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 (Min to Max)	Operating Current (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 Chromoticity	Dominant Wavelength	MCD Output	Forward Voltage
NW1S Green A	$NR_A \leq 1.7eE\text{-}10$ @ 0.1fL	r ≤ .037	530nm	150mcd	3.3V
NW1S Green A	NRA ≤ 1.7eE-10 @ 0.1fL	r ≤ .057	555nm	150mcd	3.3V
NW1S Yellow Class A	5.0E-8 ≤ NRA ≤ 1.5E-7 @ 15fL	r ≤ .083	-	150mcd	3.3V
NW1S Yellow Class B	4.7E-8 ≤ NRB ≤ 1.47E-7 @ 15fL	r ≤ 0.83	585nm	150mcd	3.3V
NW1S Red	4.7E-8 ≤ NRB ≤ 1.4E-7 @15 fL	r ≤ .060	605nm	110mcd	2.1V
NW1S White	NRA ≤ 1.0E-9 @ 0.1fL	r ≤ .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.

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ELECTRICAL SPECIFICATIONS (CONTINUED)

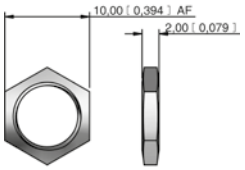
- The operating voltage must not be exceeded by more that 10% as this will result in reduced life expectancy
- Luminous intensity is measured at 20 mA on a discrete led unless otherwise stated.
- Luminous intensities and color shades of white LEDs may vary within a batch.
- Luminous intensity will be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

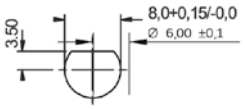
MATERIALS

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

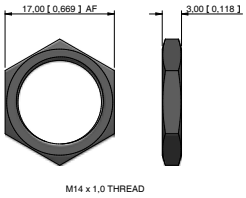
MOUNTING

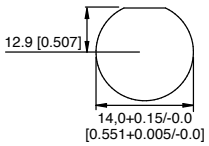
Ø8 MM





Ø14 MM





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BUILD YOUR PART NUMBER

QRM-NV — — — —

SERIES

QRM-NV

MOUNTING HOLE

8	Ø8 mm
14	Ø14 mm

TERMINALS

4	Ridgid Pins (only with Ø8 mm)
5	Wires

BEZEL FINISH

B	Black Chrome
AK	Anodized Dark Olive
AN	Anodized Black

TYPE OF ILLUMINATION

XX	Fixed Light

LED COLOR

NV-GRA	NVIS Green A
NV-GRB	NVIS Green B
NV-YWA	NVIS Yellow A
NV-YWB	NVIS Yellow B
NV-RD	NVIS Red
NV-WH	NVIS White

VOLTAGE

02	no resistor*
06	6 VDC
12	12 VDC
12A	12 VAC/DC
24	24 VDC
24A	24 VAC/DC
28	28 VDC
28A	28 VAC/DC

* please refer to the forward voltage in electrical specifications

SEALING

E	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

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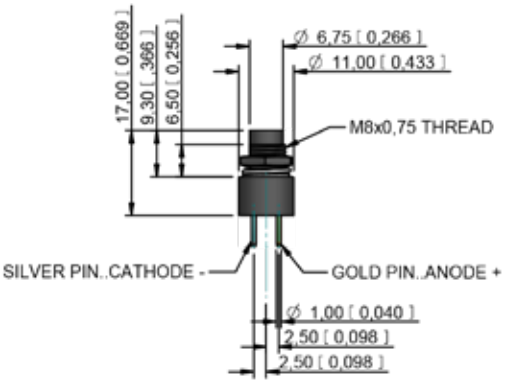
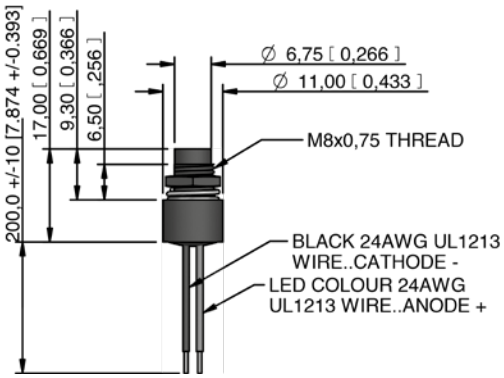
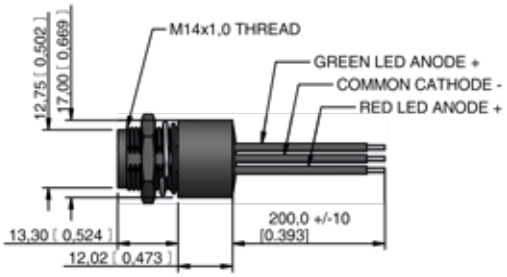
Ø8 MM REAR MOUNT - PINS TERMINALS



Ø8 MM REAR MOUNT - WIRES TERMINALS

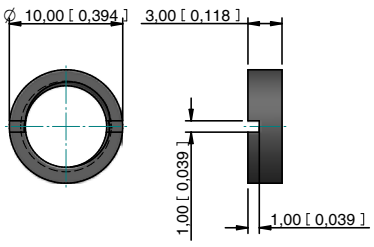


Ø14 MM REAR MOUNT - WIRES TERMINALS



HARDWARE - CYLINDRICAL DRESS NUTS - FOR Ø8 MM ONLY

P/N : AUK0001



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HARDWARE - KNURLED DRESS NUTS - FOR Ø8 MM ONLY

P/N : AUK0002