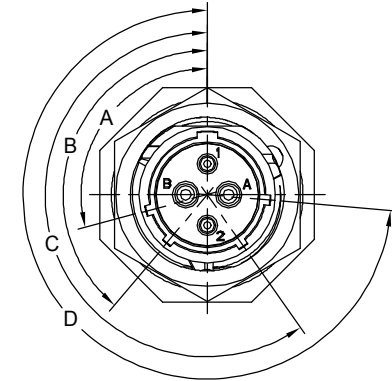
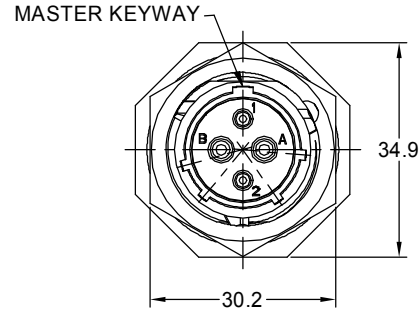
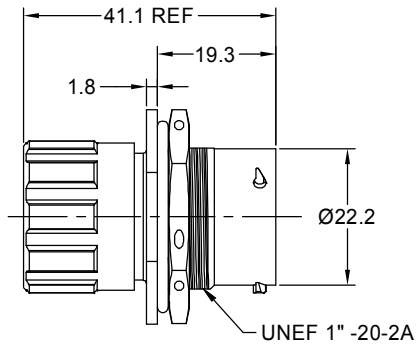




# NOTES : (UNLESS OTHERWISE SPECIFIED)

## 1. MATERIAL :

SHELL : ZINC ALLOY , NICKEL PLATED.  
 INSERT : THERMOPLASTIC , UL94 V-0.  
 END CAP : THERMOPLASTIC , UL94 V-0.  
 PLASTIC BUSHING : THERMOPLASTIC , UL94 V-0.  
 NUTS : AL ALLOY NICKEL PLATED.  
 SEAL GASKET : NBR/SILICONE RUBBER.  
 O-RING : NBR/SILICONE RUBBER.  
 WIRE SEAL : SILICONE RUBBER.

## 2. SPECIFICATIONS :

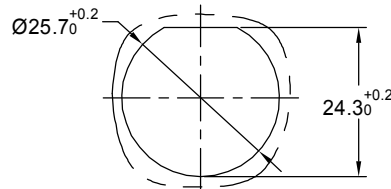
- 2.1 RATED CURRENT :  
 2.1.1 16# CINTACT 13A (MAX) .  
 2.1.2 2.5mm CONTACT 23A (MAX).  
 2.2 RATED VOLTAGE : 500V(AC/DC).  
 2.3 OPERATING TEMPERATURE : SEE CHART.  
 2.4 DIELECTRIC WITHSTANDING VOLTAGE : LESS THAN  
 2 MILLIAMPS CURRENT LEAKAGE@2000 VOLTS AC.  
 2.5 INSULATION RESISTANCE : 5000 MEGOHMS MIN.  
 2.6 IP--CLASS : IP67 (MATED CONDITION).  
 2.7 MATING CYCLES DURABILITY : 500 CYCLES MIN.  
 2.8 ROHS COMPLIANT.

## 3. SUITABLE CONTACTS : 16# & 2.5mm CONTACTS.

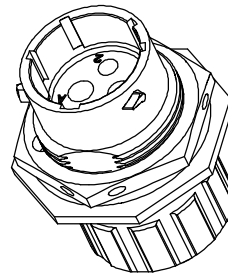
## 4. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.

## 5. CONTACT SIZE AND REAR SEAL WIRE RANGE :

| CONTACT SIZE | MIN. INSUL O.D. | MAX. INSUL O.D. | WIRE RANGE |
|--------------|-----------------|-----------------|------------|
| 16#          | Ø2.0mm          | Ø3.2mm          | 14 - 24AWG |
| 2.5mm        | Ø3.3mm          | Ø4.3mm          | 14 - 12AWG |



PANEL CUT OUT REFERENCE



# REVISIONS

| REV | ECO | DESCRIPTION                     | DATE         | BY     | APPR  |
|-----|-----|---------------------------------|--------------|--------|-------|
| B1  | -   | RELEASED DRAWING                | JULY-03-2014 | BEN    | TOMMY |
| B2  | -   | VOLTAGE UPDATE AND ADD KEY ICON | Dec-29-2020  | Ronald | Tommy |

| KEY POS | PART NUMBER   |                | A    | B    | C    | D    |
|---------|---------------|----------------|------|------|------|------|
|         | -40°C ~ 105°C | -40°C ~ 125°C  |      |      |      |      |
| N       | RT07142PNHEC  | RT07142PNHEC03 | 105° | 140° | 215° | 265° |
| W       | RT07142PWHEC  | RT07142PWHEC03 | 60°  | 140° | 215° | 265° |
| X       | RT07142PXHEC  | RT07142PXHEC03 | 105° | 160° | 215° | 265° |
| Y       | RT07142PYHEC  | RT07142PYHEC03 | 105° | 140° | 225° | 265° |
| Z       | RT07142PZHEC  | RT07142PZHEC03 | 105° | 140° | 215° | 295° |

|                                                                                                                                                                                                                                            |             |                                                                                                                                                                                                                                                                      |      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| SEE PART NUMBER CHART                                                                                                                                                                                                                      |             |                                                                                                                                                                                                                                                                      |      |
| QUANTITY                                                                                                                                                                                                                                   | PART NUMBER | DESCRIPTION                                                                                                                                                                                                                                                          | ITEM |
| <b>MATERIALS LIST</b><br>UNLESS OTHERWISE SPECIFIED<br>1) All dimensions are in metric(mm).<br>2) Tolerances are as follows:<br>1 PL DEC ±0.30<br>2 PL DEC ±0.15<br>3 PL DEC ±0.08<br>Fractions ±1/64<br>Angles ±1°<br>3) Note reference = |             |                                                                                                                                                                                                                                                                      |      |
| SIGNATURES<br>DRAWN: <b>Ronald</b><br>CHECKED: <b>Ram</b><br>ENGINEER:<br>APPROVAL: <b>Tommy</b><br>CUSTOMER:                                                                                                                              |             | DATE<br>Dec-29-20<br>Dec-30-20<br>Dec-30-20<br>Dec-30-20                                                                                                                                                                                                             |      |
| MATERIAL SPECIFICATIONS:<br>PROCESS SPECIFICATIONS:<br>NEXT ASSY:                                                                                                                                                                          |             | THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY. DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION. NO RIGHTS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS. |      |
| SCALE: NONE                                                                                                                                                                                                                                |             | SIZE: <b>B</b> TYPE: <b>C-</b> DWG NO: <b>RT07142P*HEC</b> REVISION: <b>B2</b>                                                                                                                                                                                       |      |
| SHEET 1 OF 1                                                                                                                                                                                                                               |             | SINE SYSTEMS - www.amphenol-sine.com<br>44724 Morley Drive<br>Clinton Township, MI 48036<br>ECOMATE RM, RECEPTACLE,<br>JAM NUT, SIZE 14, 2+2 POS, PIN, END CAP.                                                                                                      |      |

ecomate® RM/RSSM/Aquarius™ - Contact Size 16 Options

| Crimp Contacts, Machined |            |       |                  |            |
|--------------------------|------------|-------|------------------|------------|
| Part Number              |            | AWG   | Wire Range (mm²) | Plating    |
| Male                     | Female     |       |                  |            |
| MP14M23F                 | MS14M23F   | 14    | 2.0-2.5          | Gold Flash |
| MP14M23G5                | MS14M23G5  | 14    | 2.0-2.5          | Gold 5µ"   |
| MP14M23G10               | MS14M23G10 | 14    | 2.0-2.5          | Gold 10µ"  |
| MP14M23G15               | MS14M23G15 | 14    | 2.0-2.5          | Gold 15µ"  |
| MP14M23G30               | MS14M23G30 | 14    | 2.0-2.5          | Gold 30µ"  |
| MP16M23F                 | MS16M23F   | 18-16 | 0.75-1.5         | Gold Flash |
| MP16M23G5                | MS16M23G5  | 18-16 | 0.75-1.5         | Gold 5µ"   |
| MP16M23G10               | MS16M23G10 | 18-16 | 0.75-1.5         | Gold 10µ"  |
| MP16M23G15               | MS16M23G15 | 18-16 | 0.75-1.5         | Gold 15µ"  |
| MP16M23G30               | MS16M23G30 | 18-16 | 0.75-1.5         | Gold 30µ"  |
| MP20M23F                 | MS20M23F   | 22-20 | 0.34-0.50        | Gold Flash |
| MP20M23G5                | MS20M23G5  | 22-20 | 0.34-0.50        | Gold 5µ"   |
| MP20M23G10               | MS20M23G10 | 22-20 | 0.34-0.50        | Gold 10µ"  |
| MP20M23G15               | MS20M23G15 | 22-20 | 0.34-0.50        | Gold 15µ"  |
| MP20M23G30               | MS20M23G30 | 22-20 | 0.34-0.50        | Gold 30µ"  |
| MP24M23F                 | MS24M23F   | 26-24 | 0.14-0.25        | Gold Flash |
| MP24M23G5                | MS24M23G5  | 26-24 | 0.14-0.25        | Gold 5µ"   |
| MP24M23G10               | MS24M23G10 | 26-24 | 0.14-0.25        | Gold 10µ"  |
| MP24M23G15               | MS24M23G15 | 26-24 | 0.14-0.25        | Gold 15µ"  |
| MP24M23G30               | MS24M23G30 | 26-24 | 0.14-.025        | Gold 30µ"  |

| Tooling, Machined |                                              |
|-------------------|----------------------------------------------|
| Part Number       | Description                                  |
| QXRT16            | Contact Extraction Tool, #16 (Ø 1.6) Contact |
| MFx-3959          | Hand Crimp Tool for Machined Contacts        |
| MFx-3960          | Pneumatic Crimp Tool for Machined Contact    |

| Plating Options, All |                                            |
|----------------------|--------------------------------------------|
| Symbol               | Plating                                    |
| T                    | Tin Plated (for Stamped & Formed Contacts) |
| S                    | Silver Plated 50µm (for Machined Contacts) |
| F                    | Gold Plated                                |
| G5                   | Gold Plated (Thickness 5µ")                |
| G10                  | Gold Plated (Thickness 10µ")               |
| G15                  | Gold Plated (Thickness 15µ")               |
| G30                  | Gold Plated (Thickness 30µ")               |

| Crimp Contacts, Stamped & Formed |           |       |                  |            |
|----------------------------------|-----------|-------|------------------|------------|
| Part Number                      |           | AWG   | Wire Range (mm²) | Plating    |
| Male                             | Female    |       |                  |            |
| SP14M2F                          | SS14M2F   | 14    | 2.0-2.5          | Gold Flash |
| SP14M2G5                         | SS14M2G5  | 14    | 2.0-2.5          | Gold 5µ"   |
| SP14M2G10                        | SS14M2G10 | 14    | 2.0-2.5          | Gold 10µ"  |
| SP14M2G15                        | SS14M2G15 | 14    | 2.0-2.5          | Gold 15µ"  |
| SP14M2G30                        | SS14M2G30 | 14    | 2.0-2.5          | Gold 30µ"  |
| SP16M2F                          | SS16M2F   | 18-16 | 0.75-1.5         | Gold Flash |
| SP16M2G5                         | SS16M2G5  | 18-16 | 0.75-1.5         | Gold 5µ"   |
| SP16M2G10                        | SS16M2G10 | 18-16 | 0.75-1.5         | Gold 10µ"  |
| SP16M2G15                        | SS16M2G15 | 18-16 | 0.75-1.5         | Gold 15µ"  |
| SP16M2G30                        | SS16M2G30 | 18-16 | 0.75-1.5         | Gold 30µ"  |
| SP20M2F                          | SS20M2F   | 22-20 | 0.34-0.50        | Gold Flash |
| SP20M2G5                         | SS20M2G5  | 22-20 | 0.34-0.50        | Gold 5µ"   |
| SP20M2G10                        | SS20M2G10 | 22-20 | 0.34-0.50        | Gold 10µ"  |
| SP20M2G15                        | SS20M2G15 | 22-20 | 0.34-0.50        | Gold 15µ"  |
| SP20M2G30                        | SS20M2G30 | 22-20 | 0.34-0.50        | Gold 30µ"  |
| SP24M2F                          | SS24M2F   | 26-24 | 0.14-0.25        | Gold Flash |
| SP24M2G5                         | SS24M2G5  | 26-24 | 0.14-0.25        | Gold 5µ"   |
| SP24M2G10                        | SS24M2G10 | 26-24 | 0.14-0.25        | Gold 10µ"  |
| SP24M2G15                        | SS24M2G15 | 26-24 | 0.14-0.25        | Gold 15µ"  |
| SP24M2G30                        | SS24M2G30 | 26-24 | 0.14-0.25        | Gold 30µ"  |

| Tooling, Stamped & Formed |                                                        |
|---------------------------|--------------------------------------------------------|
| Part Number               | Description                                            |
| QXRT16                    | Contact Extraction Tool, #16 (Ø 1.6) Contact           |
| MFx-3954                  | Hand Tool, Stamped & Formed Contact, Size 16, 20-14AWG |
| MFx-3957                  | Crimp Die, Stamped & Formed Contact                    |
|                           |                                                        |

| Misc Tooling, All |                            |
|-------------------|----------------------------|
| Part Number       | Description                |
| CA-4020-59        | Sealing Plug, Size 16 & 20 |
|                   |                            |

| Standard Quantity Order Options |                   |
|---------------------------------|-------------------|
| Machined                        | Stamped & Formed  |
| Bulk Package, 500 Pieces        | Reel, 3000 Pieces |

ecomate® RM/RSSM/Aquarius™ - Contact Size 12 Options

| Machined, Crimp Contacts |            |                    |                  |            |
|--------------------------|------------|--------------------|------------------|------------|
| Part Number              |            | Contact Size (AWG) | Wire Range (mm²) | Plating    |
| Male                     | Female     |                    |                  |            |
| MP12B23T                 | MS12B23T   | 14-12AWG           | 2.3-3.5mm²       | Tin        |
| MP12B23S                 | MS12B23S   | 14-12AWG           | 2.3-3.5mm²       | Silver     |
| MP12B23F                 | MS12B23F   | 14-12AWG           | 2.3-3.5mm²       | Gold Flash |
| MP12B23G5                | MS12B23G5  | 14-12AWG           | 2.3-3.5mm²       | Gold 5µ"   |
| MP12B23G10               | MS12B23G10 | 14-12AWG           | 2.3-3.5mm²       | Gold 10µ"  |
| MP12B23G15               | MS12B23G15 | 14-12AWG           | 2.3-3.5mm²       | Gold 15µ"  |
| MP12B23G30               | MS12B23G30 | 14-12AWG           | 2.3-3.5mm²       | Gold 30µ"  |

| Machined, Tooling |                                        |
|-------------------|----------------------------------------|
| Part Number       | Description                            |
| QXRT12S           | Contact Extraction Tool, 2.5mm contact |
| UH2-5             | Universal Locator, Fits AF8 and WA27F  |
| AF8               | Hand Crimper                           |
| WA27F             | Pneumatic Crimper                      |

| Plating Options, All |                            |
|----------------------|----------------------------|
| Symbol               | Plating                    |
| T                    | Tin Plated                 |
| S                    | Silver Plated              |
| F                    | Gold Flash                 |
| G5                   | Gold 5µ" (Thickness 5µ")   |
| G10                  | Gold 10µ" (Thickness 10µ") |
| G15                  | Gold 15µ" (Thickness 15µ") |
| G30                  | Gold 30µ" (Thickness 30µ") |

| Stamped & Formed , Crimp Contacts |         |                    |                  |         |
|-----------------------------------|---------|--------------------|------------------|---------|
| Part Number                       |         | Contact Size (AWG) | Wire Range (mm²) | Plating |
| Male                              | Female  |                    |                  |         |
| SP12A1T                           | SS12A1T | 14-12AWG           | 2.5-3.5mm²       | Tin     |

| Stamped & Formed, Tooling |                                                    |
|---------------------------|----------------------------------------------------|
| Part Number               | Description                                        |
| QXRT12S                   | Contact Extraction Tool, 2.5mm Contact             |
| MFx-3962                  | Hand Tool, Stamped & Formed Contact, 2.5mm Contact |

| Misc Tooling, All |                       |
|-------------------|-----------------------|
| Part Number       | Description           |
| CA-4012-59        | Sealing Plug, Size 12 |

| Standard Quantity Order Options |                   |
|---------------------------------|-------------------|
| Machined                        | Bag, 500 Pieces   |
| Stamped & Formed                | Reel, 1000 Pieces |