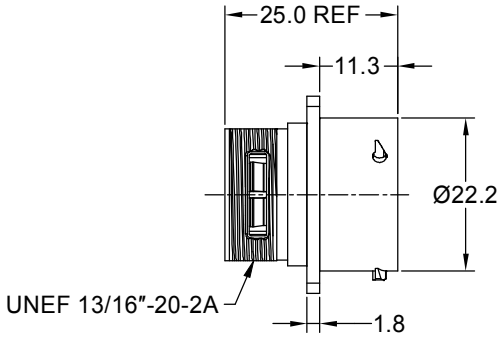
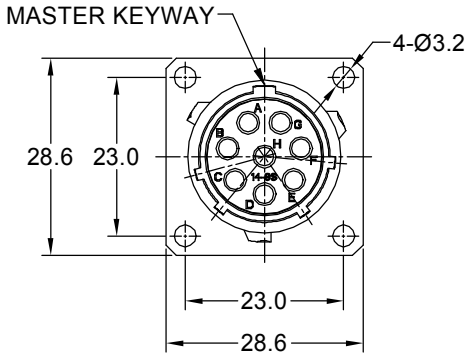
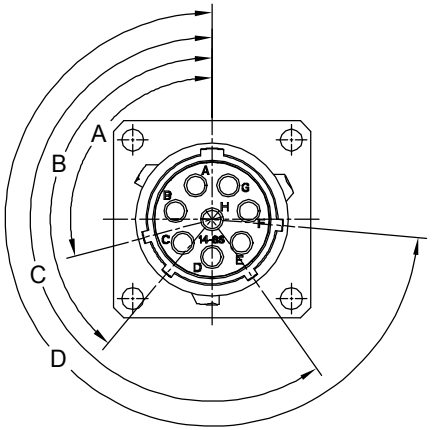
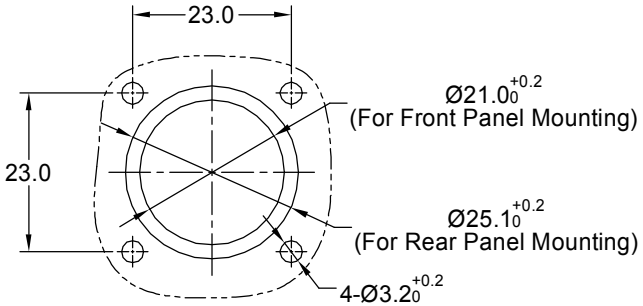
REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
B1	-	RELEASED DRAWING	JULY-07-2014	BEN	TOMMY
B2	-	VOLTAGE UPDATE AND ADD KEY ICON	Nov-23-2020	Ronald	Tommy





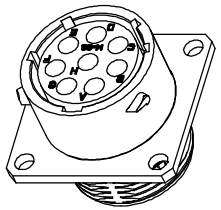




PANEL CUT OUT REFERENCE

KEY POS	PART NUMBER		A	B	C	D
	-40°C ~ 105°C	-40°C ~ 125°C				
N	RT00148SNH	RT00148SNH03	105°	140°	215°	265°
W	RT00148SWH	RT00148SWH03	60°	140°	215°	265°
X	RT00148SXH	RT00148SXH03	105°	160°	215°	265°
Y	RT00148SYH	RT00148SYH03	105°	140°	225°	265°
Z	RT00148SZH	RT00148SZH03	105°	140°	215°	295°

NOTES : (UNLESS OTHERWISE SPECIFIED)
1. MATERIAL :
   SHELL : ZINC ALLOY , NICKEL PLATED.
   INSERT : THERMOPLASTIC , UL94 V-0.
   SEAL GASKET : NBR/SILICONE RUBBER.
   O-RING : NBR/SILICONE RUBBER.
2. SPECIFICATIONS :
   2.1 RATED CURRENT : 13A(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# CONTACTS.
4. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.



	SEE PART NUMBER CHART		
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 | Fractions ±1/64
2 PL DEC ±0.15 | Angles ±1°
3 PL DEC ±0.08
3) Note reference = X

MATERIAL SPECIFICATIONS:

PROCESS SPECIFICATIONS:

NEXT ASSY:

SIGNATURES		DATE
DRAWN:	Ronald	Nov-23-20
CHECKED:	Flan	Nov-24-20
ENGINEER:		
APPROVAL:	Tommy	Nov-25-20
CUSTOMER:		

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Amphenol

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

ECOMATE RM,RECEPTACLE,
SIZE 14,8POS,SOCKET.

SIZE	TYPE	DWG NO:	REVISION
B	C-	RT00148S*Hx	B2

SCALE: NONE SHEET 1 OF 1

TITLE: ECOMATE RM,RECEPTACLE,SIZE 14,8POS,SOCKET.
DWG NO: RT00148S*Hx
REV: B2
SH: 1
OF: 1

ecomate® Aquarius™, Aquarius™ Fathom Lock, RM and RSSM Series

Size 16 Contact & Tooling Options

Machined, Crimp Contacts				
PN: Male	**PN: Female**	**Wire Range (AWG)**	**Wire Range (mm²)**	**Plating**
MP14M23F	MS14M23F	14AWG	2.5mm²	Gold Flash
MP14M23G5	MS14M23G5	14AWG	2.5mm²	Gold 5µ"
MP14M23G10	MS14M23G10	14AWG	2.5mm²	Gold 10µ"
MP14M23G15	MS14M23G15	14AWG	2.5mm²	Gold 15µ"
MP14M23G30	MS14M23G30	14AWG	2.5mm²	Gold 30µ"
MP14M23GE1T	-	14AWG - 16AWG	2.5mm² - 1.5mm²	Tin
MP14M23GE1S	-	14AWG - 16AWG	2.5mm² - 1.5mm²	Silver
MP14M23GE1F	-	14AWG - 16AWG	2.5mm² - 1.5mm²	Gold Flash
MP14M23GE1G10	-	14AWG - 16AWG	2.5mm² - 1.5mm²	Gold 10µ"
MP14M23GE1G15	-	14AWG - 16AWG	2.5mm² - 1.5mm²	Gold 15µ"
MP14M23GE1G30	-	14AWG - 16AWG	2.5mm² - 1.5mm²	Gold 30µ"
MP16M23F	MS16M23F	16AWG - 18AWG	1.5mm² - 0.75mm²	Gold Flash
MP16M23G5	MS16M23G5	16AWG - 18AWG	1.5mm² - 0.75mm²	Gold 5µ"
MP16M23G10	MS16M23G10	16AWG - 18AWG	1.5mm² - 0.75mm²	Gold 10µ"
MP16M23G15	MS16M23G15	16AWG - 18AWG	1.5mm² - 0.75mm²	Gold 15µ"
MP16M23G30	MS16M23G30	16AWG - 18AWG	1.5mm² - 0.75mm²	Gold 30µ"
MP16M23GE1T	-	16AWG - 18AWG	1.5mm² - 0.75mm²	Tin
MP16M23GE1S	-	16AWG - 18AWG	1.5mm² - 0.75mm²	Silver
MP16M23GE1F	-	16AWG - 18AWG	1.5mm² - 0.75mm²	Gold Flash
MP16M23GE1G10	-	16AWG - 18AWG	1.5mm² - 0.75mm²	Gold 10µ"
MP16M23GE1G15	-	16AWG - 18AWG	1.5mm² - 0.75mm²	Gold 15µ"
MP16M23GE1G30	-	16AWG - 18AWG	1.5mm² - 0.75mm²	Gold 30µ"
MP20M23F	MS20M23F	20AWG - 22AWG	0.50mm² - 0.34mm²	Gold Flash
MP20M23G5	MS20M23G5	20AWG - 22AWG	0.50mm² - 0.34mm²	Gold 5µ"
MP20M23G10	MS20M23G10	20AWG - 22AWG	0.50mm² - 0.34mm²	Gold 10µ"
MP20M23G15	MS20M23G15	20AWG - 22AWG	0.50mm² - 0.34mm²	Gold 15µ"
MP20M23G30	MS20M23G30	20AWG - 22AWG	0.50mm² - 0.34mm²	Gold 30µ"
MP24M23F	MS24M23F	24AWG - 26AWG	0.25mm² - 0.14mm²	Gold Flash
MP24M23G5	MS24M23G5	24AWG - 26AWG	0.25mm² - 0.14mm²	Gold 5µ"
MP24M23G10	MS24M23G10	24AWG - 26AWG	0.25mm² - 0.14mm²	Gold 10µ"
MP24M23G15	MS24M23G15	24AWG - 26AWG	0.25mm² - 0.14mm²	Gold 15µ"
MP24M23G30	MS24M23G30	24AWG - 26AWG	0.25mm² - 0.14mm²	Gold 30µ"

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

Machined, Tooling	
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

Stamped & Formed, Tooling	
Part Number	**Description**
QXRT16	Contact Extraction Tool, #16 (Ø 1.6) Contact
MFX-3954	Hand Tool, Stamped & Formed Contact, Size 16, 14-20AWG
MFX-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

Contact Options	
Symbol	**Details**
GE1	Longer contact used to establish ground / first mate-last break within connector

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

ecomate® RM and RSSM Series

Size 16 PC Tail Contact & Tooling Options

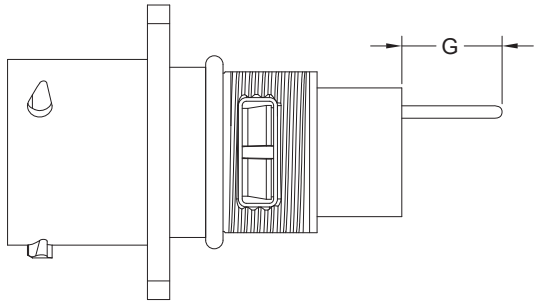
Machined, PC Tail Contacts				
Part Number		Contact Size (AWG)	Description	Plating
Male	Female			
MP16M12E06F	MS16M12E06F	16AWG	Short Version	Gold Flash
MP16M12E06G5	MS16M12E06G5	16AWG	Short Version	Gold 5µ"
MP16M12E06G10	MS16M12E06G10	16AWG	Short Version	Gold 10µ"
MP16M12E06G15	MS16M12E06G15	16AWG	Short Version	Gold 15µ"
MP16M12E06G30	MS16M12E06G30	16AWG	Short Version	Gold 30µ"
MP16M12E09F	MS16M12E09F	16AWG	Long Version	Gold Flash
MP16M12E09G5	MS16M12E09G5	16AWG	Long Version	Gold 5µ"
MP16M12E09G10	MS16M12E09G10	16AWG	Long Version	Gold 10µ"
MP16M12E09G15	MS16M12E09G15	16AWG	Long Version	Gold 15µ"
MP16M12E09G30	MS16M12E09G30	16AWG	Long Version	Gold 30µ"

Stamped & Formed , PC Tail Contacts				
Part Number		Contact Size (AWG)	Description	Plating
Male	Female			
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

PCB Contact Dimensions - Nominal Length G
(Size 20 PC Tail dimensions for ecomate® RM and ecomate® RSSM connectors only.)

Pin Contact						
Shell Size	MP20W12E06xx	MP20W12E09xx	MP16M12E04xx	MP16M12E06xx	MP10B12E05xx	MP10B12E08xx
10	4.0mm	9.5mm	4.0mm	8.0mm	-	-
12	4.0mm	9.5mm	4.0mm	8.0mm	5.0mm	-
14	4.0mm	9.5mm	4.0mm	8.0mm	5.2mm	-
16	4.0mm	9.5mm	4.0mm	8.0mm	-	-
18	-	9.5mm	4.0mm	8.0mm	-	-
20	-	9.5mm	4.0mm	8.0mm	-	-
24	-	-	-	3.9mm	-	-

Socket Contact						
Shell Size	MP20W12E06xx	MP20W12E09xx	MP16M12E04xx	MP16M12E06xx	MP10B12E05xx	MP10B12E08xx
10	3.3mm	8.5mm	2.4mm	3.0mm	-	-
12	3.3mm	8.5mm	2.4mm	3.0mm	-	-
14	3.3mm	8.5mm	2.4mm	3.0mm	-	-
16	3.3mm	8.5mm	2.4mm	3.0mm	-	-
18	--	8.5mm	2.4mm	-	-	-
20	--	8.5mm	2.4mm	-	-	-
24	-	-	-	-	-	-



Standard Quantity Order Options	
Machined	Bulk, 500 Pieces
Stamped & Formed	-

NOTE: For ecomate® Aquarius™ PC Tail options, see our **ecomate® Aquarius™ PCB Mount Jam Nut Receptacles Flyer** online at www.amphenol-sine.com.