



em eco|mate® AQUARIUS™

Waterproof Circular Connectors for Indoor/Outdoor Applications

Available in 8, 10, 12, 14, 16, and 18 Shell Sizes and 27 Insert Arrangements
for Power, Mixed Power/Signal, Coax and RJ45 layouts.

Amphenol Sine Systems' ecomate® Aquarius Waterproof Connectors 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. The pin and socket contacts are available on reels, in strip form, for high volume, low cost, automatic machine terminations. They are also available in loose piece, machined, contact forms and can be shared with the ecomate® RM Rugged Metal Connectors multi-way connector series.

Key Features

- IP67/69K in mated condition
- Bayonet Rapid Coupling System
- Power, Mixed Power/Signal, Coax and RJ45 Layouts
- Machined, Stamped & Formed, and PCB Contacts
- Lightweight, High-Strength, Impact Resistant, Thermoplastic Housing

- UL94-VO Flammability Rating
- MIL-DTL-26482-based Design
- UV/Corrosion Resistant: Salt Spray Test 500 hours
- 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

Available Connector Configurations

 Square Flange Receptacle	 Square Flange Receptacle w Cord Grip	 Square Flange Receptacle w End Cap	 Plug w Cord Grip	 Plug w End Cap
 In-Line Receptacle w Cord Grip	 Jam Nut Receptacle	 Jam Nut Receptacle w End Cap	 Jam Nut Receptacle PCB Mounted	 Plug w Heavy Duty Coupling Nut (Coax or RJ45)

em eco|mate® Family



Standard products. Custom solutions
Customer Service +1 800 394 7732

ecomate® Aquarius™ - Technical Specifications

IP Rating	IP67/69K in mated condition
Flammability Rating	UL94-VO
Fluid Resistance	Gas, oil, mineral oil, acid bath, basic bath
RoHS Compliant	RoHS ALL materials meet the requirements of the European Directive 2002/95/EC, Issue 13.2.2003
Approvals	UL ETCB2 & UL ETCB8 Pending
Temperature Range	-40°C to +125°C (See datasheets)
Max. Current (Amperage)	45A (See datasheets)
Max. Voltage Rating (AC/DC)	500V (See datasheets)
Contact Resistance	#16 <6 mΩ #20 <15 mΩ 2.5mm < 5 mΩ
Min. Mating Cycles	>500 mating cycles per MIL-C-26482

Vibration	10-2000 Hz, level of 20 G's
Test Voltage Rating	1500V or 2000V
Overvoltage Category	III
Strain Relief Clamp Range	1.5 - 14.0mm
Wire Range	10-28AWG (See datasheets)
Housing Body	Thermoplastic UL94-VO
Insulation Resistance	5000 megohms min. of 25°C
Contacts	Copper Alloy (Gold, Tin & Silver Plating are available)
Sealing Material	SR/NBR
Thermal Shock	No cracking, chipping or leaking after 20 test cycles from -55°C to 125°C

Shell Size	Contact #8	Contact #16 (Ø 1.6)	Mixed Power & Signal	Contact 2.5mm	Contact #20 (Ø 1.0)	RJ45	
8	-	*Shell Size 8 ships pre-loaded with solder contacts.				 3 positions 7A/250V	 4 positions 7A/250V
10	-	 3 positions 13A/500V	 4 positions 13A/500V	 4 positions Contact #16 (Ø 1.6) & #20 (Ø 1.0) 13A & 7.5A/5A 500V AC/DC	 6 positions 5A, 7A(machined) 250V	-	
12	-	 3 positions 13A/600V	 4 positions 13A/500V	 8 positions 13A 500V	 4 positions Contact #16(Ø 1.6) & #20 (Ø 1.0) 23A & 7.5A/5A 350V AC/DC	 10 positions 5A, 7.5A(machined) 250V	-
14	 3 positions Contact #8 45A/600V AC/DC	 7 positions 13A/500V AC/DC	 8 positions 13A/500V AC/DC	 12 positions 13A/500V	 4 positions Contact 2.5mm #16 (Ø 1.6); 23A & 13A 500V/AC/DC	 4 positions 23A/500V AC/DC	 19 positions 5A, 7.5A (machined) 250V
16	 4 positions Contact #8 (Ø 3.6) 45A, 500V AC/DC	 19 positions Contact #16 (Ø 1.6) 13A, 500V	 9 positions Contact 2.5mm & #16 (Ø 1.6) 23A & 13A 350V AC/DC	 26 positions #20 (Ø1.0) 5A, 7.5A(machined) 250V	-	-	
18	-	 23 positions Contact #16 (Ø 1.6) 13A 500V	 13 positions (10) #16(Ø1.6), 13A,500V (3)Coax RG316/U, 1A,500V	 8 positions Contact 2.5mm 23A 500V AC/DC	 32 positions Contact #20 (Ø 1.0) 5A, 7.5A 250V	 8 position RJ45 1.5A, 125V	

For more information, contact: Customer Service, +1 800 394 7732, csr@amphenol-sine.com

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