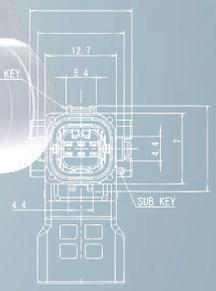
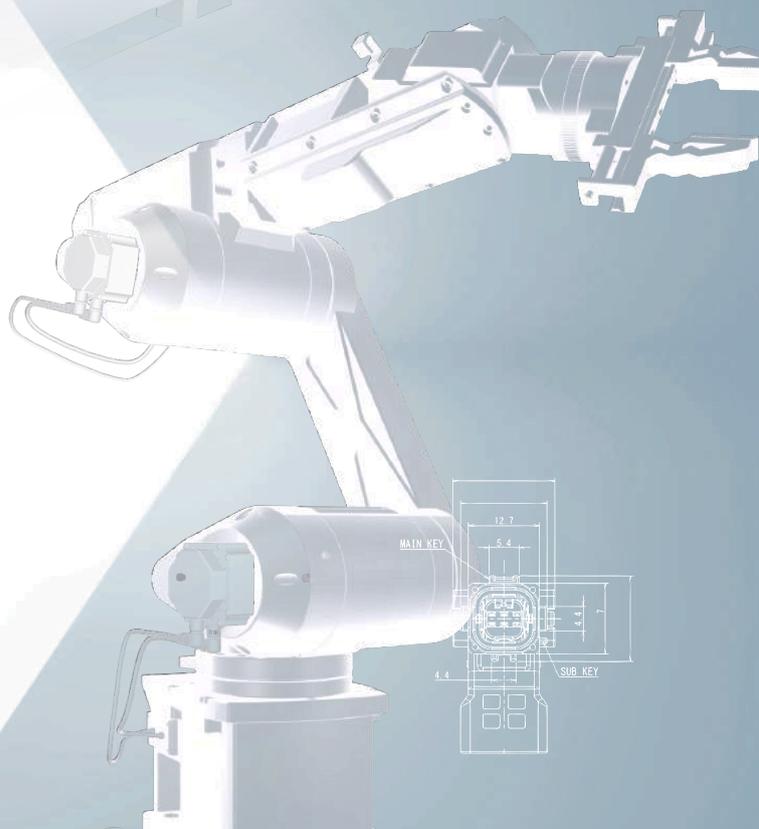
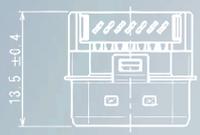
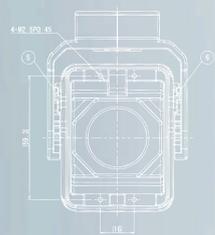
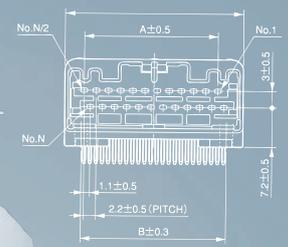
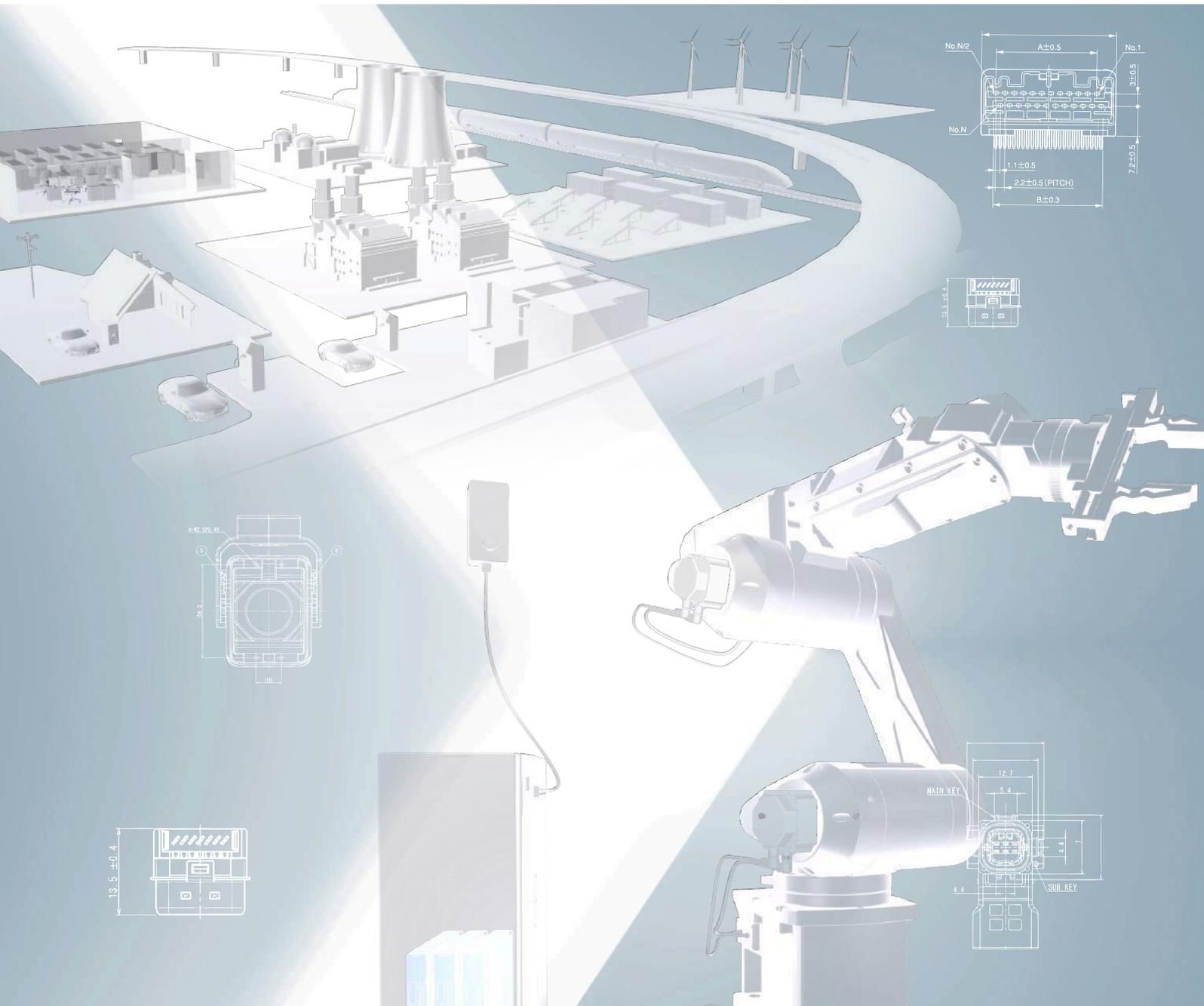


Industrial Robot and Smart Grid

Products and Applications lineup



World Wide Connector

for a multitude of Industrial Robot and Smart Grid

Since our establishment in 1953, we at JAE, under the corporate philosophy of "Explore, Create and Practice", have successfully developed and globally expanded our three core business areas of connectors, user interface related devices, and aviation electronics supported by our outstanding development capability in innovative and creative technologies.

With our global corporate slogan "Technology to Inspire Innovation", JAE focuses on technological development and product creation that inspire customer's innovation.

Smart Grid



Smart Grid 2

High-current Equipment

- DW4
- DW05
- DW07



Smart Grid 3

Manufacturing Equipment

- MX34
- MX23A
- MX19



Smart Grid 1

Battery System

- DW1
- DW2
- DW3



Smart Grid 5

Motion Sensing & Control Solutions

- JA-70SA
- Digital Directional Modules - SMART DM



Smart Grid 6

Railway

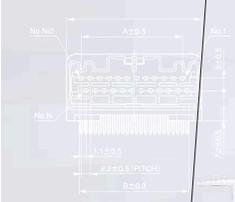
- JK06



Smart Grid 4

Electric Vehicles

- KW1
- KW02



Robots



Robot 5

User Interface Solutions

- Operation Panel



Robot 2

Small size Servomotor

- JN14 ▪ JN6 ▪ HB03



Robot 1

Controller

- DF02 ▪ DZ02 ▪ JB10



Robot 3

Middle / Large size Servomotor

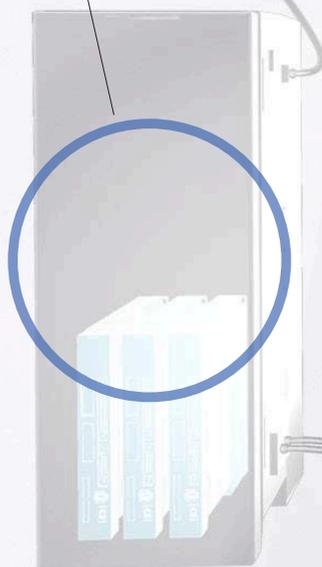
- JL10 ▪ JL04V ▪ JN1/JN2



Robot 4

Interface

- KN01 ▪ KN02 ▪ HB01



Corporate Data

Outline of Company

Company Name :

Japan Aviation Electronics
Industry, Limited

Establishment of Business :

August 20, 1953

Head Office :

10-8, Dogenzaka 1-chome, Shibuya-ku,
Tokyo 150-0043, Japan

Capital :

¥ 10.69 billion

Stock Exchange Listing :

Tokyo Stock Exchange, 1st Section

Activities :

Manufacturing and marketing of
connectors, user interface solutions,
and aerospace and related electronics

List of ISO Quality Certifications

Connector :

ISO 9001 : 2008 JQA-QMA11894

User Interface Solutions :

ISO 9001 : 2015 JQA-0413

Aerospace :

ISO 9001 : 2008 JQA-0335

JIS Q 9100 : 2009 JQA-AS0005

ISO/TS 16949 : 2009 JQA-AU0261

Corporate Website :



QR code



DataMatrix

Company Brochure[PDF] :



QR code



DataMatrix

Robot 1



Controller



DF02



Light weight realized with resin-made hood
half-pitch (1.27mm) interface connector

- Dual use specifications with one-touch lock and screw-lock
 - Shorter harness working time with an original design
- # of Contacts : 14, 20, 26, 36, 50 pos.
Rated Current : 0.5A
Rated Voltage : 250VAC



DZ02



0.635mm pitch mini I/O connector for industrial
apparatus

- Push-on lock structure with superior operability
- # of Contacts : 8 pos.
Rated Current : 0.5A
Rated Voltage : 30VAC



JB10



All-plastic, waterproof one-touch lock circular
connector

- Easy and sure mating with push-and-twist type one-touch lock mechanism
 - Waterproof conforming to IP67
- # of Contacts : 26 pos.
Rated Current : 1A
Rated Voltage : 100VAC
Mating Cycles : 500 times

Robot 2



Small size Servomotor



JN14



Low profile small waterproof connector for
small servomotor

- Enabled to be installed to metal body of motor
 - Earth contact and metal body are grounded by screw
 - Waterproof conforming to IP67
- # of Contacts : 2, 4, 9 pos.
Rated Current and Voltage
Power : 7A, 250VAC
Brake : 1A, 100VAC
Encoder : 1A, 100VAC

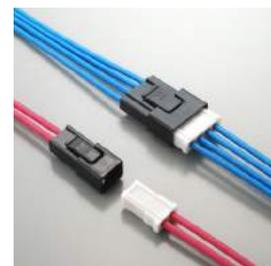


JN6



Low profile small waterproof connector for
mold-in to small servomotor

- All plastic - - - lightweight, low cost
 - Waterproof conforming to IP67
- # of Contacts : 2, 4, 7 pos.
Rated Current and Voltage
Power : 7A, 200VAC
Brake : 1A, 100VAC
Encoder : 1A, 100VAC



HB03



Cable-to-cable ultra small connector
for industrial machinery

- Enables to put through the narrow space such as inside robot arm
- # of Contacts: 2, 4 pos.
Rated Current and Voltage
1A (AWG30-28), 250VAC
2A (AWG26-24), 250VAC

S Products and Applications lineup

Robot 3



Middle / Large size Servomotor

JL10



Both screw mating and one-touch locking feasible waterproof circular connectors based on MIL-DTL-5015

- Compatible with both one-touch lock mating and MIL specification screw mating
- One-touch lock mating with easy operability and good vibration resistance
- Waterproof conforming to IP67

of Contacts : 4, 9, 17, 19, 22, 37 pos.

Rated Current and Voltage

- #16 : 13A, 100VAC
- #12 : 23A, 500VAC(2/II), 250VAC(3/III)
- #8 : 46A/57A, 500VAC(2/II), 250VAC(3/III)
- #4 : 80A, 500VAC(2/II), 250VAC(3/III)

JL04V



Screw mating waterproof circular connectors based on MIL-DTL-5015

- Compatible MIL specification screw mating
- Plug is available in straight, angle and individual type
- Waterproof conforming to IP67

of Contacts : 3, 4, 6, 7, 8, 9, 18, 20, 22 pos.

Rated Current and Voltage

- #8 : 46A / 57A, 500VAC(2/II), 250VAC(3/III)
- #12 : 23A, 500VAC(2/II), 250VAC(3/III)
- #16 : 13A, 100VAC

JN1/JN2



Waterproof one-touch lock small circular connector

- Easy and sure mating with push-and-twist type one-touch lock mechanism
- Waterproof conforming to IP67

of Contacts : 4, 10 pos.

Rated Current and Voltage

- #20 : 5A, 200VAC
- #22 : 3A, 200VAC

Robot 4



Interface

KN01



Waterproof rectangular connector for industrial equipment

- Light and easy operation of the lever locking
- Combined signal and power transmission by the insert shield

of Contacts

M Size : #16 X 16 pos. / Block A

L Size : #12 X 12 pos. / Block C

Rated Current and Voltage

- #12 : 23A, 250VAC / #16 : 16A, 250VAC
- #20 : 3A, 24VDC / #22 : 1A, 24VDC

KN02



All-plastic, one-touch lock rectangular connector

- EMI shielded by metal shield and metalized plastic
- Easy one-touch lock structure

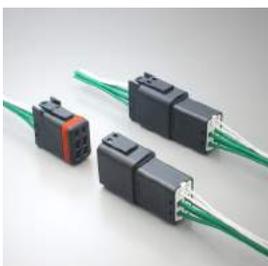
of Contacts, Rated Current and Voltage

Power : 24 pos., 13A, 250VAC

Brake : 6 pos., 2A, 24VAC

Signal : 16 pos., 2A, 24VAC

HB01



Cable-to-cable waterproof connector for industrial machinery

- Easy harnessing by loose wire relay connector
- Power and signal hybrid type with enhanced insulation
- IP67 waterproof when mated

of Contacts : 6 pos. (4 Power, 2 Signal)

Rated Current and Voltage Power : 13A (AWG14), 250VAC

Signal : 4A (AWG20), 250VAC

Applicable cable

Power : AWG18-14

Signal : AWG24-28

Robot 5



User Interface Solutions

Operation Panel



Custom design for industrial application

- Material of chassis: metal or plastic is applicable and dependent on specification

- Material of surface sheet: applicable on specification

- Switch style

- Flat sheet type

- Embossed sheet type

- Plastic type

- Illumination arrangement around key top of switch
- Operability of panel design improvement

*accepts requirement above based on customer's specification from 1,000pcs. per month of minimum order quantity

3D Data Request!

Check Movie!



Industrial Robot Solutions
Mobile Website



QR code



DataMatrix

www.jae.com/special/Industry-en/

Smart Grid **1**



Battery System

DW1



Rack and panel connector with 2 contacts for high-current (500A)

- Power supply compatible with cable connection
- Floating Amount : $\pm 2.75\text{mm}$
- # of Contacts, Rated Current and Voltage
Power : 2 pos., 500A, 600VDC
Signal : 20 pos., 2A, 100VAC

DW2



Rack and panel connector with 2 contacts for high-current (200A)

- Connection of receptacle side power supply can be made at once using the bus bar
- Floating Amount : $\pm 2.75\text{mm}$
- # of Contacts, Rated Current and Voltage
Power : 2 pos., 200A, 600VDC
Signal : 20 pos., 2A, 100VAC

DW3



Rack and panel connector with 2 contacts for high-current (150A)

- Low-profile, compact, possible to be equipped on a 19 inch 1U rack
- Floating Amount : $\pm 2.0\text{mm}$
- # of Contacts, Rated Current and Voltage
Power : 2 pos., 150A, 600VDC
Signal : 24 pos., 2A, 100VAC

Smart Grid **2**



High-current Equipment

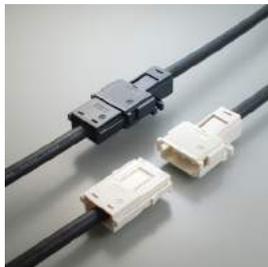
DW4



1 pin connector compatible with 100A connection with cable

- Mechanical lock
- # of Contacts : 1 pos.
- Rated Current : 100A
- Rated Voltage : 600VDC
- Mating Cycles : 50 times

DW05



1 pin connector compatible with 150A connection with cable

- Termination: Crimp termination considering on-site assembly
- Conductor cross-section of standard cable is 38 mm² (Cable of 14 to 42 mm² in the same shape is possible to be used)
- # of Contacts : 1 pos.
- Rated Current : 150A
- Rated Voltage : 600VDC
- Mating Cycles : 100 times

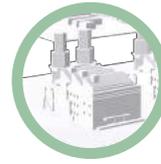
DW07



Easily connect power busbars in high-current equipment

- Floating connection and Flexible current amount
- Connector attaches easily with one hand, clipping onto mating holes in the busbar
- Applicable busbar : JIS H 3140 Silver plating
- Rated Current : Please look at the catalog
- Mating Cycles : 100 times

Smart Grid **3**



Manufacturing Equipment

MX34



Compact/ high-density non-waterproof automotive connectors

- Board-to-cable type, in-line type
- Mechanical lock system ensures reliable mating
- # of Contacts
1 row : 3, 5, 7 pos.
2 rows : 8, 12, 16, 20, 24, 28, 32, 36, 40 pos.

MX23A



Compact type, waterproof, board-to-cable application connectors

- Full water proof grommet is used for socket contact crimping area in order to reduce size
- # of Contacts : 12, 18, 26, 34, 36 pos.
- Rated Current : 3A
- Dielectric withstanding voltage : 1000VAC

MX19



Cable-to-cable compact, waterproof connectors

- Mechanical lock system enabling complete mating with a click
- Mechanical lock system to withstand vibration and tension
- # of Contacts : 2, 4 pos.
- Rated Current : 5A
- Dielectric Withstanding Voltage : 1000VAC

Smart Grid 4



Electric Vehicles



KW1



CHAdEMO EV fast charging connector

- Product lineup : UL Certified Model and CE Certified Model
- # of Contacts, Rated Current and Voltage
- Power : 2 pos., 125A, 500VDC
- Signal : 7 pos., 2A, 16VDC



KW02



CHAdEMO EV charging connector for V2H

- Convenient single action insertion and removal procedure for ease of operation
- Achieves both high-durability and light-weight at the same time
- # of Contacts, Rated Current and Voltage
- Power (power supply) : 2 pos., 25A, 450VDC
- Power (12VDC) : 2 pos., 6.4A, 16VDC
- Signal : 6 pos., 2A, 16VDC

Smart Grid 6

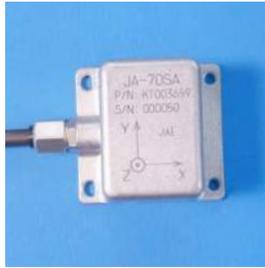


Railway

Smart Grid 5



Motion Sensing & Control Solutions



JA-70SA



Ultra-low noise. Low frequency operation. 3 axis high sensitivity MEMS accelerometer

Measurement range	±2G(X,Y), -1G to +3G(Z)
Bias	±100mG max. (Nominal@25°C)
Noise	1 x 10 ⁻⁶ Grms / √Hz max.
Temperature	-20 °C to +70 °C
Weight	100 grams max.
Sensor size	41(W)x39(D)x25(H)



Digital Directional Modules - SMART DM



High reliability MCM electronics. Operating temperature to 175 °C

- High accuracy quartz accelerometers
- Survey grade fluxgate magnetometer
- Inter-tool communication protocols : Digital Serial I/O, CAN, Up link (Pulser)



JK06



MIL-DTL-5015 Type Bayonet Connector

- Electro-mechanical & Environment design compliant to meet VG95234 standard
- Interchangeable with MIL-DTL-5015 standard
- IP67 rated at mated condition
- # of Contacts : 10, 37, 48 pos.
- Maximum Rated Current
 - Whole connector : 63.1 A (10pos.), 96.2 A (37pos.), 124.8 A (48pos.)
 - Individual contact : 13 A
- Dielectric withstanding voltage : AC 2550 Vr.m.s.

Manufacturing Technology Innovation

Innovation of production capacity by in-house production, automation and labor saving efforts

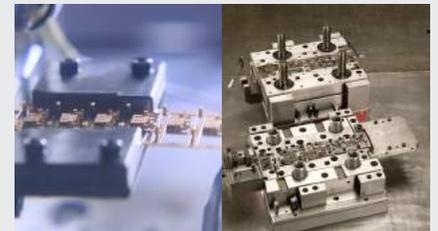
JAE has established a robust production system that focuses on local in-house production manufacturing 24 hours a day, 7 days a week. With automated operations and JAE designed labor-saving equipment mainly located in JAE Hiroasaki, JAE Yamagata and other domestic plants, our production is unaffected by rapid foreign exchange fluctuations.



Cutting



Molding



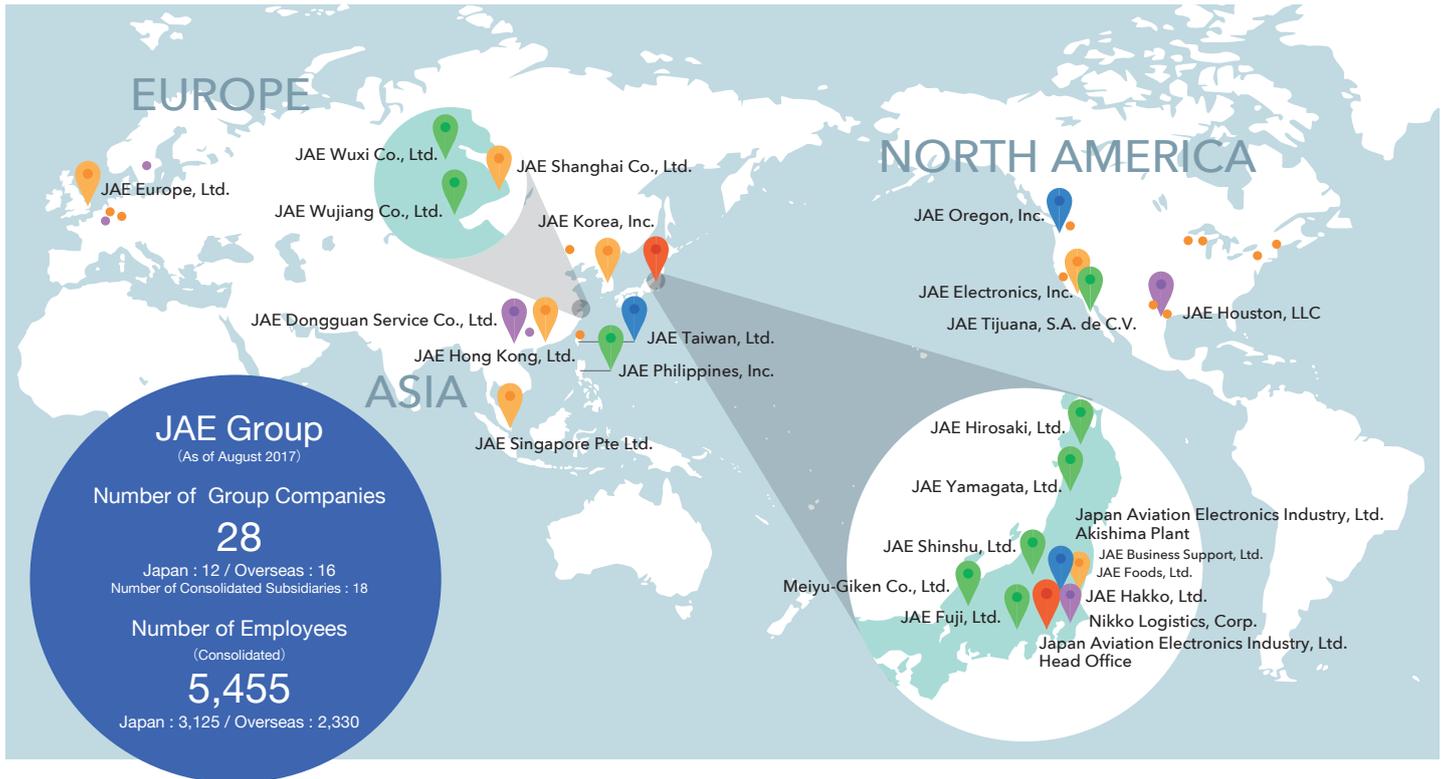
Stamping



Assembly

Global Network

The JAE Group promotes "manufacturing technology innovation" to be recognized as the number one partner for our customers.



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Colonia Niños Heroes Este. Tijuana, Baja California,
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Shanghai, 200051 P.R.China
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