



2025-26

Connector Selection Guide



For More Details Visit
JAE.COM





Board-to-Board Connectors



**Industrial I/O Connectors
(Circular)**



**Card Connectors 2
(SIM, Micro SIM, Nano SIM)**



Transportation Connectors



Board-to-FPC Connectors



**Industrial I/O Connectors
(Optical)**



LED Lighting Connectors

Company Profile – Pg. 3
Contact Information – Pg. 43
Distribution Partners – Pg. 44



Commercial I/O Connectors



Board-to-Cable Connectors



High-Power Connectors



**Industrial I/O Connectors
(Rectangular)**



**Card Connectors 1
(microSD, nano SIM, SD, SODIMM, PCI-SIG Mini Card, PCI-SIG M.2)**



EV Charging Connectors



Technology to Inspire Innovation

In 1953, Japan Aviation Electronics Industry, Ltd. began with the ambition of becoming a leading manufacturer in the aviation and space industries in Japan. Since then, we were able to expand and also specialize in designing and manufacturing connectors and gyroscopes.

Always keeping our corporate philosophy **“Explore, Create, and Practice”** in mind, we were able to successfully establish 3 strong product lines:

- ▶ Connectors
- ▶ User Interface Solutions
- ▶ Aerospace

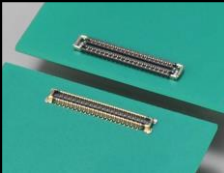
JAE strives to be the number one partner for global customers by staying innovative and creative in an industry where technology is continuously evolving and advancing.

The latest electronic equipment has revolutionized equipment mounting types through developments in digital technologies and addition of multifunction capabilities. Improved reliability, smaller size and greater compactness, lighter weight, as well as higher productivity and lower cost have all contributed to these developments, and a variety of connectors have been devised. We have been in the business of manufacturing and marketing connectors since 1955.

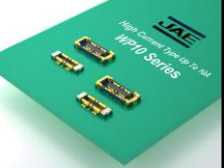
As an integrated connector manufacturer, we take pride in expertise accumulated through development of products conformed to MIL standard, primarily for aeronautics and space flight. We combine top notch technological skills with carefully monitored product quality to continue to develop connectors for multiple applications. Our products meet needs in a wide variety of fields including communications equipment, industrial machinery.

This catalog bring together a sampling of the best connectors to meet a variety of needs. Here you will find everything from connectors to meet a variety of needs. Here you will find everything from connectors for internal parts, printed circuit board, to interface connectors for linking devices. Besides the products you see here, we are also able to provide cable assembly processing and custom design. Look to JAE when choosing connectors.

Board-to-Board Connectors (1/3)

Series	WP86SD	WP55DK	WP56MS	WP56DK	WP66DK	WP26DK	WP27D
Photo							
Pitch	Contact Area: 0.25 mm, 2 rows Soldering Area: 0.5 mm, 4 rows	0.3mm	0.3mm	0.3mm	0.35mm	0.35mm	0.35mm
Stacking Heights	0.6mm	0.5mm	0.6mm	0.6mm	0.6mm	0.6mm	0.7mm
Pin Count (Parallel)	80 (+2 power)	6, 8, 10, 22 (+2 power)	50,54 (+2 power pins)	26 (+2 power)	6, 8, 30 (+2 power)	10, 16, 24, 30, 34, 40, 48, 50, 60 (+2 power)	10, 24, 30, 34, 38, 40, 50, 60 (+2 power)
Pin Count (Right Angle)	-	-	-	-	-	-	-
High Power Contacts	2	2	2	2	2	2	2
Board Mount	SMT	SMT	SMT	SMT	SMT	SMT	SMT
Current Rating	0.3A Signal, 8A Power	0.3A Signal, 5A Power	0.3A Signal 5A Power	0.3A Signal, 5A Power	0.3A Signal, 5A Power	0.3A Signal, 5A Power	0.3A Signal, 5A Power
Voltage Rating	50V AC/DC	50V AC/DC	50V AC/DC	50V AC/DC	50V AC/DC	50V AC/DC	50V AC/DC
Durability	30 cycles	30 cycles	30 cycles	30 cycles	30 cycles	30 cycles	30 cycles
Features	Staggered 0.25 mm contact pitch, quad row array for both miniaturization and soldering performance. Hybrid 8A/pos. power contact included.	Smallest terminal pitch to save space. Lowest mated height for extremely compact devices. Hybrid power contact included.	Smallest terminal pitch to save space. Additional metal reinforcement for protection against misaligned mating. 5A support Hybrid power contacts included.	Smallest terminal pitch to save space. Additional metal reinforcement for protection against misaligned mating. Hybrid power contacts included.	Ultra small width of 1.6mm. Additional metal reinforcement for ultimate protection against misaligned mating. Hybrid power contacts included.	Additional metal reinforcement for ultimate protection against misaligned mating. Hybrid power contacts included. Wide variety of pin counts available.	Hybrid connector with high power contacts as well as metal reinforcement in mating area to reduce risk of damage to insulator.

Board-to-Board Connectors (2/3)

Series	WP6C	WP12	WP11	WP10	WP16RS
Photo					
Pitch	0.4mm	0.4mm	0.4mm	0.4mm	0.35mm
Stacking Heights	0.8mm	0.7mm	0.7mm	0.7mm	0.6mm
Pin Count (Parallel)	24, 30	6 (+4 power pins+2 power H/D)	6 (+4 power pins+2 power H/D)	2, 4 (+4 power +2 power Hold-down)	2 pos. (RF(IF)), 6 pos. (Signal)
Pin Count (Right Angle)	-	-	-	-	-
High Power Contacts	-	4	4	4	-
Board Mount	SMT	SMT	SMT	SMT	SMT
Current Rating	0.3A	0.3A Signal 15A Power + Power H/D	0.3A Signal 15A Power + Power H/D	0.4A Signal, 5A Power, 2A Power Hold-down (Power hold-down is only for 12A products)	0.3A RF, 1.0A signal
Voltage Rating	50V AC/DC	50V AC/DC	50V AC/DC	50V AC/DC	50V AC/DC
Durability	30 cycles	10 cycles	30 cycles	30 cycles	30 cycles
Features	Shielded connector for improved grounding and EMI/EMC performance.	More high-power connector ideal for connecting batteries. the mating guide length has been extended. 4 additional power pins and 2 power H/D supporting 15A each.	More high-power connector ideal for connecting batteries. 4 additional power pins and 2 power H/D supporting 15A each.	High-power connector ideal for connecting batteries. 4 additional power contact supporting 5A each and 2 power Hold-down supporting 2A each.	Fully shielded connector with dedicated high performance RF contacts supporting 20GHz+.

WP86SD Series

Receptacle side: **WP86SD - S###VA# - R20000**
Plug side: **WP86SD - P###VA# - R20000**

**Shielded version*

Orderable in Reels of 20,000

WP66DK Series

Receptacle side: **WP66DK-S###VA1-R15000**
Plug side: **WP66DK-P###VA1-R15000**

Orderable in Reels of 15,000

WP12 Series

Receptacle side: **WP12-S###VA1-R15000**
Plug side: **WP12-P###VA1-R15000**

Orderable in Reels of 15,000

WP55DK Series

Receptacle side: **WP55DK-S###VA1-R20000**
Plug side: **WP55DK-P###VA1-R20000**

Orderable in Reels of 20,000

WP26DK Series

Receptacle side: **WP26DK - S###VA3 - R15000**
Plug side: **WP26DK - P###VA3 - R15000**

Orderable in Reels of 15,000

WP11 Series

Receptacle side: **WP11-S###VA1-R15000**
Plug side: **WP11-P###VA1-R15000**

Orderable in Reels of 15,000

WP56MS Series

Receptacle side: **WP56MS-S###VA1-R20000**
Plug side: **WP56MS-P###VA1-R20000**

Orderable in Reels of 20,000

WP27D Series

Receptacle side: **WP27D - S###VA3 - R15000**
Plug side: **WP27D - P###VA3 - R15000**

Orderable in Reels of 15,000

WP10 Series

Receptacle side: **WP10-S###VA10/12-R15000**
Plug side: **WP10-P###VA10/12-R15000**

Orderable in Reels of 15,000

WP56DK Series

Receptacle side: **WP56DK-S###VA1-R15000**
Plug side: **WP56DK-P###VA1-R15000**

Orderable in Reels of 15,000

WP6C Series

Receptacle side: **WP6C - S###VA1 - R6000**
Plug side: **WP6C - P###VA1 - R6000**

**Shielded version*

Orderable in Reels of 6,000

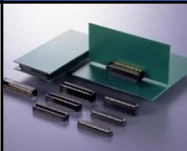
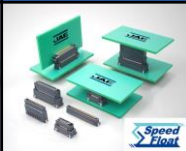
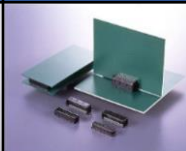
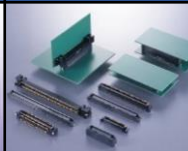
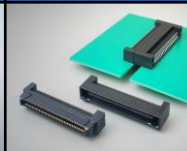
WP16RS Series

Receptacle side: **WP16RS-S###VA1-R20000**
Plug side: **WP16RS-P###VA1-R20000**

**Fully shielded version*

Orderable in Reels of 20,000

Board-to-Board Connectors (3/3)

Series	AC02	WR	MA01		AX03	IL-WX	KX14/15	TX24/25	TX24A/25A
Photo									
Pitch	0.5mm	0.5mm	0.635mm	0.635mm	0.635mm	0.80mm	0.8mm	1.27mm	1.27mm
Stacking Heights	2.5mm: 60, 80 pos. 2.5mm / 3.0mm: 50, 100 pos.	4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 8.0, 9.0mm	8, 10, 14, 16, 18, 20, 22, 24, 30mm	11.5, 13.5, 21.5mm	N/A	4-9mm	4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0mm	12-24mm (2mm increments)	N/A
Pin Count (Parallel)	50, 60, 80, 100	20, 30, 40, 50, 60, 70, 80, 100, 120, 160	30, 40, 60, 80, 90, 100, 120, 140	30		6, 8, 10, 12, 14, 16, 18, 20, 24, 26, 28, 30, 32, 34, 36	20, 30, 40, 50, 60, 70, 80	30, 40, 50, 60, 80, 100, 120	N/A
Pin Count (Right Angle)	N/A	30, 40, 50, 60, 70, 80, 120	30, 40, 60, 80, 90, 100, 120, 140	N/A	50 (horizontal)	6, 8, 10, 12, 14, 16, 18, 20, 24, 26, 28, 30, 32, 34, 36	20, 30, 40, 50, 60, 70, 80	30, 40, 50, 60, 80, 100, 120, 140	80 (horizontal)
Board Mount	SMT	SMT	SMT	SMT	SMT	SMT	SMT	Thru-hole	Thru-hole
Current Rating	0.3A	0.3A	0.5A	0.5A	0.5A	0.5A	0.5A	1.0A	1.0A
Voltage Rating	200VAC/300VDC	200VAC/300VDC	50VAC	50VAC	50VAC	200VAC/300VDC	200VAC/300VDC	250VAC	250VAC
Durability	50 cycles	500 cycles	100 cycles	100 cycles	100 cycles	30 cycles	500 cycles	500 cycles	500 cycles
Features	Highly stable and reliable contact structure, proven over decades of use.	Large variety of options including 9 different vertical stack heights.	Compatible with PCIe Gen3 high-speed transmission. Floating feature for easy blind mating, and dual contact structure for high reliability. This connector is suitable for use in the automotive industry.	New variation of MA01 series with expanded floating tolerance from the conventional 0.5 mm to 0.8 mm in the X & Y directions.	Floating feature allowing for easy blind mating, and dual contact structure for high reliability.	Combination of socket receptacle (straight) and pin header (straight/right angle) enable vertical and parallel connections.	Mating guide and key to prevent mis-mating.	Ribbon type contacts ensure reliable electrical continuity. Improved electrical characteristics from TX24/25 Series for high-speed transmission.	Ribbon type contacts ensure reliable electrical continuity. Improved electrical characteristics from TX24/25 Series for high-speed transmission.

AC02 Series

Socket side: **AC02 - S### - WA# - R####**

Modification Code
WA1: 2.5mm (Stacking height)
WA2: 3.0mm (Stacking height)
Emboss Reel Packaging

Plug side: **AC02 - P### - WA1 - R####**

Modification Code
WA1: 2.5mm (Stacking height)
Emboss Reel Packaging

WR Series

Receptacle: **WR - ###S - VF - N1**

B: Positioning Boss
H05: +0.5mm
H30: +3.0mm

Straight Plug: **WR - ###P - VF - N1**

B: Positioning Boss
50: +1.0mm
60: +2.0mm

R/A Plug: **WR - ###P - HF - HD - A1E**

MA01 Series

MA01 F ### V A C B R####

Connector Type
F: Floating Type
Mounting Type
V: SMT, Straight
Emboss Reel Packaging
Modification Code
B: With Positioning Boss
J: 0.8mm Floating product
Connector Height
A: 6.3mm, B: 12.3mm
C: 18.3mm, D: 9.8mm
A: Plating of connection area is Au0.1 µm min.

MA01 R ### V A B B R####

Connector Type
R: Rigid Type
Mounting Type
V: SMT, Straight
H: SMT, Horizontal
Emboss Reel Packaging
Modification Code
B: With Positioning Boss
Connector Height
B: 6.6mm, D: 8.6mm
N: 16.6mm, Y: Vertical type
A: Plating of connection area is Au0.1 µm min.

AX03 Series

AX03 * 050 H A #1 R####

Series
Connector Type
F: Floating Type
R: Rigid Type (fixed type)
Number of Contacts
Mounting Type
H: Angle type, contact SMT
Emboss Reel Packaging
Modification Code
A: Plating of connection area is Au0.1 µm min.

TX24/25 Series

Receptacle: **TX24 - ###R - LT - H1E**

Plug: **TX25 - ###P - LT - H1E**

Stacking Height:
Receptacle:
6, 10, 12mm
Plug:
6, 8, 12mm
*Right-angle leave blank
H: Hook pin
N: No hook pin
LT: Right angle
ST: Straight

IL-WX Series

Socket receptacle: **IL-WX - ##S - VF - B**

B: Positioning Boss
Hold Down

Straight Pin header: **IL-WX - ##P - VF - HD - S - B**

B: Positioning Boss
Hold Down
Modification Code

R/A Pin header: **IL-WX - ##P - HF - HD - S - B**

B: Positioning Boss
Hold Down
Modification Code

TX24A/25A Series

Receptacle: **TX24A - 80R - LT - H1E**

Plug: **TX25A - 80P - LT - H1E**

LT: Right-angle
H: Hook pin

KX14/15 Series

Receptacle: **KX14 - ##K 2 DE**

Stack Height:
2, 5, 8mm

Straight Plug: **KX15 - ##K 3 DE**

Stack Height:
2, 3, 4mm

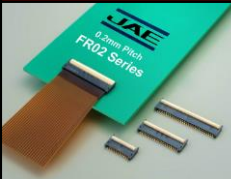
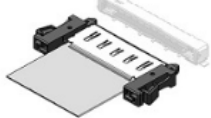
R/A Plug: **KX15 - ##K L DLE**

Right angle

R/A Plug: **KX15 - ##K L DNL**
(with Hexagonal Nut)

Right angle

Board-to-FPC/FFC Connectors

Series	FF08	FR02	JF08
Photo			
Pitch	0.2mm	0.2mm	0.5 mm
Mounted Height	1mm	0.82mm	-
FPC/FFC Thickness	0.15 ± 0.02mm	0.2 ± 0.03mm	-
FPC Contact Orientation	Bottom	Top or bottom	-
Pin Count	25,29,41,51,71,81	23,41,51,61	41, 51
Current Rating	0.3A	0.25A	0.3A
Voltage Rating	50V	50V	-
Features	Smallest pitch. Rotating actuator.	Lowest profile in class. Robust rear actuator. Compatible with top and bottom contact FPC.	Complete harness assemblies using a Flat Flexible Cable (FFC)

Part Number Guide

FF08 Series

Reel: **FF08##SA1-R3000**

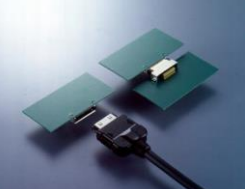
FR02 Series

Reel: **FR02C0##JA1-R5000**

JF08 Series

Reel: **JF08R0R0#####UA**

Commercial I/O Connectors

Series	DC3	DC04	DD1	DD2	DX07	DX07 Cable	RK01
Photo							
Pitch	0.4mm	1.0mm	0.5mm	0.5mm	0.5mm	0.5mm	-
Interface Type	Cable I/O	Cable I/O	Cable I/O R/A Dock 75° Vert Dock	Cable I/O R/A Dock Vert Dock	Cable I/O Vert Dock	Cable I/O (C-C, C-A)	smart textile I/O
Pin Count (Parallel)	19	19	30	40	16, 22, 24	24	4,12
Signal Standard	HDMI	HDMI 2.1	USB 2.0	USB 2.0	USB Type-C® USB 3.2, USB4, Thunderbolt™ 4*	USB 3.2 Gen 2	-
Current Rating	0.3A	0.5A	Signal: 0.5A Power: 1.0A	Signal: 0.5A Power: 1.0A	Vbus / GND: 5A Vconn: 1.25A Signal: 0.25A	USB 3.2 Gen2: 5A USB 3.2 Gen1: 3A	-
Voltage Rating	40VAC	40VAC	30VAC	30VAC	48VAC	20VAC	250VAC
Durability	5,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles	1,000 cycles
Operating Temp	-20 ~ +85 °C	-20 ~ +85 °C	-25 ~ +75 °C	-25 ~ +75 °C	-40 °C ~ +85 °C (general products) -30 °C ~ +85 °C (Vertical Receptacle) -40 °C ~ +125 °C (for products evaluated to automotive specifications, including temperature rise when energized)	PVC: +10 ~ +40 °C TPE: -20 ~ +50 °C	-20 ~ +50 °C
Locking	Friction	Friction	Latch	Latch	Friction	Friction	Friction
Features	Micro HDMI Type-D compatible. Requires HDMI adopter status.	HDMI Type A Category 3 compatible. Requires HDMI adopter status.	Docking connector to combine various high- speed signals in a single connector.	Robust and compact design. Compatible with high speed signaling.	Reversible plug for easier insertion. Multiple receptacle mounting options available.	Reversible plug for easier insertion. Compatible with USB Power Delivery 3.0 and USB 3.2 Gen2	Wash Test: JIS L 1930 (C4G) (Japanese washing test procedures for textile)

*Select part numbers only. Contact us for more information.

View all JAE connectors at www.JAE.com

DC3 SeriesReceptacle: **DC3RX19JA2**

Top Mount

Modification Code
Hold Down Type
X, J: T/H
O, H: SMT

Restricted to HDMI Adapters
Contact JAE for additional options

DC04 SeriesReceptacle: **DC04S019JA1**

Modification Code

Restricted to HDMI Adapters
Contact JAE for additional options

DD1 SeriesReceptacle: **DD1R030HA1**

Standard mount

DD1R030JA7

Reverse mount

Docking Plug: **DD1B030VA1**

Vertical

DD1B030HA1

Right angle

Cable Plug: **DD1P030MA1****DD2 Series**Receptacle: **DD2R040HP2**Docking Plug: **DD2B040VP4**

Vertical

DD2B040HA2

Right angle

Cable Plug: **DD2P040MA1****DX07 Series**Receptacle: **DX07B024J J 1**

Board Mount Type

B: Mid-mount

S: On-board

W: Waterproof

J: Horizontal SMT

X: Horizontal Hybrid

W: Vertical dock

Modification Code

Contact Area Plating

J: Au over Pd-Ni over Ni

A: Au over Ni

Plug: **DX07P024A J 5**

Board Mount Type

P: Plug type

V: Vertical dock

A: Slim

M: Standard

F: Short

Modification Code

Contact Area Plating

J: Au over Pd-Ni over Ni

A: Au over Ni

Cable Harness: **DX07 5 18 S ** N *******

Series

Modification Code

5: Plug

C: Drawn shell Plug

Cable Spec (1)

18: USB3.1 C to C

19: USB3.1 C to A

50: USB3.1 C to C

w/ Screw lock

Cable Overmold/Jacket

S: Black (PVC)

B: Black (TPE)

Modification Code

Cable Spec (2)

K: Gen1 3A

L: Gen 2 3A

N: Gen2 5A

Cable Length

10: 1 meter

20: 2 meter

RK01 Series**RK01 * 001 * Z * R******

P: Plug

R: Receptacle

Number of Contacts

Modification Code

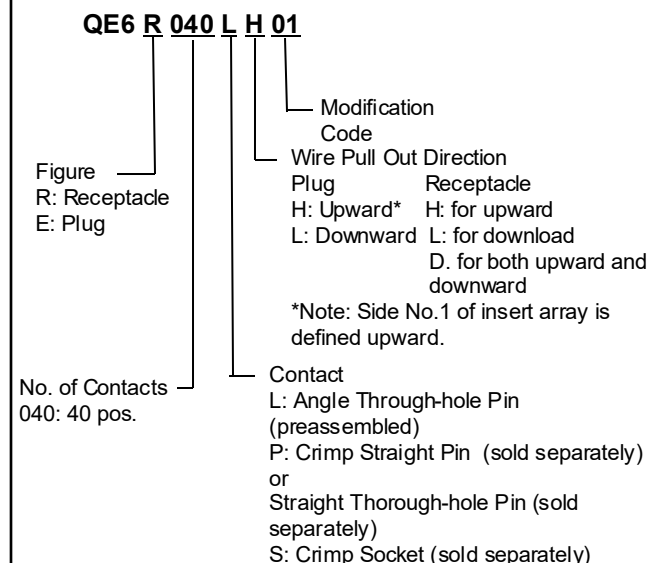
Connection
(Board attachment type)

R: Reeled pieces / reel
None: Individual Product

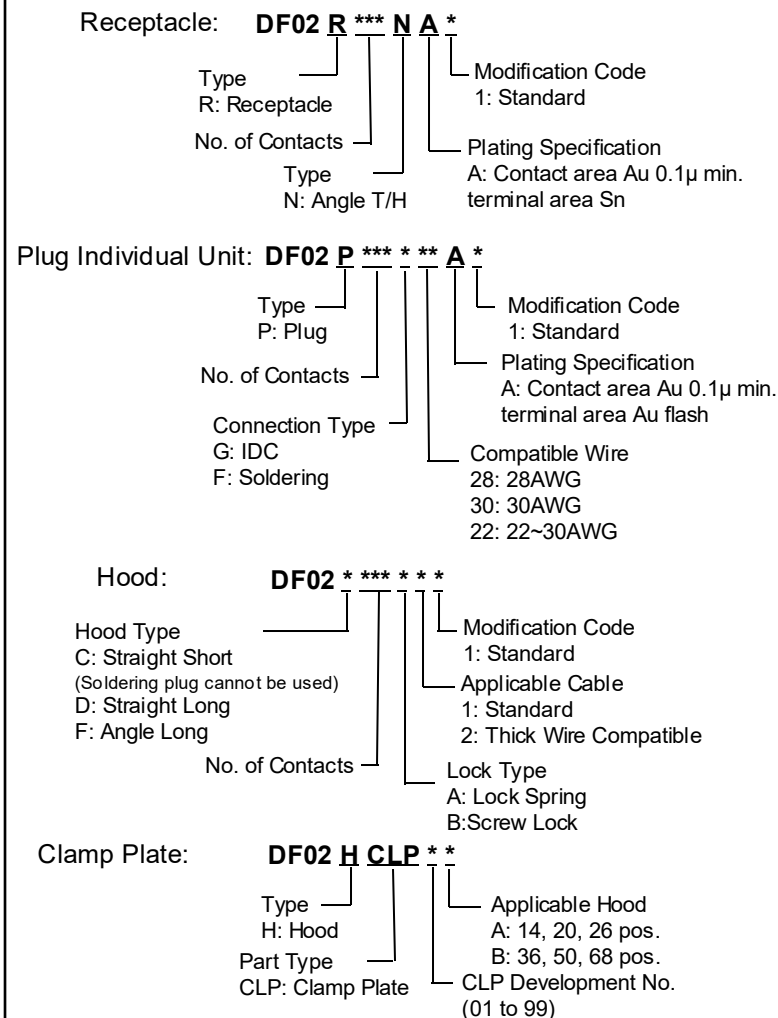
Industrial I/O Connectors [Rectangular] ^(1/2)

Series	QE6	DF02	DZ02	HB01	HB01(O/D)	HB03	HB07
Photo							
Pitch	3.8mm	1.27mm	1.27mm	N/A	N/A	N/A	4.15
I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O
Pin Count	40	14, 20, 26, 36, 50	8 (2 rows x 4pos.)	6 (4 power, 2 signal)	12,16	2, 4, 8	12,24
Current Rating	5A	0.5A	0.5A	Power: 18 AWG: 9A 16 AWG: 11A 14 AWG: 13A Signal: 24 AWG: 2A 22 AWG: 3A 20 AWG: 4A	1A	28 ~ 30 AWG : 1A 24 ~ 26 AWG : 2A 22 AWG : 3A	20 AWG : 7.5A 18 AWG : 10A 16 AWG : 13A
Voltage Rating	AC 1500 Vr.m.s.(Dielectric Withstanding Voltage)	AC 250 Vr.m.s.	AC 30 Vr.m.s.	AC, DC 250 V	AC, DC 250 V	250VAC	D.C. 250 V
Durability	500 cycles	500 cycles	Plug: 1,500 Short-circuit Plug: 1,000	30 cycles	50 cycles	100 cycles	N/A
Operating Temp	-55 ~ +85 °C	-20 ~ +80 °C	-40 ~ +85 °C	-25 ~ +85 °C	-40 ~ +85 °C	-25 ~ +105 °C	-55 ~ +125 °C
Termination	Crimp/Solder	IDC/Solder	Solder (SMT)	Crimp	Crimp	Crimp	Crimp
Locking	Lever Lock	One-touch, Screw	Tab Lock	Tab Lock	Tab Lock	Tab Lock	N/A
Features	Two types of connections – wire crimp and board through-hole types. Compatible with 3U4HP size cards for 19-inch sub-rack.	Half-pitch (1.27mm) interface compatible. Ni-plated plastic hood for lighter weight with EMI shielding.	IEC61076-3-122 (TYPE-I) compliant safety connector for Industrial applications. Single and tow end plug harness and short-circuit plug options.	Hybrid structure enables both power and signal. Terminals compatible with AWG#14-24. Mechanical lock for secure mating. IP67 rated.	IP67 rated waterproof construction eliminates the need for additional potting.	Miniature cable relay connector for compact servo motors. Simple, one-touch latch locking. Compact and Light-weight for ease of use in tight spaces.	Waterproof branch connector which can be used in a large variety of circuit configuration and Capable of harnessing multiple branches of electrical requirements in a single connector.

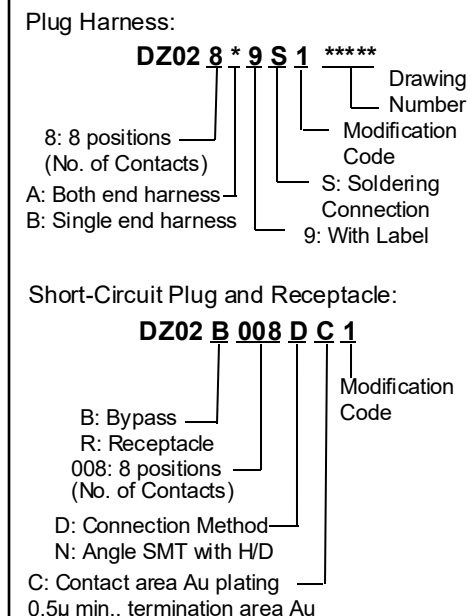
QE6 Series



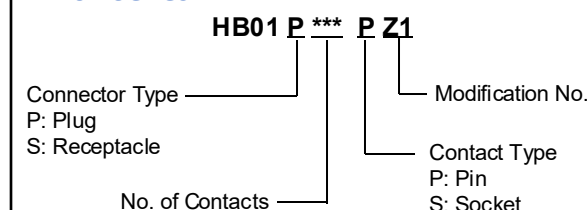
DF02 Series



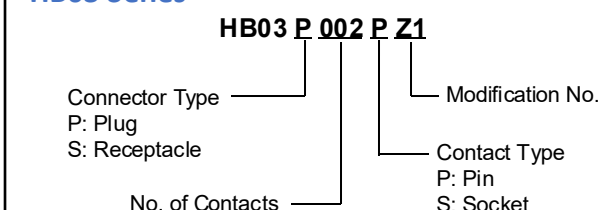
DZ02 Series



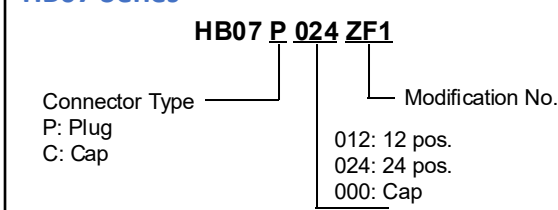
HB01 Series



HB03 Series



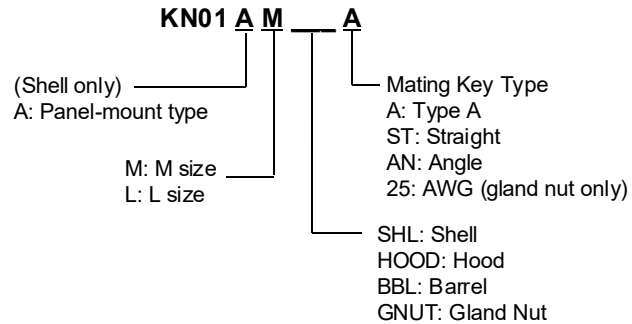
HB07 Series



Industrial I/O Connectors [Rectangular] (2/2)

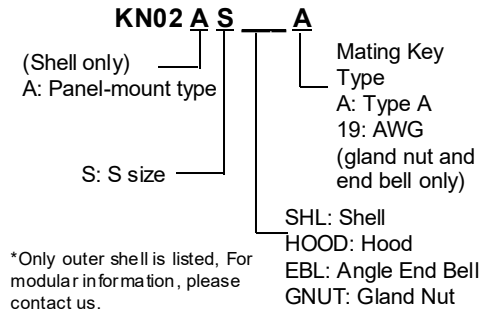
Series	KN01	KN02	KN06
Photo			
Pitch	N/A	N/A	N/A
I/O	Cable I/O	Cable I/O	Cable I/O
Pin Count	M size : MAX 64 pos. 4 x insulator blocks /unit #16 × 16, #20 × 16, #20 × 14 L size : MAX 300 pos. 6 x insulator blocks /unit #8 × 4, #12 × 12, #20 × 18, #22 × 42, #22 × 50	Type I : 28 pos. Type II : 46 pos. 3 x insulator blocks /unit	4, 12, 18, 18 with shielding, 42, 50 / 6 x insulator blocks /unit
Current Rating	M size Power : 16 pos. × 16A(#16) Signal : 14 pos. or 16pos. × 3A(#20) L size Power : 4 pos. × 30A(#8) or 12 pos. × 23A(#12) Signal : 18 pos. × 3A(#20) or 42 pos. × 2A(#22) or 50 pos. × 3A(#22)	4 pos. block: 4A 6 pos. block: 2A 8 pos. block: 13A 16 pos. block: 2A & 4A 24 pos. block: 2A	4 pos. block: 30A 12 pos. block: 23A 18 pos. block: 3A 42 pos. block: 2A 50 pos. block: 3A
Voltage Rating	M size 14 pos. : 24VDC 16 pos. : #16 250VAC, #20 24VDC L size 4 pos. : 500VDC 12 pos. : 250VAC 18, 42, 50 pos. : 24VDC	4, 6, 16 pos. blocks: 24VDC 8, 24 pos. blocks: 250VAC	4, 12 pos. blocks: 500VAC 18, 42, 50 pos. blocks: 24VDC
Durability	100 cycles	30 cycles	30 cycles
Operating Temp	-20 ~ +105 °C	-10 ~ +85 °C	-20 ~ +105 °C
Termination	Crimp	Crimp	Crimp
Locking	Rack & Pinion Lever	Tab Lock	Rack & Pinion Lever
Features	Low force locking lever. Modular insulator structure for custom power and signal combination requirements, with EMI shielding option.	All-plastic outer shell, light-weight. EMI shielding with a metal plating applied to outer shell and internally shield components.	Capable of housing up to 6 modular insulator blocks for various combinations and multi-pole, single-engagement operation, lever engagement.

KN01 Series



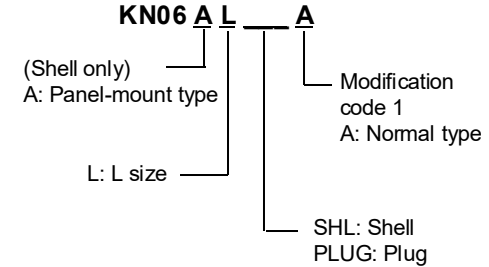
*Only outer shell is listed. For modular information, please contact us.

KN02 Series



*Only outer shell is listed. For modular information, please contact us.

KN06 Series



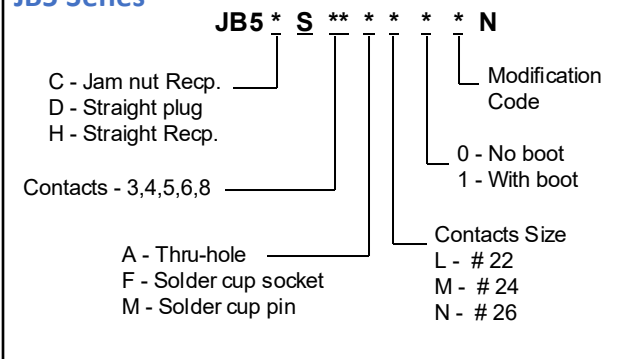
*Only outer shell is listed. For modular information, please contact us.

Industrial I/O Connectors [Circular] (1/2)

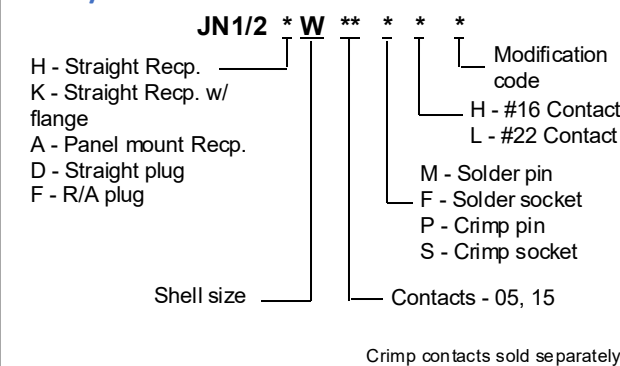
Series	JB5	JB10	JN1 / JN2	JN1W / JN2W	JN1V / JN2V	JN6	JN13	JN14	SRCN
Photo									
Plug Shell Diameter	ø11.0mm	ø33.5mm	JN1: ø19.0mm, JN2: ø 20.0mm	ø26.2mm	JN1: ø19.0mm, JN2: ø 20.0mm	2pos.: 21×12.5 4pos.: 24.5×18 7pos.: 21×12.5	6pos.: 31.8×20.2 9pos.: 23.5×16	2pos.: 19×17 4pos.: 22.1×17.6 9pos.: 22.1×17.6	ø21.2-33.2mm
Pin Count	3,4,5,6,8	26	4,10	5,15	10	2, 4, 7	6(2 + 4), 9	2, 4, 9	3,5,7,10,16,24
Shell Material	Metal	Plastic	JN1: Plastic JN2: Metal and Plastic	JN1W: Plastic JN2W: Metal and Plastic	JN1V: Plastic JN2V: Metal and Plastic	Plastic	Plastic	Plastic	Metal
Mated Condition	IP68	IP67 (mated)	IP67	IP67	IP67	IP67 (mated)	IP67 (mated)	IP67 (mated)	N/A
Current Rating	2 ~ 3A	1A	3 ~ 5A	3 ~ 13A	3A	2pos: 1A 4pos: 7A 7pos: 1A	2pos.: 1.2A 4pos.: 7.4A 9pos.: 1A	2pos.: 1A 4pos.: 7A 9pos.: 1A	5 ~ 10A
Voltage Rating	200VAC ~ 320VAC	100VAC	200VAC	200VAC ~ 400VAC	230VAC	2pos.: 100VAC 4pos.: 200VAC 7pos.: 100VAC	2pos./6 : 30VDC 4pos./6 : 230VAC(TÜV) 400VAC(UL) 9pos.: 100VAC	2pos.: 100VAC 4pos.: 240VAC 9pos.: 100VAC	250VAC
Durability	5,000 cycles	500 cycles	500 cycles	500 cycles	500 cycles	100 cycles	100 cycles	50 cycles	500 cycles
Locking	Push-pull	One-touch (push-and-twist)	Push on, twist off	Push on, twist off	Push on, twist off	Screw	Screw	Screw	Threaded
Operating Temp	-55 ~ +85 °C	-20 ~ +125 °C	-20 ~ +125 °C	-20 ~ +125 °C	-20 ~ +125 °C	-40 ~ +125 °C	-40 ~ +125 °C	-40 ~ +125 °C	-25 ~ +85 °C
Wire Size	AWG #22-28	AWG #20-28	AWG #20-28	AWG #14-28	AWG #20-28	2,7pos.: AWG #22-28 4pos.: AWG #18-20	6pos.: AWG #18-22 9pos.: AWG #22-28	2,9pos.: AWG #22-28 4pos.: AWG #18-22	AWG #16-20
Termination	Solder	Crimp	Crimp / Solder	Crimp / Solder	Crimp	Crimp	Crimp	Crimp	Solder
Features	Compact connector, individually rated IP68 waterproof in unmated condition.	Internal EMI shielding. One-touch, push-and-twist for easy locking and unmating.	Single operation push to mate, twist to unmate mechanism. JN2, metal/plastic housing is 3x durable.	Single operation push to mate, twist to unmate mechanism. JN2, metal/plastic housing is 3x durable.	Increased socket contact points to withstand 25G vibration. Mates with conventional JN1/JN2 receptacle. One-touch locking.	Plastic, waterproof connector ideal for small servo motors. Mating secured by screws. 4pin receptacle is mold-in; 2pin/7pin receptacles are press-fit.	The 6-position connector combines power and brake with reinforced insulation. TÜV & UL Certified.	Screw grounded 4pin receptacle. Spring lock 2pin/9pin receptacles. Plastic, waterproof ideal for compact servo motors.	JIS C 5432 compliant UL recognized, 5 insert guide keys.

View all JAE connectors at www.JAE.com

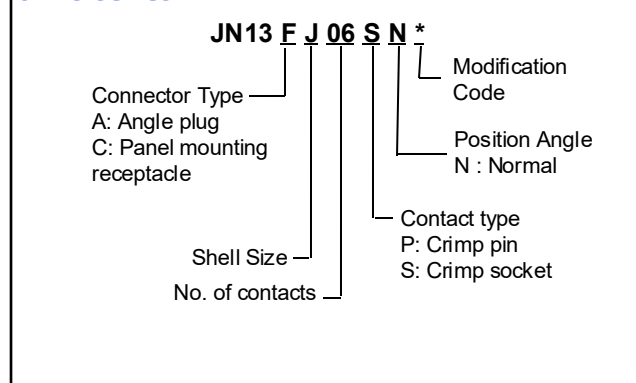
JB5 Series



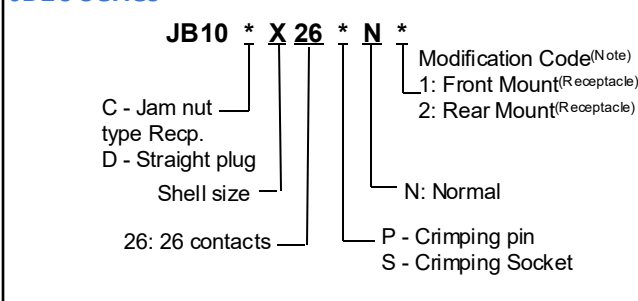
JN1W/2W Series



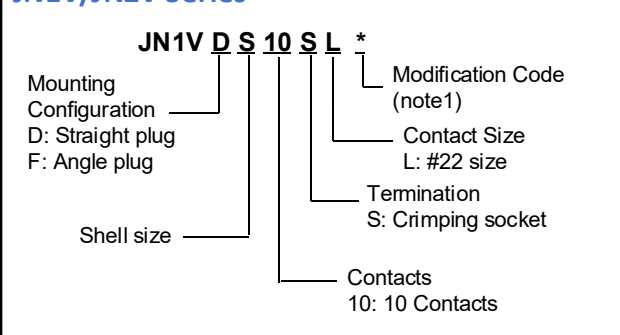
JN13 Series



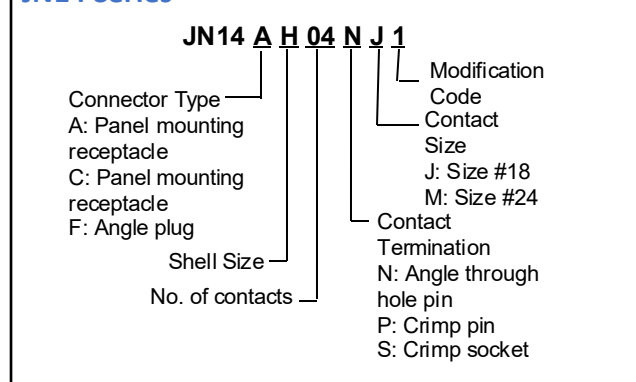
JB10 Series



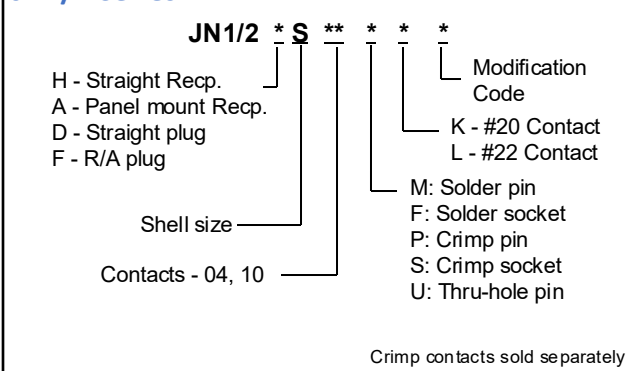
JN1V/JN2V Series



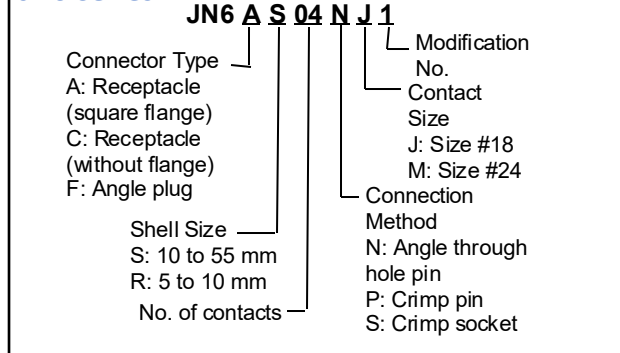
JN14 Series



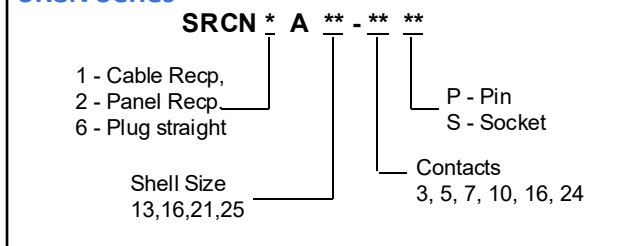
JN1/2 Series



JN6 Series



SRCN Series



Industrial I/O Connectors [Circular] (2/2)

Series	JL02	JL04V	JL05	JL10	JL10/W	JK06	JK06 Ethernet	N/MS	JB12
Photo									
Plug Shell Diameter	ø34.1-62.7mm	ø22-56.3mm	ø35.9-51.7mm	ø35.9-58.6mm	Ø42.2mm	ø36.5-66.3	ø59.8	ø22.2-81.8mm	ø16.2
Pin Count	10,17,19,24,37,48,54	3,4,6,7,8,9,22	4,5,7,8,9,10,17,19,24,30,36,37, 52,73	4,6,9,17,19,22,37	3,4	3,4,6,7,10,19,37,48	20 (for Cat.5) 4E (for Cat.6A)	1~11,14,16,17,19,22,24,26,35,37,48,54	8 (X-code for Cat.6A) 4 (D-code for Cat.5e)
Shell Material	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal
Mated Condition	N/A	IP67	IP67	IP67	IP67	IP67	IP67	N/A	IP67 (mated)
Current Rating	1.5 ~ 13A	13 ~ 80A	2 ~ 46A	13 ~ 80A	46A	13 ~ 367.9A	20pos: 13A 4pos: 3A (per inner contact)	13 ~ 150A	X-code 0.5A / contact D-code 4A / contact
Voltage Rating	200VAC ~ 500VAC	100VAC ~ 500VAC	200VAC ~ 900VAC	100VAC ~ 500VAC	100VAC ~ 500VAC	220VAC	20pos: 220VAC 4pos: 110VAC	200VAC ~ 3,000VAC	X-code 48VAC D-code 250VAC
Durability	500 cycles	500 cycles	500 cycles	500 cycles	500 cycles	500 cycles	500 cycles	500 cycles	500 cycles
Locking	Threaded	Threaded	Bayonet	Bayonet and Threaded	Bayonet	Bayonet	Bayonet	Threaded	Threaded
Operating Temp	-55 ~ +85 °C	-55 ~ +125 °C	-55 ~ +125 °C	-55 ~ +125 °C	-55 ~ +125 °C	-40 ~ +100 °C	-40 ~ +100 °C	-55 ~ +125 °C	-40 ~ +85 °C
Wire Size	AWG #14-28	AWG #4-18	AWG #8-26	AWG #4, 8-18	AWG #8-10	AWG #4-22	AWG #12-24	AWG #0-16	AWG #22-30
Termination	Crimp	Solder	Crimp / Solder	Solder	Crimp / Solder	Crimp	Crimp	Solder	Crimp
Features	Compatible with MIL-DTL-5015 standard.	TÜV approved UL recognized Compatible w/ MIL-DTL-5015	JIS B 9960-1 compatible.	TUV and UL approved. Compatible w/ MIL-DTL-5015.	Outdoor Environment water and dust-proof connector	Panel-to-cable connector, VG95234 design. Compatible w/ MIL-DTL-5015.	Cat.5 and Cat.6A compliant Ethernet data transmission connector. VG95234 design, compatible with MIL-DTL-5015 standard	UL approved. Compatible with MIL-TL-5015 standard.	IEC standard. M12-style X-code D-code cUL / UL (UL2238)

View all JAE connectors at www.JAE.com

JL02 Series

JL02 - ** ** - ** * - F0 - R

Connector Type
1B: Straight Recp.
2A: Panel mount Recp.
6B: Straight plug
8B: Right angle plug

Shell size

Contact arrangement

Crimp contacts

P - Pin
S - Socket

JL10 Series

JL10 - * E ** - ** P E - **

Connector Type
2: Recp.
6: Straight plug
8: Angle plug

Shell Size

E: Waterproof
A: Waterproof only when mated

E: Earth contact

P: Pin
S: Socket

Contact arrangement

EB - w/ end bell

JL04V Series

JL04V - * A - ** - * * E - B - ** - R

2 - Recp.
6 - Plug
8 - Plug, R/A

E - Waterproof
A - Waterproof only when mated

Shell Size

Contact arrangement

E - Earth contact

P - Pin
S - Socket

EB - w/ end bell

JL10/W Series

JL10 /W - * A ** - ** P E - **

W: Weather resistance Type

Connector Type
2: Recp.
6: Straight plug

E: Waterproof
A: Waterproof only when mated

Shell Size

E: Earth contact

P: Pin
S: Socket
SC: Socket (Cimp)

Insert arrangement

EB: With end bell
B: With solder- cup on earth contact

JK06 Series

JK06 * * ** - * * *

Connector Type
A - Panel mount Recp.
K - In-line Recp.
D - Straight plug (with Endbell)

Shell Size
F - Size 18
H - Size 22
K - Size 28
M - Size 36

Modification Code

Angle of Insertion
N, W, X, Y, Z

P: Pin
S: Socket

No. of Contacts
3, 4, 6, 7, 10, 19, 37, 48

JK06 Ethernet Series

JK06 A L 20 P N * - FO

Connector Type
A: Panel mount Recp.
K: In-line Recp. (Conduit Compatible)
D: Straight plug (Conduit Compatible)

Shell Size
L - Size 32

No. of Contacts
20: 20 positions (for Cat. 5)
4E: 4 positions for Ethernet (for Cat. 6A)

Contact Type
P: Pin Contact
S: Socket Contact

Angle of Insertion (Note 2) N, W, X

Modification Code (Note 1)

FO: Without Contact

N/MS Series

N/MS 310* * ** - * * *

Connector Type
0: Straight Recp.
2: Panel mount Recp.
6: Straight plug
8: R/A plug

Shell Size

Contact arrangement

A: Integrated Shell
B: Separate Shell

Alternate insert position

P: Pin Contact
S: Socket Contact

JL05 Series

JL05 ** - 24 - 10 PC * ** - R

6A: Straight plug
2A: Panel mount Recp.
2L: Waterproof unmated Recp.

Shell Size

Contact Arrangement

P - Solder pin, S - Solder socket
PC - Crimp pin, SC - Crimp socket

Blank: with contacts
F0: without contacts

Alternate insert position

JB12 Series

JB12 * * ** - * * *

Mounting configuration
C: Panel mount receptacle, jam nut type
D: Straight plug

Shell size

Number of contacts

Termination
Y: Selectivity (Solder or Crimping)

Modification code 2
D: D-code
X: X-code

Modification code 1
5: $\Phi 3.5$ to 5.0
7: $\Phi 6.0$ to 7.5
9: $\Phi 7.3$ to 8.8

Cable pullout direction
N: Normal

Industrial I/O Connectors [Optical]

Series	FO-BD2	FO-BD7	FO-BD7D
Photo			
Shell Material	Zinc alloy/ chromium plating	Zinc alloy/ Cr plating over Ni over Cu	Zinc alloy/ chromium plating
Mated Condition	IP67	IP67	IPx7
Corrosion Resistance	720 hours of salt spray	1000 hours of salt spray	1000 hours of salt spray
Durability	500 cycles	Mating area: 50 cycles LC Connector area: 100 cycles	500 cycles
Locking	Threaded	Push-slide lock	Push-slide lock
Operating Temp	-40 ~ +85 ° C	-40 ~ +85 ° C (Depends on harness)	-40 ~ +85 ° C (Depends on harness)
Wire Size	ø7.0mm, ø5.86mm ~ ø7.2mm, ø8.5mm ~ ø10.0mm	ø5.0mm	ø5.0mm
Features	Connects directly to an on-board SFP transceiver and modular jackets. On-site assembly capable with plug built into existing harnesses. Compatible with TE manufactured FullAXS..	Optical module slot within plug connector and mounted to outdoor environment provides optimal thermal countermeasure. IP67 rated water & dust ingress protection.	Optical module slot within plug connector and mounted to outdoor environment provides optimal thermal countermeasure. Optical module compatible with standard LC fiber optic connector

Part Number Guide

FO-BD2 Series

Receptacle : **FO-BD2-R**

Plug : **FO-BD2-P (ø7.0mm)**
FO-BD2-P-V2 (ø5.86mm ~ ø7.2mm)
FO-BD2-P-V4 (ø8.5mm ~ ø10.0mm)

Waterproof Cap without wire rope :

FO-BD2-RCAP

Waterproof Cap with wire rope :

FO-BD2-RCAP/WR

FO-BD7 Series

Receptacle : **FO-BD7-R**

Plug : **Available as harnessed product only. Please contact us for details**

Cage : **FO-BD7-C**

Waterproof Cap : **FO-BD7-R-DC**

FO-BD7D Series

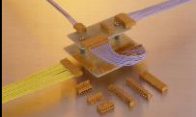
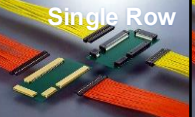
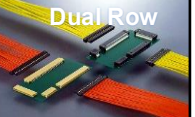
Receptacle : **FO-BD7-R**

Plug : **FO-BD7D-P**

Cage : **FO-BD7-C**

Waterproof Cap : **FO-BD7-R-DC**

Board-to-Cable Connectors

Series	FI-J	IL-G	IL	LY	HD	FI-R	FI-X	FI	
Photo									
Pitch	0.4mm	2.5mm	2.5mm	2.0mm	0.5mm	0.5mm	1.0mm	1.25mm	1.25mm
Discrete Wire AWG	N/A	#22-28	#22-28	#22 to #30	#32,34,36	#30,32,36	#30,32,36	#28,30,32	#28,30,32
Coax Wire AWG	#42,44	N/A	N/A	N/A	#36-44	#40	#32,40	N/A	N/A
FPC/FFC	N/A	N/A	N/A	N/A	N/A	JF08 Assembly	0.14 ± 0.03mm	0.14 ± 0.03mm	N/A
Pin Count	40	2 to 15	2 to 10, 12	4 to 44 (Even numbers)	30,40	21,31,41,51	30	2-6,8,10,15, 20, 25,30	5,7,9,11,13,15,17,19, 21, 31,41
Mated Height	1.58mm	6.0mm	7.73mm	5.3mm	1.0mm	3.8mm	1.6-2.35mm	1.8mm	3.7mm
Locking	Friction	Friction	Friction	Latches	Friction/Pull Bar	Latches	Latches	Latches	Latches
Durability	30 cycles	100 cycles	100 cycles	Tin: 50 Gold: 500	30 cycles	50 cycles	50 cycles	50 cycles	50 cycles
Current Rating	0.3A	3A	3A	3A	0.1A to 1.0A	0.8A	1.0A	1.0A	1.0A
Voltage Rating	50V	500V	AC 300 V、DC400V	250V	100V	200V	200V	200V	200V
Features	Thin wire coaxial connector for small portable devices.	Friction locking mechanism, allowing lower height and higher density mounting.	Crimp type cable-side easy to terminate.	Dual row, crimp, high-density, low-profile.	Compatible with VESA standard for LED backlit panels. LICENSED BY DAI-ICHI SEIKO CO., LTD.	VESA standard for LCD interface of HD TV. Vertical mount available.	VESA standard for 1.0mm pitch LVDS interface.	Single row for low profile. Standard interface for LCD. (20 pin)	Dual row for smaller footprint.

FI-J Series

Receptacle: **FI - J40S - VF15N-R3000**
Orderable in reels

Cable Plug: **FI - J40C5 - T3000**
Only orderable in trays

Plug Shell: **FI - J40C2 - SH - D - 10000**
Only orderable in reels

IL-G Series

Receptacle: **IL - G - ##S - S3C2 - SA**

Cable Plug: **IL - G - ##P - S3T2 - SA - # - 1**

Crimp Contacts: **IL - G - C2 - SC - 10000**
Hand Crimp Tools: **CT150-2C-ILG** (AWG #24 to #22)
CT150-2B-ILG (AWG #26 to #24)
CT150-2-ILG (AWG #28 to #26)

IL Series

Receptacle: **IL - ##S - S3L - (N)**

Cable Plug: **IL - ##P - S3_2**
EN: Straight
FP: Right angle
UX: Bottom-entry

Crimp Contacts: **IL-C2-1-10000**
Hand Crimp Tools: **CT150-2-IL** (AWG #22 to #28)
CT150-2B-IL (AWG #24 to #26)
CT150-2C-IL (AWG #20)
Semi-Auto: **3502-IL-2B**

LY Series

Receptacle: **LY10 - DC - ##**

Cable Plug: **LY20 - ##P - D_1P#**

Crimp Contacts: **LY10-C1-A1-10000**
LY10-C2*-10000
Hand Crimp Tools: **CT150-4-LY1** (AWG #22 to #26)
CT150-4-LY2 (AWG #26 to #30)
Semi-Auto: **CT350-2**
T: Straight
LT: Right angle

HD1 Series

Receptacle: **HD1S040HA1R6000**

Cable Plug: **HD1P040MA1R6000**

Cover Shell: **HD1P040-CSH1-10000**
1: Discrete wire
2: Coax wire

Pull Bar: **HD1P040-PB1**

HD2 Series

Receptacle: **HD2S030HA1R6000**
Modification Code

*Licensed by I-PEX, Co., Ltd.

Orderable in reels

FI-R Series

Receptacle: **FI - R_ ## S - HF**
E: EMI shell
H: Horizontal
V: Vertical

Cable Plug: **FI - R_ ## H**
E: EMI shell
L: Locking Latches
H: Discrete wire crimp
C: Fine-wire coaxial

Cover Shell: **FI - RE ## CL - SH2 - 3000**
Only for coax cable plug

FFC Harness: **JF08R0R0##0##UA**
Pin Count 41, 51
Cable length in cm

Crimp Contacts: **FI-RC3-1A-1E-15000 (upper)**
FI-RC3-1B-1E-15000 (lower)
Hand Crimp Tool: **CT150-4C-FIR**
Semi-Auto: **3502-FI-2B**

FI-X Series

Receptacle: **FI - X_ 30S_ L_ - HF_**
B: Mid mount
S: Stronger shell
Modification Code
R: Reverse

Cable Plug: **FI - X30H**
H: Discrete wire crimp
C: Coax wire
MA1: FPC/FFC
L: Locking latches

Crimp Contacts: **FI-XC3B-1-15000**
Hand Crimp Tool: **CT150-4C-FIX**
Semi-Auto: **3502-FI-2B**

FI Series**Single Row**

Receptacle: **FI - S_ ##P - HFE**

Cable Plug: **FI - S_ ##S**
E: EMI Shell
(Only for 20 pos, FPC)
S: Discrete wire crimp
ME: FPC/FFC
MRE: Rev. FPC/FFC

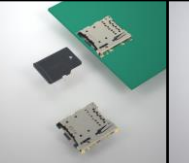
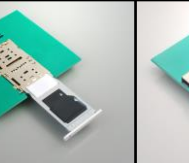
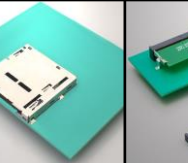
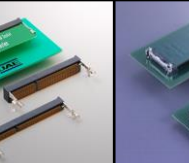
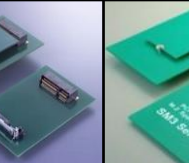
Dual Row

Receptacle: **FI - W_ ##P - HFE** Right angle
E: EMI Shell

Cable Plug: **FI - W##S**

Crimp Contacts: **FI-C3-A1-15000**
Hand Crimp Tool: **CT150-4C-FI**
Semi-Auto: **3502-FI-2B**

Card Connectors (1/2) (microSD, nano SIM, SD, SODIMM, PCI-SIG Mini Card, PCI-SIG M.2)

Series	ST1	ST11	ST12	ST50	ST51	ST19	SG50	MM80	MM60	SM3
Photo										
Card	microSD™	microSD™	microSD™ (UHS-I)	microSD™ (UHS-II)	microSD™ EXPRESS	microSD™ and nano SIM combo	SD (UHS-I,UHS-II)	DDR3 SDRAM SODIMM	PCI Express Mini Card	PCI-SIG M.2
Mounted Height	1.9mm,1.4mm	1.25mm	1.4mm	1.35mm	1.4mm	1.3mm	3.15mm	5.2mm	4.0mm, 5.9mm	1.2mm, 2.15mm, 3.1mm, 4.1mm
Pin Count	8, 8+1	8+2	10+2	17+4	17+2	20+2	9+3 (UHS-I) 17+3 (UHS-II)	204	52	67
Voltage Rating	10V	10V	10V	10V	10V	10V	10V	200V AC rms	50VAC rms	50V AC rms
Current Rating	0.5A	0.5A	0.5A	0.5A	1A	0.5A	0.5A	0.3A	0.5A	0.5A
Durability	10,000 cycles	5,000 cycles	10,000 cycles	5,000 cycles	5,000 cycles	2,500 cycles	10,000 cycles	25 cycles	50 cycles	60 cycles
Style	Hinged	Push-Push	Push-Push	Push-Push	Push-Push	Push Eject Tray	Push-Push	Card Edge	Card Edge	Card Edge
Features	Available with card detection switch. Smallest footprint & lowest height for hinged type. Conducted vehicle specifications evaluation including high-temperature environments of 105°C	Strong mechanical lock to prevent card from popping out from vibration and shock.	Mechanical lock structure resistant to vibration and shock Conducted vehicle specifications evaluation including high-temperature environments of 105°C	Compatible with ultra high-speed data transmission standard UHS-II for transferring large files quickly.	Multi-point hold-down structure for strength, EMC, and heat dissipation Conducted vehicle specifications evaluation including high-temperature environments of 105°C	3 in 2 combo connector can house a nano SIM and either an additional nano SIM or a microSD.	Each terminal has 2 points of contact to prevent discontinuity in environments with foreign debris as well as high vibration and shock. UHS-II compatible product for future high-speed applications. Conducted vehicle specifications evaluation including high-temperature environments of 105°C	DDR3 SO-DIMM connector compatible with JEDEC standard MO-268C.	Retention latch or screw hold downs available to fix module to connector and main PCB.	Multiple key and heights variations available.

ST1 Series

MicroSD: **ST1W008S4 A R1500**
Hinged type
Modification code

MicroSD: **ST1W008S4 G R2000**
Low profile
Hinged type
G: W/out detect switch
T: With detect switch
X: Cover detect switch

ST11 Series

MicroSD: **ST11S008V4HR2000**
Push-push type

ST12 Series

MicroSD (UHS I): **ST12S010VBAR1800**
Push-push type

ST50 Series

MicroSD (UHS II): **ST50S017VCAR1800**
Push-push type

ST51 Series

MicroSD EXPRESS: **ST51S017VBBR1800**
Push-push type

ST19 Series

MicroSD and nano SIM: **ST19S020VCAR1400**
Combo tray type

SG50 Series

SD: **SG50S017VCAR500**
Push-push type
No. of contacts
A: UHS-II Support
B: UHS-I Support

MM80 Series

DDR3 SDRAM SO-DIMM

Connector: **MM80 - 204B1 - E1R**
Blank: Standard
R: Reverse

MM60 Series

PCI Express Mini Card

Connector : **MM60 - 52 - B 1 - E 1**
No. of contacts
Socket type
B: Top mount
Key type
Contact finish
Height modification code
Latch : **MM60 - EZ - H059 - B 5**
Latch type
Connector height
With boss
5: Sn plating

Nut : **NT1R3000** 4.0mm height connector
NT4R1600 5.9mm height connector

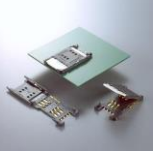
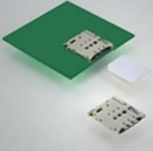
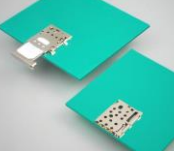
SM3 Series

M.2 (NGFF)

Connector: **SM3 Z S 067 U 310 ****
No. of contacts
Mounting Type:
U: On-board
B: Mid mount
Connector Height:
120: 1.20mm
215: 2.15mm
310: 3.10mm
410: 4.10mm
Polarizing key:
A/B/E/M
Contact finish:
(Au plating)
A: 0.13um
B: 0.25um

Nut : **SM3ZS067U215-NUT1** 2.15mm connector
SM3ZS067U310-NUT1 3.1mm connector
SM3ZS067U410-NUT1 4.1mm connector

Card Connectors (2/2) (SIM, Micro SIM, Nano SIM)

Series	SF7	SF15	SF53	SF56K	SF58	SF70	SF72	SF78
Photo								
Card	SIM	micro SIM	micro SIM	micro SIM	micro SIM	nano SIM	nano SIM	Dual nano SIM
Mounted Height	2.5mm/2.3mm	1.55mm	1.45mm	1.27mm	1.3mm	1.25mm	1.25mm	1.3mm
Pin Count	6, 6+2	6	6	6+2	6+2	6+2	6+2	12+2
Card/Tray Detect Switch	Available	Without switch	Without Switch	With Switch	With Switch	With Switch	With Switch	With Switch
Current Rating	10µA to 1A	0.5A	0.5A	0.5A	0.5A	0.5A	0.5A	0.5A
Durability	5,000 cycles	1,500 cycles	1,500 cycles	5,000 cycles	5,000 cycles	5,000 cycles	5,000 cycles	2,500 cycles
Style	Hinged	Hinged	Push-Pull	Push-Push	Pin Eject Tray	Pin Eject Tray	Push-Push	Pin Eject Tray
Features	Reliable locking structure. Positioning boss, metal cover available.	Small footprint and height. Clear click feeling to indicate when cover is locked.	Unique contact design to prevent damage from angled insertion and use with card adapters.	Smallest in class height. Long eject length for ease of use. Bridged contact to prevent damage from adapter cards.	Low profile and narrow design. Strong lock design for high tray retention.	Small size for compact portable devices. Strong lock design for high tray retention.	Low profile; Special contact shape for enhanced reliability. Long card eject length for ease of use.	Low profile dual SIM connector can house 2 nano SIM cards at the same time.

SF7 Series

SIM: **SF7W 006 S 1 A**
 Hinge type

006: 6 position
 008: 6 signal + 2 switch

A: Positioning boss
 B: No boss
 E: Low profile

1: Standard
 4: Low profile

SF15 Series

Micro SIM: **SF15W006S4BR2000**
 Hinge type

SF53 Series

Micro SIM: **SF53S006VCBR2000**
 Push-Pull type

SF56 Series

Micro SIM: **SF56K006VBAR2000**
 Push-Push Type

SF58 Series

Micro SIM: **SF58S006VBAR2000**
 Tray type

Please contact JAE for recommended dimensions of the tray.

SF70 Series

Nano SIM: **SF70S006VBAR2000**
 Tray type

Please contact JAE for recommended dimensions of the tray.

SF72 Series

Nano SIM: **SF72S006VBDR2500**
 Push-Push type

SF78 Series

Nano SIM: **SF78S012VBAR1400**
 Tray type

Please contact JAE for recommended dimensions of the tray.

LED Lighting Connectors

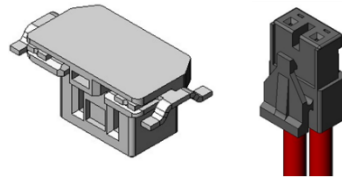
Series	ES3 (WF2)	ES5	ES6	ES9
Photo				
Applicable Wire Size	#22,24,26	#22,24,26	N/A	#22,24,26
Pin Count	2	1	2	2,4
Height	1.65mm (above board)	1.6mm	1.55mm (above board)	3mm
Locking	Latch	Latch	Friction	Friction
Durability	20 cycles	20 cycles	20 cycles	10 cycles
Current Rating	2.0A	4.0A(AWG24,26) 6.0A(AWG22)	1.0A	3.0A
Voltage Rating	200V	N/A	250V	250V
Operating Temperature	-40 ~ +105 °C	-40 ~ +105 °C	-40 ~ +105 °C	-40 ~ +105 °C
Features	Mechanical lock included for use in applications with vibration and shock. cULus certified.	Special lock structure that has a clear “click” feeling for secure mating. cULus certified available.	Smallest size. Card edge connector design to reduce components and labor. cULus certified.	Spring lock structure provides high vertical and horizontal retention strength. cULus certified available.

ES3-WF2 Series (Board-to-Wire type)

Receptacle: **ES3B002WF2R1000**

Housing: **ES3S002SZA**

Contact: **IL-Z-C1-A-7000**



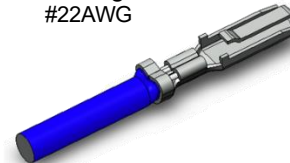
ES5 Series

Receptacle: **ES5S001JFAR5500**



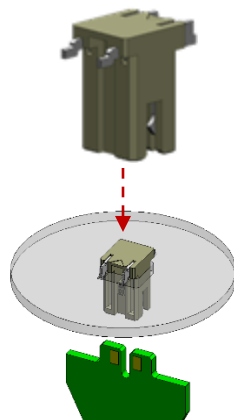
Cable Plug: **ES5P09K5FA**
#24-26AWG

Cable Plug: **ES5P09K4F2**
#22AWG



ES6 Series

Receptacle: **ES6B002WF1R1000**



ES9 Series

Receptacle: **ES9P 00# VF1R1600**

No. of contacts:
002: 2
004: 4

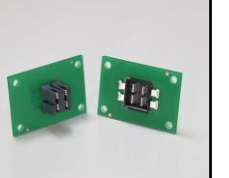
Plug (housing): **ES9S 00# SZA**

No. of contacts:
002: 2
004: 4

Contact: **ES9S06K4FA**



High-Power Connectors

Series	DW1	DW2	DW3	DW4	DW05	DW07	JK11	DW11
Photo								
Type	Rack-and-Panel	Rack-and-Panel	Rack-and-Panel	Bus bar-to-Cable	Cable-to-Cable	Bus bar-to-Bus bar	Lever Locking	Board to Board
Pin Count	Power: 2 Signal: 20	Power: 2 Signal: 20	Power: 2 Signal: 24	1	1	1	4	4
Current	Power: 500A Signal: 2A	Power: 200A Signal: 2A	Power: 150A Signal: 2A	100A	150A	Up to 414A (Varies by bus bar thickness and allowable temp rise. Scalable for added current)	150A (50mm ² wire) 150A (38mm ² wire) 60A (14mm ² wire)	20A
Voltage Rating	Power: 600V Signal: 100V	Power: 600V Signal: 100V	Power: 600V Signal: 100V	600V	N/A	N/A	Varies by usage.*	250V
Durability	20 cycles	100 cycles	100 cycles	50 cycles	100 cycles	100 cycles	500 cycles	30 cycles
Floating Range	+/- 2.75mm	+/-2.75mm	+/-2.0mm	N/A	N/A	+/-2.5mm	N/A	+/-0.8mm
Operating Temp	-40 ~ +95 °C	-25 ~ +115°C	-25 ~ +105°C	-40 ~ +85°C	-40 ~ +85°C	-25 ~ +105°C	-55 ~ +85°C	-40 ~ +85°C *1
Features	Robust high-power and signal hybrid for large battery modules. Floating for easy and blind mating.	200A for mid-range power solutions. Signal and power hybrid. Floating for easy and blind mating.	Low-profile to fit 1U form-factory battery rack. Power plus signal. Floating for easy and blind mating.	Secure cable connector for high-power. Color-coded and keyed to prevent mating errors. Offered as harness.	Keyed cable-to-cable connector for safe high-power mating. Screw holes for easy mounting.	Innovative busbar clip connector, without requiring screw, housing, nor tools for assembly.	Horizontally arranged high-current contacts provide a slimmer profile compared to conventional circular connectors.	Unique ±0.8mm, X & Y-direction, floating structure for misalignment compensation during automated mating. Ideal to supply power between boards in various industrial applications.

View all JAE connectors at www.JAE.com

*Please consult with JAE representative.

*1 Please contact us if you are considering a high-temperature environment.

DW1 Series

DW1 * 002 Z H 1

R: Receptacle
P: Plug

No. of Contacts
002: 2 pos.
(shown in 3 digits)

Plating of Contact Area
H: Ag plating

Connection Type
Z: Others

Modification Code

DW1 * 020

R: Receptacle
P: Plug

No. of Contacts
020: 20 pos. (shown in 3 digits)

DW1 * 04K 4 F 1

S: Crimp, socket
P: Crimp, pin

No. of Contacts
04K: 4000 pcs.

Reel Part Number
K: unit of 1000 pcs. (Note 1)

Plating of Contact Area
F: Sn plating

Applicable Cable Size
4: 22AWG

Modification Code

Note 1: An embossed reel contains 4,000 pcs.

DW2 Series

DW2 * 002 Z H 1

R: Receptacle
P: Plug

No. of Contacts
002: 2 pos.
(shown in 3 digits)

Plating of Contact Area
H: Ag plating

Connection Type
Z: Others

Modification Code

DW2 * * ***

R: Receptacle
P: Plug

Modification Code
(Plug side only)

No. of Contacts
010: 10 pos.
020: 20 pos. (shown in 3 digits)

DW1 * 04K 4 F 1

S: Crimp, socket
P: Crimp, pin

No. of Contacts
04K: 4000 pcs.

Reel Part Number
K: unit of 1000 pcs. (Note 1)

Plating of Contact Area
F: Sn plating

Applicable Cable Size
4: 22AWG

Modification Code

Note 1: An embossed reel contains 4,000 pcs.

DW3 Series

DW3 * 002 Z H 1

R: Receptacle
P: Plug

No. of Contacts
002: 2 pos.
(shown in 3 digits)

Plating of Contact Area
H: Ag plating

Connection Type
Z: Others

Modification Code

DW3 * 012 A

R: Receptacle
P: Plug

Modification Code

No. of Contacts
012: 12 pos. (shown in 3 digits)

DW* * 04K 4 F 1

1: Standard
3: Long Pin

S: Crimp, socket
P: Crimp, pin

No. of Contacts
04K: 4000 pcs.

Reel Part Number
K: unit of 1000 pcs. (Note 1)

Plating of Contact Area
F: Sn plating

Applicable Cable Size
4: 22AWG

Modification Code

Note 1: An embossed reel contains 4,000 pcs.

DW4 Series

DW4 * 001 Z F 1

P: Plug
(with Cable)

No. of Contacts
001: 1 pos.
(shown in 3 digits)

Plating of Contact Area
F: Sn plating

Connection Type
Z: Others

Modification Code

DW4R 001 W 00 12880

No. of Contacts
001: 1 pos.
(shown in 3 digits)

Connection Type
W: Ultrasonic wave

Last five digits of SJ No.

Modification Code

DW05 Series

DW05 * 01 C ** *

S: Socket
P: Pin

No. of Contacts
01: 1 contact

Plating of Connection Area
AG: Silver
ZZ: Others

Connections
C: Cable

Modification Code

DW07 Series

DW07 S 01 B AG *

S: Socket

No. of Contacts
01: 1 contact

Plating Specification
AG: Silver

Connected to
B: Busbar

Modification Code

JK11 Series

JK11 A Y 04 P H *

A: Panel Mount
Receptacle

D: Straight Plug

Shell Size
Y: JAE original

No. of Contacts
04: 4 contacts

Contact Plating
H: Ag plating

P: Pin Contact
S: Socket Contact

Modification Code

DW11 Series

Plug: **DW11P04PSN2R280**

Socket: **DW11S04PSN2R180**

EV Charging Connectors (1/3)

Series	KW1 (CE Compliant Products)	KW1 (UL and cUL Recognized Products)	KW1C / KW1E (CE Compliant Products)	KW1C (UL and cUL Recognized and JCS Standard Compliant)	KW02 (CE and JCS Standard Compliant Products)
Photo					
Type	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable
Pin Count	Power : 2 pos.	Power : 2 pos.	Power : 2 pos.	Power : 2 pos.	Power : 2 pos.
	GND: 1 pole	GND: 1 pole	12V Power: 1 pos.	12V Power: 1 pole	12V Power: 1 pole
	Signal: 6 pos.	Signal: 6 pos.	GND: 1 pole Signal: 6 pos.	GND: 1 pole Signal: 6 pos.	GND: 1 pole Signal: 6 pos.
Current	Power: 125A	Power: 125A	Power : 150A max.	Power : 150A max.	Power : 25A
	Signal: 2A	Signal: 2A	12V Power : 6.4A	12V Power : 6.4A	12V power 6.4A
			Signal : 2A	Signal : 2A	signal: 2A
Voltage Rating	DC500V	DC500V	DC500V	DC500V	DC450V
Durability	10,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles
Floating Range	N/A	N/A	N/A	N/A	N/A
Operating Temp	-30 ~ +50 ° C	-30 ~ +40 ° C	-30 ~ +50 ° C (Rated current: 125A) -30 ~ +45 ° C (Rated current: 135A) -30 ~ +40 ° C (Rated current: 150A)	-30 ~ +40 ° C (Rated current: 150A) -30 ~ +50 ° (Rated current: 125A)	-30 ~ +50 ° C
Features	Compliant with CHAdeMO standard. Grip designed for easy operation. Convenient single action insertion and removal. Highly reliable design using metal for significant componentry. CE compliant product.	Compliant with CHAdeMO standard. Grip designed for easy operation. Convenient single action insertion and removal. Highly reliable design using metal for significant componentry. UL and cUL recognized products.	Compliant with CHAdeMO standard. CE compliant product. Highly reliable design using materials which are tough against various environmental conditions. Lightweight and highly reliable design.	Compliant with CHAdeMO standard. UL and cUL recognized products. Compatible with JCS standard. Highly reliable design using materials which are tough against various environmental conditions. Lightweight and highly reliable design	Compliant with CHAdeMO standard. Compliant with the Electric Vehicle Charging and Discharging System Guidelines. Grip designed with operability ergonomics considerations. CE compliant product (IEC62196-3 Compliant, by certification organization TÜV Rheinland)

EV Charging Connectors (2/3)

Series	KW02C (JCS Standard Compliant Product)	KW02C (UL and cUL Recognized Products)	KW02C (CE and JCS Standard Compliant Products)	KW03 (UL Recognized and CE compliant Products)	KW03C (UL Recognized and JCS standard compliant Products)
Photo					
Type	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable
Pin Count	Power : 2 pos.	Power : 2 pos.	Power : 2 pos.	Power : 2 pos.	Power : 2 pos.
	12V Power: 1 pole	12V Power: 1 pole	12V Power: 1 pole	12V Power: 1 pole	12V Power: 1 pole
	GND: 1 pole	GND: 1 pole	GND: 1 pole	GND: 1 pole	GND: 1 pole
	Signal: 6 pos.	Signal: 6 pos.	Signal: 6 pos.	Signal: 6 pos.	Signal: 6 pos.
Current	Power: 37A max.	Power: 37A max.	Power: 37A max.	Power: 80A	Power: 80A max.
	12V Power: 6.4A	12V Power: 6.4A	12V Power: 6.4A	12V Power: 6.4A	12V Power: 6.4A
	Signal: 2A	Signal: 2A	Signal: 2A	Signal: 2A	signal: 2A
Voltage Rating	DC500V	DC500V	DC500V	DC500V	DC750V
Durability	10,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles
Floating Range	N/A	N/A	N/A	N/A	N/A
Operating Temp	-30 ~ +50 ° C (Rated current: 30 A)	-30° C to +40° C	-30 ~ +50 ° C (Rated current: 30 A)	-30 ~ +50 ° C	-30°C ~ +50°C
	-30 ~ +40 ° C (Rated current: 37 A)		-30 ~ +40 ° C (Rated current: 37 A)		
Features	Compliant with CHAdeMO standard. Compliant with the EV Charging and Discharging System Guidelines (EVPS-002). Compatible with JCS standard. Miniaturized design comes with higher rated current. Highly reliable design using environmentally withstanding materials. Lightweight and highly reliable design.	Compliant with CHAdeMO standard. Compliant with the EV Charging and Discharging System Guidelines (EVPS-002). UL and cUL recognized products. Miniaturized design comes with higher rated current. Highly reliable design using environmentally withstanding materials. Lightweight and highly reliable design.	Compliant with CHAdeMO standard. Compliant with the EV Charging and Discharging System Guidelines (EVPS-002). CE compliant product (IEC62196-3 Compliant, by certification organization TÜV Rheinland). Miniaturized design comes with higher rated current. Highly reliable design using environmentally withstanding materials.	Compliant with CHAdeMO standard. Compliant with the Electric Vehicle Charging and Discharging System Guidelines (EVPS-002). Use of highly reliable materials which are tough against various environmental conditions. Grip design for ergonomic operation. World-wide authentication: UL Recognized and CE compliant products.	Compliant with CHAdeMO standard. Compliant with the EV Charging and Discharging System Guidelines. Compatible with JCS standard. UL and cUL recognized products. Compatible with DC750V rated voltage. Highly reliable design using materials which are tough against various environmental conditions.

EV Charging Connectors (3/3)

Series	KW11 (CCS-1 UL and cUL recognized Products)	KW07C (UL and cUL Recognized Products)	KW07C (Non-UL Recognized Products)	KW21A (CCS-2 CE compliant Products)	KW51 (Compatible with the SAE J3400(NACS) EV Fast Charging Standard)
Photo					
Type	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable
Pin Count	Power: 2 pos Protective Earth : 1 pole Signal: 2 pos	Power: 2 pos GND: 1 pole Signal: 6 pos	Power: 2 pos GND: 1 pole Signal: 6 pos	Power : 2 pos. Protective Earth : 1 pole Signal: 2 pos.	Power : 2 pos. Ground : 1 pole Signal: 2 pos.
Current	Power: 150A / 200A Signal: 2A	Power: 200A Signal: 2A	Power: 200A Signal: 2A	Power: 40A / 80A Signal: 2A	Power: 300A Signal: 2A
Voltage Rating	DC1000V	DC750V	DC750V	DC1000V	DC1000V
Durability	10,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles	30,000 cycles
Floating Range	N/A	N/A	N/A	N/A	N/A
Operating Temp	-30° C ~ +50° C	-30°C ~ +40°C	-30°C ~ +40°C	-35° C ~ +50° C	-30°C ~ +40°C
Features	Compatible with the fast-charging standard CCS Type-1. UL and cUL recognized products. The strength of the latch is enhanced with a metal core reinforcement. Safety design with waterproof protection of live parts inside the connector. Easy-to-grip handle design even when wearing thick gloves. Highly reliable design using materials proven to be resilient against harsh environmental conditions.	Compliant with CHAdeMO standard. Product structure compatible with UL and cUL certification. Highly reliable design using materials which various outdoor environments. High-strength design, yet compact and light weight. Compatible with DC 750V rated voltage. Compatible with DC quick chargers with a rated output of 150kW (in case of charging voltage DC750V)	Compliant with CHAdeMO standard. Highly reliable design using materials which various outdoor environments. High-strength design, yet compact and light weight. Compatible with DC quick chargers with a rated output of 150kW (in case of charging voltage DC750V) Product with cable specifications which is suitable for temporarily carrying currents can exceed the rated current.	Compliant with the CCS2 Charging Standard. Weather resistant plastic body with durable design. Ergonomic handle design. Light-weight connector with flexible cable. Compatible for Bi-directional Charging.	SAE J3400 TIR*(NACS) Standard. UL2251 Certification planned. Mating durability : 30,000 times or more. Ergonomic handle design. Light connector weight and highly flexible cable.

KW1 Series

KW1 G Y 09 P D L** ****

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification Code
E1: CE Compliant
U1: UL/cUL Recognized

Cable Length L (cm)
Contact Size

KW02C Series

KW02C G Y 10 P D L** ****

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification Code
JG: JCS compliant
UG: UL and cUL Recognized
EN: CE and JCS compliant

Cable Length L (cm)
Contact Size

KW07C Series

KW07C G Y 09 P D L** U ***

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification Code
P: Standard Cable
H: High Current Boost Cable
U: UL Recognized
J: Non-UL Recognized

Cable Length L (cm)
Contact Size

KW1C Series

KW1C G Y 10 P D L** ***

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification Code
E: CE Compliant
U: UL Recognized
U : Rated current 150A
U1: Rated current 125A

Cable Length L (cm)
Contact Size

KW03 Series

KW03 G Y 10 P D L** ****

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification Code
E: CE Compliant
U: UL Recognized

Cable Length L (cm)
Contact Size

KW21A Series

KW21A G Y 05 P D L** E ***

Angle Plug ————
Shell Size ————
Number of Contacts ————
Welding ————

Modification Code
P: Rated current 40A
H: Rated current 80A
E: CE Compliant

Cable Length L (cm)
Contact Size

KW1E Series

KW1E G Y 10 P D L** E**

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification Code
E: CE Compliant

Cable Length L (cm)
Contact Size

KW03C Series

KW03C G Y 10 P D L** U**

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification
UL and cUL Rrecognized

Cable Length L (cm)
Contact Size

KW51 Series

KW51 G Y 05 P D L** U 0**

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification Code
U: UL Compliant

Cable Length L (cm)
Contact Size

KW02 Series

KW02 G Y 10 P D L** B**

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification Code

Cable Length L (cm)
Contact Size

KW11 Series

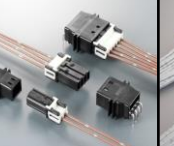
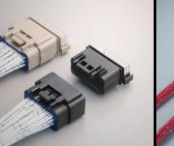
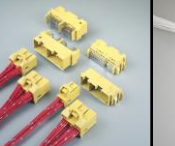
KW11 G Y 05 P D L** H ***

Angle Plug ————
Shell Size ————
Number of Contacts ————
Crimp ————

Modification Code
H: Rated Current 200A
P: Rated Current 150A

Cable Length L (cm)
Contact Size

Transportation (1/4)

Series	MX19	MX80	MX23A	MX36	MX37	MX44	MX47	MX57	MX60A	MX67A	MX72 A/B/C/D
Photo											
Pitch	2.5mm	2.54 mm	2.5mm	2.5mm	2.2mm	3.5mm	2.5mm	2.2mm	Signal: 2.4mm Power: 2.7mm	2.2mm	3.2 mm
Wire Size	AWG #22-20 CAVS: 0.3 to 0.5mm ² AVSS: 0.5mm ²	AWG #26-17 FLRY-A, FLRY-B, AESSX 0.13 to 1.0mm ²	AWG #22-16 AVSS, AVS: 0.3 to 1.25mm ²	AWG #20 AVSS 0.5, AVSSC 0.5f, AVSSX 0.5f, TVSSX 0.5f	AWG #20 AVSS 0.5, AVSSC 0.5f, AVSSX 0.5f, TVSSX 0.5f	AWG #22-20 AVSS 0.3 to 0.5mm ²	AWG #22-16 AVSS 0.3 to 1.25mm ²	AWG #22-20 AVSS 0.3, AVSS 0.5, AVSSX 0.5f	AWG #22-16 Signal: AVSS 0.3 to 0.5mm ² Power: AVSS 0.5 to 1.25mm ²	AWG #22-20 AVSS 0.3 to 0.5mm ²	AWG #22-20 FLRY-A, FLRY-B 0.35, 0.5mm ²
Pin Count	2,3*,4	2,3,4,6*,8,10**,12	12,18,26,34,36,40	2,4	4	2,4,6	39	MX57A: 30 MX57B: 48	177 (2 blocks)	100 (2 blocks)	2
Current Rating	5A	3.6A – 10.3A Varies by wire size*	3A	3A	3A	3A	3A	Varies by cable type	Varies by cable type	3A	Varies by cable type
Operating Temp	-40 ~ +85 ° C	-40 ~ +125 ° C	-40 ~ +125 ° C	-40 ~ +120 ° C	-40 ~ +105 ° C	-40 ~ +125 ° C	-40 ~ +125 ° C	-40 ~ +80 ° C	-40 ~ +105 ° C	-40 ~ +120 ° C	-40 ~ +100 ° C
Application	Cable-to-Cable	Cable-to-Cable	Board-to-Cable	Cable-to-Cable	Cable-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable
Features	Waterproof. Mechanical lock system. Terminals have low insertion force and stress dispersion. Rear cover protects the included grommet from damage. *	Compact waterproof inline automotive connector. Supports extended wire size ranges. Integrated bracket support vehicle fastening clips.	Waterproof. Low profile. Available in reverse mount type. Retainer detects incomplete insertion of socket contact.	Waterproof. Spring separates connectors if not fully mated. Shorting contact eliminates static discharge. Retainer detects incomplete insertion of contact.	Spring separates connectors if not correctly mated. Shorting contact eliminates static discharge. Retainer detects incomplete insertion of contact.	Individually sealed pin cavities. Compact size. Improved vibration resistance by vibration absorption function of rubber. Secondary contact lock mechanism.	Waterproof. Different key option available. Retainer detects incomplete insertion of socket contact.	For small and low-cost SRS ECU for light and compact cars has been developed. Features a short circuit function to prevent accidental air-bag inflation and rupture.	High pin count waterproof IPX9K connector with a lever structure that reduces the force required to mate and unmate.	Achieves a high pin count of 100 positions in two blocks, while being compact in size. Press-fit type contact design that does not require soldering.	Next generation self rejecting AK2 and ABX-5 squib, Extremely high reliability for use with SRS airbag applications. Different key options available.

*Only socket housing available for option.

**10 positions option is a 12 position with 2 cavities plugged

*Only socket housing available for option.

MX19 Series

Socket housing: **MX1900#S51** 1: Black
2: Gray

Pin housing: **MX1900#P51**

*3 pin version

Socket housing: **MX19A003S51**

Contacts: MX19S 10K451 (socket)
MX19P 10K451 (pin)

Dummy pin: MX1900XD1

Hand Tool: CT150-4C-MX19

Semi auto: 3502-MX19-2B

MX80 Series

Female and Male Inline Housing:

MX80 A 02 S Z1 A

A: No clip
B: With clip

No. of Contacts

S: Female Socket
P: Male Pin

Key Code: A, B, C

Number of "unused cavity"

Female and Male Crimp Terminal:

MX80 S 08K 5 F1

S: Female / Socket
P: Male / Pin

Wire size:
3: 0.75 – 1.0 mm²
4: 0.3 – 0.5 mm²
5: 0.13 – 0.22 mm²

Package size:
08K: 8,000 per reel
10K: 10,000 per reel

Hand Tool for
*K5F1 Terminal: CT150-19E-MX80
*KF41 Terminal: CT150-19D-MX80
*K3F1 Terminal: CT150-19C-MX80

Semi auto: 3502-MX80-2

MX23A Series

Socket housing: **MX23A##SF1**

Pin header: **MX23A##NF1** 1: Standard
2: Reverse

Front cap: **MX23A##XF1**

Contacts: M23S05K351
Dummy pin: M120-55780

Hand tool: CT170-14B-MX23

Semi auto: 3502-MX23-2

MX36 Series

Socket housing: **MX3600#SQ3**

Pin housing: **MX3600#PQ3**

Front cap: **MX3600#XF3**

Contacts: M36S08K4Q3 (socket)
M36P08K4Q3 (pin)

Semi auto: 350-MX36-2

Automatic: 350-MX36-3B

MX37 Series

Socket housing: **MX37004SP3**

Pin housing: **MX37004PP3**

Contacts: M37S07K4P3 M37P75C4P3

Semi Auto: 350-MX37S-2 350-MX37P-2

Automatic: 350-MX37S-3B 350-MX37P-3B

MX44 Series

Socket housing: **MX44###SF1**

Pin header: **MX44###NF1**

Retainer: **MX44###XR1**

Wire seal: **MX44000XP1** Wire O.D.
1: 1.4-1.5mm
2: 1.6-1.7mm

Contacts: M44S05K4F1

Hand Tool: CT150-2-MX44

Semi Auto: 3502-MX44-2

MX47 Series

Socket housing: **MX47039SF1** Key code: 1,2

Pin header: **MX47039NF1**

Front cap: **MX47039XF1**

Hand Crimp Tools	CT170-14C-MX47	CT170-14B-MX47	CT170-14-MX47
Contacts	M47S65H2FA	M47S65H3FA	M47S65H4FA
Wire Size (AWG)	#22-20	#18	#16

MX57 Series

Socket housing: **MX570##SF#**

Pin header: **MX57B48NF1**

Contacts: M37S07K4F3 M37S07K4F4

Semi Auto
Automatic: 3502-MX37S-2

MX60A Series

Socket Housing: **MX60A###SFK**

Pin header: **MX60A177NF2**

Front retainer: **MX60A###XF2**

Contacts: MX60S05K2FA (power supply 0.75sq~1.25sq)
MX60S05K3FA (power supply 0.5sq~0.75sq)
MX60S65H4F1 (signal 0.3sq~0.5sq)

Dummy pins: MX60A000XD2 (power supply)
MX60A000XD3 (signal)

MX67 Series

Socket housing: **MX67S0##SQA**

Pin header: **MX67A###ZPA**

Contacts: MX67S75C4P1 MX67S75C4P2

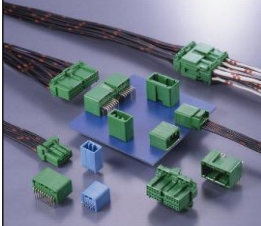
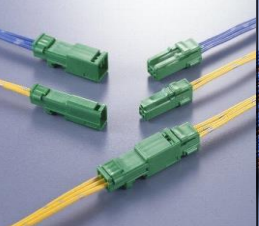
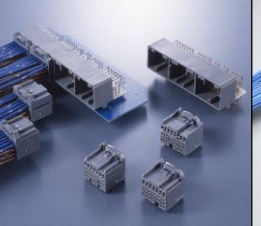
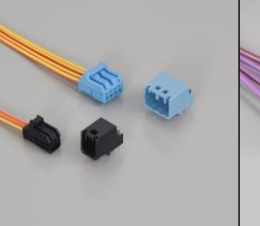
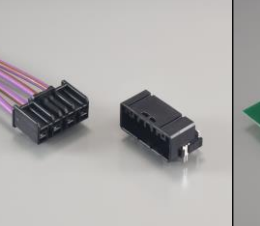
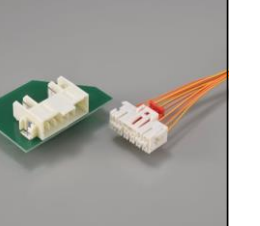
MX72 Series

MX72A 1 F####

Connector Type Key Code

JAE will supply the complete mating harness designed to customer specifications.

Transportation (2/4)

Series	IL-AG5	IL-AG9	MX31	MX77	MX81A	MX81D	MY05
Photo							
Pitch	2.5mm	2.5mm	Signal: 2.2mm Power: 3.2mm	Signal: 1.8mm Power: 2.1mm	2.54mm	9.2mm	6.1mm
Wire Size	AWG #22-20 AWG #18 AV, AVS, AVSS: 0.3 to 0.5 mm ² AVS, AVSS: 0.85 mm ²	AWG #22-20 AWG #18 AV, AVS, AVSS: 0.3 to 0.5 mm ² AVS, AVSS: 0.85 mm ²	Signal: AWG #22-20 Power: AWG #22-16 Signal: AVS, AVSS, AVX 0.3 to 0.5mm ² Power: AVS, AVSS, AVX 0.3 to 1.25mm ²	AWG #26-22 CHFUS, CIVUS: 0.13 to 0.35mm ² AVSS: 0.3mm ²	FLRY-A, FLRY-B, AESSX, FLCUSNRY 0.13 to 1.0mm ²	AWG #21-11 FLRYW-B: 0.35 to 4.0mm ²	AWG #26-17 FLRY-A, FLRY-B, AESSX 0.13 to 1.0mm ²
Pin Count	1 row: 4,5,6,7,10 2 rows: 14,16,18,22,30	2,3	Pin: 70,98,104,135 Socket: 31,34,35	4,8,12,16,20,24,32,40	2, 4	4	10,14
Current Rating	3A	3A	Signal: 2.2A Power: 5.7A	3A	3.7-10A	25A(4.0sq wire) Ambient temperature is 80°C	3A
Operating Temp	-40 ~ +85 °C	-40°C ~ +85 °C	-40 ~ +85 °C	-40 ~ +85 °C	-40 ~ +125 °C	-40 ~ +125 °C	-40 ~ +125 °C
Application	Cable-to-Cable/ Board-to-Cable	Cable-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable
Features	Mechanical lock system enabling complete mating. Secondary lock mechanism to ensure correct terminal retention. Simplified crimp type termination.	Mechanical lock system enabling complete mating. Double hook mechanism to prevent contacts from being inserted or removed incompletely.	Mechanical lock system with audible click. Socket side contact designed with secondary lock. Simplified crimp type termination.	Extreme height reduction for slimmer ECU. SMT reflow compatible. Secondary lock mechanism to ensure terminal position. MX77D additional height reduction.	Low profile design while maintaining compatibility with a wide range of wire sizes. A secondary terminal lock is molded with main housing. Multiple colored key codes are available.	Pin terminal tab size: 2.8mm Non-sealed. Mechanical lock system. USCAR-2/21 tested.	High voltage, low current connectors which can support up to 1,000V DC. They are designed to meet creepage and clearance distance requirements based on the IEC 60664-1 specification.

IL-AG5 Series

Socket Housing: **IL-AG5-#S- S3C1**

Pin housing: **IL-AG5-#P- S3C1**

Pin header: **IL-AG5-#P- S3L2**

S: single row
D: double row

L: right angle
T: straight

Contacts: IL-AG5-C1-5000 (socket)
IL-AG5-PC1-5000 (pin)

Hand tool: CT150-2-AG5
Semi auto: 3502-AG5-2
Automatic: 350-AG5-3B

IL-AG9 Series

Socket Housing: **IL-AG9-#S- S3C1**

Pin housing: **IL-AG9-#P- S3C1**

Pin header: **IL-AG9-#P- S3L1-B**

S: single row
D: double row

L: right angle
T: straight

Contacts: IL-AG5-C1-5000 (socket)
IL-AG5-PC1-5000 (pin)

Hand tool: CT150-2-AG5
Semi auto: 3502-AG5-2
Automatic: 350-AG5-3B

MX31 Series

Socket housing: **MX31 ### SGA**

31, 34, 35 pos

Modification code

Pin header: **MX31 ### N F D**

70, 104, 135 pos

Modification code

F: All Sn plated contacts
Q: Selective gold plated contacts

Contacts	Wire Size (AWG)
M31S07K4FA (Sn, signal)	#22-20
M31S07K4QA (Au, signal)	#22-20
M31S07K4FB (Sn, signal)	#24
M31S05K4FA (Sn, power)	#18-16
M31S05K4FA (Sn, power)	#22-18
M31S05K4QA (Au, power)	#22-18

MX77 Series

SMT Pin header: **MX77A0##HF1**

H: Angled
Modification Code

Socket housing: **MX77A0##SF1**

A: Height of 13.5mm
D: Height of 9.5mm
No. of Contacts

Contacts	MX77S 13K5F1	MX77S 13K4F2	MX77S 13K4F1
Wire Size	0.13mm ²	0.22mm ²	0.3, 0.35mm ²

MX81 Series

Pin header: **MX81A####NF1**

A: Tab 0.64mm
D: Tab 2.8mm

Key Code

Socket housing: **MX81A####SF1**

A: Tab 0.64mm
D: Tab 2.8mm

Key Code

*Socket contacts are in common with MX80 Series.

MY05 Series

MY05 A C ## S Z 1

Series:
MY05

Connector Type

Socket A: MX80 Terminal
B: EU Standard Terminal
Pin header A: Standard

CPA Type
Socket C: with CPA
N: No CPA
Pin header 0: N/A

1 ~ 4: Key Code

Terminal Finish

Socket Z: Non-Terminal
(Terminal is sold separately)

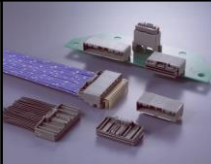
Pin header F: Sn/Tn Plating

Mating Style

Socket S: Socket Housing
Pin header N: Angle Type
U: Straight Type

	Part Number	Applicable Wire
Socket	MX80S08K3F1	0.75 ~ 1.0mm ²
Terminal	MX80S08K4F1	0.3 ~ 0.5mm ²

Transportation (3/4)

Series	MX34						MX84B		
	Inline	Right Angle Flow T/H	Vertical Flow T/H	Vertical Reflow T/H	Vertical SMT	Right Angle SMT	Inline	Right Angle Flow	
Photo									
Pitch	2.2mm	2.2mm	2.2mm	2.2mm	2.2mm	2.2mm	2.2mm	2.2mm	
Wire Size	AWG #26-18 AVSS: 0.3-0.85mm² CHFUS: 0.13-0.75mm² CAN SD: 0.35mm² CAVS: 0.5-0.85mm²	AWG #26-18 AVSS: 0.3-0.85mm² CHFUS: 0.13-0.75mm² CAN SD: 0.35mm² CAVS: 0.5-0.85mm²	AWG #26-18 AVSS: 0.3-0.85mm² CHFUS: 0.13-0.75mm² CAN SD: 0.35mm² CAVS: 0.5-0.85mm²	AWG #26-18 AVSS: 0.3-0.85mm² CHFUS: 0.13-0.75mm² CAN SD: 0.35mm² CAVS: 0.5-0.85mm²	AWG #26-18 AVSS: 0.3-0.85mm² CHFUS: 0.13-0.75mm² CAN SD: 0.35mm² CAVS: 0.5-0.85mm²	AWG #26-18 AVSS: 0.3-0.85mm² CHFUS: 0.13-0.75mm² CAN SD: 0.35mm² CAVS: 0.5-0.85mm²	AWG #26-18 AVSS: 0.3-0.85mm² CHFUS: 0.13-0.75mm² CAN SD: 0.35mm² CAVS: 0.5-0.85mm²	AWG #22-20 AVSS: 0.3-0.85mm² CHFUS: 0.13-0.75mm² CAN SD: 0.35mm² CAVS: 0.5-0.85mm²	AWG #22-20 AVSS: 0.3-0.85mm² CHFUS: 0.13-0.75mm² CAN SD: 0.35mm² CAVS: 0.5-0.85mm²
Pin Count	12,16,20	3,5,7,8,12,16,20,24,28,32,36,40	3,5,7,12,16,20,24,28,32,36,40	20,32	12,20,32	3,5,7,8,12,16,20,24,28,32,36	7,12,16,20,24,28	12,16,20,24,28,32,36,40	
Current Rating	3A	3A	3A	3A	3A	3A	3A	3A	
Operating Temp	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +85 ° C	
Application	Cable-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable	Board-to-Cable	Cable-to-Cable	Board-to-Cable	
Features	Strong mechanical lock for high connector retention. Secondary lock mechanism to ensure terminal position. Simplified crimp type termination.	Strong mechanical lock for high connector retention. Secondary lock mechanism to ensure terminal position. Simplified crimp type termination. Through hole terminals	Strong mechanical lock for high connector retention. Secondary lock mechanism to ensure terminal position. Simplified crimp type termination. Through hole terminals.	Strong mechanical lock for high connector retention. Secondary lock mechanism to ensure terminal position. Simplified crimp type termination. Through hole reflow terminals.	Vertical mount SMT header. Strong mechanical lock for high connector retention. Secondary lock mechanism to ensure terminal position. Simplified crimp type termination.	Horizontal mount SMT header. Mechanical lock system. Secondary lock mechanism to ensure terminal position. Simplified crimp type termination.	Insulator with UL94 V-0 flammability rating. Same connector shape as MX34.	Insulator with UL94 V-0 flammability rating. PCB footprint compatible with MX34.	

MX34 Series

Flow T/H Pin header:

MX340##UF1
 U: Straight _____
 N: Angled _____
 _____ Modification Code

Socket housing:

MX340##SF1

 _____ Modification Code

SMT Pin header:

MX34R##VF1 *
 V: Straight _____
 H: Angled _____
 _____ Blank: tube
 _____ T: tray
 _____ 1: Straight
 _____ 4: Angled

Reflow T/H Pin header:

MX34Q##ATF1
 _____ Terminal Length
 A : 1.9mm _____
 B : 2.4mm _____
 _____ Termination Type
 _____ Modification Code
 _____ Plating Specification

Contacts :

M34S75C4F#
 _____ Contact Type
 P: Pin
 S: Socket
 _____ Compatible Wire Size:
 1: 0.22-0.35mm²
 2: 0.5-0.75mm²
 3: 0.35mm² *
 4: 0.85mm² *
 3: 0.13mm²

Hand Crimp Tool
 CT150-2-MX34
 CT150-2B-MX34
 CT150-2C-MX34

Contact
 M34*75C4F1
 M34*75C4F2
 M34S75C4F3, M34S75C4F4

*Only available for socket

MX84B Series

Pin connector:

MX84B0##NF1
 N: Angled Header _____
 P: Relay Housing _____
 _____ Key Code

Socket housing:

MX84B0##SF1

 _____ Key Code

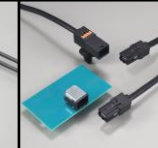
Male Crimp Terminal:

MX84 P 75 H 4 F2
 _____ P: Male / Pin
 _____ Contacts per reel: 7,500
 _____ Wire size:
 4: 0.22 – 0.35 mm²
 3: 0.5 – 0.75 mm²

Hand Tool: CT150-2-MX34
 CT150-2B-MX34

*Socket terminals in common with MX34 Series. Reference MX34 ordering information

Transportation (4/4)

Series	MX38	MX48	MX49	MX50 / MX53	MX55J	MX62	MX65	MX66	MX68	MX79A	MX74	MA07
Photo												
Pitch	2.2mm	2.0mm	2.0mm	1.5mm	2.2mm	2.0mm	2.0mm	N/A	2.0mm	2.0mm	2.2mm	0.5mm
Wire Size	AWG #28 (Twin Ax)	AWG #28 (Twin Ax)	Signal: AWG #26 (Twin Ax) Power: AWG #20	AWG #28 (Twin Ax)	AWG #26 (STQ)	Signal: AWG #26 (Twin Ax) Power: AWG #22	0.14mm ² x4, 0.22mm ² x4 (STQ)	1.5D equiv coax	AWG 28 (STP)	AWG #26 (STQ)	AWG #26 (UTP)	AWG #30 STP (4 pairs for high speed)
Pin Count	2	2	4	19	4	10	4, 4+2, 8	1	2, 4, 8	4	2, 4	24
Current Rating	Varies by cable type*	Varies by cable type*	Signal: 0.5A	0.5A	Varies by cable type*	Power: 3A	1.5A	1A	Varies by cable type*	Signal: 2A Power: 2A	3A	0.25A
Operating Temp	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +105 ° C	-40 ~ +85 ° C	-40 ~ +105 ° C	-40 ~ +105 ° C	-40 ~ +85 ° C	-40 ~ +85 ° C	-40 ~ +105 ° C	-40 ~ +105 ° C
Application	Cable-to-Cable/ Board-to-Cable	Board-to-Cable	Cable-to-Cable/ Board-to-Cable	Cable-to-Cable/ Board-to-Cable	Board-to-Cable	Cable-to-Cable/ Board-to-Cable	Cable-to-Cable/ Board-to-Cable	Board-to-Cable	Board-to-Cable	Cable-to-Cable/ Board-to-Cable	Board-to-Cable	Board-to-Cable
Features	Excellent in transmission of high-speed signals such as LVDS and GVIF. Different key options available.	Excellent in transmission of high-speed signals such as LVDS and GVIF. Different key options available. Extremely compact design.	Compatible with USB 2.0 signal speeds. Different key options available. Extremely compact design.	HDMI Type E compatible connector and harnesses. Cable mounted receptacle for mating with consumer HDMI cables is available.	Waterproof connector for LVDS transmission from digital cameras. Right angle and straight plug available.	Compatible with USB 3.0 signal transmission. Mechanical lock included. Double metal shield for improved EMI.	Mating compatible with HSD connectors. Waterproof and non waterproof variations available. Pin headers not provided by JAE.	Waterproof connectors conformed to FAKRA standard. IPX9K water sealing. Pin headers not provided by JAE.	Excellent in transmission of high-speed signals such as LVDS and GVIF. USB 2.0 compatible. Sold as complete harness.	Compatible with LVDS or USB 2.0 signal speeds. Different key options available. Extremely compact design.	IEEE802.3 100BASE-T1 Automotive Ethernet in-vehicle networking, such as Infotainment, ADAS, Gateway applications.	Compatible with USB 3.2 and DisplayPort 1.4 signal transmission. Robust locking mechanism included. Different key options available.

MX38 Series

Board Mounting Receptacle: **MX38002FQ1**
 Pin header: **MX38002NQ1**

└─ Different key code: 1,2,3,4

JAE will supply the complete mating harness designed to customer specifications.

MX48 Series

Board Mounting Receptacle: **MX48002NQ1**
 └─ Different key code: 1,2,3,4

JAE will supply the complete mating harness designed to customer specifications.

MX49 Series

Board mounting receptacle: **MX49004 # Q 1**
 N: T/H
 H: SMT
 └─ Different key code: 1,2 (T/H)
 1,2,3,4 (SMT)

JAE will supply the complete mating harness designed to customer specifications.

MX50/MX53 Series

Board mounting receptacle: **MX50019NQ1**

JAE will supply the complete mating harness designed to customer specifications.

MX55J Series

Board mounting header: **MX55004KBDR900**
 Camera back housing connector: reference design available

JAE will supply the complete mating harness designed to customer specifications.

MX62 Series

Board mounting header: **MX62010HQ1R100**

JAE will supply the complete mating harness designed to customer specifications.

MX65 Series**MX65 Series Harness**

JAE will supply the complete harness designed to customer specifications.

MX66 Series**MX66 Series Harness**

JAE will supply the complete harness designed to customer specifications.

MX68 Series**MX68 A 0# H Q 1 R150**

A: LDVS/GVIF
 B: USB2.0
 No. of Contacts
 2: 2 pos.
 4: 4 pos. (2 pos. + 2 pos.)
 8: 8 pos. (2 pos. + 6 pos.)
 H: Angle pin header
 V: Straight pin header
 1: Key Type A
 2: Key Type B
 3: Key Type C
 4: Key Type D
 Emboss reel packaging

JAE will supply the complete mating harness designed to customer specifications.

MX79A Series**MX79A 04 H Q 1 R150**

4 Positions
 Horizontal
 1: Key Code 1
 2: Key Code 2
 3: Key Code 3
 4: Key Code 4
 Emboss reel packaging

JAE will supply the complete mating harness designed to customer specifications.

MX74 Series**MX74 B 002 HF A**

Modification Code
 Number of positions
 A: Key code A
 B: Key code B
 HF: Right angle header
 VF: Straight header
 XG: Socket outer housing
 XN: Socket inner housing

Supplied as individual connectors (Contact us for cable harness options).

MA07 Series**MA07 S 024 XD * R100**

S: Receptacle
 Number of positions
 XD: Angle, T/H&SMT hybrid
 Contact area Au0.76µm min.
 Emboss reel packaging

JAE will supply the complete mating harness designed to customer specifications.

Contact Us

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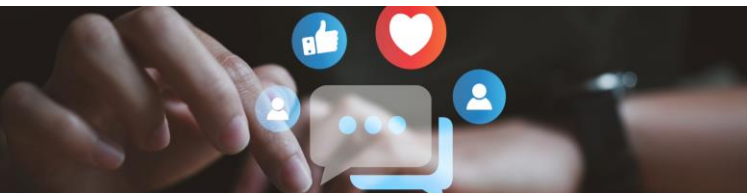
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