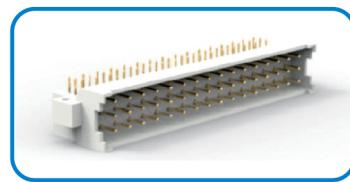


中航华亿  
JOHUAYI



Connectors & Sensors for rail transit



JOHUAYI(shenyang) Electronic Technology Co., Ltd  
[www.johuayi.com](http://www.johuayi.com)

## Profile

JOHUAYI is affiliated with Aviation Industries Corporation of China, and is a subsidiary corporation of JONHON. Established in 2008, JOHUAYI has been specializing in supply of electrical/optical/fluid connectors , sensors , and system integration & interconnection products.

As the key supplier for CRRC Group , Johuayi has been mastering the core technologies and production processes of connectors, sensors, and integrated products in the rail transit and high-end manufacturing areas.

## Certificate



ISO 9001:2015



ISO 14001:2015



ISO 45001:2018



ISO/TS22163:2017

## Main customer



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# XC158 series

## Introduction

- The hyperbolic wire spring female contact makes the connector easy to insert and remove and connect reliably
- The bayonet connect system, securely locked
- Five types of key positions
- Eight types of shells
- Ten types of contacts
- The contact and wire are soldered
- Installation holes provide compatibility for socket installation



## Application

Suitable for electrical connections in harsh environments such as immersion and humidity

## Technical performance

No.	Project	Parameter
1	Specification	GJB 2889
2	Qty of pins	1~129
3	Rated current	1 A~250 A
4	Withstanding voltage	1000 V/AC~3000 V/AC
5	Insulation resistance	$\geq 5000 \text{ M}\Omega$
6	Working temperature	-55 °C~+200 °C
7	Mating cycles	$\geq 1000$ times
8	Salt spray resistance	200 h~Aluminum alloy shell 1000 h~Stainless steel shell
9	Vibration	Sinusoidal-frequency 10~2000Hz, acceleration 196m/s <sup>2</sup>
10	Impact	Acceleration 980m/s <sup>2</sup>
11	Degree of protection	IP68

# XC158A series

## Introduction

- The hyperbolic wire spring female contact makes the connector easy to insert and remove and connect reliably
- The bayonet connect system, securely locked
- Five types of key positions
- Four types of contacts
- The contact and wire are crimped
- Installation holes provide compatibility for socket installation



## Application

Suitable for electrical connections in harsh environments such as immersion and humidity

## Technical performance

No.	Project	Parameter
1	Specification	GJB 2889
2	Qty of pins	1~55
3	Rated current	5 A~40 A
4	Withstanding voltage	1500 V/AC~3000 V/AC
5	Insulation resistance	$\geq 5000 \text{ M}\Omega$
6	Working temperature	-55 °C~+200 °C
7	Mating cycles	$\geq 1000$ times
8	Salt spray resistance	200 h~Aluminum alloy shell 1000 h~Stainless steel shell
9	Vibration	Sinusoidal-frequency 10~2000Hz, acceleration 196m/s <sup>2</sup>
10	Impact	Acceleration 980m/s <sup>2</sup>
11	Degree of protection	IP68

# XCY series

## Introduction

- The bayonet connect system, securely locked
- Five types of key positions
- Four types of contacts
- The contact and wire are crimped



## Application

Suitable for electrical connections in harsh environments

## Technical performance

No.	Project	Parameter
1	Specification	GJB 2889
2	Qty of pins	1~55
3	Rated current	5 A~40 A
4	Withstanding voltage	1500 V/AC~3000 V/AC
5	Insulation resistance	$\geq 5000 \text{ M}\Omega$
6	Working temperature	-40 °C~+125 °C
7	Mating cycles	$\geq 750$ times
8	Salt spray resistance	96 h / 240 h
9	Vibration	IEC 61373-2010-I-B
10	Impact	IEC 61373-2010-I-B

# GJB599 series

## Introduction

- The bayonet connect system, securely locked
- Five types of key positions
- Six types of contacts
- The contact and wire can be soldered or crimped



## Application

Suitable for electrical connections in strong vibration, sandstorms, and humid environments

## Technical performance

No.	Project	Parameter
1	Specification	MIL-DTL-38999K
2	Qty of pins	1~128
3	Rated current	5 A~40 A
5	Withstanding voltage	1000 V/AC~2300 V/AC
6	Insulation resistance	$\geq 5000 \text{ M}\Omega$
7	Working temperature	-65 °C~+200 °C
8	Mating cycles	$\geq 500$ times
9	Salt spray resistance	48 h / 96 h / 500 h / 1000 h
10	Vibration	Sinusoidal-frequency 10-2000Hz, acceleration 196m/s <sup>2</sup>
11	Impact	Acceleration 980m/s <sup>2</sup>

# CT63 series

## Introduction

- The bayonet connect system, securely locked
- Five types of key positions
- The contact and wire are crimped



## Application

Suitable for electrical connections in harsh environments

## Technical performance

No.	Project	Parameter
1	Specification	Q/21EJ623
2	Qty of pins	3~48
3	Rated current	13 A
4	Withstanding voltage	2000 V/AC
5	Insulation resistance	$\geq 5000 \text{ M}\Omega$
6	Working temperature	-40 °C ~ +105 °C
7	Mating cycles	$\geq 500$ times
8	Salt spray resistance	96 h
9	Vibration	Sinusoidal-frequency 10-500Hz, acceleration 100m/s <sup>2</sup>
10	Degree of protection	IP68

# KY series

## Introduction

- The bayonet connect system, securely locked
- Five types of key positions
- Three types of contacts
- The contact and wire are crimped



## Application

Suitable for electrical connections in harsh environments

## Technical performance

No.	Project	Parameter
1	Specification	MIL-DTL-5015 NFF61030
2	Qty of pins	1~60
3	Rated current	13 A~46 A
4	Withstanding voltage	2000 V/AC~7000 V/AC
5	Working temperature	-55 °C~+125 °C
6	Mating cycles	≥500 times
7	Salt spray resistance	96 h
8	Vibration	Sinusoidal-frequency 5-150Hz, acceleration 60m/s <sup>2</sup>
9	Impact	Acceleration 50m/s <sup>2</sup>
10	Degree of protection	IP67

# M12 series

## Introduction

- The screw and push-pull connect systems
- Three types of codes
- Three types of contacts
- The contact and wire are crimped or soldered



## Application

Suitable for communication interfaces in infrastructure, industrial automation, rail transit, and other fields

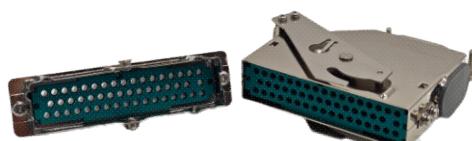
## Technical performance

No.	Project	Parameter
1	Specification	IEC 61076-2
2	Qty of pins	4-5-8
3	Code	A-D-X
4	Rated current	2A / 5A
5	Withstanding voltage	800 V/AC~1500 V/AC
6	Insulation resistance	$\geq 100M\Omega$
7	Working temperature	-40 °C~+85 °C
8	Mating cycles	$\geq 500$ times
9	Salt spray resistance	$\geq 96$ h
10	Degree of protection	IP67

# MY35 QE series

## Introduction

- Seven types of contacts arrangement
- Two types of contacts
- The contact and wire are crimped



## Application

Suitable for electrical connections inside rail vehicles

## Technical performance

No.	Project	Parameter
1	Specification	GB/T 34119
2	Qty of pins	27-28-29-30-34-44-50
3	Rated current	13 A / 23 A
4	Withstanding voltage	2500 V/AC
	Insulation resistance	$\geq 5000M\Omega$
5	Working temperature	-55 °C ~ +125 °C
6	Mating cycles	$\geq 500$ times
7	Salt spray resistance	96 h
8	Vibration	IEC 61373-2010-I-B
9	Impact	IEC 61373-2010-I-B

# DIN41612 series

## Introduction

- Three types of contacts
- The contact and wire are crimped



## Application

Suitable for electrical connections in PCB

## Technical performance

No.	Project	Parameter
1	Specification	DIN41612 IEC-60603-2
2	Qty of pins	48-64-96
3	Rated current	2 A-6 A-15 A,etc.
4	Withstanding voltage	1000 V/AC-1500 V/AC
5	Insulation resistance	$\geq 1000 \text{ M}\Omega$
6	Working temperature	-55 °C ~ +125 °C
7	Mating cycles	$\geq 500$ times
8	Vibration	IEC 61373-2010-I-B
9	Impact	IEC 61373-2010-I-B

## D-sub series



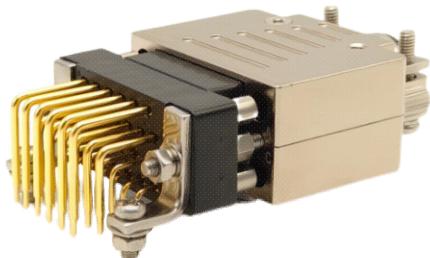
### Application

Suitable for electrical connections in PCB

### Technical performance

No.	Project	Parameter
1	Specification	IEC60807
2	Qty of pins	9-15-25-37-50
3	Rated current	5A
4	Withstanding voltage	1000 V/AC
5	Insulation resistance	5000 MΩ
6	Working temperature	-55 °C ~ +125 °C
7	Mating cycles	≥500 times
8	Salt spray resistance	48 h
9	Vibration	IEC 61373-2010-I-B
10	Impact	IEC 61373-2010-I-B

## TJ19 series



### Application

Suitable for electrical connections in PCB

### Technical performance

No.	Project	Parameter
1	Specification	Q/21EJ775
2	Qty of pins	24-28-36-50
3	Rated current	5A
4	Withstanding voltage	1500 V/AC
5	Insulation resistance	5000 MΩ
6	Working temperature	-55 °C ~ +120 °C
7	Mating cycles	≥500 times
8	Salt spray resistance	48 h

# TJ22 series

## Introduction

- The bayonet connect system, securely locked
- Five types of key positions
- Three types of contacts
- The contact and wire are crimped



## Application

1. Traction Control Unit (TCU)
2. Remote Input/Output Unit (RIOM)
3. Vehicle ground wireless transmission device
4. Automatic Train Protection System (ATP)
5. Train Control Center (TCC)
6. Dispatch Center
7. Electronic Brake Control Unit (EBCU)
8. Central Control Unit (CCU)
9. Event Recorder Module (ERM)
10. Automatic Train Operation System (ATO)
11. Computer Interlocking System
12. Radio Blocking Center (RBC)

## Technical performance

No.	Project	Parameter
1	Specification	T/CECA 43-2020
2	Qty of pins	48-64
3	Rated current	5A
4	Withstanding voltage	1500 V/AC
5	Working temperature	-40 °C ~ +105 °C
6	Mating cycles	≥500 times
7	Salt spray resistance	48 h
8	Vibration	IEC 61373-2010-I-B
9	Impact	IEC 61373-2010-I-B

## MY30 series



### Application

Power transmission for vehicles

### Technical performance

No.	Project	Parameter
1	Specification	TB/T 2761 GJB 1217A-2009
2	Qty of pins	1
3	Rated current	210A-240A-490A-630A
4	Withstanding voltage	3250 V/AC-6000 V/AC-8000 V/AC
5	Working temperature	-55 °C~+125 °C
6	Mating cycles	≥1000 times
7	Salt spray resistance	240 h
8	Vibration	IEC 61373-I-B
9	Impact	IEC 61373-I-B
10	Degree of protection	IP68

## MY66 series



### Application

Power transmission for vehicles

### Technical performance

No.	Project	Parameter
1	Specification	TB/T 2761 GJB 1217A-2009
2	Qty of pins	1+2
3	Rated current	340A (95mm <sup>2</sup> ) +2× (1.5mm <sup>2</sup> )
4	Withstanding voltage	5400 V/AC
5	Working temperature	-55 °C~+125 °C
6	Mating cycles	≥700 times
7	Salt spray resistance	240 h
8	Vibration	IEC 61373-III
9	Impact	IEC 61373-III
10	Degree of protection	IP67

**MY68 series****Application**

Power transmission for vehicles

**Technical performance**

No.	Project	Parameter
1	Specification	TB/T 2761 GJB 1217A-2009
2	Qty of pins	1
3	Rated current	500 A
4	Withstanding voltage	3000 V/AC
5	Working temperature	-55 °C~+125 °C
6	Mating cycles	≥750 times
7	Salt spray resistance	96 h
8	Vibration	IEC 61373-I-B
9	Impact	IEC 61373-I-B
10	Degree of protection	IP67

## MY150 series



### Application

Power charging for vehicles

### Technical performance

No.	Project	Parameter
1	Specification	GB/T 34119-2017
2	Qty of pins	power 2+signal 10 power 2+signal 4 power 4+signal 6
3	Rated current	330 A-450 A-530 A
4	Withstanding voltage	3000 V/AC-3500 V/AC-7000 V/AC
5	Working temperature	-55 °C~+125 °C
6	Mating cycles	≥750 times
7	Degree of protection	IP67

## MY153 series



### Application

Power transmission for vehicles

### Technical performance

No.	Project	Parameter
1	Specification	TB/T 2761 GJB 1217A-2009
2	Qty of pins	1
3	Rated current	105 A~35mm <sup>2</sup> 210 A~70mm <sup>2</sup> 360 A~95mm <sup>2</sup>
4	Withstanding voltage	6000 V/AC
5	Insulation resistance	$\geq$ 5000MΩ
6	Working temperature	-55 °C~+125 °C
7	Mating cycles	$\geq$ 750 times
8	Salt spray resistance	96 h
9	Vibration	IEC 61373-I-B
10	Impact	IEC 61373-I-B
11	Degree of protection	IP67

## CT88 series



## Application

Power charging for urban rail vehicles

## Technical performance

No.	Project	Parameter
1	Specification	Q/21EJ821
2	Qty of pins	power 2+signal 10
3	Rated current	Φ9~30 A Φ26~255 A
4	Withstanding voltage	Φ9~2500 V/AC Φ26~6000 V/AC
5	Insulation resistance	≥5000 MΩ
6	Working temperature	-40 °C ~ +105 °C
7	Mating cycles	≥500 times
8	Salt spray resistance	96 h
9	Vibration	Sinusoidal-frequency 10-2000Hz, acceleration 147m/s <sup>2</sup>
10	Degree of protection	IP66

## CT88A series



### Application

Power charging for urban rail vehicles

### Technical performance

No.	Project	Parameter
1	Specification	Q/21EJ3609
2	Qty of pins	power 2+signal 10
3	Rated current	Φ18~400 A 12#~20 A
4	Withstanding voltage	Φ18~7000 V/AC 12#~1000 V/AC
5	Insulation resistance	≥500 MΩ
6	Working temperature	-40 °C~+120 °C
7	Mating cycles	≥500 times
8	Salt spray resistance	96 h
9	Vibration	IEC 61373-I-B
10	Impact	IEC 61373-I-B
11	Degree of protection	IP65

## CT88B series



### Application

Power charging for standardized high-speed trains

### Technical performance

No.	Project	Parameter
1	Specification	Q/21EJ5026
2	Qty of pins	power 4+signal 2
3	Rated current	Φ6~30 A Φ15.9/Φ17.9~450 A
4	Withstanding voltage	Φ6~2500 V/AC Φ15.9/Φ17.9~4000 V/AC
5	Insulation resistance	≥5000 MΩ
6	Working temperature	-55 °C ~ +125 °C
7	Mating cycles	≥1500 times
8	Vibration	IEC 61373-I-B
9	Impact	IEC 61373-I-B
10	Degree of protection	IP67

## TJD series



### Application

Power transmission between converter and motor for urban rail vehicles

### Technical performance

No.	Project	Parameter
1	Specification	GB/T 34119-2017
2	Qty of pins	3
3	Rated current	Φ20~200 A Φ20(internal Φ8)~350 A
4	Withstanding voltage	6000 V/AC
5	Insulation resistance	≥5000 MΩ
6	Working temperature	-40 °C ~ +125 °C
7	Salt spray resistance	240 h
8	Mating cycles	≥500 times
9	Vibration	IEC 61373-I-B
10	Impact	IEC 61373-I-B
11	Degree of protection	IP67

## MY58 series



### Application

Power transmission between converter and motor for rail vehicles

### Technical performance

No.	Project	Parameter
1	Specification	NF F61-030
2	Qty of pins	3/4
3	Rated current	100A~400A
4	Withstanding voltage	9500 V/AC
5	Insulation resistance	$\geq 5000 \text{ M}\Omega$
6	Working temperature	-40 °C ~ +100 °C
7	Salt spray resistance	96 h
8	Mating cycles	$\geq 500$ times
9	Vibration	IEC 61373-I-B
10	Impact	IEC 61373-I-B
11	Degree of protection	IP68



**WORLD STARTS WITH  
CONNECTION**

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