MD CRM8 17.07

# **QRM8** series

Ø8 mm rear panel mount LED indicators



### **DISTINCTIVE FEATURES**

5 mm flush diffused LED, standard, hyper brigh or clear water Bi-color and tri-color LED options 200 mm wire or pin terminations



### **ENVIRONMENTAL SPECIFICATIONS**

- IP67 sealing option (EN60529)
- Operating Temperature Range: -40 °C to +85 °C (-40 °F to +185 °F)
- Storage Temperature Range: -55 °C to +100 °C (-67 °F to +212 °F)



### **GENERAL SPECIFICATIONS**

- Max Reverse Voltage: 5 V
- Viewing Angle: 60°
- Life Expectancy: 100,000 hours
- Max Panel Thickness: 3.5 mm
- Torque: 60 cNm

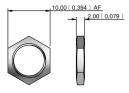


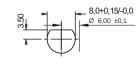
#### **MATERIALS**

- Body: Black chrome plated brass
- Lock Washer: Spring steel
- Nut: Black chrome plated brass
- Terminal Seal: Epoxy
- Panel Seal: Nitrile O-ring
- Wires: 24 AWG to UL1061 or UL1213 on request



### **MOUNTING**





The company reserves the right to change specifications without notice.

LED characteristics are dependent upon environmental conditions. Therefore published data should be considered nominal and subject to variations.





Ø8 mm rear panel mount LED indicators



### **ELECTRICAL SPECIFICATIONS**

#### STANDARD LED INTENSITY

LED COMPONENT SPECIFICATIONS			
	MCD Output (all voltages)	Forward Voltage	
HE Red	8 mcd	2.0 V	
Green	6 mcd	2.2 V	
Yellow	6 mcd	2.1 V	
Blue	50 mcd	3.8 V	
White	500 mcd	3.3 V	
Bi-color (Typical) (Red/Green)	15/10 mcd	2.0 V/2.2 V	
Tri-color (Typical) (Red/Green/Yellow)	15/10/6 mcd	2.0 V/2.2 V/2.1 V	

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 INTENSITY

LED COMPONENT SPECIFICATIONS			
	MCD Output (all voltages)	Forward Voltage	
HE Red	1,300 mcd	2.2 V	
Green	1,200 mcd	3.3 V	
Yellow	350 mcd	2.0 V	
Blue	280 mcd	3.3 V	
White	950 mcd	3.3 V	
Orange	500 mcd	2.2 V	

#### HYPER BRIGHT LED INTENSITY

LED COMPONENT SPECIFICATIONS			
	MCD Output (all voltages)	Forward Voltage	
HE Red	980 mcd	2.2 V	
Green	300 mcd	3.3 V	
Yellow	250 mcd	2.0 V	

- The operating voltage must not be exceeded by more that 10% as this will result in reduced life expectancy
- Luminous intensity is measured at 20 mA on a discrete led unless otherwise stated.
- Luminous intensities and color shades of white LEDs may vary within a batch.
- Luminous intensity will be reduced with lower operating current.

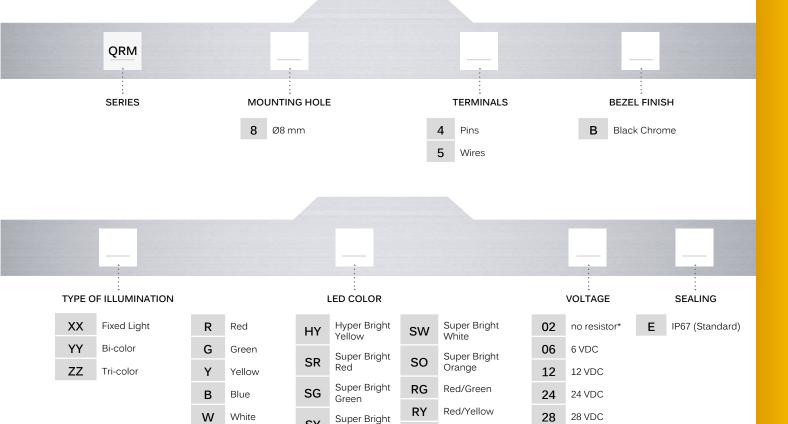
Operating Voltage	Operating Current
(Min to Max)	(Typical All Types)
1.8 to 3.8 VDC	20 mA max
5.4 to 6.6 VDC	20 mA
10.8 to 13.2 VDC	20 mA
21.6 to 26.4 VDC	20 mA
25.2 to 30.8 VDC	20 mA
	(Min to Max)  1.8 to 3.8 VDC  5.4 to 6.6 VDC  10.8 to 13.2 VDC  21.6 to 26.4 VDC

<sup>\*</sup> Customer to supply resistor for desired operating current.

Ø8 mm rear panel mount LED indicators

# (£3)

### **BUILD YOUR PART NUMBER**





### **ABOUT THIS SERIES**

( | Notice: please note that not all combinations of above numbers are available.

Hyper Bright

Hyper Bright

Red

HR

HG

• Standard wire length is 200 mm, 24 AWG UL1061, red wire denotes Anode (+), black wire denotes Cathode (-) for other wire lengths consult APEM.

GY

RYG

Green/Yellow

Red/Yellow/

Green

\* please refer to the

electrical specifications

forward voltage in

- $\bullet$  For LEDs with alternate voltages and multi-voltage options consult APEM.
- Bi-color LEDs, by connecting the gold Faston (+) one color is produced, by reversing the supply voltage another color is produced. Bi-color are available up to 28 VDC.
- Take care when soldering (recommended solder temperature 270 °C 2 sec).
- The Tri-color LED has red and green LEDs when both are connected yellow is produced.
- Standard Tri-color termination is two Anodes (+) and one Cathode (-).
- Tri-color wires are one red (+) and one green (+) Anode and one black (-) Cathode.
- Tri-color pins are center (-) Cathode, shortest (+) Anode pin green, longest (+) Anode pin red.

SY

SB

Yellow

Blue

Super Bright

Ø8 mm rear panel mount LED indicators

#### **REAR MOUNT - PINS TERMINALS**



#### **REAR MOUNT - WIRES TERMINALS**



### CUSTOM OPTIONS - FIXED AND BI-COLOR - LONG BODY - RIGID PINS

-X0245

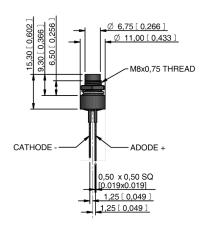
To apply the above custom option, suffix the part number with the -X reference number. Example / QRM84BXXHB24AE-X0245

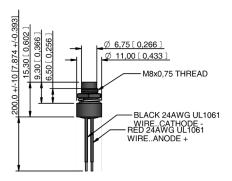
### CUSTOM OPTIONS - TRI-COLOR - LONG BODY - RIGID PCB TERMINALS

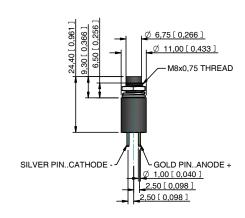


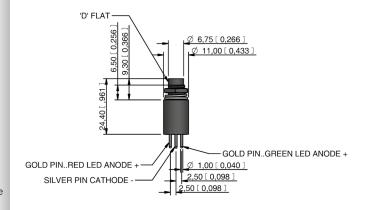
-X0246

To apply the above custom option, suffix the part number with the -X reference number. Example / QRM84BXXHB24AE-X0246









Ø8 mm rear panel mount LED indicators

# CUSTOM OPTIONS - FIXED AND BI-COLOR - STANDARD BODY - RIGID PINS

-X0259

To apply the above custom option, suffix the part number with the -X reference number. Example / QRM84BXXHB24AE-X0259

### HARDWARE - CYLINDRICAL DRESS NUTS - 8 MM

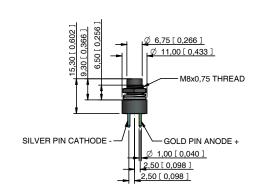


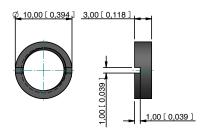
P/N: AUK0001

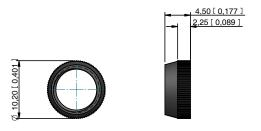
# HARDWARE - KNURLED DRESS NUTS - 8 MM



P/N: AUK0002







### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for LED Panel Mount Indicators category:

Click to view products by Apem manufacturer:

Other Similar products are found below:

607-1312-310F 607-3232-140F 6091M1-24V 6091M5-24V 6091M7-24V 821-0331-503 FL2870C8R FL2950WL7B FL589WL8R

Q6P3BXXB12E H8630FBBA3 MPC5ADW6.0 DX1091GN NL177WL3G NL276C3G NL2950BWL3G NL2950CWL2R NL589WL2R

NL67C3G NL67C3R 2191L1-12V PB22SIOL0RG PB22SPPM41R PB22SPPM61R LE177C5B LH1048BSWL3702 LH1048BWL3702

LH382A LHM62B SSI-LXH387USBD-150 SSI-LXH9ZIC40587 SSP-LXS110818BA FL2950BWL7R FL2950WL7R FL2951WL8G

FL2951WL8R FL589C7R FL67C7R FL67WL8G 2191QU7-24V 2191U1-12V 2191U5-12V 2191U5-6V 2191U7-12V 249-4167-3734-504F Q6P5BXXG02E 3990A7 5110F3-12V MPC5BCW18.0 556-1237-801F