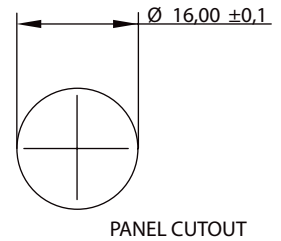


# Q-SERIES 16mmØ Panel Mounting LED Indicator

## Product Specification

### Distinctive Features and Specifications

- 16mm panel mounting LED indicator
- 10mm coloured diffused epoxy lens or 10mm water clear super bright LEDs
- Bright chrome, black chrome, satin grey, plated brass bezel finish
- Bright chrome, satin grey, gold and black ABS plastic bezel finish
- Prominent and flush 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



PANEL CUTOUT

NB: UL Recognised Component

### TECHNICAL SPECIFICATIONS

Switch Voltage	Operating Voltage Vop (Min to Max)	Operating Current Iop (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 Iop Standard	Prominent (all voltages)	Flush (all voltages)	Forward Voltage
HE Red	80mcd	10mcd	2.0V
Green	40mcd	5mcd	2.2V
Yellow	30mcd	4mcd	2.1V
Blue	280mcd	10mcd	3.2V
White	350mcd	20mcd	3.2V
Bi-colour (Typical) (Red/Green)	80/50mcd	14/10mcd	2.0V/2.2V
Tri-colour (Typical) (Red/Green/Yellow)	80/50/50mcd	14/10/10mcd	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	7,500mcd	2000mcd	2.2V
Green	4,100mcd	250mcd	3.5V
Yellow	2,500mcd	350mcd	2.3V
Blue	1,300mcd	300mcd	3.7V
White	1,900mcd	200mcd	3.7V

Luminous intensity will be reduced with lower operating current.

**Max Reverse Voltage:** 5V

**Viewing Angle:** 100° (dependant on model)

**Life Expectancy:** 100,000 hours

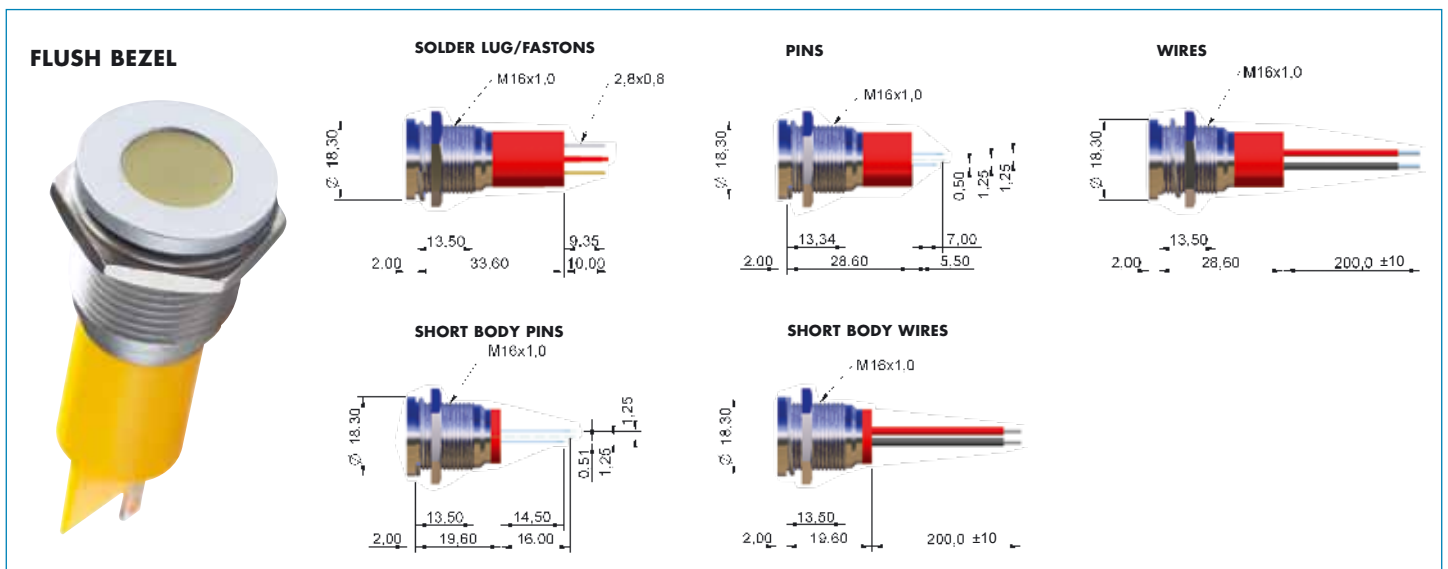
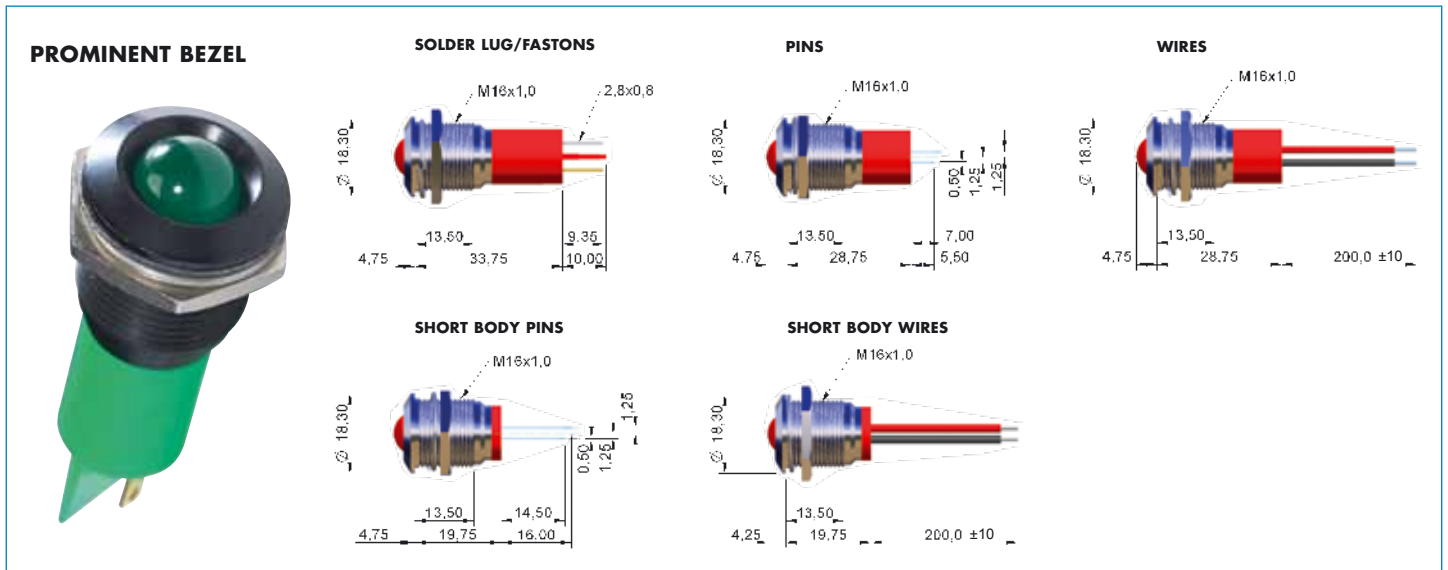
**Operating Temperature Range:** -40 to +85°C

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

[www.apem.com](http://www.apem.com)

# Q-SERIES 16mmØ Panel Mounting LED Indicator

## Technical Drawings



Note: The company reserves the right to change specifications without notice.

# Q-SERIES 16mmØ Panel Mounting LED Indicator

## Ordering Overview

### STANDARD OPTIONS

The Q16 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	16	F	1	G	XX	Y	24	E
SERIES	MOUNTING HOLE	BEZEL STYLE	TERMINALS	BEZEL FINISH	TYPE OF ILLUMINATION	LED COLOUR	VOLTAGE	SEALING
Q	16 = Ø16mm	Metal P = Prominent F = Flush Plastic PP = Prominent FP = Flush	1 = Solder Lug/ Fastons (2.8 x 0.8) 2 = Pins 3 = Wires 6 = Short body Pins 7 = Short body Wires	Metal C = Bright Chrome B = Black Chrome G = Satin Grey Plastic CP = Bright Chrome BP = Black GP = Satin Grey AU = Gold	XX = Fixed Light KK = Flashing Light (only up to 28VDC) YY = Bi-colour ZZ = Tri-colour	R = Red G = Green Y = Yellow B = Blue W = White SR = Super Bright Red SG = Super Bright Green SY = Super Bright Yellow SB = Super Bright Blue SW = Super Bright White RG = Red/Green RY = Red/Yellow GY = Green/Yellow RYG = Red/Yellow/Green	02 = 2VDC 06 = 6VDC 12 = 12VDC 12A = 12VAC/DC 24 = 24VDC 24A = 24VAC/DC 28 = 28VDC 28A = 28VAC/DC 110 = 110VAC 220 = 220VAC	(Blank) = Unsealed E = IP67

#### Example Q16F1GXXY24E

Ø16mm, flush metal bezel, solder lug terminals, satin grey finish, fixed light, yellow, 24volt DC LED, IP67 Panel Seal



- 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