indicator Product Specification

### **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 | Operating Current lop |
|----------------------|-----------------------|-----------------------|
|                      | (Min to Max)          | (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 lop Standard     | Prominent      | Flush          | Forward Voltage |
|---|----------------|----------------|-----------------|
|   | (all voltages) | (all voltages) |                 |
| HE Red                                  | 80mcd          | 70mcd          | 5. <b>7</b> V   |
| 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      | Flush          | Forward Voltage |  |
|--|----------------|----------------|-----------------|--|
|  | (all voltages) | (all voltages) |                 |  |
| 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

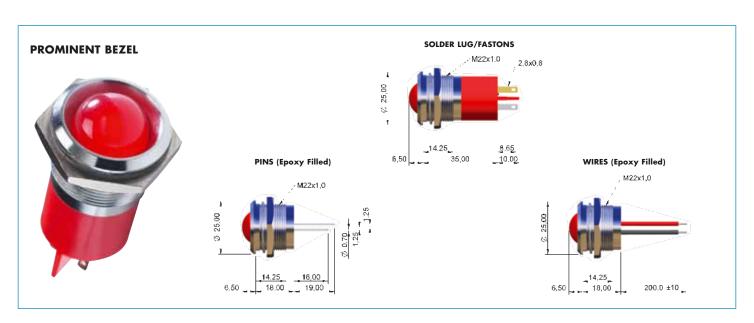
Viewing Angle: 100° (dependant on model)

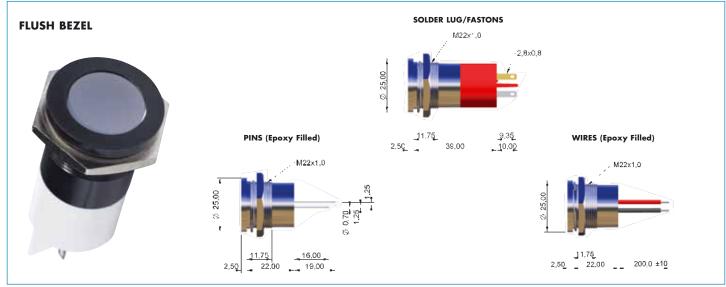
Life Expectancy: 100,000 hours

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

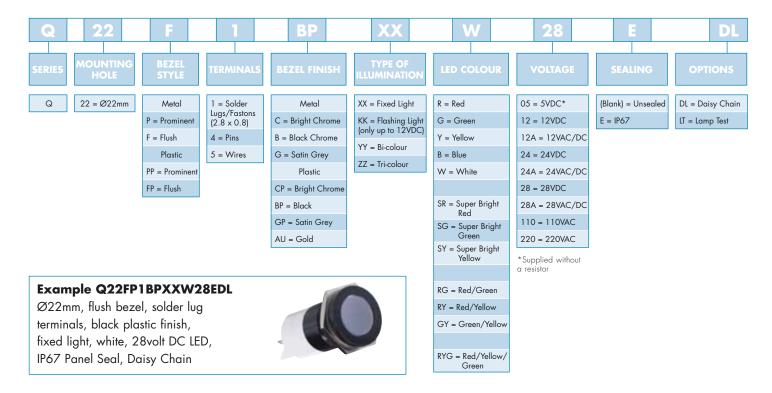




### Q-SERIES 22mmØ Panel Mounting LED Indicator Ordering Overview

#### 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.



- 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