



# WATERPROOF

Registered



ISO 9001

# EDACON

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40 Tiffield Road., Scarborough, Ontario, M1V 5B6, Canada

Telephone: (416) 754-3322 Facsimile: (416) 754-3299

e-mail: edac@edac.net Web Page: <http://www.edac.net>

**Your Connection to Quality and Service**

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## ENGINEERING NOTES:

The Waterproof series of connectors are made using the following materials and processes.

The insulator housing is made of high impact flame retardant (UL 94-V0) Polyester (PBT). The water seals are moulded out of silicone rubber. The housings use latching mechanisms to hold and lock the mating halves together.

The mated connectors have been tested for various levels of resistance to water ingress. These test vary from a level of "0" which means "without protection" to "8" which is a fully submersible connector.

The contacts are made of brass or phosphor bronze and are plated with nickel (to improve wear resistance and reduce galvanic corrosion), then they are plated with a tin-lead alloy for conductivity.

Crimp contacts are available for wire sizes of 28 to 22 AWG for the 566 series, and for 22 to 16 AWG for the 568 and 570 series.

## APPLICATION NOTES:

The typical application of these connectors includes any place where there is the chance of water contaminating the circuit. These applications have included: bathrooms, hot water heaters, washing machines, water purifiers, outdoor motors, frozen food show cases, dishwashers and most outdoor applications.

The Waterproof connectors have been approved for use in environments which require a protection grade of "4" (Splash-Proof). The connectors have successfully passed testing to a protection grade of "7".

The following chart describes the protection grades, class descriptions, and meanings of the various moisture/water protection grades.

Protection Grade	Class Description	Meaning
0	-	No Moisture Protection
1	Drip-Proof Type I	No harmful influence by a drip of water falling perpendicularly.
2	Drip-Proof Type II	No harmful influence by a drip of water falling from a range covering 15 from perpendicular.
3	Spray-Proof	No harmful influence by a rainfall of water falling from a range covering 60 from perpendicular.
4	Splash-Proof	No harmful influence by a splash of water from any direction.
5	Jet-Proof	No harmful influence by a jet of water from any direction.
6	Watertight	No ingress of water inside by a jet of water from any direction.
7	Immersion-Proof	No ingress of water inside when immersed in water under specified conditions.
8	Submersible	Always useable when submerged in water of specified pressure.

Waterproof Standard descriptions Based on JIS C 0920-1993

The waterproof connectors are available in a wire-to-wire or a wire-to-board configuration. When used in a wire-to-board application, a silastic conformal coating may be used to seal the board mounted connector.



# 565 SERIES WATERPROOF CONNECTOR

## Plug and Receptacle



### FEATURES

- Fully waterproof connector
- Plastic latch provides locking mechanism
- Plug and Receptacle in 2, 3 and 5 Contact positions
- Tools available for Contact Installation, Removal and Crimping
- Able to carry current up to 3A

### SPECIFICATIONS

- Insulator Material: PBT (UL94V-0)
- Contact Material: PB / Tin plating
- Wire Housing Seal: Silicone Rubber
- Current Rating: 3 Amperes maximum
- Contact Resistance: 10 m $\Omega$  maximum
- Insulator Withstanding Voltage: 100 VAC rms at Sea Level
- Insulation Resistance: 1000 M $\Omega$  minimum at 500 VDC
- Operating Temperature: -40 to +105 Degrees C
- Waterproof Grade 4
- Insulation diameter from .039" (1.0 mm) to .067" (1.7 mm) can be accommodated using different wire seals and contacts

### 565 SERIES ORDERING CODE

Example Part Number 565 - 003 - 000 - 3 1 0

Series \_\_\_\_\_  
Total Number of Contacts \_\_\_\_\_  
Contact Code \_\_\_\_\_  
Style \_\_\_\_\_  
Wire Diameter \_\_\_\_\_  
Termination \_\_\_\_\_

Series 565

Total Number of Contacts 002, 003, or 005

Contact Code 000 No Contacts Assembled

Style 3 Plug (Housing Black)  
4 Receptacle (Housing Black)  
9 Special (Consult Factory)

Wire Diameter 1 AWG 22 to 28 (Seal Color - Yellow)  
Insulator Dia. 0.39" (1.0 mm) to .051" (1.30 mm)

Termination 0 Wire Crimp terminals required

#### Ordering Code Notes

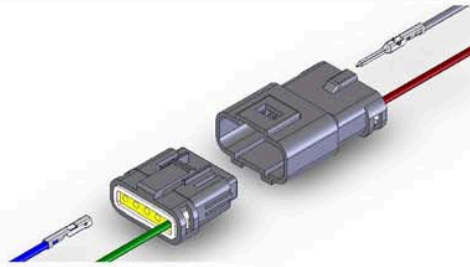
- 1) Crimp contacts are available for the 565 series connectors  
Contacts may be ordered separately for pre-wired or select position assembly.

Part Number	Description
565-290-711	Male contact - AWG 22 to 28
565-290-721	Female contact - AWG 22 to 28

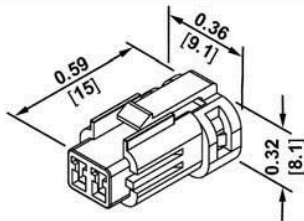
- 2) For contact installation, removal and crimping tool, consult factory.
- 3) Insulator design prevents improper mating of individual plug and receptacle.

# 565 SERIES WATERPROOF CONNECTOR

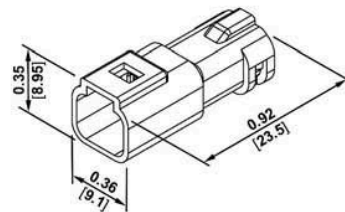
## Plug and Receptacle



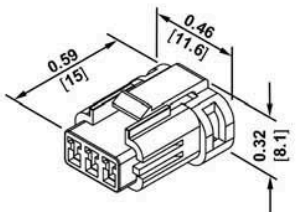
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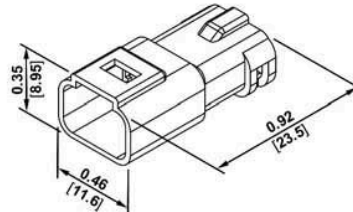
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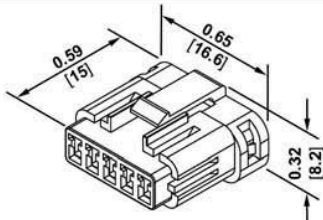
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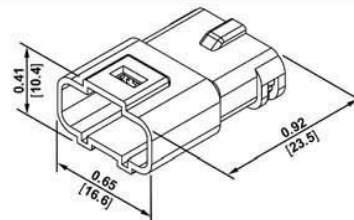
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565-005-000-410 (SML GA)

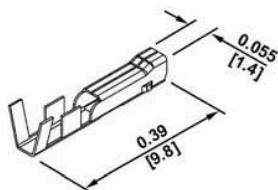


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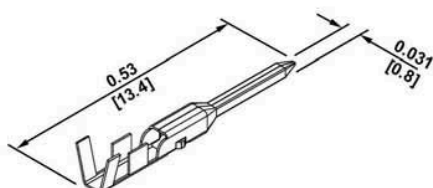
### FEMALE TERMINAL

565-290-721 AWG# 22~28



### MALE TERMINAL

565-290-711 AWG# 22~28



### ASSEMBLY LAYOUT

- ① RETAINER
- ② WIRE SEAL
- ③ M CONTACT
- ④ HOUSING SEAL
- ⑤ PLUG INSULATOR
- ⑥ RECETPACLE HOUSING
- ⑦ F CONTACT

