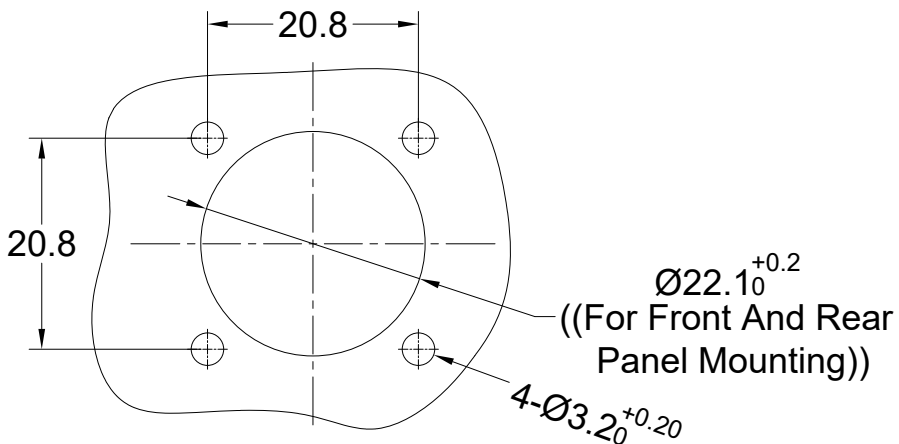


TIGHTEN SCREW M2.5;
(RECOMMENDED TORQUE:0.3~0.4Nm)

NOTES: (UNLESS OTHERWISE SPECIFIED)

- MATERIAL:
 - SHELL: THERMOPLASTIC, BLACK, UL94 V-0.
 - INSERT: THERMOPLASTIC, BLACK, UL94 V-0.
 - O-RING: SILICONE RUBBER.
 - END CAP: THERMOPLASTIC, BLACK, UL94 V-0.
 - PLASTIC RING:THERMOPLASTIC, BLACK, UL94 V-0.
 - WIRE SEAL: SILICONE RUBBER, RED.
- SPECIFICATIONS:
 - 2.1 RATED CURRENT: SEE TABLE1.
 - 2.2 RATED VOLTAGE: SEE TABLE1.
 - 2.3 OPERATING TEMPERATURE: -40°C~125°C.
 - 2.4 DIELECTRIC WITHSTANDING VOLTAGE: SEE TABLE1.
 - 2.5 INSULATION RESISTANCE: 5000 MEGOHMS MIN.
 - 2.6 IP--CLASS: IP67 ,IP68 AND IP69K IN MATED CONDITION.
 - 2.7 MATING CYCLES DURABILITY: 500 CYCLES MIN.
 - 2.8 RoHS COMPLIANT.
- SUITABLE CONTACTS : SEE TABLE1.
- ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.
- CONTACT SIZE AND REAR SEAL WIRE RANGE:

| CONTACT SIZE | MIN. INSUL O.D. | MAX. INSUL O.D. | WIRE RANGE |
|--------------|-----------------|-----------------|-----------------|
| 2.5mm | Ø3.3mm | Ø4.3mm | 4mm²&12 - 14AWG |
| 16# | Ø2.0mm | Ø3.2mm | 14 - 24AWG |
| 20# | Ø1.4mm | Ø2.1mm | 20 - 30AWG |



RECOMMENDED PANEL MOUNTING HOLE
RECOMMENDED PANEL THICKNESS 5.0MM MAX

SEALING PLUGS CAN BE PURCHASED SEPARATELY

| REVISIONS | | | | | |
|-----------|-----|-------------------------------|-------------|-------|-------|
| REV | ECO | DESCRIPTION | DATE | BY | APPR |
| A1 | -- | FIRST RELEASED | NOV-23-2021 | BLINK | TOMMY |
| A2 | -- | REVISE ONE TYPO | MAY-25-2022 | BLINK | TOMMY |
| A3 | -- | ADD IP68 | APR-26-2023 | JUN | TOMMY |
| A4 | -- | UPDATED SUITABLE CONTACT NOTE | MAY-16-2023 | RO | RO |

| QUANTITY | PART NUMBER | DESCRIPTION | ITEM |
|--|-------------|--|------|
| MATERIALS LIST | | | |
| UNLESS OTHERWISE SPECIFIED 1) All dimensions are in metric(mm). 2) Tolerances are as follows: 1 PL DEC ±0.30 2 PL DEC ±0.15 3 PL DEC ±0.08 3) Note reference = \triangle X | | SIGNATURES DRAWN: JUN APR-26-2023 CHECKED: JOE APR-28-2023 ENGINEER: APPROVAL: TOMMY MAY-02-2023 | DATE |
| MATERIAL SPECIFICATIONS: | | CUSTOMER: | |
| PROCESS SPECIFICATIONS: | | 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. | |
| NEXT ASSY: | | SCALE: NONE | |
| | | SHEET 1 OF 3 | |

Amphenol

Sine Systems - www.amphenol-sine.com
44724 Morley Drive
Clinton Township, MI 48036

EcoMate Aquarius,RECEPTACLE, SQUARE FLANGE, xx POSITION, FEMALE,SHELL SIZE 12,END CAP

SIZE: B C- DWG NO: FLS012xxxSHEC03 REVISION: A4

TITLE: EcoMate Aquarius RECEPTACLE, SQUARE FLANGE, xx POSITION, FEMALE, SHELL SIZE 12, END CAP
DWG NO.: FLS012xxxSHEC03
REV: A4
SH: 1
OF: 2

| REVISIONS | | | | | |
|-----------|-----|-------------------------------|-------------|-------|-------|
| REV | ECO | DESCRIPTION | DATE | BY | APPR |
| A1 | -- | FIRST RELEASED | NOV-23-2021 | BLINK | TOMMY |
| A2 | -- | REVISE ONE TYPO | MAY-25-2022 | BLINK | TOMMY |
| A3 | -- | ADD IP68 | APR-26-2023 | JUN | TOMMY |
| A4 | -- | UPDATED SUITABLE CONTACT NOTE | MAY-16-2023 | RO | RO |

TABLE 1:

| PART NUMBER | FLS012x3SHEC03 | FLS012x2SHEC03 | FLS012x8SHEC03 | FLS012x10SHEC03 |
|--------------------------------------|-----------------------------------|--|-----------------------------------|---|
| FEMALE INSERT ARRANGEMENT FRONT VIEW | | | | |
| FEMALE INSERT ARRANGEMENT REAR VIEW | | | | |
| SUITABLE CONTACTS | 3 x Size 16 (1.5mm ²) | 2 x Size 20 (0.5mm ²) 2 x Size 12 (2.5mm ²) | 8 x Size 16 (1.5mm ²) | 10 x Size 20 (0.5mm ²) |
| RATED CURRENT | 13A | (2.5mm) 25A-MACHINED CONT. (2.5mm) 23A-STAMPED CONT. (20#)7.5A-MACHINED CONT. (20#)5A-STAMPED CONT. | 13A | 7.5A-MACHINED CONT. 5A-STAMPED CONT. |
| RATED VOLTAGE | 600V AC/DC | 500V AC/DC | 500V AC/DC | 250V AC/DC |
| DIELECTRIC WITHSTANDING VOLTAGE | 2200V AC | 2000V AC | 2000V AC | 1500V AC |

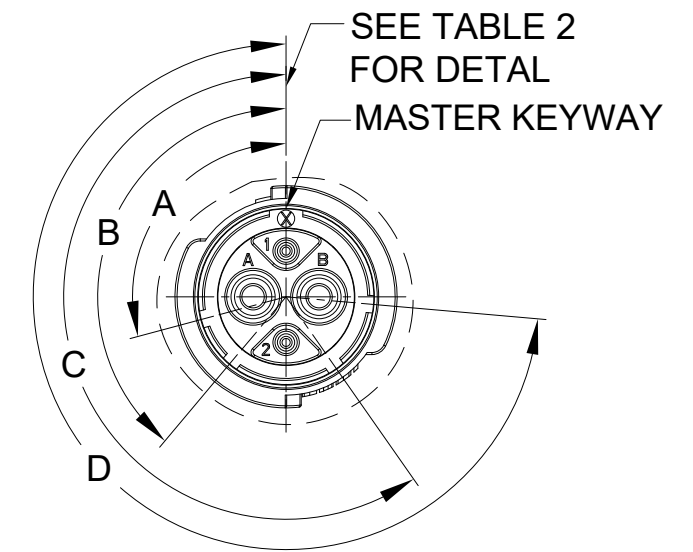


TABLE 2:

| KEY POS | A | B | C | D |
|---------|------|------|------|------|
| N | 105° | 140° | 215° | 265° |
| W | 60° | 140° | 215° | 265° |
| X | 105° | 155° | 215° | 265° |
| Y | 105° | 140° | 225° | 265° |
| Z | 105° | 140° | 215° | 295° |

ORDERING INFORMATION:

FLS012xxxSHEC03

PROTECTION KEY:(SEE TABLE 2):
N KEY(STANADRD VERSION)
W KEY
X KEY
Y KEY
Z KEY

STANDS FOR INSERT ARRANGEMENT:
2 - 4(2+2) CORES.
3 - 3 CORES.
8 - 8 CORES.
10 - 10 CORES.

| QUANTITY | PART NUMBER | DESCRIPTION | ITEM |
|--|-------------|--|---------------------|
| MATERIALS LIST | | | |
| UNLESS OTHERWISE SPECIFIED 1) All dimensions are in metric(mm). 2) Tolerances are as follows: 1 PL DEC ±0.30 2 PL DEC ±0.15 3 PL DEC ±0.08 3) Note reference = | | SIGNATURES DRAWN: JUN APR-26-2023 CHECKED: JOE APR-28-2023 ENGINEER: APPROVAL: TOMMY MAY-27-2022 | DATE |
| MATERIAL SPECIFICATIONS: | | CUSTOMER: | |
| PROCESS SPECIFICATIONS: | | 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. | |
| NEXT ASSY: | | SCALE: NONE | |
| | | <p style="text-align: center;">Amphenol</p> <p>Sine Systems - www.amphenol-sine.com 44724 Morley Drive Clinton Township, MI 48036</p> <p>EcoMate Aquarius,RECEPTACLE, SQUARE FLANGE, xx POSITION, FEMALE,SHELL SIZE 12, END CAP</p> | |
| | | SIZE: B TYPE: C- DWG NO: FLS012xxxSHEC03 | REVISION: A4 |
| | | SHEET 2 OF 3 | |

TITLE: EcoMate Aquarius RECEPTACLE, SQUARE FLANGE, xx POSITION, FEMALE, SHELL SIZE 12, END CAP

DWG NO:

FLS012xxxSHEC03

REV: A4

SH: 2

OF: 2

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

| Machined, Crimp Contacts | | | | |
|--------------------------|------------|--------------------|-------------------------------|------------|
| Part Number | | Contact Size (AWG) | Wire Range (mm ²) | Plating |
| Male | Female | | | |
| MP14M23F | MS14M23F | 14AWG | 2.0-2.5mm ² | Gold Flash |
| MP14M23G5 | MS14M23G5 | 14AWG | 2.0-2.5mm ² | Gold 5μ" |
| MP14M23G10 | MS14M23G10 | 14AWG | 2.0-2.5mm ² | Gold 10μ" |
| MP14M23G15 | MS14M23G15 | 14AWG | 2.0-2.5mm ² | Gold 15μ" |
| MP14M23G30 | MS14M23G30 | 14AWG | 2.0-2.5mm ² | Gold 30μ" |
| MP16M23F | MS16M23F | 18-16AWG | 0.75-1.5mm ² | Gold Flash |
| MP16M23G5 | MS16M23G5 | 18-16AWG | 0.75-1.5mm ² | Gold 5μ" |
| MP16M23G10 | MS16M23G10 | 18-16AWG | 0.75-1.5mm ² | Gold 10μ" |
| MP16M23G15 | MS16M23G15 | 18-16AWG | 0.75-1.5mm ² | Gold 15μ" |
| MP16M23G30 | MS16M23G30 | 18-16AWG | 0.75-1.5mm ² | Gold 30μ" |
| MP20M23F | MS20M23F | 22-20AWG | 0.34-0.50mm ² | Gold Flash |
| MP20M23G5 | MS20M23G5 | 22-20AWG | 0.34-0.50mm ² | Gold 5μ" |
| MP20M23G10 | MS20M23G10 | 22-20AWG | 0.34-0.50mm ² | Gold 10μ" |
| MP20M23G15 | MS20M23G15 | 22-20AWG | 0.34-0.50mm ² | Gold 15μ" |
| MP20M23G30 | MS20M23G30 | 22-20AWG | 0.34-0.50mm ² | Gold 30μ" |
| MP24M23F | MS24M23F | 26-24AWG | 0.14-0.25mm ² | Gold Flash |
| MP24M23G5 | MS24M23G5 | 26-24AWG | 0.14-0.25mm ² | Gold 5μ" |
| MP24M23G10 | MS24M23G10 | 26-24AWG | 0.14-0.25mm ² | Gold 10μ" |
| MP24M23G15 | MS24M23G15 | 26-24AWG | 0.14-0.25mm ² | Gold 15μ" |
| MP24M23G30 | MS24M23G30 | 26-24AWG | 0.14-0.25mm ² | Gold 30μ" |

| Stamped & Formed, Crimp Contacts | | | | |
|----------------------------------|-----------|--------------------|-------------------------------|------------|
| Part Number | | Contact Size (AWG) | Wire Range (mm ²) | Plating |
| Male | Female | | | |
| SP14M2F | SS14M2F | 14AWG | 2.0-2.5mm ² | Gold Flash |
| SP14M2G5 | SS14M2G5 | 14AWG | 2.0-2.5mm ² | Gold 5μ" |
| SP14M2G10 | SS14M2G10 | 14AWG | 2.0-2.5mm ² | Gold 10μ" |
| SP14M2G15 | SS14M2G15 | 14AWG | 2.0-2.5mm ² | Gold 15μ" |
| SP14M2G30 | SS14M2G30 | 14AWG | 2.0-2.5mm ² | Gold 30μ" |
| SP16M2F | SS16M2F | 18-16AWG | 0.75-1.5mm ² | Gold Flash |
| SP16M2G5 | SS16M2G5 | 18-16AWG | 0.75-1.5mm ² | Gold 5μ" |
| SP16M2G10 | SS16M2G10 | 18-16AWG | 0.75-1.5mm ² | Gold 10μ" |
| SP16M2G15 | SS16M2G15 | 18-16AWG | 0.75-1.5mm ² | Gold 15μ" |
| SP16M2G30 | SS16M2G30 | 18-16AWG | 0.75-1.5mm ² | Gold 30μ" |
| SP20M2F | SS20M2F | 22-20AWG | 0.34-0.50mm ² | Gold Flash |
| SP20M2G5 | SS20M2G5 | 22-20AWG | 0.34-0.50mm ² | Gold 5μ" |
| SP20M2G10 | SS20M2G10 | 22-20AWG | 0.34-0.50mm ² | Gold 10μ" |
| SP20M2G15 | SS20M2G15 | 22-20AWG | 0.34-0.50mm ² | Gold 15μ" |
| SP20M2G30 | SS20M2G30 | 22-20AWG | 0.34-0.50mm ² | Gold 30μ" |
| SP24M2F | SS24M2F | 26-24AWG | 0.14-0.25mm ² | Gold Flash |
| SP24M2G5 | SS24M2G5 | 26-24AWG | 0.14-0.25mm ² | Gold 5μ" |
| SP24M2G10 | SS24M2G10 | 26-24AWG | 0.14-0.25mm ² | Gold 10μ" |
| SP24M2G15 | SS24M2G15 | 26-24AWG | 0.14-0.25mm ² | Gold 15μ" |
| SP24M2G30 | SS24M2G30 | 26-24AWG | 0.14-0.25mm ² | Gold 30μ" |

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

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

| Plating Options, All | |
|----------------------|--|
| 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") |

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

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