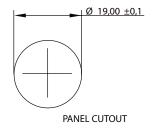
### **Q-SERIES 19mmØ Panel Mounting LED Indicator**

#### **Product Specification**

#### **Distinctive Features and Specifications**

- 19mm panel mounting LED indicator
- 10mm coloured diffused epoxy lens or 10mm water clear super bright LEDs
- Bright chrome, black chrome and satin grey bezel finish
- Prominent bezel styles
- 2VDC 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)   |
| 2VDC (No Resistor) | 1.8 to 2.5VDC         | 20mA                  |
| 12VDC              | 10.8 to 13.2VDC       | 20mA                  |
| 24VDC              | 21.6 to 26.4VDC       | 20mA                  |
| 28VDC              | 25.2 to 30.8VDC       | 20mA                  |
| 110VAC             | 99 to 121VAC          | 6mA                   |
| 230VAC             | 207 to 253VAC         | 3mA                   |

| Intensity (Typical) at lop Standard     | Prominent      | Forward Vo     | ltage |
|-----------------------------------------|----------------|----------------|-------|
|                                         | (all voltages) |                |       |
| HE Red                                  | 80mcd          | 2.0V           |       |
| Green                                   | 40mcd          | 2.2V           |       |
| Yellow                                  | 30mcd          | 2.1V           |       |
| Blue                                    | 280mcd         | 3.2V           |       |
| White                                   | 350mcd         | 3.2V           |       |
| Bi-colour (Typical) (Red/Green)         | 80/50mcd       | 2.0V/2.2V      |       |
| Tri-colour (Typical) (Red/Green/Yellow) | 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      | Forward Voltage |  |
|------------------------------------------------------------------|----------------|-----------------|--|
|                                                                  | (all voltages) |                 |  |
| HE Red                                                           | 7,500mcd       | 2.2V            |  |
| Green                                                            | 4,100mcd       | 3.5V            |  |
| Yellow                                                           | 2,500mcd       | 2.3V            |  |
| Blue                                                             | 1,300mcd       | 3.7V            |  |
| White                                                            | 1,900mcd       | 3.7V            |  |
| Luminous intensity will be reduced with lower operating current. |                |                 |  |

Max Reverse Voltage: 5V

Viewing Angle: 60° (dependant on model)

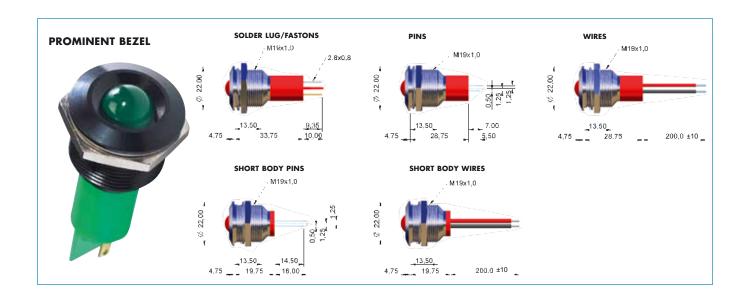
Life Expectancy: 100,000 hours

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.

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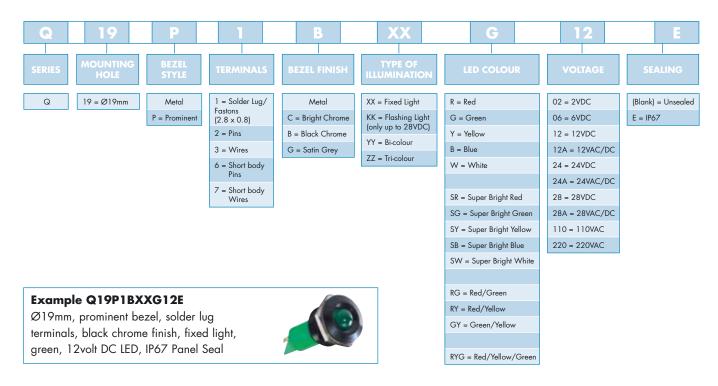
# Q-SERIES 19mmØ Panel Mounting LED Indicator Technical Drawings



## Q-SERIES 19mmØ Panel Mounting LED Indicator Ordering Overview

#### STANDARD OPTIONS

The Q19 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
- Short body pins and wires are only available up to 28VDC
- 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 11mm
- For behind panel epoxy sealing option please consult APEM
- We recommend using Superbright LEDs for use at 220VAC
- For resistorless versions (02) please pay attention to the forward voltage
- · For multi-voltage options please consult Apem