

# Industrial Connectors Selection Guides

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**Japan Aviation Electronics  
Industry, Limited**

# External Interface Connectors

## TÜV Certified Waterproof Screw Mating Connector JL04V Series



Connector  
Details



### General Specifications

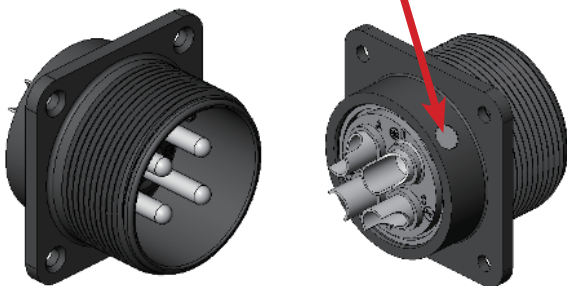
Number of Contacts	3, 4, 6, 7, 8, 9, 22
Rated Current (by contact size)	#16 Cont. : 13A max., #12 Cont. : 23A max. #8 Cont. : 46A max., 57A max. (For arrangement 22-22) #4 Cont. : 80A max.
Rated Voltage	AC 100V / AC 200V / AC 250V / AC 400V / AC 500V
Dielectric Withstanding Voltage	AC 2,000V
Insulation Resistance	1,000MΩ min. / 5,000MΩ min. (In the case of non-waterproof · 2A receptacle)
Operating Temperature	-55°C ~ +125°C
Applicable Wire	#16 Cont. : 1.25mm <sup>2</sup> max. or 0.5mm <sup>2</sup> max. #12 Cont. : 3.5mm <sup>2</sup> max. #8 Cont. : 10mm <sup>2</sup> max. or 8mm <sup>2</sup> max. or 5.5mm <sup>2</sup> max. #4 Cont. : 22mm <sup>2</sup> max.

### Features

- TÜV Rheinland Certified in compliance with European Safety Standards
- Built-in ground terminal that conducts to outer metal shell, with protective circuit connection structure that enables sequence connection
- IP67 rated water, oil and dust ingress protection

#### Protective Earth connection structure

Grounding pin connects from contact to outer shell



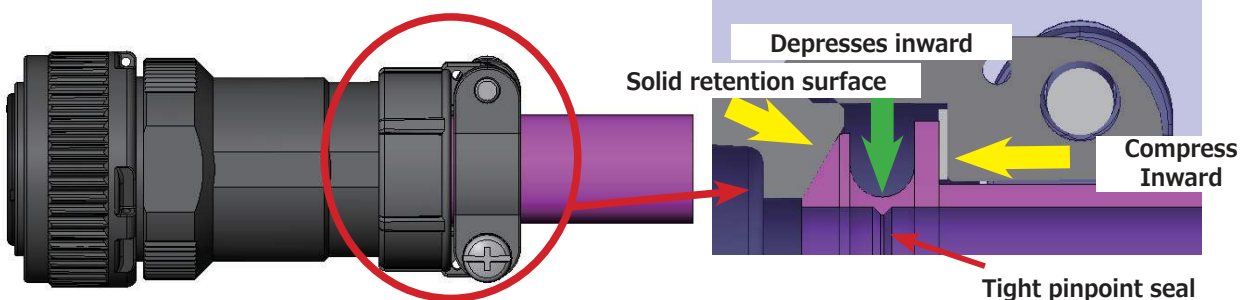
#### Stand alone waterproof structure

2E type receptacles use rubber insulators to prevent ingress protection into inner contacts.



#### Waterproof structure cable clamp

Dual function cable clamp provides both reliable waterproof sealing and tight cable retention through tightening of screws.



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### ■ Contact arrangement

Arrangement	10SL-3	18-10		20-4		22-22		32-17	
Contact arrangement (View of pin insert from mating side)									
Size x Number of Contacts	#16 x 3 pos.	#12 x 4 pos.		#12 x 4 pos.		#8 x 4 pos.		#4 x 4 pos.	
Rated Voltage	200V	250V	500V	250V	500V	250V	500V	250V	500V
Overvoltage Category	III	III	II	III	II	III	II	III	II
Pollution Level	3	3	2	3	2	3	2	3	2
Dielectric Withstanding Voltage	2,000V	2,000V		2,000V		2,000V		2,000V	
Rated Current	13A	23A		23A		57A		80A	
Arrangement	18-12	20-15		24-10		24-10(G)		20-7	
Contact arrangement (View of pin insert from mating side)									
Size x Number of Contacts	#16 x 6 pos.	#12 x 7 pos.		#8 x 7 pos.		#8 x 7 pos.		#16 x 8 pos. (A,B,H) (C,D,E,F)	
Rated Voltage	250V	250V	500V	250V	500V	250V		400V	100V
Overvoltage Category	III	III	II	III	II	III		II	
Pollution Level	3	3	2	3	2	3		2	
Dielectric Withstanding Voltage	2,000V	2,000V		2,000V		2,000V		2,000V	
Rated Current	13A	23A		46A		46A		13A	
Arrangement	22-23	20-18			24-11		28-11		
Contact arrangement (View of pin insert from mating side)									
Size x Number of Contacts	#12 x 8 pos.	#12 x 3 pos. (F,I,B)	#16 x 6 pos. (Other)		#8 x 3 pos. (D,E,F)	#12 x 6 pos. (Other)		#12 x 4 pos. (J,K,L,M)	#16 x 18 pos. (Other)
Rated Voltage	250V	250V	100V		250V	500V		250V	100V
Overvoltage Category	III	II			III	II		III	
Pollution Level	3	2			3	2		2 (Note: mating area is 3)	
Dielectric Withstanding Voltage	2,000V	2,000V			2,000V		2,000V		
Rated Current	23A	23A (#12), 13A (#16)			46A (#8), 23A (#12)		23A (#12), 13A (#16)		

## Before placing an order

- ① The values specified in this catalogue are only for reference. The products and specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.
- ② Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.
- ③ The products presented in this catalogue are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

### **(1) Applications that require consultation:**

- (i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:
  - Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.
- (ii) We may separately give you our support with a quality assurance program that you specify, when you think of a use such as:
  - Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc

### **(2) Recommended applications include:**

Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.