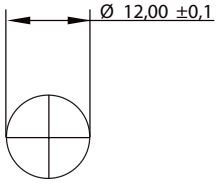
Q-SERIES 12mmØ Panel Mounting LED Indicator
Product Specification

Distinctive Features and Specifications

- 12mm panel mounting LED indicator
- 8mm coloured diffused epoxy lens or 8mm water clear super bright LEDs
- Bright chrome, black chrome or satin grey bezel finish
- Prominent bezel style
- 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



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 121VAC	6mA
230VAC	207 to 253VAC	3mA
Intensity (Typical) at Iop Standard	**Prominent**	**Forward Voltage**
	(all voltages)	
HE Red	100mcd	1.9V
Green	50mcd	2.2V
Yellow	50mcd	2.1V
Blue	500mcd	3.3V
White	350mcd	3.3V
Bi-colour (Typical) (Red/Green)	80/50mcd	2.0V/2.2V
Bi-colour - The colour is changed by reversing the polarity of the supply voltage.		
Tri-colour versions are available upon request, please consult Apem.		
Super Bright	**Prominent**	**Forward Voltage**
	(all voltages)	
HE Red	2,700mcd	1.9V
Green	4,200mcd	3.2V
Yellow	1,400mcd	2.1V
Blue	1,500mcd	3.6V
White	550mcd	3.3V
Luminous intensity will be reduced with lower operating current.		

Max Reverse Voltage: 5V
Viewing Angle: 60°
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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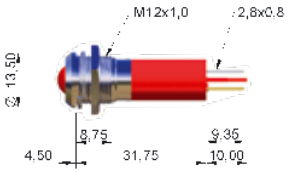
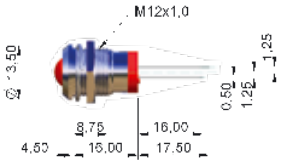
Technical Drawings

PROMINENT BEZEL

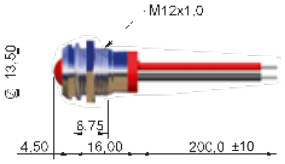
SOLDER LUG/FASTONS



PINS



WIRES



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Order Overview

STANDARD OPTIONS

The Q12 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	12	P	1	B	XX	G	12	E
SERIES	**MOUNTING HOLE**	**BEZEL STYLE**	**TERMINALS**	**BEZEL FINISH**	**TYPE OF ILLUMINATION**	**LED COLOUR**	**VOLTAGE**	**SEALING**
Q	12 = Ø12mm	P = Prominent	1 = Solder Lug/ Fastons (2.0 x 0.8)	C = Bright Chrome	XX = Fixed Light	R = Red	02 = 2VDC	(Blank) = Unsealed
			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 Q12P1BXXG12E
Ø12mm, prominent bezel, solder lug terminals, black chrome finish, fixed light, green, 12volt DC LED, IP67 Panel Seal

- Gold Faston terminal denotes Anode (+), silver terminal denotes Cathode (-)
- Standard wire length is 200mm, 24AWG, red wire denotes Anode (+), black wire denotes Cathode (-) for other wire lengths consult APEM
- For LEDs with alternate voltage 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
- Max voltage for pins and wires is 28V
- Maximum panel thickness 7mm
- For behind panel epoxy sealed options please consult APEM
- Tri-colours are only available behind panel epoxy sealed with wires or pins
- 110VAC and 220VAC only available with solder lug/Faston terminals
- We recommend using Superbright LEDs for use at 220VAC
- For resistorless versions (02) please pay attention to the forward voltage