# 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网,版权归原作者所有。如读者和版权方有任何异议请及时告之,我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译,其目的是协助用户阅读,该译文无法自动跟随原稿更新,同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料,来自厂商的技术支持或者使用者的心得体会等,其内容可能存在描 叙上的差异,建议读者做出适当判断。
- 4.如需与我们联系,请发邮件到marketing@iczoom.com,主题请标有"数据手册"字样。

# **Read Statement**

- 1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
- 2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
- 3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
- 4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

# WATERPROOF

Registered



ISO 9001



an EDACOM company



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

| Series    | Page |
|-----------|------|
| 556       | 8    |
| 566       | 2    |
| 566 Tools | 7    |
| 568       | 6    |
| 568 Tools | 7    |
| 570       | 4    |
| 570 Tools | 7    |

## **TABLE OF CONTENTS**

| Products                 | Page |
|--------------------------|------|
| Application Notes        | 1    |
| Water Proof Connectors   | 5    |
| Discrete wire Connectors | 8    |

## **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 phosper 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.

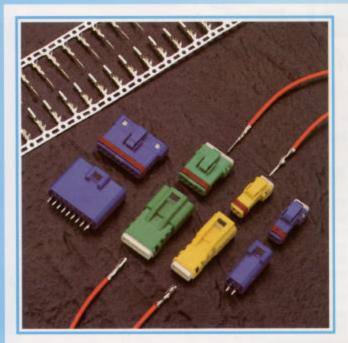
| Protection<br>Grade | Class<br>Description  | Meaning  |
|---------------------|-----------------------|--|
| 0                   | -                     | No Moisture Protection   |
| 1                   | Drip-Proof<br>Type I  | No harmful influence by a drip of water falling perpendicularly.                                   |
| 2                   | Drip-Proof<br>Type II | No harmful influence by a drip of water<br>falling from a range covering 15 from<br>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-<br>Proof   | No ingress of water inside when<br>immersed in water under specified<br>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.



Plug, Receptacle & Board Mount



## **FEATURES**

- · Fully waterproof connector
- Plastic latch provides locking mechanism
- Plug and Receptacle in 1, 3, and 5 Contact positions
- Board mount style available in 2, 3, 5 and 9 contact positions
- Tools Available for Contact Installation, Removal and Crimping
- Able to carry current up to 2 A

#### SPECIFICATIONS

- Insulator Material: PBT (UL94V-0)
- Contact Material: PB / Tin plating
- Wire Housing Seal: Silicone Rubber
- Current Rating: 2 Amperes maximum
- Contact Resistance: 10m Ω Maximum
- Insulator Withstanding Voltage: 1000 V AC rms at Sea Level
- Insulation Resistance: 1000M Ω Minimum at 500 VDC
- Operating Temperature: -40 to +105 Degrees C
- Rated Voltage: 250 V
- Waterproof Grade 4
- Insulation diameter from .039" (1.0mm) to .059" (1.5mm) can be accommodated using different wire seals.

# 566 SERIES ORDERING CODE Evample Part Number 566 - 003 - 000 - 1 1 0

| LXample F           | art Numb    | ei <u>500</u> - | 000 - 00 | - 1 |
|---------------------|-------------|-----------------|----------|-----|
| Series —            |             |                 |          |     |
| <b>Total Number</b> | of Contacts |                 |          |     |
| <b>Contact Code</b> |             |                 |          |     |
| Style-              |             |                 |          |     |
| Wire Diameter       |             |                 |          |     |
| Termination -       |             |                 |          |     |

| Series                   | 566                            |
|--------------------------|--------------------------------|
| Total Number of Contacts | 002, 003, 005 or 009           |
| Contact Code 1.2         |                                |
| 000                      | No Contacts Assembled          |
| 420                      | Board Mount Contacts Installed |
| Style <sup>3</sup>       |                                |
| 1                        | Plug                           |
| 2                        | Receptacle                     |

| Wire I | Diameter <sup>4</sup>                           |
|--------|---|
| 1      | AWG 28 to 26                                    |
| 9      | Insulation Dia039 " (1.0 mm) to .049" (1.25 mm) |
| 2      | AWG 24 to 22                                    |
|        | Insulation Dia049* (1.25 mm) to .059" (1.5 mm)  |

| Termination |                               |
|-------------|-------------------------------|
| 0           | Wire crimp terminals required |
| 1           | PC Board Mount                |

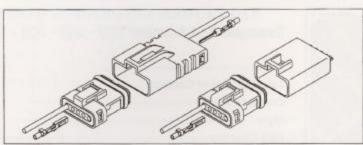
## **Ordering Code Notes**

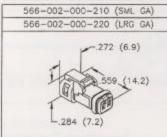
 Crimp contacts are available for the 566 series connectors. Contacts may be ordered separately for pre-wired or select position assembly.

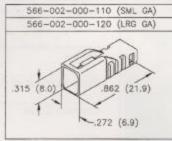
| Part Number | Description    |
|-------------|----------------|
| 566-290-711 | Male contact   |
| 566-290-721 | Female contact |

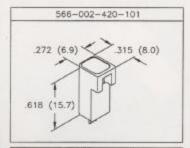
- For contact installation, removal and crimping tools, refer to page 7.
- Insulator design prevents improper mating of individual plug and receptacle.

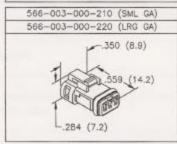
Plug, Receptacle & Board Mount

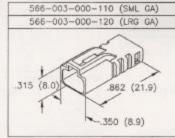


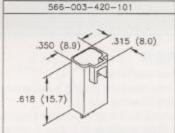


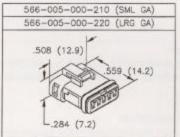


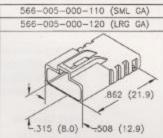




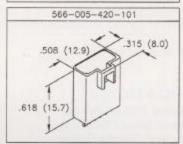


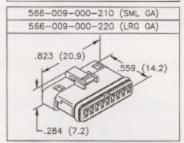




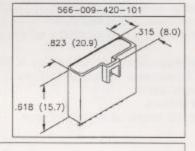


ASSEMBLY LAYOUT

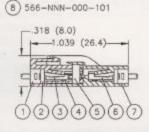




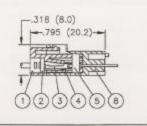
| 1) RETAINER           |
|-----------------------|
| 2) WIRE SEAL          |
| 3 F TERMINAL          |
| 4 566-NNN-000-210/220 |
| 5 HOUSING SEAL        |
| (6) M TERMINAL        |



| M TERMINAL  |
|-------------|
| 020 (0.5)   |
|             |
| 1           |
| F.028 (0.7) |
| 492         |
| (12.5)      |
|             |



7) 566-NNN-000-110/120



Plug, Receptacle & Board Mount



## **FEATURES**

- Fully waterproof connector
- Plastic latch provides both locking mechanism and polarity
- 5.8 mm Contact Spacing
- Plug and Receptacle in 2 or 3 Contact positions
- · Board Mount Style available in 1, 2 or 3 contact positions
- Contact Termination Options include Crimp and P.C. Tail
- Tools Available for Contact Installation, Removal and Crimping
- · Able to carry large current up to 10 A

#### **SPECIFICATIONS**

- Insulator Material: PBT (UL94V-0)
- · Contact Material: Brass / Tin plating
- Wire Housing Seal: Silicone Rubber
- Current Rating: 10 Amperes maximum
- Contact Resistance: 10m Ω Maximum
- Insulator Withstanding Voltage: 1700 V AC rms at Sea Level
- Insulation Resistance: 1000M Ω Minimum at 500 VDC
- Operating Temperature: -40 to +105 Degrees C
- · Rated Voltage: 300 V
- Waterproof Grade 4
- · For use with PC boards up to (.063") 1.6mm

## **570 SERIES ORDERING CODE**

| Example Part      | Nulliber 570 | - 003 - 000 - 1 0 |
|-------------------|--------------|-------------------|
| Series —          |              |                   |
| Total Number of C | ontacts-     |                   |
| Contact Code -    |              |                   |
| Style-            |              |                   |
| Wire Diameter -   |              |                   |
| Termination-      |              |                   |

| Series                   | 570                            |
|--------------------------|--------------------------------|
| Total Number of Contacts | 001, 002 or 003                |
| Contact Code 1,2         |                                |
| 000                      | No Contacts Assembled          |
| 420                      | Board Mount Contacts Installed |
| Style 3                  |                                |
| 1                        | Plug                           |
| 2                        | Receptacle                     |

| Wire Diamete | r 4             | W - W - W - W | V-10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 |
|--------------|-----------------|---------------|---|
| 0            | None installed; | both contacts | and water seals<br>sold separately      |

| Termination |                               |
|-------------|-------------------------------|
| 0           | Wire crimp terminals required |
| 1           | PC Board Mount                |

## **Ordering Code Notes**

Crimp contacts are available for the 570 series connectors.
 Contacts may be ordered separately for pre-wired or select position assembly.

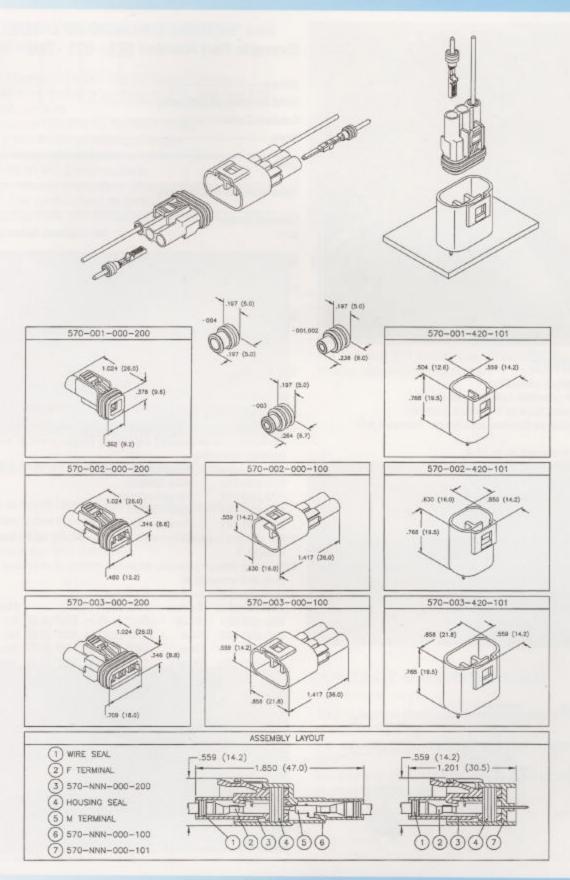
| Part Number | Description                           |
|-------------|---------------------------------------|
| 570-290-711 | Male contact for smaller gauge wire   |
| 570-290-721 | Female contact for smaller gauge wire |
| 570-290-731 | Male contact for larger gauge wire    |
| 570-290-741 | Female contact for larger gauge wire  |
|             |                                       |

- For contact installation, removal and crimping tools, refer to page 7.
- Insulator design prevents improper mating of individual plug and receptacle.
- 4) Wire Seals are available as follows:

| Part Number | Colour | Insulation Dia             | Flange |
|-------------|--------|----------------------------|--------|
| 570-260-001 | Black  | .067" (1.7) to .075" (1.9) | No     |
| 570-260-002 | Blue   | .079" (2.0) to .102" (2.6) | No     |
| 570-260-003 | Blue   | .083" (2.1) to .106" (2.7) |        |
| 570-260-004 | Brown  | .106" (2.7) to .122" (3.1) |        |



Plug, Receptacle & Board Mount



Plug and Receptacle



## **FEATURES**

- Fully waterproof connector
- Plastic latch provides locking mechanism
- Plug and Receptacle in 1 Contact position
- Tools Available for Contact Installation, Removal and Crimping
- Able to carry current up to 15 A

#### SPECIFICATIONS

- Insulator Material: PBT (UL94V-0)
- · Contact Material: Brass / Tin plating
- Wire Housing Seal: Silicone Rubber
- Current Rating: 15 Amperes maximum
- Contact Resistance: 10m Ω Maximum
- Insulator Withstanding Voltage: 1700 V AC rms at Sea Level
- Insulation Resistance: 1000M Ω Minimum at 500 VDC
- Operating Temperature: -40 to +105 Degrees C
- Rated Voltage: 300 V
- Waterproof Grade 4

## **568 SERIES ORDERING CODE**

Series

Total Number of Contacts

Contact Code

| Contact Code             |                       |
|--------------------------|-----------------------|
| Style —                  |                       |
| Series                   | 568                   |
| Total Number of Contacts | 001                   |
| Contact Code 1,2         |                       |
| 000                      | No Contacts Assembled |
| Style 3                  |                       |
| 1                        | Plug                  |

Wire Diameter \*

None installed; both contacts and water seals sold separately

Receptacle

Termination

Wire crimp terminals required

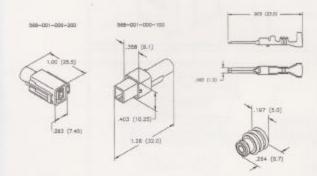
#### **Ordering Code Notes**

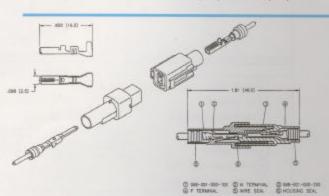
 Crimp contacts are available for the 568 series connectors.
 Contacts may be ordered separately for pre-wired or select position assembly.

| Part Number | Description    |
|-------------|----------------|
| 570-290-711 | Male contact   |
| 570-290-721 | Female contact |
| 570-290-731 | Male contact   |
| 570-290-741 | Female contact |

- For contact installation, removal and crimping tools, refer to page 7.
- Insulator design prevents improper mating of individual plug and receptacle.
- 4) Wire Seals are available as follows:

| Part Number | Colour | Insulation Dia             | Flange |
|-------------|--------|----------------------------|--------|
| 570-260-001 | Black  | .067" (1.7) to .075" (1.9) | No     |
| 570-260-002 | Blue   | .079" (2.0) to .102" (2.6) | No     |
| 570-260-003 | Blue   | .083" (2.1) to .106" (2.7) | Yes    |
| 570-260-004 | Brown  | .106" (2.7) to .122" (3.1) | Yes    |





## Tools for 566, 568, 570 Series Waterproof Connectors

Crimp Tools, Withdrawal Tool, Automated Crimping Tool

# AUTOMATIC CONTACT CRIMP MACHINE

- Part Number 516-280-700 for base machine
- Applicators available to crimp all 566, 568 and 570 series contacts
- · All required guards for operator safety
- Easy access for all setting changes
- · Foot switch to initiate crimp cycle
- · Mounts to any bench surface
- Quick change applicators allow for fast conversions from one contact type to another
- Requires 110V 50 / 60 Hz electrical supply



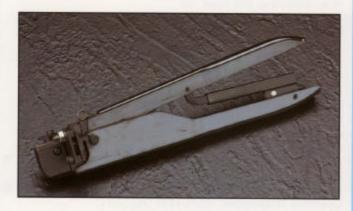


## CONTACT HAND CRIMP TOOL

- Manual hand crimp tool
- Uses contacts on carrier strip, crimps them and cuts the contacts from the carrier
- For 566 series, use crimper number 566-280-200
- For 568 and 570 series, use either 570-280-200 for smaller diameter wire and part

## RETAINER INSERTION TOOL

- Tool to insert retainer into connector housing to ensure water tight seal
- Required for all 566 series connectors
- Part number 566-280-250





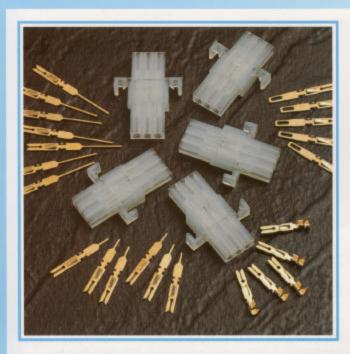
## CONTACT EJECTION TOOL

- Tool to remove previously inserted contact from connector housing
- For use with 566 series, use tool part number 566-280-300
- For use with 568 and 570 series, use tool part number 570-280-300



## 556 SERIES EDACON CONNECTOR

Plug and Receptacle

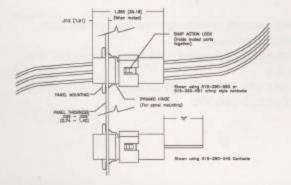


#### **FEATURES**

- UL Recognized
- .156 (3.96) Contact Spacing
- Plug and Receptacle in 3, 4, or 6 Contact Sizes
- Edacon Hermaphroditic Contact Mating Design
- Contact Termination Options include Crimp, P.C. Tail, Wire Hole, Wire Wrap and Taper Tail
- Tools Available for Contact Installation, Removal and Crimping
- These connectors are not waterproof.

## **SPECIFICATIONS**

- Insulator Material: White Nylon
- Contact Material: Phosphor Bronze Alloy CA-510
- Contact Plating: Gold over Nickel for Entire Contact
- Current Rating: 8.5 Amperes
- Contact Resistance: 10 Milliohms Maximum
- Dielectric Withstanding Voltage: 2000 V AC rms at Sea
   Level
- Insulation Resistance: 5000 Megohms Minimum
- Operating Temperature: -65 to +125 Degrees C
- Insertion and Withdrawal Force: 2 to 16 oz (0.56 to 4.45 N) per Contact Position



## 556 SERIES ORDERING CODE

Series

Total Number of Contacts

Contact Code

Style

| Series                   | 556             |
|--------------------------|-----------------|
| Total Number of Contacts | 003, 004 or 006 |

| Contac | t Code 1 Description & Tail Size Tail | Leng | th "G"  |
|--------|---------------------------------------|------|---------|
| 000    | No Contacts Assembled                 |      |         |
| 500    | Wire Hole .110 x .024 (2.79 x 0.61)   | .245 | (6.22)  |
| 501    | Taper Tail                            | .245 | (6.22)  |
| 520    | P.C. Tail .025 x .024 (0.64 x 0.61)   | .215 | (5.46)  |
| 540    | Wire Wrap .050 x .024 (1.27 x 0.61)   | .600 | (15.24) |
| 541    | Wire Wrap .026 x .024 (0.66 x 0.61)   | .620 | (15.75) |
| 542    | Wire Wrap .050 x .024 (1.27 x 0.61)   | .790 | (20.07) |

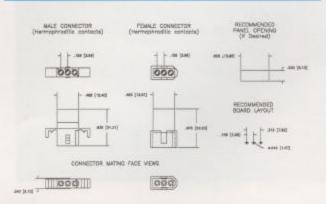
| Style and Material 3 | Style                           |
|----------------------|---------------------------------|
| 101                  | Plug                            |
| 201                  | Receptacle with Panel Retention |

#### **Ordering Code Notes**

 Crimp contacts are available for the 556 series connectors.
 Contacts may be ordered separately for pre-wired or select position assembly.

| Part Number | Description       |      |
|-------------|-------------------|------|
| 516-290-500 | Wire Hole         |      |
| 516-290-501 | Taper Tail        |      |
| 516-290-520 | P.C. Tail         |      |
| 516-290-540 | Wire Wrap         |      |
| 516-290-541 | Wire Wrap         |      |
| 516-290-542 | Wire Wrap         |      |
| 516-290-590 | Crimp - Loose     |      |
| 516-290-591 | Crimp - 1800      | De-I |
|             | Contacts per reel |      |

- For contact installation, removal and crimping tools, refer to page 112.
- Insulator design prevents improper mating of individual plug and receptacle.





an EDACOM company

## 40 TIFFIELD ROAD SCARBOROUGH, ONTARIO, CANADA M1V 5B6

Telephone: (416)754-3322 Facsimile: (416)754-3299 E-mail: edac@edac.net Web Page: http://www.edac.net