

2024-25

Connector Selection Guide











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





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



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 (1/2)

Series	WP86SD	WP55DK	WP56DK	WP16RS	WP66DK	WP26DK	WP27D	WP10	WP6C
Photo				C C C C C C C C C C C C C C C C C C C	JEE .	The state of the s		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Pitch	Contact Area: 0.25 mm, 2 rows Soldering Area: 0.5 mm, 4 rows	0.3mm	0.3mm	0.35mm	0.35mm	0.35mm	0.35mm	0.4mm	0.4mm
Stacking Heights	0.6mm	0.5mm	0.6mm	0.6mm	0.6mm	0.6mm	0.7mm	0.7mm	0.8mm
Pin Count (Parallel)	80 (+2 power)	6, 8, 10, 22 (+2 power)	26 (+2 power)	2 pos. (RF(IF)), 6 pos. (Signal)	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)	2, 4 (+4 power +2 power Hold-down)	24, 30
Pin Count (Right Angle)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High Power Contacts	2	2	2	N/A	2	2	2	4	N/A
Board Mount	SMT	SMT	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 RF, 1.0A signal	0.3A Signal, 5A Power	0.3A Signal, 5A Power	0.3A Signal, 5A Power	0.4A Signal, 5A Power, 2A Power Hold- down (Power hold-down is only for 12A products)	0.3A
Voltage Rating	50V AC/DC	50V AC/DC	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	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. Hybrid power contacts included.	Fully shielded connector with dedicated high performance RF contacts supporting 20GHz+.	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.	High power connector ideal for connecting batteries. 4 additional power contact supporting 5A each and 2 power Hold-down supporting 2A each.	Shielded connector for improved grounding and EMI/EMC performance.

Part Number Guide

Board-to-Board Connectors

WP86SD Series

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

*Shielded version

Orderable in Reels of 20,000

WP16RS Series

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

*Fully shielded version

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

WP55DK Series

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

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

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

WP26DK Series

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

Board-to-Board Connectors (2/2)

Series	AC02	WR	M.	A01	AX03	IL-WX	KX14/15	KX24/25	TX24/25	TX24A/25A
Photo			Speed	Speed						
Pitch	0.5mm	0.5mm	0.635mm	0.635mm	0.635mm	0.80mm	0.8mm	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	N/A	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	N/A	6, 8, 10, 12, 14, 16, 18, 20, 24, 26, 28, 30, 32, 34, 36	20, 30, 40, 50, 60, 70, 80	80, 100, 120, 140, 180 (horizontal)	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	80, 100, 120, 140, 180	30, 40, 50, 60, 80, 100, 120, 140	80 (horizontal)
Board Mount	SMT	SMT	SMT	SMT	SMT	SMT	SMT	Thru-hole	Thru-hole	Thru-hole
Current Rating	0.3A	0.3A	0.5A	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	200VAC	250VAC	250VAC
Durability	50 cycles	500 cycles	100 cycles	100 cycles	100 cycles	30 cycles	500 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.		Combination of socket receptacle (straight) and pin header (straight/right angle) enable vertical and parallel connections.	Mating guide and key to prevent mis-mating.	Robust mating guide. Click response when mated.	Ribbon type contacts ensure reliable electrical continuity.	Ribbon type contacts ensure reliable electrical continuity. Improved electrical characteristics from TX24/25 Series for high- speed transmission.

Part Number Guide

Board-to-Board Connectors

AC02 Series Socket side: AC02 – S### - WA# - R#### Modification Code _____ Emboss WA1: 2.5mm (Stacking height) Reel WA2: 3.0mm (Stacking height) Packaging Plug side: AC02 – P### - WA1 – R####

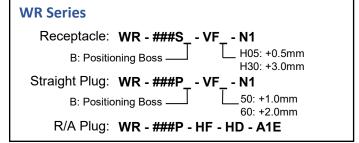
WA1: 2.5mm (Stacking height)

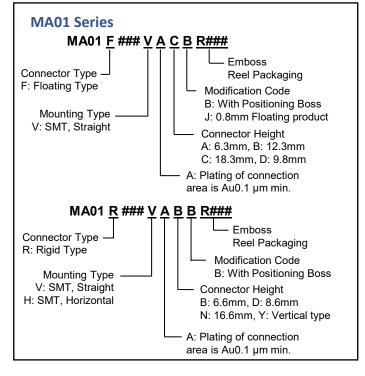
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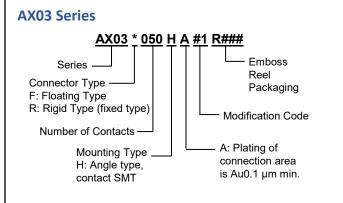
Fmboss

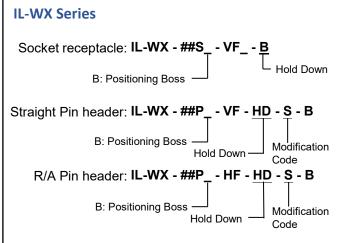
Packaging

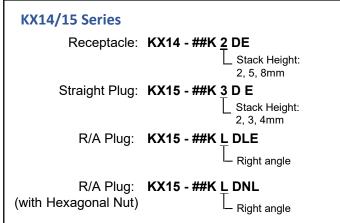
Reel

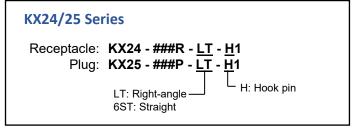


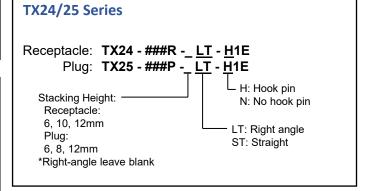


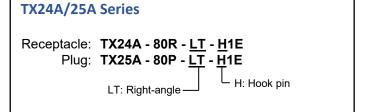












Board-to-FPC Connectors

Series	FF08	FR02	FA10	FF03	FM8
Photo	SAN TO SERVICE STATE OF THE SE	PROS SOTIOS			19/1/1/2
Pitch	0.2mm	0.2mm	0.5mm	0.5mm	0.5mm
Mounted Height	1mm	0.82mm	0.9mm	2mm	2.2mm
FPC/FFC Thickness	0.15 ± 0.02mm	0.2 ± 0.03mm	0.2 ± 0.03mm	0.3 ± 0.05mm	0.3mm ± 0.03mm
FPC Contact Orientation	Bottom	Top or bottom	Top or bottom	Bottom	Bottom
Pin Count	25,29,41,51,71,81	23,41,51,61	4,5,6,10	60,80,96	41, 51, 60
Current Rating	0.3A	0.25A	0.5A	0.5A	0.5A
Voltage Rating	50V	50V	50V	50V	50V
Features	Smallest pitch. Rotating actuator.	Lowest profile in class. Robust rear actuator. Compatible with top and bottom contact FPC.	Quick one-step insertion & removal. Requires no actuator operation. Compatible with top and bottom contact FPC.	Highest pin count.	Compatible with high speed signal transmission. Guides hold the FFC in place to prevent misalignment.

FF08 Series

Reel: FF08##SA1-R3000

FF03 Series

Loose pcs: FF03##SA1

Reel: FF03##SA1 - R2000

FR02 Series

Reel: FR02C0##JA1-R5000

FM8 Series

Reel: FM8S###HA2R4000

FA10 Series

Reel: FA10##SA1-R8000

Commercial I/O Connectors

Series	DC2	DC3	DD1	DD2	DX07	DX07 Cable	DC1	DC04
Photo		A TAIL AND A STATE OF THE STATE						rous reis som
Pitch	0.4mm	0.4mm	0.5mm	0.5mm	0.5mm	0.5mm	1.0mm	1.0mm
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)	Cable I/O	Cable I/O
Pin Count (Parallel)	19	19	30	40	16, 22, 24	24	19	19
Signal Standard	НДМІ	HDMI	USB 2.0	USB 2.0	USB Type-C [®] USB 3.2, USB4 Thunderbolt [™] 4*	USB 3.2 Gen 2	HDMI 2.0	HDMI 2.1
Current Rating	0.5A	0.3A	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	0.5A	0.5A
Voltage Rating	40VAC	40VAC	30VAC	30VAC	48VAC	20VAC	40VAC	40VAC
Durability	5,000 cycles	5,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles	10,000 cycles	10,000 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 ~ +85 °C	-20 ~ +85 °C
Locking	Friction	Friction	Latch	Latch	Friction	Friction	Friction	Friction
Features	Mini HDMI Type-C compatible. Requires HDMI adopter status.	Micro HDMI Type-D compatible. Requires HDMI adopter status.	Docking connector to combine various high-speed signals in a single connector.	design. Compatible	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	HDMI Type A compatible. Requires HDMI adopter status.	HDMI Type A Category 3 compatible. Requires HDMI adopter status.

^{*}Select part numbers only. Contact us for more information.

Part Number Guide

DC2 Series

Receptacle: DC2R019JA4

Hold Down Type J T Modification
J: T/H, H: SMT code

Cable Harness: DC1DC2ST2150B

Restricted to HDMI Adopters Contact JAE for additional options

DC3 Series

Receptacle: Top Mount

DC3RX19JA2

Modification Code

Hold Down Type
X, J: T/H
0. H: SMT

Restricted to HDMI Adopters Contact JAE for additional options

DD1 Series

Receptacle: **DD1R030HA1** Standard mount

DD1R030JA7

Reverse mount

Docking Plug: DD1B030VA1

DD1B030VA1 Vertical DD1B030HA1 Right angle

Cable Plug: DD1P030MA1

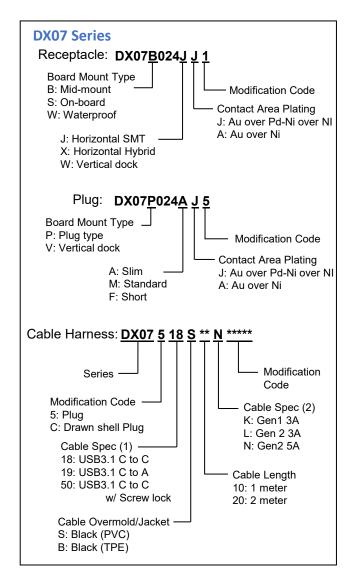
DD2 Series

Receptacle: DD2R040HP2

Docking Plug: DD2B040VP4 Vertical

DD2B040HA2 Right angle

Cable Plug: DD2P040MA1



DC1 Series

Receptacle: DC1RS19JA7

Cable Harness: DC1P019ST30200B

Restricted to HDMI Adopters Contact JAE for additional options

DC04 Series

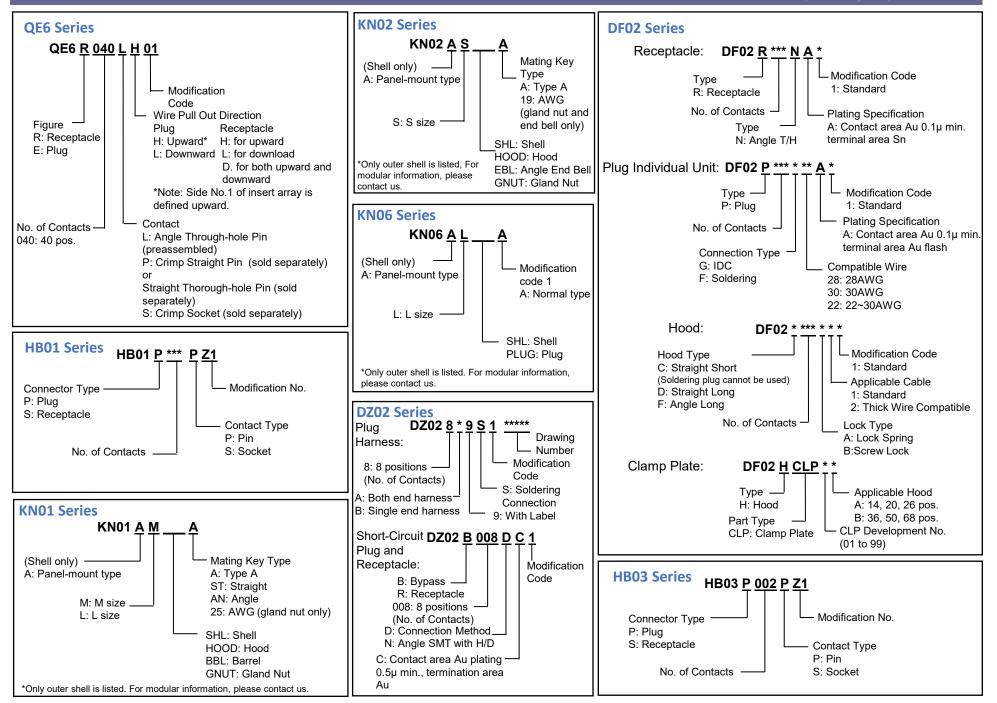
Receptacle: DC04S019JA1

Modification Code

Restricted to HDMI Adopters Contact JAE for additional options

Industrial I/O Connectors [Rectangular]

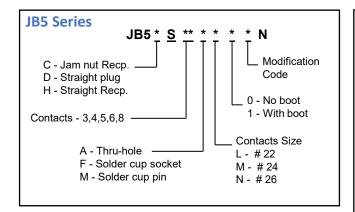
Series	QE6	DF02	DZ02	HB01	HB01(O/D)	HB03	KN01	KN02	KN06	
Photo										
Pitch	3.8mm	1.27mm	1.27mm	N/A	N/A	N/A	N/A	N/A	N/A	
I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	
Pin Count	40	14, 20, 26, 36, 50	8 (2 rows x 4pos)	6 (4 power, 2 signal)	12,16	2, 4, 8	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	5 A	0.5A	0.5A	Power: 18 AWG: 9A 16 AWG: 11A 14 AWG: 13A Signal: 24 AWG: 2A 22 AWG: 3A 20 AWG: 4A	1 A	28 ~ 30 AWG : 1A 24 ~ 26 AWG : 2A 22 AWG : 3A	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	4 pos. block: 30A 12 pos. block: 23A 18 pos. block: 3A 42 pos. block: 2A 50 pos. block: 3A	
Voltage Rating	AC 1500 Vrms for 1 minute (Dielectric withstanding voltage)	250VAC	30VAC	250VAC	50VAC	250VAC	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	500 cycles	500 cycles	Plug: 1,500 Short-circuit Plug: 1,000	30 cycles	50 cycles	100 cycles	100 cycles	30 cycles	30 cycles	
Operating Temp	-55 ~ +85 ° C	-20 ~ +80 ° C	-40 ~ +85 ° C	-25 ~ +85 ° C	-40 ~ +85 ° C	-25 ~ +105 ° C	-20 ~ +105 ° C	-10 ~ +85 ° C	-20 ~ +105 ° C	
Termination	Crimp/Solder	IDC/Solder	Solder (SMT)	Crimp	Crimp	Crimp	Crimp	Crimp	Crimp	
Locking	Lever Lock	One-touch, screw	Tab Lock	Tab Lock	Tab Lock	Tab Lock	Rack & Pinion Lever	Tab Lock	Rack & Pinion Lever	
Features	Two types of connections – wire crimp and board through-hole types. Compatible with 3U4HP size cards for 19-inch subrack.	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.	Terminals	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.	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.	

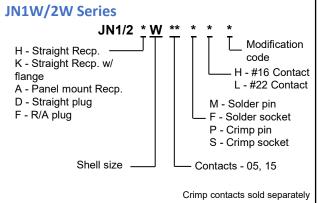


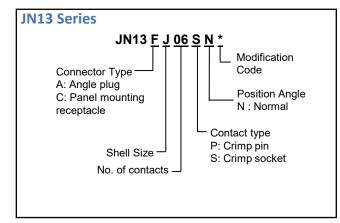
Industrial I/O Connectors [Circular] (1/2)

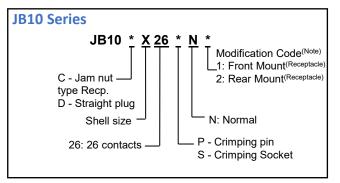
Series	JB5	JB10	JN1 / JN2	JN1W / JN2W	JN1V / JN2V	JN6	JN13	JN14	SRCN
Photo	0				STOP .			000	
Plug Shell Diameter	ø11.0mm	ø33.5mm	JN1: ø19.0mm, JN2: ø 20.0mm	ø26.2mm	JN1: ø19.0mm, JN2: ø 20.0mm	2pos. : 21 × 12.5 4pos. : 24.5 × 18 7pos. : 21 × 12.5	6pos.: 31.8×20.2 9pos.: 23.5×16	2pos.: 19×17 4pos.: 22.1×17.6 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-postion connector combines power and brake with reinforced insulation. TÜV & UL Certified.	Screw grounded 4pin receptacle. Spring lock 2pin/9pin receptacles. Plastic, waterproofideal for compact servo motors.	JIS C 5432 compliant UL recognized, 5 insert guide keys.

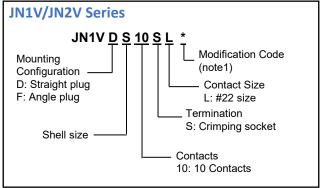
View all JAE connectors at www.JAE.com

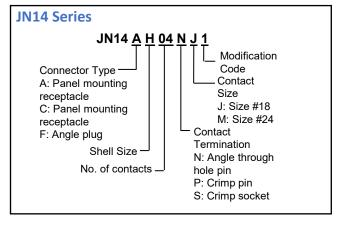


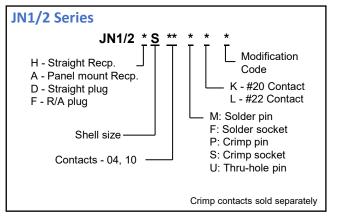


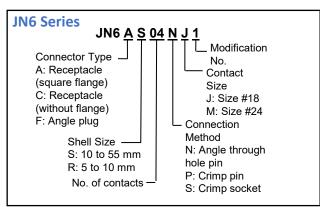


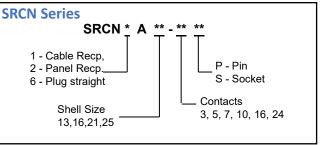








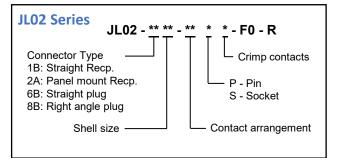


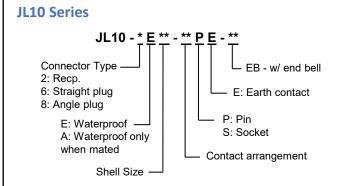


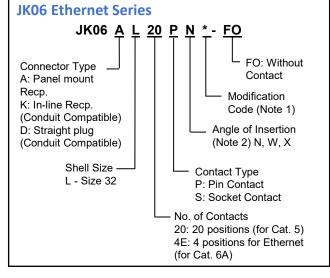
Industrial I/O Connectors [Circular] (2/2)

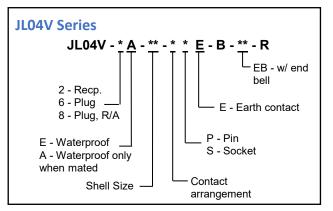
Series	JL02	JL04V	JL05	JL10	JL10/W	JK06	JK06 Ethernet	N/MS	JB12
Photo					THE O				
Plug Shell Diameter	ø34.1-62.7mm	ø22-56.3mm	ø35.9-51.7mm	ø35.9-58.6mm	Ø42.2mm	ø36.5-66.3	ø59.8	ø22.2-81.8mm	ø16.2
Pin Count	10,17,19,24,37,48,54	3,4,6,7,8,9,22	4,5,7,8,9,10,17,19, 24,30,36,37, 52,73	4,6,9,17,19,22,37	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 ℃	-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)

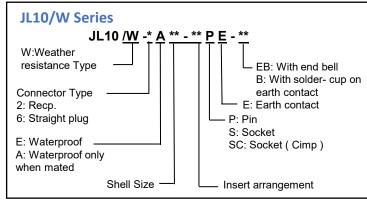
View all JAE connectors at www.JAE.com

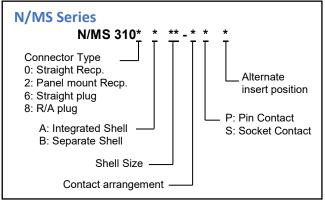


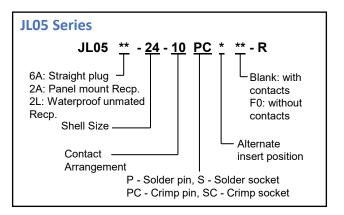


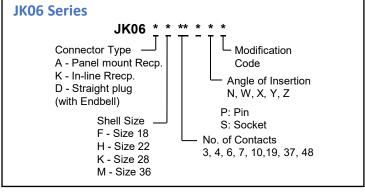


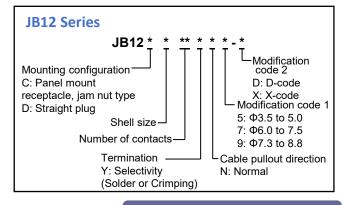












Industrial I/O (Circular) 2

Industrial I/O Connectors [Optical]

Series	FO-BD2	FO-BD6	FO-BD7	FO-BD7D
Photo				
Shell Material	Zinc alloy/ chromium plating	Weather Resistant Plastic	Zinc alloy/ Cr plating over Ni over Cu	Zinc alloy/ chromium plating
Mated Condition	IP67	IP67	IP67	IPx7
Corrosion Resistance	720 hours of salt spray	1000 hours of salt spray	1000 hours of salt spray	1000 hours of salt spray
Durability	500 cycles	500 cycles	Mating area: 50 cycles LC Connector area: 100 cycles	500 cycles
Locking	Threaded	Push-pull lock	Push-slide lock	Push-slide lock
Operating Temp	-40 ~ +85 ° C	-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	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	One-touch mating through three-axis floating structure. Space-saving compact design, and light weight plastic connector housing.	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



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-BD6 Series

Jam Nut Mounted Type Receptacle:

FO-BD6-R-B-F

4-point Screw Type Receptacle:

FO-BD6-R-S

Plug: FO-BD6-P-S

Waterproof Cap: FO-BD6-R-DC

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	FI-JW	IL-G	IL	LY	HD	FI-R	FI-X	F	-
Photo	V	5				The state of the s		11/12	Single Row	Dual Row
Pitch	0.4mm	0.3mm	2.5mm	2.5mm	2.0mm	0.5mm	0.5mm	1.0mm	1.25mm	1.25mm
Discrete Wire AWG	N/A	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	#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	N/A	JF08 Assembly	0.14 ± 0.03mm	0.14 ± 0.03mm	N/A
Pin Count	40	34	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	1.65mm	6.0mm	7.73mm	5.3mm	1.0mm	3.8mm	1.6-2.35mm	1.8mm	3.7mm
Locking	Friction	Friction	Friction	Friction	Latches	Friction/Pull Bar	Latches	Latches	Latches	Latches
Durability	30 cycles	30 cycles	100 cycles	100 cycles	Tin: 50 Gold: 500	30 cycles	50 cycles	50 cycles	50 cycles	50 cycles
Current Rating	0.3A	0.25A	3A	3A	3A	0.1A to 1.0A	0.8A	1.0A	1.0A	1.0A
Voltage Rating	50V	50V	500V	AC 300 V, DC400V	250V	100V	200V	200V	200V	200V
Features	Thin wire coaxial connector for small portable devices.	Vertical mating. Small footprint.	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.

Part Number Guide Board-to-Cable Connectors

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

FI-JW Series

Receptacle: FI - JW##S - VF16

Orderable in reels

Cable Plug: FI - JW##C - R3000

Only orderable in reels

Plug Shell: FI - JW##C - SH 1 - 9000

Only orderable in reels

Ground Bar: FI - JW##C - BGB - S - 6000

Cover: FI - JW##C - CGB - S - 9000

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

Crimp Contacts: IL-C2-1-10000

Hand Crimp Tools: CT150-2-IL (AWG #22 to #28)

CT150-2B-IL (AWG #24 to #26)

UX: Bottom- entry

CT150-2C-IL (AWG #20)

Semi-Auto: 3502-IL-2B

LY Series

Receptacle: LY10 - DC - ##

Cable Plug: LY20 - ##P - D__1P#

T: Straight Crimp Contacts: LY10-C1-A1-10000 LT: Right

LY10-C2-*-10000

Hand Crimp Tools: CT150-4-LY1 (AWG #22 to #26)

CT150-4-LY2 (AWG #26 to #30)

Semi-Auto: CT350-2

HD1 Series

Receptacle: HD1S040HA1R6000

Cable Plug: HD1P040MA1R6000

Cover Shell: HD1P040-CSH1-10000

1: Discrete wire 2: Coax wire

angle

2. 000

Pull Bar: **HD1P040-PB1**

HD2 Series

Receptacle: HD2S030HA1R6000

└ Modification Code

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

Orderable in reels

FI-X Series



Cable Plug: FI - X30H

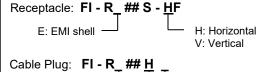
H: Discrete wire crimp L: Locking latches

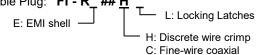
C: Coax wire MA1: FPC/FFC

Crimp Contacts: FI-XC3B-1-15000 Hand Crimp Tool: CT150-4C-FIX

Semi-Auto: 3502-FI-2B

FI-R Series





Cover Shell: FI - RE ## CL- SH2 - 3000

Only for coax cable plug

FFC Harness: JF08R0R0##0##UA



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 Series

Single Row

Receptacle: FI - S ##P - HFE

Cable Plug: FI - S_##S

E: EMI Shell S: Discrete wire crimp ME: FPC/FFC

MRE: Rev. FPC/FFC

Dual Row

Receptacle: FI - W_##P - HFE Right angle

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

Series	ST1	ST11	ST19	ST50	ST12	SG50	MM80	MM60	SM3
Photo									
Card	microSD™	microSD™	microSD™ and nano SIM combo	microSD™ (UHS-II)	microSD™ (UHS-I)	SD (UHS-I,UHS-II)	DDR3 SDRAM SODIMM	PCI Express Mini Card	PCI-SIG M.2
Mounted Height	1.9mm,1.4mm	1.25mm	1.3mm	1.35mm	1.4mm	3.15mm	5.2mm	4.0mm, 5.9mm	1.2mm, 2.15mm, 3.1mm, 4.1mm
Pin Count	8, 8+1	8+2	20+1	17+1	10+2	9+3 (UHS-I) 17+3 (UHS-II)	204	52	67
Voltage Rating	10V	10V	10V	10V	10V	10V	200V AC rms	50VAC rms	50V AC rms
Current Rating	0.5A	0.5A	0.5A	0.5A	0.5A	0.5A	0.3A	0.5A	0.5A
Durability	10,000 cycles	5,000 cycles	2,500 cycles	5,000 cycles	20,000 cycles	10,000 cycles	25 cycles	50 cycles	60 cycles
Style	Hinged	Push-Push	Push Eject Tray	Push-Push	Push-Push	Push-Push	Card Edge	Card Edge	Card Edge
Features	Available with card detection switch. Smallest footprint & lowest height for hinged type.	Strong mechanical lock to prevent card from popping out from vibration and shock.	3 in 2 combo connector can house a nano SIM and either an additional nano SIM or a microSD.	Compatible with ultra high-speed data transmission standard UHS-II for transferring large files quickly.	for use in high temperature environments up to 105Deg. C. *Operating Temperature Range	environments with foreign debris as	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.

Part Number Guide Card Connectors

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

ST19 Series

MicroSD nano SIM: ST19S020VCAR1400

Combo tray type

ST50 Series

MicroSD (UHS II): ST50S017VCAR1800

Push-push type

ST12 Series

MicroSD (UHS I): ST12S010VBAR1800

Push-push type

SG50 Series

SG50S017VCAR500 SD:

Push-push type A: UHS-II Support B: UHS-I Support

No. of contacts _

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 Contact No. of contacts finish Socket type -Height B: Top mount modification Key type code

MM60 - EZ - H059 - B 5 Latch: Latch type -5: Sn plating Connector height With boss -

Nut: NT1R3000 4.0mm height connector

NT4R1600 5.9mm height connector **SM3 Series** M.2 (NGFF) Connector: SM3 Z S 067 U 310 * * Polarizing key: No. of contacts -A/B/E/M Mounting Type: -U: On-board Contact finish: B: Mid mount (Au plating) Connector Height:-A: 0.13um 120: 1.20mm B: 0.25um 215: 2.15mm 310: 3.10mm 410: 4.10mm 2.15mm connector Nut: **SM3ZS067U215-NUT1** 3.1mm connector SM3ZS067U310-NUT1 SM3ZS067U410-NUT1 4.1mm connector

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

Series	SF7	SF15	SF53	SF56K	SF58	SF70	SF72	SF78
Photo		SSE STATE OF THE S		→				
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+1	6+2	6+2	6+1	12+1
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.

Part Number Guide Card Connectors

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

SF53 Series

Micro SIM: SF53S006VCBR2000
Push-Pull type

SF70 Series

Nano SIM: SF70S006VBAR2000 Tray type

Please contact JAE for recommended dimensions of the tray.

SF15 Series

Micro SIM: SF15W006S4BR2000
Hinge type

SF56 Series

Micro SIM: SF56K006VBAR2000
Push-Push Type

SF72 Series

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

SF58 Series

Micro SIM: SF58S006VBAR2000
Tray type

Please contact JAE for recommended dimensions of the tray.

SF78 Series

Nano SIM: SF78S012VBAR1400 Tray type

Please contact JAE for recommended dimensions of the tray.

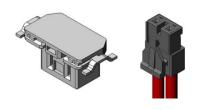
LED Lighting Connectors

Series	ES3 (WF2)	ES5	ES6	ES9	ES10
Photo	Series Series	Salar Sa			The state of the s
Applicable Wire Size	#22,24,26	#22,24,26	N/A	#22,24,26	#24,26 (solid)
Pin Count	2	1	2	2,4	1
Height	1.65mm (above board)	1.6mm	1.55mm (above board)	3mm	2.2mm
Locking	Latch	Latch	Friction	Friction	Friction
Durability	20 cycles	20 cycles	20 cycles	10 cycles	5 cycles
Current Rating	2.0A	4.0A	1.0A	3.0A (4 pos.) 4.0A (2 pos.)	2.0A
Voltage Rating	200V	N/A	250V	300V	N/A
Operating Temperature	-40 ~ +105 °C	-40 ~ +105 °C	-40 ∼ +105 °C	-40 ∼ +105 °C	-40 ~ +105 °C
Features	Mechanical lock included for use in applications with vibration and shock.	Special lock structure that has a clear "click" feeling for secure mating.	Smallest size. Card edge connector design to reduce components and labor.	Spring lock structure provides high vertical and horizontal retention strength.	Compact structure with no insulator allows design flexibility. Easy single wire insertion.

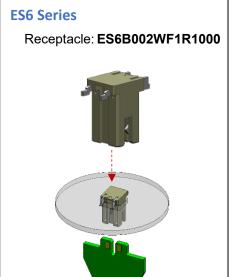
Part Number Guide LED Lighting Connectors

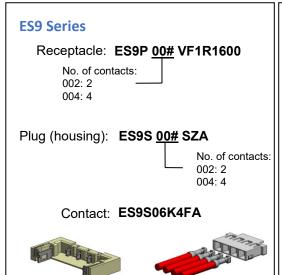
ES3-WF2 Series (Board-to-Wire type) Receptacle: ES3B002WF2R1000

Housing: **ES3S002SZA**Contact: **IL-Z-C1-A-7000**



ES5 Series Receptacle: ES5S001JFAR5500 Cable Plug: ES5P09K5FA #24-26AWG Cable Plug: ES5P09K4F2 #22AWG





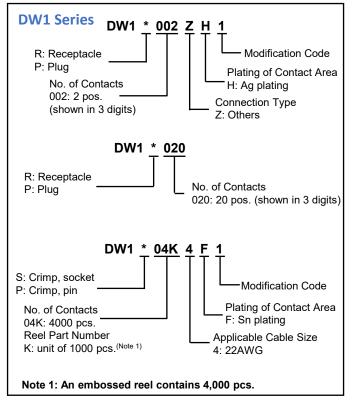


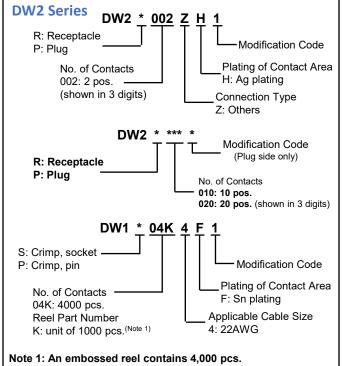
High-Power Connectors

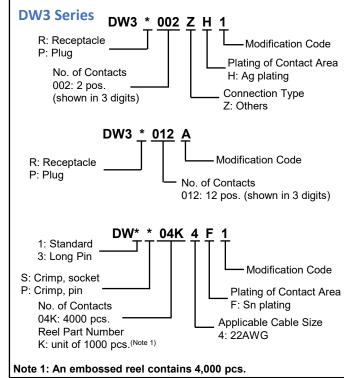
Series	DW1	DW2	DW3	DW4	DW05	DW07	JK11	DW11
Photo								
Туре	Rack-and-Panel	Rack-and-Panel	Rack-and-Panel	Bus bar-to-Cable	Cable-to-Cable	Bus bar-to-Bus bar	Lever Locking	Board to Board
Pin Count	Power: 2 Signal: 20	Power: 2 Signal: 20	Power: 2 Signal: 24	1	1	1	4	4
Current	Power: 500A Signal: 2A	Power: 200A Signal: 2A	Power: 150A Signal: 2A	100A	150A	Up to 413A (Varies by bus bar thickness and allowable temp rise. Scalable for added current)	150A (38mm² wire); 60A (14mm² wire)	20A DC
Voltage Rating	Power: 600V Signal: 100V	Power: 600V Signal: 100V	Power: 600V Signal: 100V	600V	600V	N/A	Varies by usage.*	250V DC
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℃	-25 ~ +105℃	-40 ~ +75°C	-40 ~ +85°C	-25 ~ +105°C	-55 ~ +85℃	-40 ~ +85°C
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.

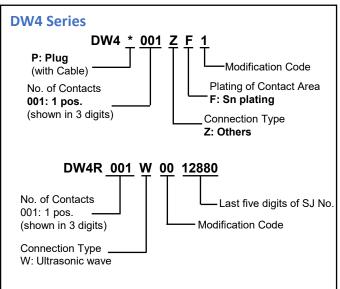
Part Number Guide

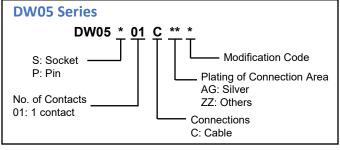
High-Power Connectors

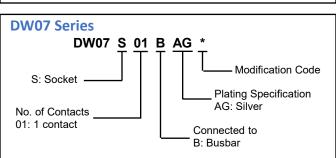


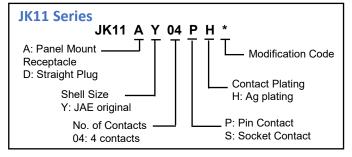












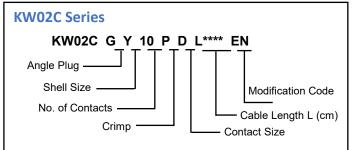


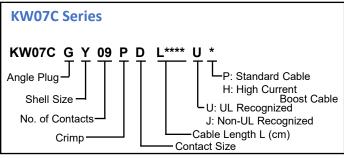
EV Charging Connectors

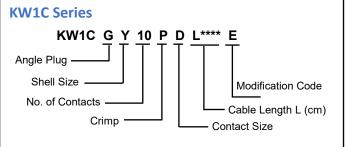
Series	KW1	KW1C	KW02	KW02C	KW03	KW03C	KW07C	KW11
Photo		Ower/ance™		Dower ance"		Power ance"	Oower ance™	
Туре	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable	Plug + Cable
Pin Count	Power: 2 Signal: 7	Power : 2 pos. 12V Power: 2 pos. Signal: 6 pos.	Power : 2 pos. 12V Power : 1pos. Signal : 6 pos.	Power : 2 pos. 12V Power: 2 pos. Signal: 6 pos.	Power : 2 pos. 12V Signal: 2 pos. Signal: 6 pos.	Power: 2 pos 12V Signal: 2pos Signal: 6pos	Power: 2 pos Signal: 7 pos	Power: 2 pos Protective Earth : 1 pos Signal: 2 pos
Current	Power: 125A Signal: 2A	Power : 150A max. 12V Signal : 6.4A Signal : 2A	Power : 25A 12V power 6.4A signal: 2A	Power: 37A max. 12V Power: 6.4A Signal: 2A	Power: 80A 12V Signal: 6.4A Signal: 2A	12V Signal: 6.4A 12V Signal: 6.4A		Power: 150A / 200A Signal: 2A
Voltage Rating	DC500V	DC500V	DC450V	DC500V	DC500V	DC750V	DC750V	DC1000V
Durability	10,000 cycles	10,000 cycles	10,000 cycles	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 N/A		N/A	N/A
Operating Temp	-30 ~ +40°C (modification U1) -30 ~ +50°C (modification E1)	-30 ~ +50 °C (Rated current: 125A) -30 ~ +45°C (Rated current: 135A) -30 ~ +40°C (Rated current: 150A)	-30 ~ +50 °C	-30 ~ +50°C (Rated current: 30 A) -30 ~ +40°C (Rated current: 37 A)	-30 ~ +50°C	-30 ~ +50°C	-30~+40℃	-30~ +50°C
Features	CHAdeMO standard. Highly durable diecast housing, with one- touch operation and easy to handle. CE certified and UL recognized (as separate part numbers). Weather and impact resistant.	CHAdeMO standard. One-touch operation and light-weight for easy handling. CE certified and UL recognized (as separate part numbers). Weather and impact resistant.	CHAdeMO standard. One-touch operation and light-weight for easy handling.	CHAdeMO standard. One-touch operation and light-weight for easy handling. CE certified and UL recognized (as separate part numbers). Weather and impact resistant.	CHAdeMO standard. One-touch operation and light-weight for easy handling. CE certified and UL recognized (as separate part numbers). Weather and impact resistant.	CHAdeMO standard. One-touch operation and light-weight for easy handling. UL recognized. Weather and impact resistant.	CHAdeMO standard. One-touch operation for easy handling. UL recognized. Weather and impact resistant.	Metal core reinforced locking latch. Easy-to- grip and operate handle design, even while wearing wearing thick gloves.

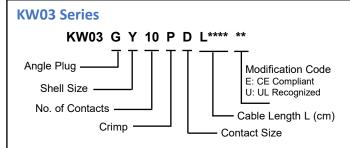
^{*}Please consult with JAE representative.

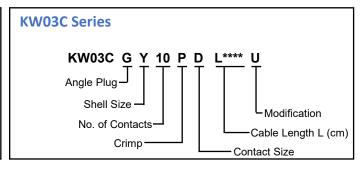
Part Number Guide EV Charging Connectors

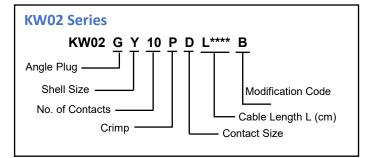


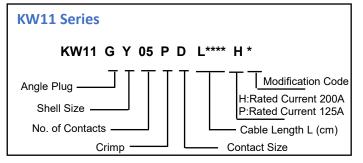












Transportation (1/4)

Series	MX19	MX80	MX23A	MX36	MX37	MX44	MX47	MX57	MX60A	MX67A	MX72 A/B/C/D
Photo			Par la				No.		100		
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 0.5mm² Power: AVSS 0.5 to 1.25mm²	AVSS 0.3 to	AWG #22-20 FLRY-A,FLRY-B 0.35, 0.5mm ²
Pin Count	2,3*,4	2,3,4,6*	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.	profile. Available in reverse mount type. Retainer detects incomplete insertion of	Waterproof. Spring separates connectors if not fully mated. Shorting contact eliminates static discharge. Retainer detects incomplete insertion of contact.	discharge.	Improved	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 airbag inflation and rupture.	High pin count waterproof IPX9K connector with a lever structure that reduces the force required to mate and unmate.	type contact	Next generation self rejecting AK2 and ABX-5 squib ,Extremely high reliability for use with SRS airbag applications. Different key options available.

Part Number Guide Transportation Connectors

MX19 Series

Socket housing: MX1900#S51 Contacts: MX19S10K451 (socket) MX19P10K451 (pin)

Pin housing: MX1900#P51 Dummy pin: MX19000XD1

*3 pin version

Hand Tool: CT150-4C-MX19 Semi auto: 3502-MX19-2B

Socket housing: MX19A003S51

MX80 Series

Female and Male Inline Housing:

MX80 A 02 S Z1 A Key Code: A, B, C A: No clip B: With clip Number of "unused cavity" S: Female Socket No. of Contacts P: Male Pin

3: 0.75 - 1.0 mm²

5: 0.13 - 0.22 mm²

4: 0.3 - 0.5 mm²

1: Black

2: Gray

Female and Male Crimp Terminal:

MX80 S 08K 5 F1 - Wire size: S: Female / Socket -

Hand Tool for *K5F1 Terminal:

CT150-19E-MX80 *KF41 Terminal: CT150-19D-MX80 *K3F1 Terminal: CT150-19C-MX80

Package size: 08K: 8.000 per reel 10K: 10,000 per reel

Semi auto: 3502-MX80-2

MX23A Series

P: Male / Pin

Socket housing: MX23A##SF1

Contacts: M23S05K351 M120-55780 Dummy pin:

Pin header: MX23A##NF1

CT170-14B-MX23

3502-MX23-2

1: Standard Hand tool: 2: Reverse Semi auto: Front cap: MX23A##XF1

MX36 Series

Socket housing: MX3600#SQ3

M36S08K4Q3 (socket) Contacts: M36P08K4Q3 (pin)

Pin housing: MX3600#PQ3

350-MX36-2

Front cap: MX3600#XF3

Semi auto: 350-MX36-3B Automatic:

MX37 Series

Socket housing: MX37004SP3

Pin Socket M37P75C4P3 Contacts: M37S07K4P3

Pin housing: MX37004PP3

Semi Auto: 350-MX37S-2 350-MX37P-2 Automatic: 350-MX37S-3B 350-MX37P-3B **MX44 Series**

Socket housing: MX44##\$F1

Pin header: MX44##NF1

Retainer: MX44###XR1

Wire seal: MX44000XP1

Wire O.D. 1, 1.4-1.5mm 2: 1.6-1.7mm

MX47 Series

Socket housing: MX47039SF1

Key code: 1,2

Hand Tool: CT150-2-MX44

M44S05K4F1

3502-MX44-2

Contacts:

Semi Auto:

Pin header: MX47039NF1

Front cap: MX47039XF1

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

MX57 Series

Sockets

Socket housing: MX570##SF#

M37S07K4F4 M37S07K4F3 Contacts:

Semi Auto

Contacts:

Automatic: 3502-MX37S-2 Pin header: MX57B48NF1

MX60A Series

Socket Housing: MX60A###SFK

Front retainer: MX60A###XF2

MX60S05K3FA

Pin header: MX60A177NF2

(power supply 0.5sq~0.75sq)

(power supply 0.75sq~1.25sq)

MX60S65H4F1

MX60S05K2FA

(signal 0.3sg~0.5sg)

Dummy pins: MX60A000XD2 (power supply)

MX60A000XD3 (signal)

MX67 Series

Socket housing: MX67S0##SQA

Contacts: MX67S75C4P1 MX67S75C4P2

Pin header: MX67A###ZPA

Connector Type —

MX72 Series

MX72A 1 F####

JAE will supply the complete mating harness designed

to customer specifications.

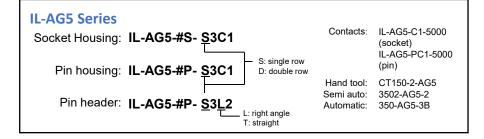
└─ Key Code

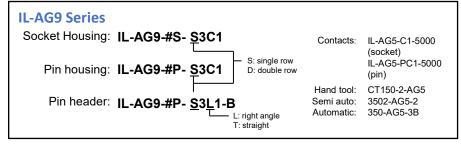
Transportation 1

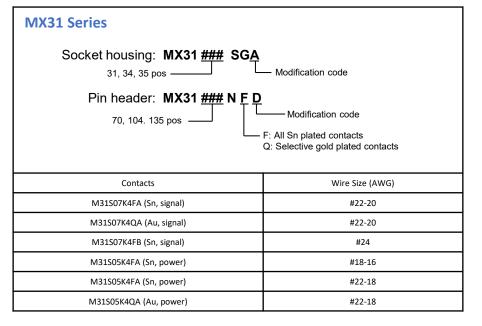
Transportation (2/4)

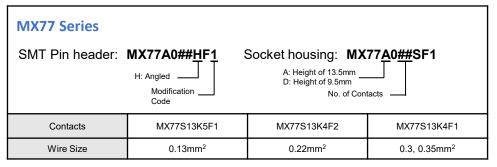
Series	IL-AG5	IL-AG9	MX31	MX77	MA01	MX81	
Photo							
Pitch	2.5mm	2.5mm 2.5mm		Signal: 1.8mm Power: 2.1mm	0.635mm	2.54mm	
Wire Size	AWG #22-20 AWG #18 AV, AVS, AVSS: 0.3 to 0.5 mm² AVS, AVSS: 0.85 mm²	AWG #22-20 AWG #18 AV, AVS, AVSS: 0.3 to 0.5 mm² AVS, AVSS: 0.85 mm²	Signal: AWG #22-20 Power: AWG #22-16 Signal: AVS, CAVS, CAVUS 0.3 to 0.5mm ² Power: AVS, CAVS, CAVUS 0.3 to 1.25mm ²	AWG #26-22 CHFUS, CIVUS: 0.13 to 0.35mm ² AVSS: 0.3mm ²	8,10,14, 16,18,20, 22, 24, 30mm	FLRY-A, FLRY-B, AESSX, FLCUSNRY 0.13 to 1.0mm ²	
Pin Count	1 row: 4,5,6,7,10 2 rows: 14,16,18,22,30			4,8,12,16,20,24,32,40	30,40,60,80,90,100,120,14 0	2, 4	
Current Rating	3A	3A	Signal: 2.2A Power: 5.7A	3A	0.5A	4.1-9.7A	
Operating Temp	-40 ~ +85 ° C	-40° C ~ +85° C	-40 ~ +85 ° C	-40 ~ +85 ° 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-Board	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.	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.	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.	

Part Number Guide Transportation Connectors

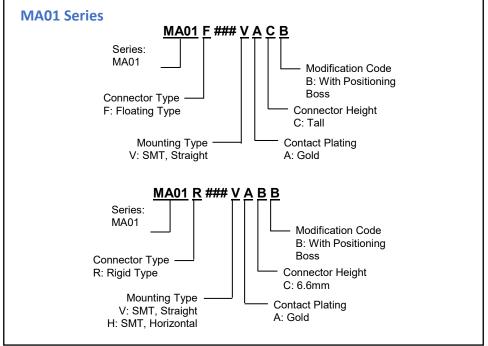








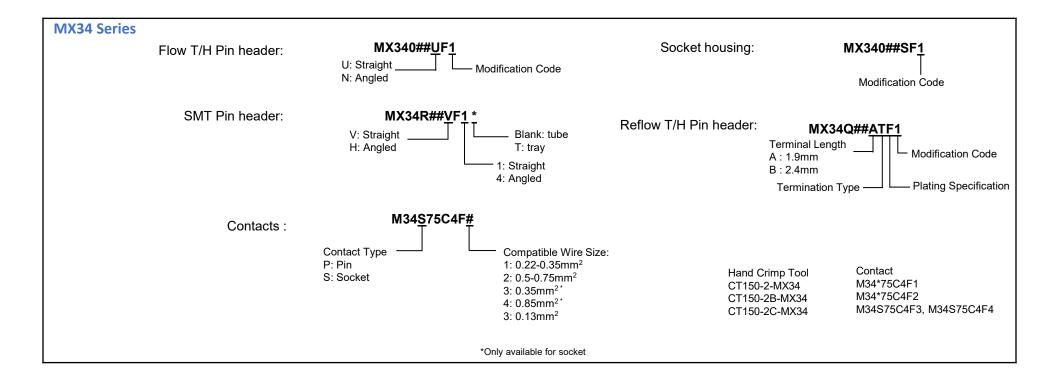


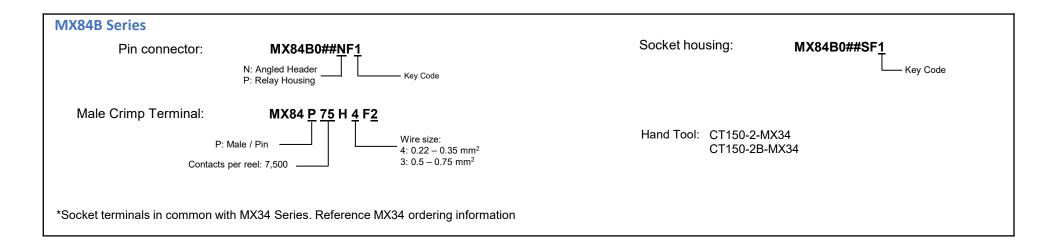


Transportation (3/4)

		MX84B						
Series	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	.2mm 2.2mm 2.2mm		2.2mm	2.2mm 2.2mm		2.2mm	2.2mm
Wire Size	AWG #26-18 AVSS: 0.3-0.85mm ² CHFUS: 0.13- 0.75mm ² CAN SD: 0.35mm ² CAVS: 0.5-0.85mm ²	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: 0.3-0.85mm ² CHFUS: 0.13- 0.75mm ² CAN SD: 0.35mm ² CAVS: 0.5-0.85mm ²	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 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: 0.3-0.85mm ² CHFUS: 0.13- 0.75mm ² CAN SD: 0.35mm ² CAVS: 0.5-0.85mm ²
Pin Count	12,16,20	3,5,7,8,12,16, 20,24,28,32, 36,40	3,5,7,8,12,16,20,24,28 ,32,36,40	20,32	20,32 12,20,32		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.	Secondary lock mechanism to ensure terminal position. Simplified	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.

Part Number Guide Transportation Connectors





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	0.14mm² x4, 0.22mm² 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
Applicatio n	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		Board-to-Cable	Board-to-Cable	Cable-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.	with USB 2.0 signal speeds.	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.	with USB 3.0 signal	Mating compatible with HSD connectors. Waterproof and non waterproof variations available. Pin headers not provided by JAE.	connectors conformed to FAKRA	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 invehicle 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.

Part Number Guide Transportation Connectors

MX38 Series

Board Mounting Receptacle: MX38002FQ1

Different key code: 1,2,3,4

Pin header: MX38002NQ1

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

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

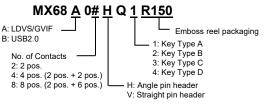
JAE will supply the complete harness designed to customer specifications.

MX66 Series

MX66 Series Harness

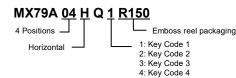
JAE will supply the complete harness designed to customer specifications.

MX68 Series



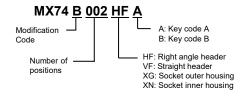
JAE will supply the complete mating harness designed to customer specifications.

MX79A Series



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

MX74 Series



<u>Supplied as individual connectors (Contact us for cable harness options).</u>

MA07 Series



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

Transportation 4

Contact Us

Connector Sales

Headquarter

Japan Aviation Electronics Industry, Ltd. 1-19, Aobodai 3-chome, Meguro-ku, Tokyo 153-8539, Japan

E-mail: iodinfo@jae.co.jp

Tel +81-3-3780-2768, Fax +81-3-3780-2883

www.jae.com

Europe

JAE Europe, Ltd.

Royal Pavilion, Tower 3, First Floor, Wellesley Road

Aldershot, Hampshire, GU11 1PZ, U.K.

Email: sales@jae.co.uk

Tel +44 1252 55 11 00, Fax +44 1252 55 11 10



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JAE Electronics, Inc. 142 Technology Dr. #100, Irvine, CA 92618 Email: jaeinfo@jae.com

Tel +1 949-753-2600 www.jaeusa.com

USA - Automotive

JAE Electronics, Inc. (Automotive) 19500 Victor Parkway #275. Livonia, MI 48152

Email: shinskew@jae.com Tel +1 734-542-0486 x702

www.jaeusa.com

Shanghai

JAE Shanghai Co., Ltd.

8F, Jin Hong Qiao Business Building, No. 8, 555 Gubei Rd, Chang Ning District, Shanghai, 200051 P.R. China

Email: info.sh@jae.com.cn

Tel +86-21-6236-0322, Fax +86-21-6236-1292

Korea

JAE Korea, Inc.

5F, Korea Sanhak Foundation B/D, 329, Gangnam-daero, Seocho-gu, Seoul 06627,

Korea

Email: info@kr.jae.co.jp

Tel +82-2-6230-1100, Fax +82-2-6230-1190

Hong Kong

JAE Hong Kong, Ltd.

Units 1810-1813, Level 18, Tower 1, Grand Century Place, 193 Prince Edward Road West, Mongkok,

Kowloon, Hong Kong Email: info@jae.com.hk

Email: info@jae.com.hk

Tel +852-2723-7782, Fax +852-2723-9028

Singapore

JAE Singapore Pte Ltd.

33 Tannery Lane, #02-01 Hoesteel Industrial Building,

Singapore 347789

Email: info@jae.com.sg

Tel +65-6748-1332, Fax +65-6748-2920

Taiwan

JAE Taiwan, Ltd.

3F., No.57, Lane.10, Jihu Rd., Neihu Dist.,

Taipei 11492, Taiwan

Email: coninfo@jae.com.tw

Tel +886-2-2799-6777, Fax +886-2-2799-0996

www.jae.com.tw

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JAE Electronics
Distribution Manager

Stephen Birmingham
Office: (949) 981-1954
Email: BirminghamS@jae.com



Digi-Key Corporation

701 Brooks Avenue South Thief River Falls, MN 56701 Toll Free: 1-800-344-4539 Tel +1 218-681-6674 Fax +1 218-681-3380 Email: sales@digikey.com

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TTI, Inc.

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Master Electronics

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JAE EUROPE European Distribution Manager Kevin Hartmann

Mobile: +49 15172826674
Email: HartmannK@jae-europe.de



Rutronik Elektronische Bauelemente GmbH

Industriestrasse 2

75228 Ispringen, Germany Tel.: +49 (0) 72 31 / 801 0

Email: rutronik@rutronik.com

www.rutronik.com



TTI. Inc.

Ganghoferstr. 34 82216 Maisach-Gernlinden

Germany

Tel.: +49 8142 6680 - 0 Email: <u>sales@de.ttiinc.com</u>

www.ttieurope.com



Heilind Electronics GmbH

Pfarrer-Huber-Ring 8 83620 Feldkirchen-Westerham

Germany

Tel.: +49 8063 8101 100

www.heilind.de



R.S.Tech

Ashkenazy st. 64, Tel Aviv, Israel. 6986928

Tel.: +972 (3) 6490454

Email: info@rstech.co.il

www.rstech.co.il



Wittig Electronic GmbH

Gewerbegebiet Süd Nr. 5 09618 Brand-Erbisdorf, Germany

Tel.: +49 (0) 37322 5280-0 Email: info@wittig-electronic.de

www.wittig-electronic.de

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Japan Aviation Electronics Industry, Ltd. 21-1, Dogenzaka 1-chome, Shibuya-ku, Tokyo 150-0043, Japan Telephone: +81-3-3780-2711

www.JAE.com