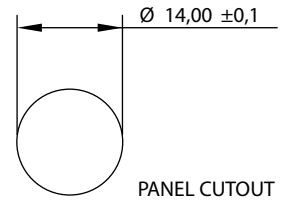# Q-SERIES 14mmØ Panel Mounting LED Indicator
Product Specification

Distinctive Features and Specifications

- 14mm panel mounting LED indicator
- 10mm coloured diffused epoxy lens or 10mm water clear super bright LEDs
- Bright chrome, black chrome or satin grey 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

NB: UL Recognised Component

Ø 14,00 ±0,1

PANEL CUTOUT

TECHNICAL SPECIFICATIONS

Switch Voltage	Operating Voltage Vop	Operating Current Iop
	(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 121VDC	6mA
230VAC	207 to 253VDC	3mA

Intensity (Typical) at Iop Standard	Prominent	Flush	Forward Voltage
	(all voltages)	(all voltages)	
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	Flush	Forward Voltage
	(all voltages)	(all voltages)	
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)
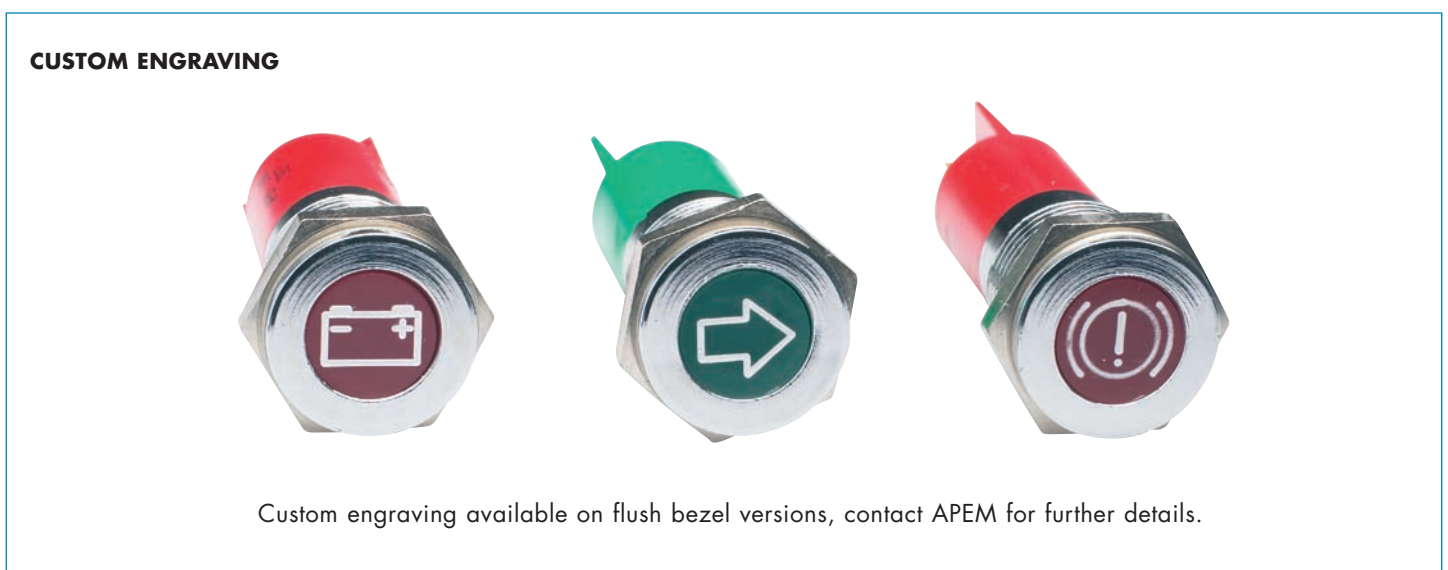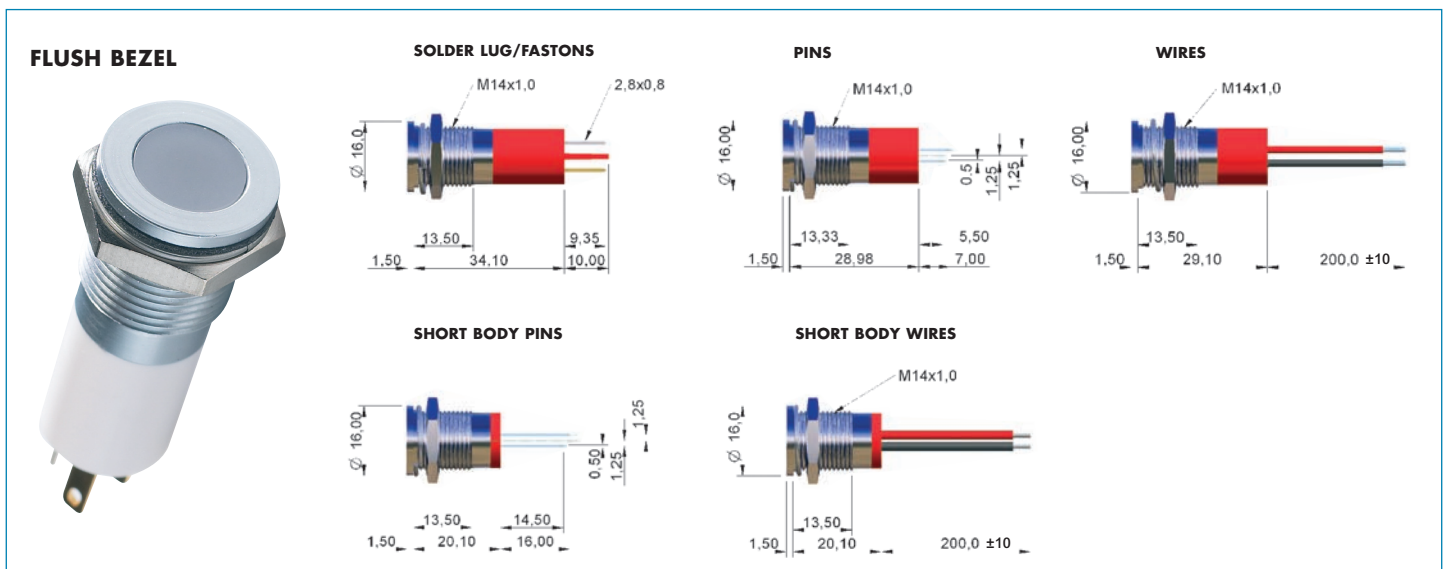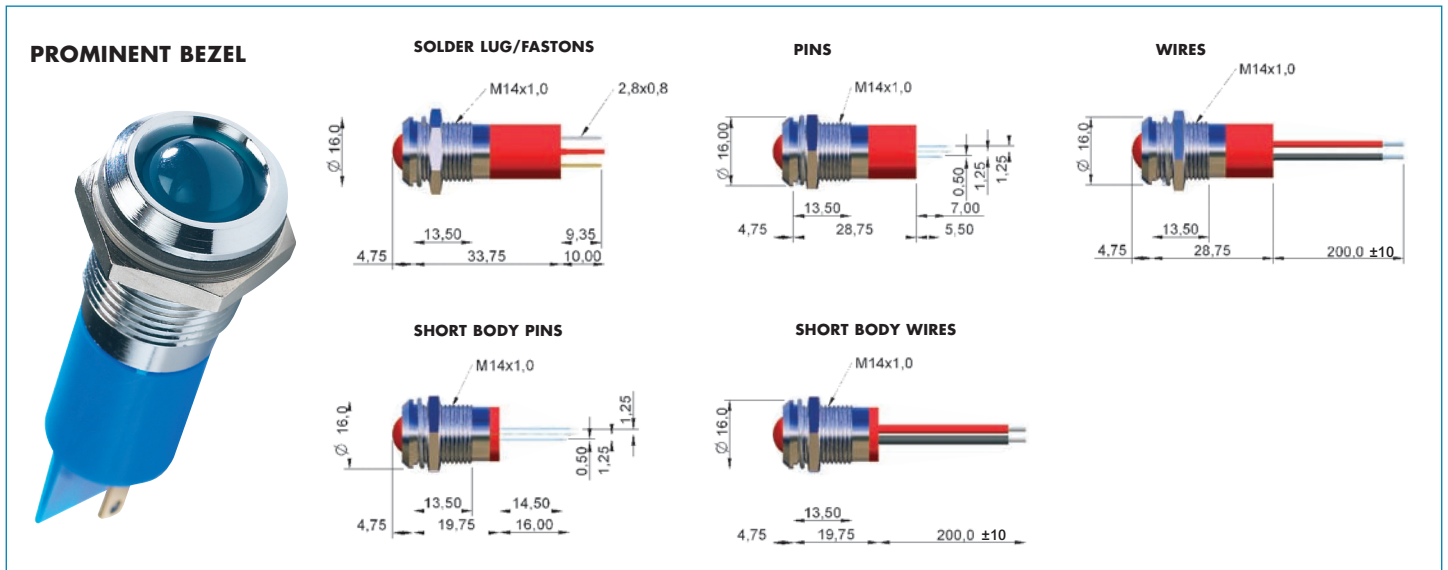**Life Expectancy:** 100,000 hours
Operating Temperature Range: –40 to +85°C

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

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PROMINENT BEZEL

SOLDER LUG/FASTONS
M14x1,0   2,8x0,8
Ø 16,0
13,50   9,35
4,75   33,75   10,00

PINS
M14x1,0
16,00
0,50   1,25
4,75   13,50   28,75   7,00   5,50

WIRES
M14x1,0
Ø 16,0
4,75   13,50   28,75   200,0 ±10

SHORT BODY PINS
M14x1,0
Ø 16,0
1,25   0,50   1,25
4,75   13,50   19,75   14,50   16,00

SHORT BODY WIRES
M14x1,0
Ø 16,0
4,75   13,50   19,75   200,0 ±10

FLUSH BEZEL

SOLDER LUG/FASTONS
M14x1,0   2,8x0,8
Ø 16,0
13,50   9,35
1,50   34,10   10,00

PINS
M14x1,0
16,00
0,5   1,25   1,25
1,50   13,33   28,98   5,50   7,00

WIRES
M14x1,0
Ø 16,00
1,50   13,50   29,10   200,0 ±10

SHORT BODY PINS
Ø 16,00
1,25   0,50   1,25
1,50   13,50   20,10   14,50   16,00

SHORT BODY WIRES
M14x1,0
Ø 16,0
1,50   13,50   20,10   200,0 ±10

CUSTOM ENGRAVING

Custom engraving available on flush bezel versions, contact APEM for further details.

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

STANDARD OPTIONS

The Q14 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	14	P	1	C	XX	B	28	E
SERIES	**MOUNTING HOLE**	**BEZEL STYLE**	**TERMINALS**	**BEZEL FINISH**	**TYPE OF ILLUMINATION**	**LED COLOUR**	**VOLTAGE**	**SEALING**
Q	14 = Ø14mm	P = Prominent	1 = Solder Lug/ Fastons (2.8 x 0.8)	C = Bright Chrome	XX = Fixed Light	R = Red	02 = 2VDC	(Blank) = Unsealed
		F = Flush	2 = Pins	B = Black Chrome	KK = Flashing Light (only up to 28VDC)	G = Green	06 = 6VDC	E = IP67
			3 = Wires	G = Satin Grey	YY = Bi-colour	Y = Yellow	12 = 12VDC	
			6 = Short body Pins		ZZ = Tri-colour	B = Blue	12A = 12VAC/DC	
			7 = Short body Wires			W = White	24 = 24VDC	
							24A = 24VAC/DC	
						SR = Super Bright Red	28 = 28VDC	
						SG = Super Bright Green	28A = 28VAC/DC	
						SY = Super Bright Yellow	110 = 110VAC	
						SB = Super Bright Blue	220 = 220VAC	
						SW = Super Bright White		
						RG = Red/Green		
						RY = Red/Yellow		
						GY = Green/Yellow		
						RYG = Red/Yellow/Green		

Example Q14P1CXXB28E
Ø14mm, prominent bezel, solder lug terminals, bright chrome finish, fixed light, blue, 28volt 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

- Bicolour 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 sealed options please consult Apem

- We recommend using Superbright LEDs for use at 220VAC