

# QRM-NV series

Ø8 and Ø14 mm rear panel mount •  
NVIS LED indicators



## DISTINCTIVE FEATURES

NVIS Green A, NVIS Green B, NVIS Yellow, NVIS Red, NVIS White  
NVIS compliant to MIL Std 3009

200 mm wire for Ø 8 and 14 mm or rigid pin (1.00 mm) for Ø8 mm 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: Ø8 mm: 60 cNm  
Ø14 mm: 75 cNm



## ELECTRICAL SPECIFICATIONS

Voltage	Operating Voltage	Operating Current
	(Min to Max)	(Typical All Types)
02 (No Resistor)	2.1 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

### LED COMPONENT SPECIFICATIONS

LED Color	NVIS Radiance	NVIS Chromaticity	Dominant Wavelength	MCD Output	Forward Voltage
NW1S Green A	$NR_A \leq 1.7eE-10 @ 0.1fL$	$r \leq .037$	530nm	150mcd	3.3V
NW1S Green A	$NR_A \leq 1.7eE-10 @ 0.1fL$	$r \leq .057$	555nm	150mcd	3.3V
NW1S Yellow Class A	$5.0E-8 \leq NR_A \leq 1.5E-7 @ 15fL$	$r \leq .083$	-	150mcd	3.3V
NW1S Yellow Class B	$4.7E-8 \leq NR_B \leq 1.47E-7 @ 15fL$	$r \leq 0.83$	585nm	150mcd	3.3V
NW1S Red	$4.7E-8 \leq NR_B \leq 1.4E-7 @ 15 fL$	$r \leq .060$	605nm	110mcd	2.1V
NW1S White	$NR_A \leq 1.0E-9 @ 0.1fL$	$r \leq .40$	(x).33 (y).33	150mcd	3.3V

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.



# QRM-NV series

Ø8 and Ø14 mm rear panel mount •  
NVIS LED indicators



## ELECTRICAL SPECIFICATIONS (CONTINUED)

- The operating voltage must not be exceeded by more than 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.



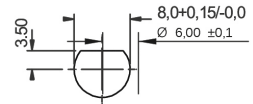
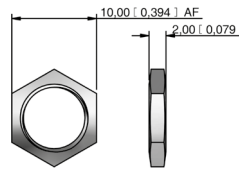
## MATERIALS

- Body: Black chrome plated brass
- Lock Washer: Spring steel
- Nut: Black chrome plated brass
- Terminal Seal: Epoxy
- Panel Seal: Nitrile O-ring
- Wires: **Ø8 mm:** 24 AWG - Approved to UL1213  
**Ø14 mm:** 22A WG - Approved to UL1007

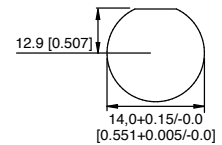
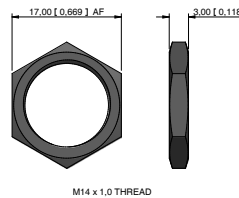


## MOUNTING

Ø8 MM



Ø14 MM



# QRM-NV series

Ø8 and Ø14 mm rear panel mount • NVIS LED indicators



## BUILD YOUR PART NUMBER

<p><b>QRM-NV</b></p> <p>.....</p> <p><b>SERIES</b></p>	<p>.....</p> <p><b>MOUNTING HOLE</b></p> <table border="0"> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>8</b></td> <td>Ø8 mm</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>14</b></td> <td>Ø14 mm</td> </tr> </table>	<b>8</b>	Ø8 mm	<b>14</b>	Ø14 mm	<p>.....</p> <p><b>TERMINALS</b></p> <table border="0"> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>4</b></td> <td>Ridgid Pins (only with Ø8 mm)</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>5</b></td> <td>Wires</td> </tr> </table>	<b>4</b>	Ridgid Pins (only with Ø8 mm)	<b>5</b>	Wires	<p>.....</p> <p><b>BEZEL FINISH</b></p> <table border="0"> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>B</b></td> <td>Black Chrome</td> </tr> </table>	<b>B</b>	Black Chrome																						
<b>8</b>	Ø8 mm																																		
<b>14</b>	Ø14 mm																																		
<b>4</b>	Ridgid Pins (only with Ø8 mm)																																		
<b>5</b>	Wires																																		
<b>B</b>	Black Chrome																																		
<p>.....</p> <p><b>TYPE OF ILLUMINATION</b></p> <table border="0"> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>XX</b></td> <td>Fixed Light</td> </tr> </table>	<b>XX</b>	Fixed Light	<p>.....</p> <p><b>LED COLOR</b></p> <table border="0"> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>NV-GRA</b></td> <td>NVIS Green A</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>NV-GRB</b></td> <td>NVIS Green B</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>NV-YWA</b></td> <td>NVIS Yellow A</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>NV-YWB</b></td> <td>NVIS Yellow B</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>NV-RD</b></td> <td>NVIS Red</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>NV-WH</b></td> <td>NVIS White</td> </tr> </table>	<b>NV-GRA</b>	NVIS Green A	<b>NV-GRB</b>	NVIS Green B	<b>NV-YWA</b>	NVIS Yellow A	<b>NV-YWB</b>	NVIS Yellow B	<b>NV-RD</b>	NVIS Red	<b>NV-WH</b>	NVIS White	<p>.....</p> <p><b>VOLTAGE</b></p> <table border="0"> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>02</b></td> <td>no resistor*</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>06</b></td> <td>6 VDC</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>12</b></td> <td>12 VDC</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>12A</b></td> <td>12 VAC/DC</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>24</b></td> <td>24 VDC</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>24A</b></td> <td>24 VAC/DC</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>28</b></td> <td>28 VDC</td> </tr> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>28A</b></td> <td>28 VAC/DC</td> </tr> </table> <p><small>* please refer to the forward voltage in electrical specifications</small></p>	<b>02</b>	no resistor*	<b>06</b>	6 VDC	<b>12</b>	12 VDC	<b>12A</b>	12 VAC/DC	<b>24</b>	24 VDC	<b>24A</b>	24 VAC/DC	<b>28</b>	28 VDC	<b>28A</b>	28 VAC/DC	<p>.....</p> <p><b>SEALING</b></p> <table border="0"> <tr> <td style="background-color: #cccccc; padding: 2px;"><b>E</b></td> <td>IP67 (Standard)</td> </tr> </table>	<b>E</b>	IP67 (Standard)
<b>XX</b>	Fixed Light																																		
<b>NV-GRA</b>	NVIS Green A																																		
<b>NV-GRB</b>	NVIS Green B																																		
<b>NV-YWA</b>	NVIS Yellow A																																		
<b>NV-YWB</b>	NVIS Yellow B																																		
<b>NV-RD</b>	NVIS Red																																		
<b>NV-WH</b>	NVIS White																																		
<b>02</b>	no resistor*																																		
<b>06</b>	6 VDC																																		
<b>12</b>	12 VDC																																		
<b>12A</b>	12 VAC/DC																																		
<b>24</b>	24 VDC																																		
<b>24A</b>	24 VAC/DC																																		
<b>28</b>	28 VDC																																		
<b>28A</b>	28 VAC/DC																																		
<b>E</b>	IP67 (Standard)																																		



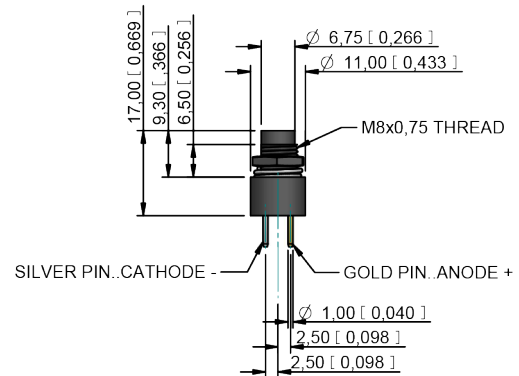
## ABOUT THIS SERIES

- ⚠ **Notice:** please note that not all combinations of above numbers are available.
- Standard wire length is 200 mm, 24 AWG UL1061, red wire denotes Anode (+), black wire denotes Cathode (-) for other wire lengths consult APEM.
  - For LEDs with alternate voltages and multi-voltage options consult APEM.
  - Take care when soldering (recommended solder temperature 270°C - 2 sec).
  - Suitable for the toughest environment and compliant to MIL standard specification

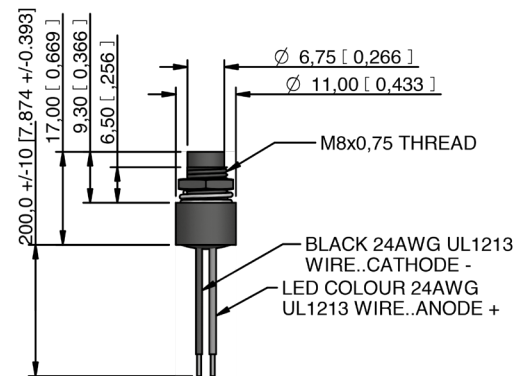
# QRM-NV series

Ø8 and Ø14 mm rear panel mount •  
NVIS LED indicators

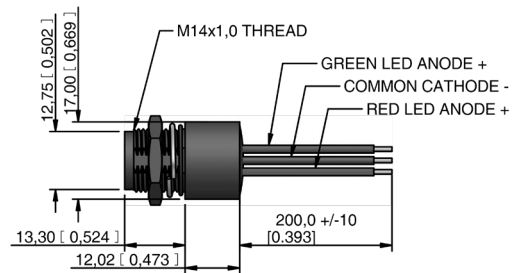
## Ø8 MM REAR MOUNT - PINS TERMINALS



## Ø8 MM REAR MOUNT - WIRES TERMINALS



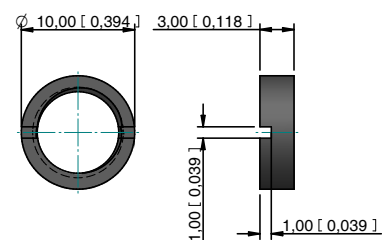
## Ø14 MM REAR MOUNT - WIRES TERMINALS



## HARDWARE - CYLINDRICAL DRESS NUTS - FOR Ø8 MM ONLY



P/N : AUK0001



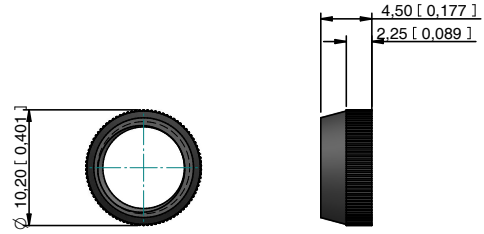
# QRM-NV series

Ø8 and Ø14 mm rear panel mount •  
NVIS LED indicators

HARDWARE - KNURLED DRESS NUTS  
- FOR Ø8 MM ONLY



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 :

[607-3232-140F](#) [821-0331-503](#) [FL2870C8R](#) [FL2950WL7B](#) [FL2950WL8G](#) [FL589WL8R](#) [FL67C8R](#) [H8630FBBA3](#) [NL177WL2A](#)  
[NL177WL3G](#) [NL276C2A](#) [NL2950BWL3G](#) [NL589WL2R](#) [NL67C2C](#) [NL67C3R](#) [C480AABG3](#) [PB22BM41K](#) [PB22SIM40Y](#)  
[PB22SKRS31KC](#) [L32R-R2-2311](#) [L3353-MWRG](#) [L39UR-R24-2111](#) [L58D-G2-W](#) [L58D-Y2-W](#) [L59D-R12-W](#) [L59UD-R12-W](#) [L625DG](#)  
[L625DR](#) [LE177WL39007](#) [LE2950BWL39018](#) [LH1048BSWL3702](#) [LH1048BWL3702](#) [LH382A](#) [LH677G](#) [LHM628A](#) [FL276WL7R](#)  
[FL2950BWL7R](#) [FL2950WL7R](#) [FL2950WL8R](#) [FL2950WL8R-12](#) [FL2951WL8G](#) [FL2951WL8R](#) [FL589C7R](#) [FL67WL8G](#) [MPC5BCW18.0](#)  
[556-1605-808F](#) [556-1705-809F](#) [556-3008-839F](#) [558-0201-818F](#) [559-0001-813F](#)