# Pogo pin Connector---Cnomax Technology Co., Limited



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主要客户群体 MAJOR CUSTOMER GROUPS

















Website: www.pogopinconnector.com Tel: +86-13652508770 E-mail: Sales@cnomax.com

# Pogo pin Connector---Cnomax Technology Co., Limited

Cnomax Technology Co., Ltd. is located at Chang'an Town, Dongguan City, Guangdong Province.Company always focused on the Research, Development, Production, Sales and technical support for High-quality Pogo Pin connectors, spring needles, and precision products since 1997.Cnomax is a High-Tech company, which has a professional and efficient team which always in line with the business philosophy of professionalism, dedicated, focused and strives to provie the best quality service and products for customers.

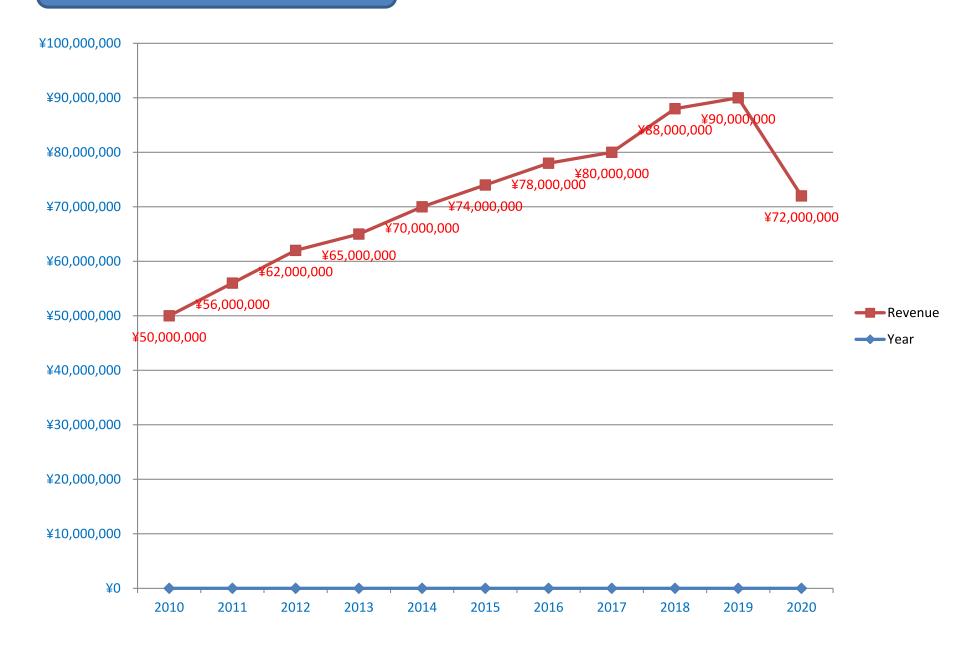
Company main products:Pogo pin connectors,Pogo pin,spring loaded pin,High current charging spring needles,Magnetic suction Pogo pin connector,and all kinds of custom Pogo pin,Our various product are widely used in each kind of consumer electronics products like mobile phones,wristbands,watches,laptops,smart POS machines,handheld device chargers,automobiles(electric vehicle charging gun termianl),communications,medical care,internet of product,etc.

Company passed ISO9001:2015,ISO14001:2015 and has several technical and design patents. We have vdozens of advanced production equipment and automatic production line, rigorous process control process, precision testing instruments, fully meet the customer's high quality, large quantities of procurement demands. All products comply with EU RoHS Environmental standards.

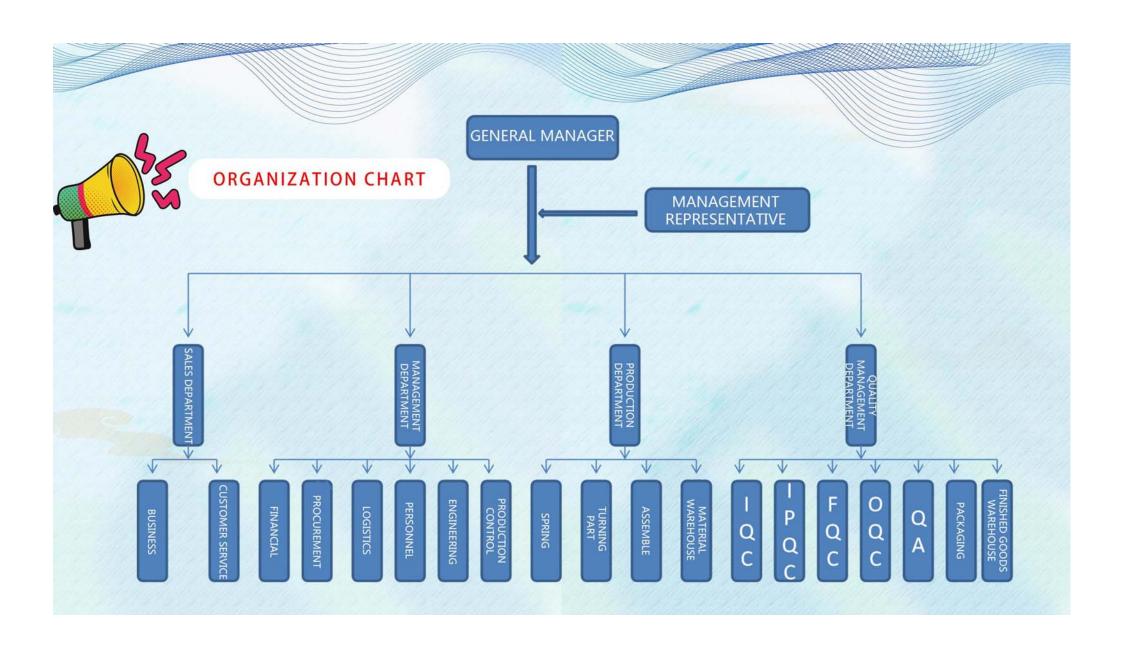
Our slogan: Pioneering and Innovative, win-win cooperation, Welcome all friends to Cooperation.

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## Revenue in recent 10 years



Note: The sales volume declined in 2020 as COVID-19 impacted





#### ♦ MULTI-PIN COMPONENT SERIES









### ♦ MULTIPLE POGOPIN COMPONENT SERIES

















### ◆ WATERPROOF CONNECTOR











GENERAL CONNECTOR SERIES - BATTERY HOLDER SERIES





 MAGNETIC SUCTION CONNECTOR



PLASTIC PARTS



♦ AXLE PRODUCTS







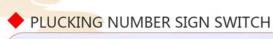




♦ STAMPING PARTS SERIES









TORSION SPRING AND GUIDE ROD, STRAIGHT SHAFT, LINE FORMING SERIES

### ♦ COMPRESSION SPRING SERIES











**GUIDE BAR** 



**DIRECT AXIS** 

♦ WIRE PRODUCTS











**TORSIONAL SPRING** 









LINE SHAPE

LINE SHAPE

LINE SHAPE

# PRODUCTION EQUIPMENT













# PRODUCTION EQUIPMENT









## OFFICE AREA











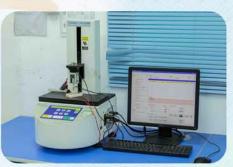


# CHECKOUT EQUIPMENT

























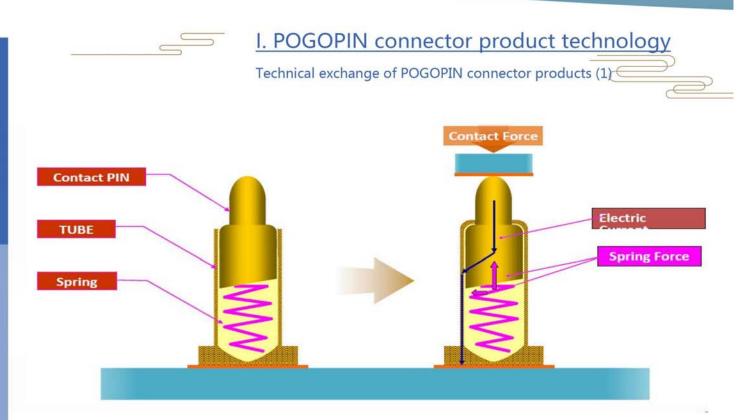
Pogopin is a precision connector made by Plunger, Barrel and Spring by automatic riveting. It is also known as Spring needle, Spring thimble and PogoPin connector. In the connector industry, the Pogo Pin is a special connection technology.

Single head POGO PIN structure:

Needle Plunger (brass plated)

Tube (brass plated)

Spring (stainless steel)



#### Technical exchange of POGOPIN connector products (2)

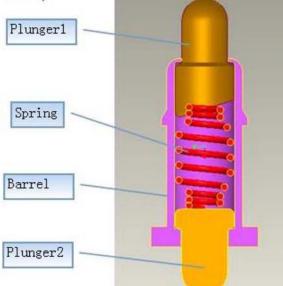
### Double headed Pogo Pin structure:

1 Plunger 1 (brass plated)

Needle 2 Plunger 2 (brass plated)

Tube (brass plated)

Spring (stainless steel)



#### Technical exchange of POGOPIN connector products (3)

#### **POGO PIN**



#### Skew bottom of needle:

To ensure 100% contact between the needle and the tube during operation, we cut the end of the needle and the spring into a bevel. This design concept ensures a low and stable contact impedance, which absolutely guarantees the stable conduction of the product.



#### Needle reverse drilling:

This design is best for small size connectors. Can meet the elastic requirements of customers. The length of the matching spring of this design can exceed the length of the needle tube. In the case of limited space, the design of reverse drilling can obtain stable elastic force and stroke.

#### Technical exchange of POGOPIN connector products (4)

#### Technical exchange of POGOPIN connector products (5)

#### spring

Processing technology:Precision computer processing, can be very good to ensure the size

Accuracy, accuracy can reach 0.02mm, product life Life can be more than 100,000 times.

Material: Stainless steel SUS304: good toughness

Resistivity 0.73 Ω·mm2/m

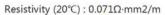
SWP: high strength

Resistivity 0.73 Ω·mm2/m

### needle tubing

The design of the needle tube will be designed in accordance with the structural space of the customer and the functional requirements of the product as well as the guarantee of the service life. Can provide common and heterosexual design for choice.

Material: Brass C3604







#### The structure of POGO PIN connector products





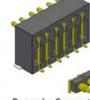












Pogo pin Connector structure

Pogo Pin

Housing

Connector

Cap for Vacuum Nozzle

#### Two, POGO PIN connector product characteristics and advantages

#### POGO PIN connector features:

It has the characteristics of short development cycle, low development cost and customized size, which can adapt to the ever-changing market demand.

#### Advantages of POGO PIN connector:

- 1, POGO PIN contact reliability is good
- 2, POGO PIN precise and stable connection point, conducive to radio frequency signal transmission
- 3. Pogo Pin occupies a small space of customers' products
- 4, POGO PIN can realize the connection scheme of large current
- 5, POGO PIN products long service life

### Advantages of POGO PIN connector (1)

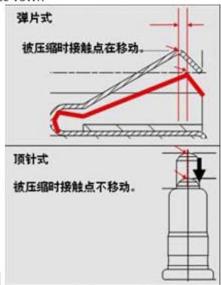
#### 1. Pogopin has better contact reliability

The spring pressure of the POGOPIN connector changes little when subjected to strong impact from external forces.

Mobile phone battery connection: ensure stable current, no power loss Mobile phone antenna connection: ensure stable RF performance Microphone/speaker connection: prevent noise

#### 2. Pogopin connects the antenna contact accurately.

When the antenna is connected, accurate contact points can obtain stable RF electrical performance VSWR



#### Advantages of POGO PIN connector (2)

#### 3. Pogo Pin saves space

Pogopin occupies small space, which can save limited PCB board space.

4, POGO PIN products long service life:

It can be used for at least 10000 times. The product impedance stability can be controlled within 30 mOhm. After life test, it can also be controlled within 50 mOhm. It is a very ideal connector.

5, POGO PIN can realize the connection scheme of large current

A. Normal: 2A

B, high current: 3A-10A

6, POGO PIN product appearance fashionable atmosphere, thick texture is suitable for high-end electronic products.



### Three, POGO PIN connector application

### Should be used scene (1)

The Pogopin connector applies the ---- signal transmission connection

- 1. Antenna connection of smart phones, smart watches, smart bracelets and NFC
- 2. Connect mobile phone handset, vibrator and other function modules.

Product design description of POGOPIN connected antenna:

- 1, can be single head patch type and double head plug-in type
- 2, the needle inclined bottom design











The iPhone 6S, 7 and 8 are widely used

### Three, POGO PIN connector application

### Should be used scene (2)

Pogopin Connector Applications -- Conducting Ground:

Smart phone: metal frame, metal shell mobile phone grounding function

Design Description of Conducting Grounded POGOPIN Product:

- 1, ordinary double-headed plug-in type
- 2, the needle inclined bottom design





### Three, POGO PIN connector application

### Should be used scene (3)

Pogopin Connector Application - Charging Connection

Mobile phone batteries, wristbands, watches, laptops, GPS positioning systems,

Tablet PC, PDA, POS machine, handheld data terminal, vehicle-mounted intelligence

Charging connection of electronic equipment.

#### Pogopin product design description:

- 1, single head plug-in type (or multi-pin connector)
- 2, the needle must be inclined bottom design









### Three, POGO PIN connector application

### Should be used scene (4)

Pogopin Connector Applications - Multiple PIN magnetic suction connections Notebook: keyboard magnetic suction connector and charging magnetic suction connector.

#### Magnetic suction type POGOPIN multi-pin connector products:

- 1, magnetic suction multi-pin connection keyboard and computer, female head installed in the computer host end, The male head is mounted on the keyboard.
- 2, magnetic suction multi-pin connection charging line, female head installed in the computer host end, male The head is mounted on the charging line.









### Three, POGO PIN connector application

### Should be used scene (5)

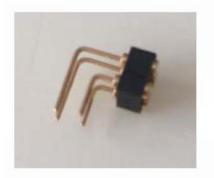
Pogopin Connector Applications - Charging Connections for Electric Vehicles

Electric car charging gun charging terminals with large current.

Single pin current can reach: 10A

Pogopin Connector Applications - Power connection for medical equipmentCustom charging connectors for medical devices.





### IV. POGO PIN connector product series

# Product Series - Single PIN Connectors

#### 1, table paste type

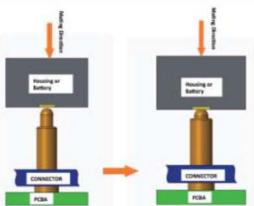
Surface SMT POGO PIN connectors are mainly used in reflow soldering processes, which can improve welding efficiency when used in large quantities and are the most common application mode. The welding surface of this kind of product is flat and the welding area is relatively large. The product is packed with carrier-belt and has a craft cap for SMT manipulator to absorb.

A. Products are divided into vertical type and side type

B. The diameter of the needle is 0.9mm, and the diameter of the needle tube is 1.5mm. Under this specification, the Pin can combine different product sizes

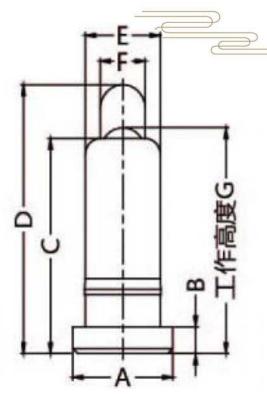
 $\mathsf{C},\mathsf{can}$  be customized according to customer requirements, to meet customer's personal-

ized needs









#### IV. POGO PIN connector product series

#### **Product Series - Single PIN Connectors**

#### 2. Plug-in

Plug-in type POGO PIN connector is mainly used in wave soldering and hand welding process. The product can be better positioned. The tail needle of the product passes through PCB board, which is more convenient for hand welding.

#### Plug-in products are usually available in bulk.

A. Products are divided into vertical plug-in type and lateral plug-in typeAmong them: the side plug-in product and PCB are at a 90 degree Angle.

The tail pin is bent, inserted into the PCB and soldered through the wave.

B. The diameter of the needle is 0.9mm and the diameter of the needle tube is 1.5mm The PIN can be combined in different product sizes under this specification

C, can be customized according to customer requirements, to meet customer personalized

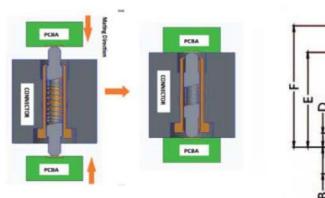
### IV. POGO PIN connector product series

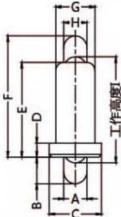
### **Product Series - Single PIN Connectors**

#### 3. Double-headed Pogo Pin

Double-headed POGO PIN type products are mainly used in special occasions. Both ends can not be soldered and can be conveniently separated. Double end Pogo PIN product bulk packaging

Can be customized according to customer requirements, to meet customer's personalized needs.





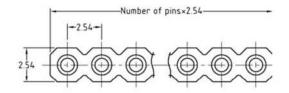
### IV. POGO PIN connector product series

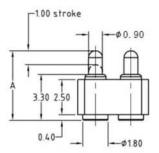
#### **Product Series - Multiple PIN Connectors**

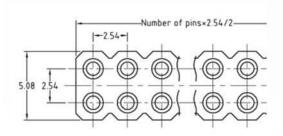
#### 1, multi-pin standard Pitch connector

Multi-PIN connector products are mainly used in multi-channel signal transmission and charging connection occasions. Multi-PIN connector products can be rolled up or in bulk









### IV. POGO PIN connector product series

### Product Series - Multiple PIN Connectors

#### 2, multi-pin custom connector

The multi-pin custom connector products are designed to meet customers' specific applications and unique structural design requirements.

Multi-pin custom connector products can be rolled in bulk.

Pin number can be customized according to customer requirements to meet customer's personalized needs.









