

Technology to Inspire Innovation

# **Preferred Connector Products**

# **JAE**



**JAE Electronics, Inc.**

For Additional Information Visit [www.jae-connector.com](http://www.jae-connector.com)

**J**apan Aviation Electronics Industry, Ltd. (JAE) is an international manufacturer and supplier of electronic components and systems. For over four decades, JAE has provided the electronics industry with solutions to complex design requirements. Since its founding, the Company has strived to contribute to society through market-driven, technology-based global business operations under the philosophy: "Technology to Inspire Innovation."

With worldwide and world-class manufacturing certified to ISO 9001 and QS 9000, JAE has made the commitment to meet the global requirements of our customer. In addition to a network of state of the art manufacturing facilities, JAE has technical service offices located around the world, staffed with experts in connector design and application.

This catalog contains a select overview of JAE Connector Products. For in-depth information on our complete product line, and information on new developments, visit JAE's online catalog at [www.jae-connector.com](http://www.jae-connector.com).

Innovative design, quality oriented manufacturing, commitment to our customers and sensitivity to the environment assures JAE's leadership position in the 21<sup>st</sup> century.

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- All JAE connector products shown in this catalog are lead free.
- We reserve the right to modify designs in order to improve quality, keep pace with technological advancements or meet particular requirements in production.
- Products shown in this catalog are made for the applications specified. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information. Recommended Applications: Computers, Office Machines, Measuring Devices, Telecommunications Devices (Terminals, Mobile Devices) AV Devices, Household Applications, FA Devices, etc.
- Refer to end of catalog for alphabetical index of products.

# JL05 SERIES CONNECTORS

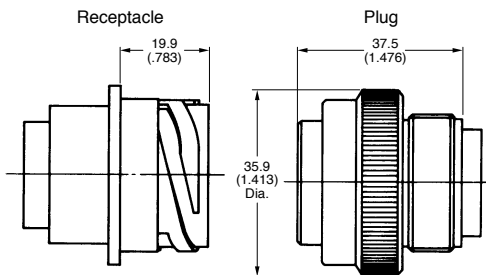
## Waterproof, Circular Connectors



### FEATURES

- Five insert guide keys for easy mating and unmating
- First-to-make/last-to-break contacts
- IP55F class waterproof structure

Connector Profile (Ref.)



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The JL05 Series connectors conforms to JISB6015 specifications. JL05 is a circular, waterproof connector using IP55F structure. There is a one-touch locking mechanism for ease in mating and unmating. With first-to-make/last-to-break contacts, you are ensured a good circuit protection. Their ideal application are machining tools, servomotors, robots, and other industrial machines. The JL05 Series has two types of panel mount connectors. One option is waterproof only in the mated condition (JL05-2A/JL05-6A) and the other option is fully waterproof by itself (JL05-2L/JL05-6A).

### GENERAL SPECIFICATIONS

Rated Current (Per Contact)	Contact Size	#20 5A	#16 13A	#12 23A	#8 46A
Rated voltage		INST	A	D	
	DC.V	#16 13A	#16 13A	#16 13A	
	AC.V r.m.s.				
Dielectric Withstanding Voltage	AC.V r.m.s	1,000	2,000	2,800	
Insulation Resistance	5,000 megohms min. waterproof when mated 1,000 megohms min. single waterproof structure				
Contact Resistance	Contact Size milliohms max.	#20 15	#16 4	#12 2	#8 0.6
Operating Temperature	-55°C to +125°C				
Humidity	Relative Humidity: 85% max.				

	No. of Contacts	1 – 28	29 – Ground
Dielectric Withstanding Voltage	A.C. V r.m.s.	1,500	2,000
Rated Voltage	A.C. V r.m.s.	250	500

### MATERIALS AND FINISHES

Description	Materials/Finishes
Shell	Aluminum Zinc plating
Coupling Nut	Aluminum Olive Drab or Black
Insulator	Synthetic Resin (UL94V-0)
Front Insulator (Single Waterproof type)	Synthetic Rubber
Contact	Copper Alloy, Silver plating
O-Ring	Glass-filled Nylon (UL94V-0, Black)
Retaining Ring	Copper Alloy, Zinc plating
Stop Ring	Stainless Steel
Wave Spring	Stainless Steel
Earth Lug	Copper Alloy, Silver plating

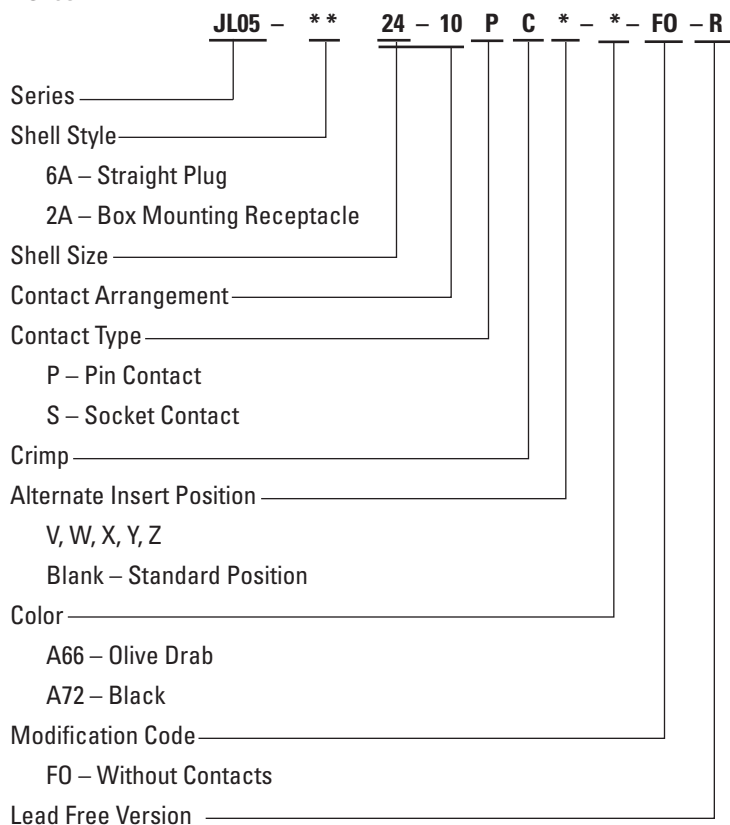
Dimensions and specifications subject to change without notice.

# JL05 SERIES CONNECTORS

## Waterproof, Circular Connectors

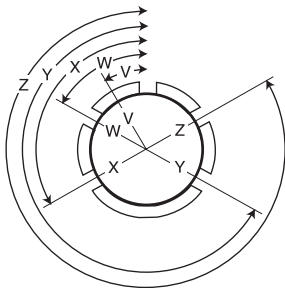
### ORDERING INFORMATION

#### • JL05-A



### ALTERNATE INSERT POSITIONS (POLARIZATION)

The position of the guide key of the shell changed by a certain angle in relation to the standard insert position is indicated by the symbols V, W, X, Y and Z. Use this table for reference when instructing since the changeable angle will differ depending on the contact arrangement. This diagram shows the contact pin arrangement as viewed from the pin side coupling.



No. of Contacts	Polarization					
	Arrangements	V°	W°	X°	Y°	Z°
4	22-22	45	–	160	–	300
5	18-11	35	–	170	265	–
7	20-15	30	80	–	–	280
	24-10	30	80	–	–	280
8	22-23	25	85	–	–	–0325
9	24-11	–	35	110	190	290
10	18-1	–	70	145	260	280
17	18-19A	–	80	–	–	280
19	18-19A	–	80	110	250	280
	22-14	–	75	150	–	285
24	24-28	–	80	110	250	280
30	24-28	–	80	110	250	280
36	28-36B	–	80	110	250	280
37	28-21	–	80	110	250	280
58	24-52A	–	80	110	250	280
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Dimensions in mm (inches).

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to Connect Your World”***



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