

# GzC Anti-explosion Electrical connector

## Description

- Apply to electrical connection between equipment and cable under severe environment like damp, soaking, etc
- IP68 protection grade
- The termination form of plug and receptacle-soldering, normally brazing or fusion welding
- Five key guiding structure to avoid blind mating and mismating
- Easy to push in and out with high-reliability hyperboloid wire spring socket ,low contact resistance
- Plug and receptacle can be both loaded with pin and socket
- Quick bayonet coupling
- Increased safety anti-explosion sign (Exe II T5) ,according to standard GB3836.1-2000, GB3836.3-2000
- Anti-explosion certification numbers  
 No 18 shell code: CNE×09.1686X; No 22 shell code: CNE×09.1687X;  
 No 24 shell code: CNE×09.1686X; No 27 shell code: CNE×09.1687X;  
 No 30 shell code: CNE×09.1687X; No 33 shell code: CNE×09.1687X;



## Main technical features

### Mechanical

- Shell: Stainless steel passive, copper alloy nickel plating or aluminum alloy
- Insulator: Thermoset plastic
- Grommet and seal: silicon elastomer
- Contact: gold plate copper alloy
- Vibration: Frequency 10~2000Hz  
Acceleration: 196m/s<sup>2</sup>
- Shock: Acceleration 980 m/s<sup>2</sup>
- Constant acceleration: 980 m/s<sup>2</sup>
- Endurance:1000 cycles

### Electrical

#### —Contact resistance and Current rating

Contact size mm	Contact resistance mΩ	Current rating A	Sintering cylinder mm
φ1.0	5	5	φ1.3
φ1.5	2.5	10	φ1.8
φ2.0	1.25	20	φ2.5
φ3.0	0.75	40	φ3.4

#### —Operating voltage, Withstanding voltage and insulation resistance

Working environment	Operating voltage V	Withstanding voltage V	Insulation resistance MΩ
Normal condition		1000	≥5000

### Environmental

- Environmental temperature: -20°C ~ +60°C
- Relative humidity: 95% at 60°C
- Protection grade: IP68
- Environmental resistance: Stainless steel-1000h; copper alloy-500h; aluminum alloy-48h
- Anti-RFI: Minimum attenuation 60dB at 100MHz ~ 1GHz
- Using area.0.0: for class II, in Zone 1 and 2 of T1-T5 mixed explosion air
- Installation and Operation: check name plate, explosion-proof marks, anti-explosion certificate number before installation

### Remarks

If cable into device seal ring has the problem like deterioration and aging, contact the supplier in time and change

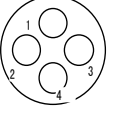
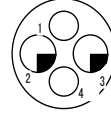
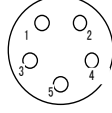
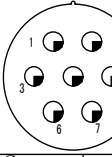
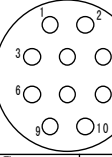
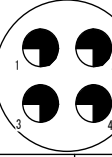
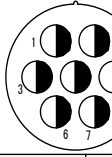
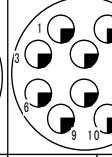
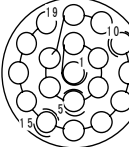
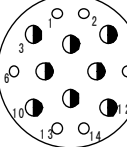
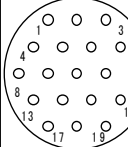
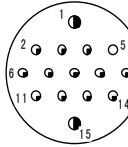
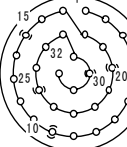
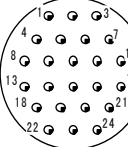
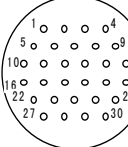
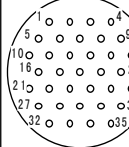
Disconnection condition: After disconnection, it can be reconnected until the equipment stops discharging.

### Ordering information

Basic series	<b>GzC</b>	<b>18</b>	<b>T</b>	<b>4</b>	<b>K<sub>1</sub></b>	<b>P</b>	<b>40</b>	<b>(W)</b>
Shell size	18-22-24-27-30-33							
<b>Type</b>	T - Plug F- Square flange receptacle							
	Contact number See contact arrange figure							
<b>Contact form</b>	Z <sub>1</sub> - gold plated pin    K <sub>1</sub> - gold plated socket							
<b>Shell</b>	P- With thread and accessory D-Without thread and accessory							
<b>Plating</b>	1-Aluminum alloy electroless nickel plating 12-Copper alloy satin nickel plating 40-Stainless steel passive							
<b>Polarization</b>	no mark-N    W-W    X-X    Y-Y    Z-Z							

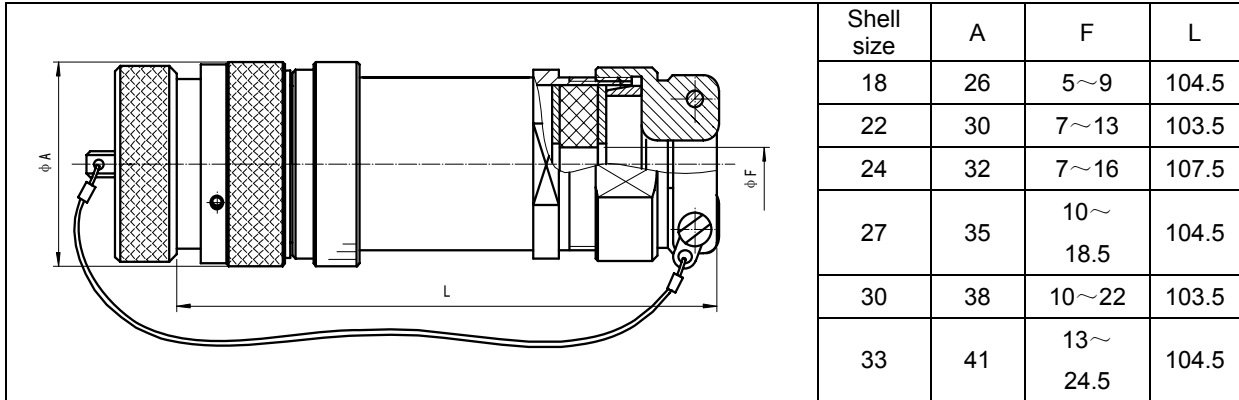
## Contact layout

mating view of insulator with pin

18-4		18-4-1		18-5		22-7		22-10-1		24-4		24-7		24-10	
															
Creepage distance	1.9	Creepage distance	1.6	Creepage distance	1.8	Creepage distance	1.9	Creepage distance	1.6	Creepage distance	2.9	Creepage distance	2.3	Creepage distance	1.8
clearance	1.9	clearance	1.6	clearance	1.8	clearance	1.9	clearance	1.6	clearance	2.9	clearance	2.3	clearance	1.8
Rated voltage	30V	Rated voltage	15V	Rated voltage	30V	Rated voltage	30V	Rated voltage	15V	Rated voltage	60V	Rated voltage	30V	Rated voltage	30V
24-19		27-14-1		27-19-1		30-15		30-32		33-24		33-30		33-35	
															
Creepage distance	1.7	Creepage distance	2.1	Creepage distance	2.1	Creepage distance	2.0	Creepage distance	1.8	Creepage distance	1.9	Creepage distance	2.1	Creepage distance	1.9
clearance	1.7	clearance	2.1	clearance	2.1	clearance	2.0	clearance	1.8	clearance	1.9	clearance	2.1	clearance	1.9
Rated voltage	15V	Rated voltage	30V	Rated voltage	30V	Rated voltage	30V	Rated voltage	30V	Rated voltage	30V	Rated voltage	30V	Rated voltage	30V

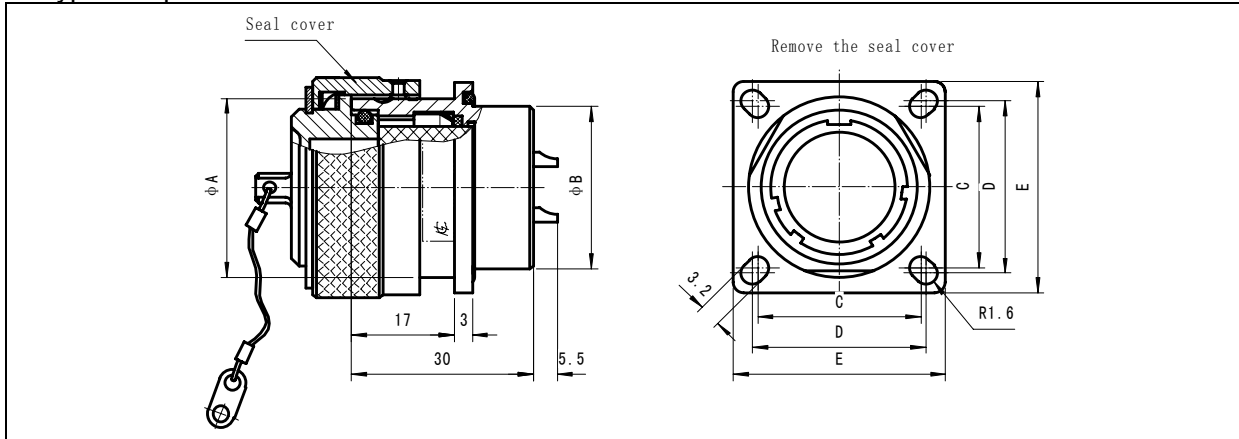
### Dimension

#### Plug

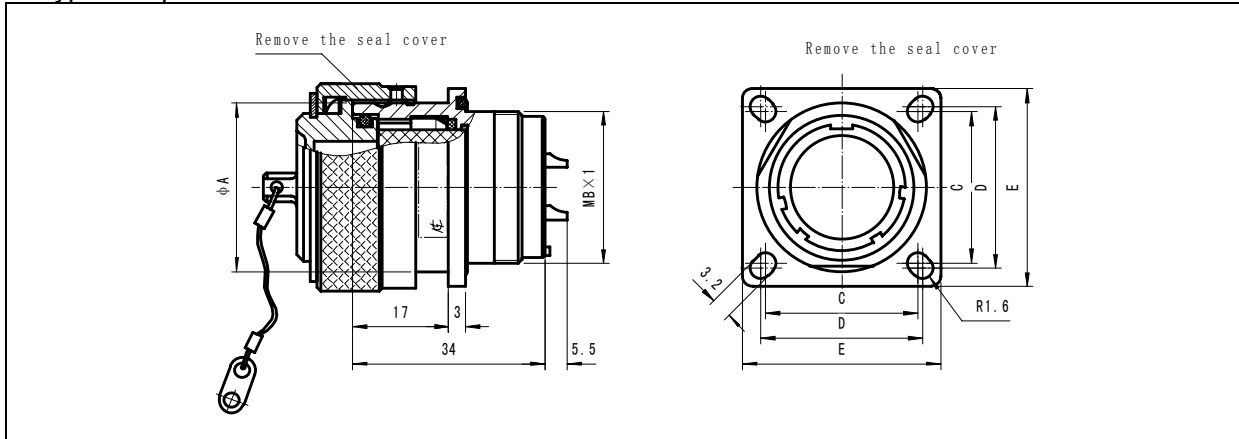


#### Receptacle

##### D type receptacle without thread



##### P type receptacle with thread



#### recommended panel open socket size

