

Q SERIES Ø6mm (.236") Panel Mount LED Indicators

Distinctive features and specification

VOYC1603R1US

Features

- 6mm panel mounting LED indicator
- 3mm colored diffused epoxy lens or 3mm water clear super bright LEDs
- Plated brass bezel finished in bright chrome, black chrome or satin grey and moulded polycarbonate rear body
- Prominent, recessed and flush bezel styles
- 2VDC – 28VDC
- (2.0 x 0.5) solder lug terminals, pins or (200mm long) wire terminations
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

NB: UL Recognized Component



TECHNICAL SPECIFICATIONS

Voltage	Operating Voltage	Operating Current
	(Min to Max)	(Typical All Types)
02 (No Resistor)	1.8 to 3.8VDC	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

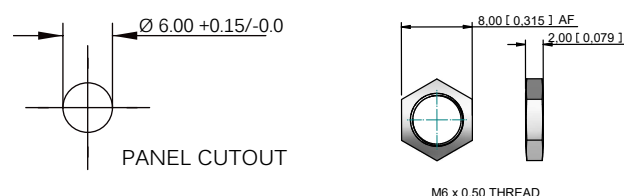
Max Reverse Voltage: 5V

Viewing Angle: 30–100° (dependant on model)

Life Expectancy: 100,000 hours

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

Torque: 4cNm



Standard LED Intensity	Prominent and Recessed	Flush	Forward Voltage
HE Red	40mcd	10mcd	2.0V
Green	50mcd	12mcd	2.2V
Yellow	30mcd	6mcd	2.1V
Blue	1,200mcd	100mcd	3.8V
White	1,200mcd	160mcd	3.8V
Orange	60mcd	10mcd	2.0V
Bi-color (Typical) (Red/Green)	20/15mcd	10/8mcd	2.0V/2.2V

The color is changed by reversing the polarity of the supply voltage.

Super Bright LED	Prominent and Recessed	Flush	Forward Voltage
HE Red	1,000mcd	700mcd	2.2V
Green	1,200mcd	2,000mcd	3.5V
Yellow	2000mcd	8,000mcd	2.3V
Blue	1,600mcd	200mcd	3.3V
White	1,200mcd	350mcd	3.3V
Orange	10,000mcd	500mcd	2.2V

Hyper Bright LED	Prominent and Recessed	Flush	Forward Voltage
HE Red	3,700mcd	600mcd	2.2V
Green	2,000mcd	350mcd	3.2V
Yellow	1,200mcd	140mcd	2.0V
Orange	4,500mcd	400mcd	2.2V

Luminous intensity will be reduced with lower operating current.

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.

* Customer to supply resistor for desired operating current.

Luminous intensity is measured at 20mA on a discrete LED unless otherwise stated.

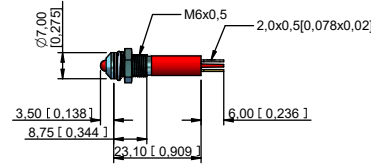
Q SERIES Ø6mm (.236") Panel Mount LED Indicators

Technical Drawings

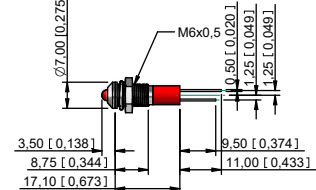
PROMINENT BEZEL



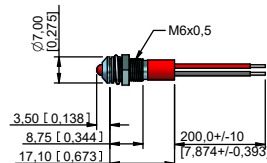
SOLDER LUG



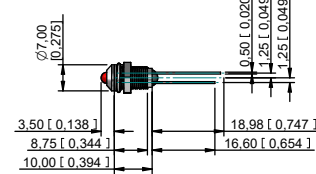
PINS



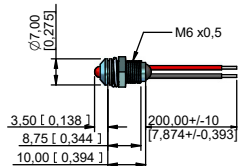
WIRES



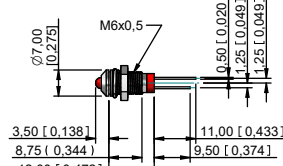
REAR EPOXY PINS



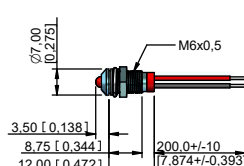
REAR EPOXY WIRES



SHORT BODY PINS



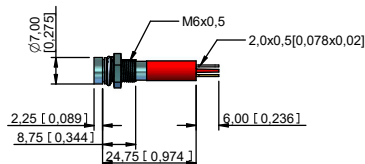
SHORT BODY WIRES



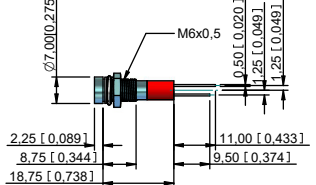
RECESSED BEZEL



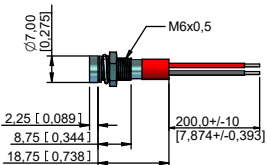
SOLDER LUG



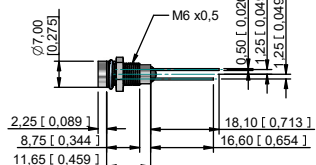
PINS



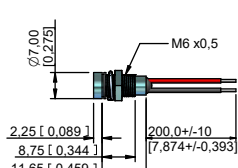
WIRES



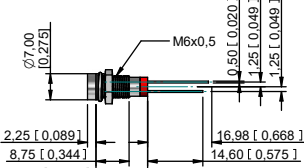
REAR EPOXY PINS



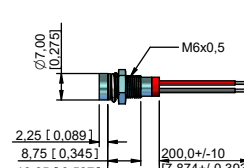
REAR EPOXY WIRES



SHORT BODY PINS



SHORT BODY WIRES



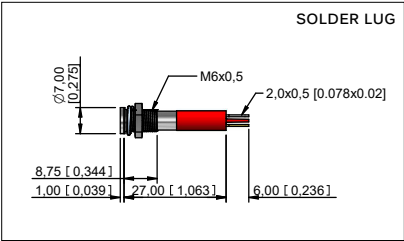
Q SERIES Ø6mm (.236") Panel Mount LED Indicators

Technical Drawings

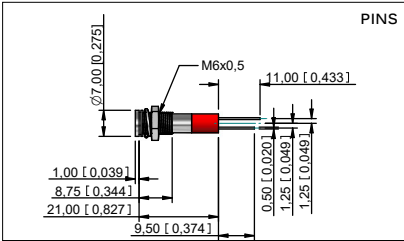
FLUSH BEZEL



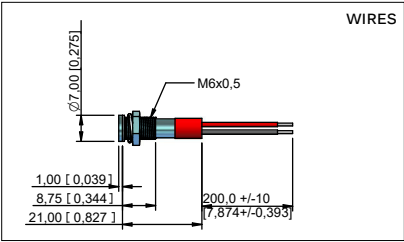
SOLDER LUG



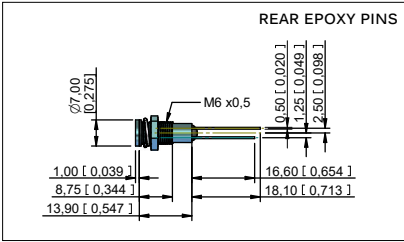
PINS



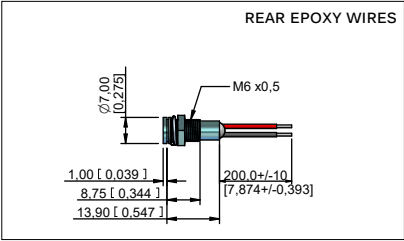
WIRES



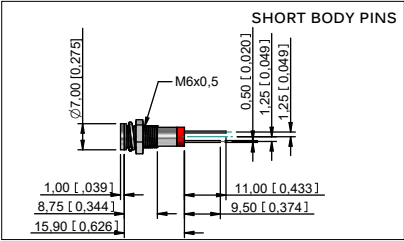
REAR EPOXY PINS



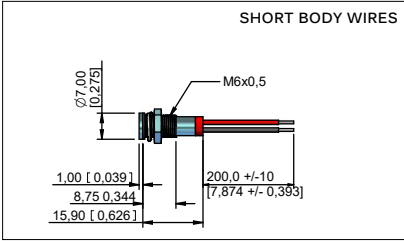
REAR EPOXY WIRES



SHORT BODY PINS



SHORT BODY WIRES



Q SERIES Ø6mm (.236") Panel Mount LED Indicators

Overview

STANDARD OPTIONS

The Q6 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	6	P	1	B	XX	G	12	E
SERIES	MOUNTING HOLE	BEZEL STYLE	TERMINALS	BEZEL FINISH	TYPE OF ILLUMINATION	LED COLOR	VOLTAGE	SEALING
Q	6 = Ø6mm	P = Prominent R = Recessed F = Flush	1 = Solder Lug 2 = Pins 3 = Wires 4 = Rear epoxy Pins 5 = Rear epoxy Wires 6 = Short body Pins 7 = Short body Wires	C = Bright Chrome B = Black Chrome G = Satin Grey	XX = Fixed Light KK = Flashing Light (12V – 28VDC) YY = Bi-color	R = Red G = Green Y = Yellow B = Blue W = White O = Orange HR = Hyper Bright Red HG = Hyper Bright Green HY = Hyper Bright Yellow 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	02 = no resistor* 06 = 6VDC 12 = 12VDC 12A = 12VAC/DC 24 = 24VDC 24A = 24VAC/DC 28 = 28VDC 28A = 28VAC/DC	(Blank) = Unsealed E = IP67

Example Q6F3CXXB12E

Ø6mm, flush bezel, wire terminals
bright chrome finish, fixed light,
blue, 12VDC LED, IP67 panel sealed



- Gold solder lug terminal denotes Anode (+), silver terminal denotes Cathode (-)
- Standard wire length is 200mm, 24AWG UL 1061, 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 gold solder lug (+) one color is produced, by reversing the supply voltage another color is produced – Bi-colors are available up to 28VDC
- Take care when soldering to the terminals (recommended solder temperature 300°C - 3 sec)
- Short body options are only available up to 24VDC
- Maximum panel thickness 7mm

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