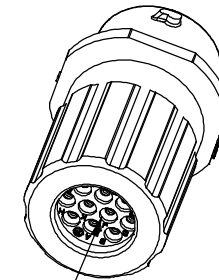
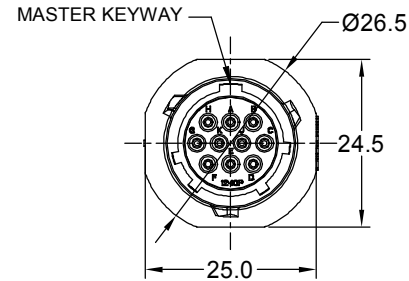
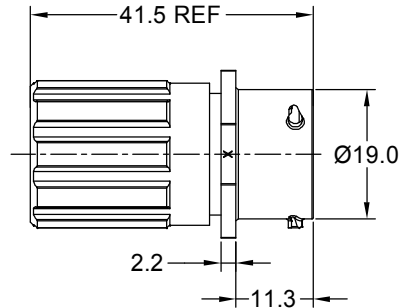


| REVISIONS |     |                  |           |       |       |
|-----------|-----|------------------|-----------|-------|-------|
| REV       | ECO | DESCRIPTION      | DATE      | BY    | APPR  |
| A1        | -   | RELEASED DRAWING | Feb-24-21 | Blink | Tommy |



SEALING PLUGS CAN BE  
PURCHASED SEPARATELY

NOTES : (UNLESS OTHERWISE SPECIFIED)

- MATERIAL :
  - SHELL : THERMOPLASTIC , UL94 V-0.
  - INSERT : THERMOPLASTIC , UL94 V-0.
  - O-RING : NBR/SILICONE RUBBER.
  - SEAL GASKET : NBR OR SILICONE RUBBER.
  - END CAP : THERMOPLASTIC , UL94 V-0.
  - PLASTIC RING:THERMOPLASTIC , UL94 V-0.
  - WIRE SEAL : SILICONE RUBBER.
- SPECIFICATIONS :
  - RATED CURRENT :
    - STAMPED CONTACT 5A (MAX).
    - MACHINED CONTACT 7.5A (MAX).
  - RATED VOLTAGE : 250V(AC/DC).
  - OPERATING TEMPERATURE : SEE TABLE.
  - DIELECTRIC WITHSTANDING VOLTAGE : LESS THAN 2 MILLIAMPS CURRENT LEAKAGE@1500 VOLTS AC.
  - INSULATION RESISTANCE : 5000 MEGOHMS MIN.
  - IP-CLASS : IP67 AND IP69K IN THE MATED CONDITION, WIRE SEALS FULLY POPULATED.
  - MATING CYCLES DURABILITY : 500 CYCLES MIN.
  - RoHS COMPLIANT.
- SUITABLE CONTACTS : 20# CONTACT.
- ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.

| CONTACT SIZE | MIN. INSUL O.D. | MAX. INSUL O.D. | WIRE RANGE |
|--------------|-----------------|-----------------|------------|
| 20#          | Ø1.4mm          | Ø2.1mm          | 20 - 30AWG |

| KEY | PART NUMBER     |                   |
|-----|-----------------|-------------------|
|     | -40°C ~ 105°C   | -40°C ~ 125°C     |
| N   | RTS1BS12N10PHEC | RTS1BS12N10PHEC03 |

| QUANTITY                                                                                                                                                                                                                                                             | PART NUMBER | DESCRIPTION                                                                                     | ITEM         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------|--------------|
| MATERIALS LIST                                                                                                                                                                                                                                                       |             |                                                                                                 |              |
| UNLESS OTHERWISE SPECIFIED                                                                                                                                                                                                                                           |             | SIGNATURES                                                                                      | DATE         |
| 1) All dimensions are in metric(mm).                                                                                                                                                                                                                                 |             | DRAWN:     | Feb-24-2021  |
| 2) Tolerances are as follows:                                                                                                                                                                                                                                        |             | CHECKED:   | Feb-25-2021  |
| 1 PL DEC ±0.30                                                                                                                                                                                                                                                       |             | ENGINEER:                                                                                       |              |
| 2 PL DEC ±0.15                                                                                                                                                                                                                                                       |             | APPROVAL:  | Feb-25-2021  |
| 3 PL DEC ±0.08                                                                                                                                                                                                                                                       |             | CUSTOMER:                                                                                       |              |
| 3) Note reference =                                                                                                                                                             |             |                                                                                                 |              |
| MATERIAL SPECIFICATIONS:                                                                                                                                                                                                                                             |             | ECO-MATE AQUARIUS,RECPTACLE,IN-LINE<br>BACK SHELL,SIZE 12,10POS,PIN                             |              |
| PROCESS SPECIFICATIONS:                                                                                                                                                                                                                                              |             | SIZE TYPE DWG NO. REVISION                                                                      |              |
| 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. |             | B C- RTS1BS12*10PHEC A1                                                                         |              |
| NEXT ASSY:                                                                                                                                                                                                                                                           |             | SCALE: NONE                                                                                     | SHEET 1 OF 1 |

## ecomate® RM/RSSM/Aquarius™ - Contact Size 20 Options

| Machined, Crimp Contacts |            |       |                               |            |
|--------------------------|------------|-------|-------------------------------|------------|
| Part Number              |            | AWG   | Wire Range (mm <sup>2</sup> ) | Plating    |
| Male                     | Female     |       |                               |            |
| MP20W23F                 | MS20W23F   | 22-20 | .34-.50                       | Gold Flash |
| MP20W23G5                | MS20W23G5  | 22-20 | .34-.50                       | Gold 5μ"   |
| MP20W23G10               | MS20W23G10 | 22-20 | .34-.50                       | Gold 10μ"  |
| MP20W23G15               | MS20W23G15 | 22-20 | .34-.50                       | Gold 15μ"  |
| MP20W23G30               | MS20W23G30 | 22-20 | .34-.50                       | Gold 30μ"  |
| MP24W23F                 | MS24W23F   | 26-24 | .13-.25                       | Gold Flash |
| MP24W23G5                | MS24W23G5  | 26-24 | .13-.25                       | Gold 5μ"   |
| MP24W23G10               | MS24W23G10 | 26-24 | .13-.25                       | Gold 10μ"  |
| MP24W23G15               | MS24W23G15 | 26-24 | .13-.25                       | Gold 15μ"  |
| MP24W23G30               | MS24W23G30 | 26-24 | .13-.25                       | Gold 30μ"  |
| MP28W23F                 | MS28W23F   | 30-28 | .05-.08                       | Gold Flash |
| MP28W23G5                | MS28W23G5  | 30-28 | .05-.08                       | Gold 5μ"   |
| MP28W23G10               | MS28W23G10 | 30-28 | .05-.08                       | Gold 10μ"  |
| MP28W23G15               | MS28W23G15 | 30-28 | .05-.08                       | Gold 15μ"  |
| MP28W23G30               | MS28W23G30 | 30-28 | .05-.08                       | Gold 30μ"  |

| Tooling, Machined |                                              |
|-------------------|----------------------------------------------|
| Part Number       | Description                                  |
| QXRT20            | Contact Extraction Tool, #20 (Ø 1.0) Contact |
| MFY-3959          | Hand Crimp Tool for Machined Contacts        |
| MFY-3960          | Pneumatic Crimp Tool for Machined Contact    |
|                   |                                              |

| Plating Options |                                            |
|-----------------|--------------------------------------------|
| Symbol          | Plating                                    |
| T               | Tin Plated (for Stamped & Formed Contacts) |
| S               | Silver Plated 5Um (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")               |

| Stamped & Formed, Crimp Contacts |           |       |                               |            |
|----------------------------------|-----------|-------|-------------------------------|------------|
| Part Number                      |           | AWG   | Wire Range (mm <sup>2</sup> ) | Plating    |
| Male                             | Female    |       |                               |            |
| SP20W2F                          | SS20W2F   | 22-20 | .34-.50                       | Gold Flash |
| SP20W2G5                         | SS20W2G5  | 22-20 | .34-.50                       | Gold 5μ"   |
| SP20W2G10                        | SS20W2G10 | 22-20 | .34-.50                       | Gold 10μ"  |
| SP20W2G15                        | SS20W2G15 | 22-20 | .34-.50                       | Gold 15μ"  |
| SP20W2G30                        | SS20W2G30 | 22-20 | .34-.50                       | Gold 30μ"  |
| SP24W2F                          | SS24W2F   | 26-24 | .14-.25                       | Gold Flash |
| SP24W2G5                         | SS24W2G5  | 26-24 | .14-.25                       | Gold 5μ"   |
| SP24W2G10                        | SS24W2G10 | 26-24 | .14-.25                       | Gold 10μ"  |
| SP24W2G15                        | SS24W2G15 | 26-24 | .14-.25                       | Gold 15μ"  |
| SP24W2G30                        | SS24W2G30 | 26-24 | .14-.25                       | Gold 30μ"  |
| SP28W2F                          | SS28W2F   | 30-28 | .05-.08                       | Gold Flash |
| SP28W2G5                         | SS28W2G5  | 30-28 | .05-.08                       | Gold 5μ"   |
| SP28W2G10                        | SS28W2G10 | 30-28 | .05-.08                       | Gold 10μ"  |
| SP28W2G15                        | SS28W2G15 | 30-28 | .05-.08                       | Gold 15μ"  |
| SP28W2G30                        | SS28W2G30 | 30-28 | .05-.08                       | Gold 30μ"  |

| Tooling, Stamped & Formed |                                                        |
|---------------------------|--------------------------------------------------------|
| Part Number               | Description                                            |
| QXRT20                    | Contact Extraction Tool, #20 (Ø 1.0) Contact           |
| MFY-3958                  | Hand Tool, Stamped & Formed Contact, Size 20, 20-28AWG |
| MFY-3957                  | Crimp Die for Stamped & Formed Contact                 |
|                           |                                                        |

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

**Amphenol Sine Systems**  
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 04/2021