



**em** eco|mate® AQUARIUS™

**PCB Mounted Jam Nut Receptacles**  
for Heavy Duty, Harsh Environment Applications

Available in 6 Shell Sizes and 18 Insert Arrangements

Amphenol Sine Systems' ecomate® Aquarius™ PCB Mounted Jam Nut Receptacles are designed specifically for mounting to Printed Circuit Boards (PCB) or Flex Circuits. As part of the ecomate® Aquarius Waterproof Connector series, they provide an IP67/69K waterproof rating when in a mated condition for industrial applications, and incorporates the latest technology in high impact thermoplastic design, offering advantages of lightweight, lower-cost, sealed connector systems on the market today. ecomate® Aquarius Waterproof Connectors are ideal for Indoor/Outdoor applications and the MIL-DTL-26482 based design provides a quick, reliable, 1/3 turn bayonet coupling.

**Key Features**

- **Built-In Stand-Off's** for consistent height off PCB for ease of cleaning
- **Optional Locking Posts** for secure mounting for harsh environments
- **Lower Profile** than industry standard Jam Nut receptacles
- Bayonet Rapid Coupling System
- Colored Rings for Visual Identification Available



**Applications:** Solar Energy – Power; Off-Road – Mining, Railway, Marine; Instrumentation – Measurement, Water Metering; Building Automation - HVAC, Lighting, Closed Circuit TV; Telecom – Data Infrastructure, Traffic Control

**ecomate® Aquarius™ PCB Mounted Jam Nut Receptacles - Technical Specifications**

IP Rating	IP67/69K in mated condition	Dielectric Withstanding Voltage	Less than 2 milliamps current leakage @2000V AC
Housing Body/Insert	Thermoplastic UL94-VO	Insulation Resistance	5000 megohms minimum of 25°C
O-Ring/Seal Gasket	Silicone Rubber	Min. Mating Cycles	>500
Jam Nut Material	Aluminum Alloy, Black Anodizing	UV/Corrosion Resistance	Salt Spray Test 500 Hrs
Contacts	Copper Alloy, Gold-Plated (See specific datasheets)	Fluid Resistance	Gas, Oil, Mineral Oil, Acid Bath, Basic Bath
Locking Posts	Copper Alloy, Tin-Plated	Thermal Shock	No cracking/chipping/leaking after 20 test cycles from -55°C to 125°C
Contact Current Ratings	16# 13A Max; 20# 7.5A Max	Vibration	10-2000 Hz, Level of 20 G's
Max. Voltage Rating (AC/DC)	Up to 600V	Approvals	UL ECBT2
Operating Temperature	-40°C to 125°C (Silicone Rubber Seal); -40°C to 105°C (NBR Seal)	RoHS	Compliant

**ecomate® Aquarius™ PCB Mounted Jam Nut Receptacles - 6 Shell Sizes/18 Insert Arrangements (For reference only)**

<b>Size 8</b> 3 Pos 3 x 7A 250V	<b>Size 8</b> 4 Pos 3 x 7A 250V	<b>Size 10</b> 3 Pos 3 x 13A 500V	<b>Size 10</b> 4 Pos 3 x 13A 500V	<b>Size 10</b> 4(2+2)Pos 2 x 13A (A,B) 2 x 5A or 2 x 7.5A (1,2) 500V	<b>Size 10</b> 6 Pos 6 x 5A or 6 x 7.5A 250V	<b>Size 12</b> 3 Pos 3 x 13A 600V	<b>Size 12</b> 4 Pos 4 x 13A 500V	<b>Size 12</b> 8 Pos 8 x 13A 500V
<b>Size 12</b> 10 Pos 10 x 5A or 10 x 7.5A 250V	<b>Size 14</b> 7 Pos 7 x 13A 500V	<b>Size 14</b> 8 Pos 8 x 13A 500V	<b>Size 14</b> 12 Pos 12 x 13A 500V	<b>Size 14</b> 19 Pos 19 x 5A or 19 x 7.5A 250V	<b>Size 16</b> 26 Pos 26 x 5A or 26 x 7.5A 250V	<b>Size 18</b> 23 Pos 23 x 13A 500V	<b>Size 18</b> 32 Pos 32 x 5A or 32 x 7.5A 250V	





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**ecomate® Aquarius™ PCB Mounted Jam Nut Receptacles**

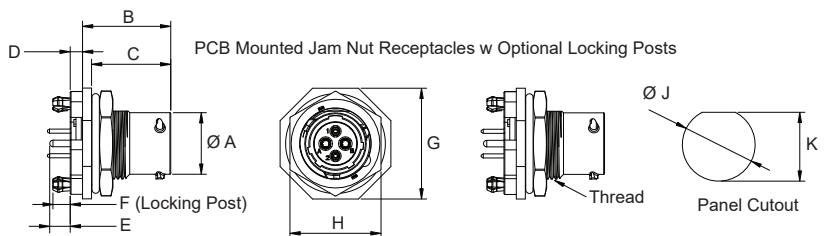
Part Number	Description	Amperage	Voltage
RTS78ND3S	3 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 8, ecomate® Aquarius™, NBR Seal	7A	250V
RTS78ND4S	4 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 8, ecomate® Aquarius™, NBR Seal	7A	250V
RTS710ND3S03	3 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 10, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS710ND2S03	4 (2+2) Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 10, ecomate® Aquarius™, Silicone Rubber Seal	13A & 7.5A	500V
RTS710ND4S03	4 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 10, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS710ND6S03	6 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 10, ecomate® Aquarius™, Silicone Rubber Seal	7.5A	250V
RTS712ND3S03	3 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 12, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS712ND4S03	4 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 12, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS712ND8P03	8 Position, Jam Nut Receptacle, PCB Mounted, Pin, Size 12, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS712ND8S03	8 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 12, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS712ND10S03	10 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 12, ecomate® Aquarius™, Silicone Rubber Seal	7.5A	250V
RTS714ND7S03	7 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 14, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS714ND8S03	8 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 14, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS714ND12S03	12 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 14, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS714ND19P03	19 Position, Jam Nut Receptacle, PCB Mounted, Pin, Size 14, ecomate® Aquarius™, Silicone Rubber Seal	7.5A	250V
RTS714ND19S03	19 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 14, ecomate® Aquarius™, Silicone Rubber Seal	7.5A	250V
RTS716ND19S03	19 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 16, ecomate® Aquarius™, Silicone Rubber Seal	7.5A	250V
RTS716ND26S03	26 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 16, ecomate® Aquarius™, Silicone Rubber Seal	7.5A	250V
RTS718ND23S03	23 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 18, ecomate® Aquarius™, Silicone Rubber Seal	13A	500V
RTS718ND32S03	32 Position, Jam Nut Receptacle, PCB Mounted, Socket, Size 18, ecomate® Aquarius™, Silicone Rubber Seal	7.5A	250V

**Note:** RTS710ND3S0332 for optional PCB Mounted Jam Nut Receptacle w Locking Post (Must add 32 to end of standard part number.)

**ecomate® Aquarius™ PCB Mounted Jam Nut Receptacles - Accessories**

Image	Part Number	Description	Size
	RTS(XX)CCR(X)	ecomate® Aquarius™, Coding Color Ring - Available in Green (G), Yellow (Y) or Red (R) <b>Example:</b> RTS10CCRG = ecomate® Aquarius™, Coding Color Ring, Green	08, 10, 12, 14, 16, 18
	RTS0(XX)DCG	ecomate® Aquarius™, Dust Cap for Receptacle <b>Example:</b> RTS010DCG = ecomate® Aquarius™, Dust Cap for Receptacle, Size 10	10, 12, 14, 16, 18

**ecomate® Aquarius™ PCB Mounted Jam Nut Receptacles w Locking Posts - Dimensions (in mm)**



Size	Ø A	B	C	D	E	F	G	H	Thread	Ø J	K
08	11.9	21.7	19.5	2.9	5.0	4.1	24.0	19.1	7/16" - 28 UNEF	14.6	13.8
10	15.0	21.5	19.3	3.0	5.0	4.1	27.0	22.2	9/16" - 24 UNEF	17.8	16.8
12	19.0	21.5	19.3	3.0	5.0	4.1	27.0	31.7	11/16" - 24-2A UNEF	22.5	21.2
14	22.2	21.5	19.3	3.0	5.0	4.1	35.0	30.2	13/16" - 20 UNEF	25.6	24.2
16	25.3	21.5	19.3	3.0	5.0	4.1	38.1	33.3	15/16" - 20 UNEF	28.9	27.6
18	28.6	21.5	19.3	3.0	5.0	4.1	41.3	36.5	1" 1/16-18 UNEF	32.1	30.6

**For more information, contact:** Customer Service, +1 800 394 7732, [csr@amphenol-sine.com](mailto:csr@amphenol-sine.com)

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