Q SERIES Ø10mm (.393") Panel Mount LED Indicators

Distinctive features and specification

Features

- 10mm panel mounting LED indicator
- 5mm flush diffused LED, standard, hyper bright or water clear
- 316L Stainless Steel bezel
- Flush chamfered bezel style
- 2VDC – 220VAC
- 200mm long potted wire terminations
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer
- Bi-color and Tri color options

NB: UL Recognized Component

TECHNICAL SPECIFICATIONS

Voltage	Operating Voltage (Min to Max)	Operating Current (Typical All Types)
02 (No Resistor)	1.8 to 3.3VDC	20mA max*
6VDC	5.4 to 6.6VDC	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
220VAC	207 to 253VAC	3mA

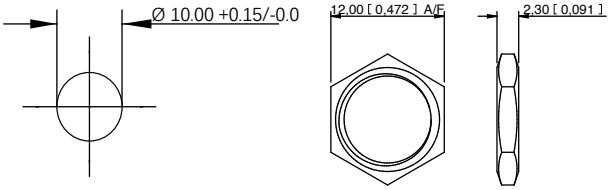
Max Reverse Voltage: 5V

Viewing Angle: 60° (dependant on model)

Life Expectancy: 100,000 hours

Temperature Range: –40 to +85°C (operating & storage)

Torque: 20 to 25cNm



PANEL CUTOUT

Standard LED Intensity	Prominent and Recessed	Flush	Forward Voltage
HE Red	80mcd	8mcd	2.0V
Green	60mcd	6mcd	2.2V
Yellow	50mcd	6mcd	2.1V
Blue	1600mcd	50mcd	3.3V
White	1600mcd	500mcd	3.3V
Orange	60mcd	110mcd	2.2V
Bi-color (Typical) (Red/Green)	14/30mcd	15/10mcd	2.0V/2.2V
Tri-color (Typical) (Red/Green/Yellow)	60/15/13mcd	15/10/6mcd	2.0V/2.2V/2.1V
Bi-color - The color is changed by reversing the polarity of the supply voltage.			
Tri-color - The indicator has red and green LEDs, when both connected yellow is produced.			
Super Bright LED	**Prominent and Recessed**	**Flush**	**Forward Voltage**
HE Red	5,000mcd	1,300mcd	2.2V
Green	10,000mcd	1,200mcd	3.3V
Yellow	4,000mcd	350mcd	2.0V
Blue	2,200mcd	280mcd	3.3V
White	2,500mcd	950mcd	3.3V
Orange	4,000mcd	500mcd	2.2V
Hyper Bright LED	**Prominent and Recessed**	**Flush**	**Forward Voltage**
HE Red	6,000mcd	980mcd	2.2V
Green	1,900mcd	300mcd	3.3V
Yellow	1,600mcd	250mcd	2.0V
Orange	2,400mcd	110mcd	2.2V
Luminous intensity will be reduced with lower operating current.			

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.
* Customer to supply resistor for desired operating current.
Luminous intensity is measured at 20mA on a discrete LED unless otherwise stated.
Luminous intensities and color shades of white LEDs may vary within a batch.
LED characteristics are dependent upon environmental conditions. Therefore published data should be considered nominal.

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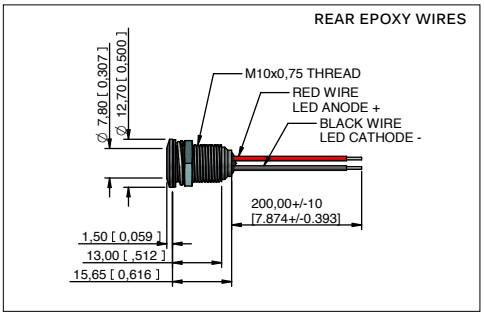
Technical Drawings

FLUSH BEZEL



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Overview

STANDARD OPTIONS

The Q8 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		10		F		5		S		XX		Y		12		E	

SERIES	MOUNTING HOLE	BEZEL STYLE	TERMINALS	BEZEL FINISH	TYPE OF ILLUMINATION	LED COLOR	VOLTAGE	SEALING
Q	10 = Ø10mm	F = Flush	5 = Rear epoxy Wires	S = Stainless Steel	XX = Fixed Light	R = Red	02 = no resistor*	(Blank) = Unsealed
					KK = Flashing Light (12V – 28VDC)	G = Green	06 = 6VDC	E = IP67
					YY = Bi-color	Y = Yellow	12 = 12VDC	
					ZZ = Tri-color	B = Blue	12A = 12VAC/DC	
						W = White	24 = 24VDC	
						O = Orange	24A = 24VAC/DC	
							28 = 28VDC	
						HR = Hyper Bright Red	28A = 28VAC/DC	
						HG = Hyper Bright Green	110 = 110VAC	
						HY = Hyper Bright Yellow	220 = 220VAC	
						HO = Hyper Bright Orange		
						SR = Super Bright Red		
						SG = Super Bright Green		
						SY = Super Bright Yellow		
						SB = Super Bright Blue		
						SW = Super Bright White		
						SO = Super Bright Orange		
						RG = Red/Green		
						RY = Red/Yellow		
						GY = Green/Yellow		
						RYG = Red/Yellow/Green		

Example Q10F5SXXY12E
Ø10mm, flush bezel, 200mm wire terminations
stainless steel finish, fixed light, yellow
2VDC LED, IP67 panel sealed

- Standard wire length is 200mm, 24AWG UL1061, red wire denotes Anode (+), black wire denotes Cathode (-) for other wire lengths consult APEM
- For LEDs with alternative voltages consult APEM
- Bi-color LEDs, by connecting the red wire (+) one color is produced, by reversing the supply voltage another color is produced – Bi-colors are available up to 28VDC. [AC products not available]
- Maximum panel thickness 7mm
- We recommend using Hyperbright or Superbright LED's for use at 110VAC and 220VAC
- The Tri-color LED has red and green LEDs when both are connected yellow is produced
- Standard Tri-color wire terminations are two Anodes (+) and one Cathode (-)
- Tri-color wires are one red (+) and one green (+) Anode and one black (-) Cathode

* = For resistorless versions (02) please refer to the forward voltage on page 1