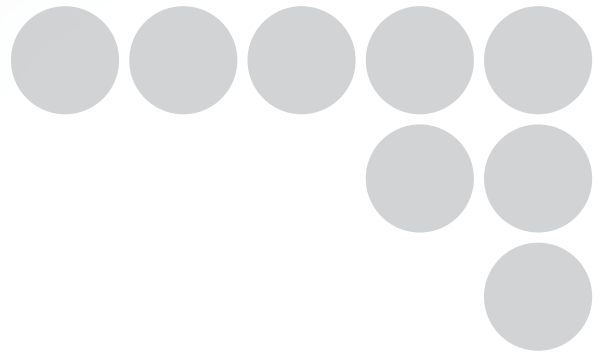


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CONNECTOR SELECTION



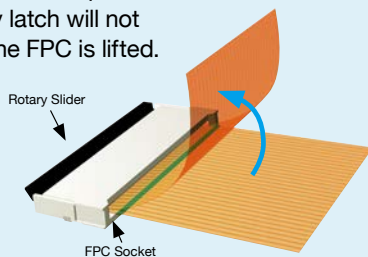
# OMRON Connectors: A Perfect Match for Your Requirements

Boards to FPC/FFC Connections **FPC/FFC Connectors**

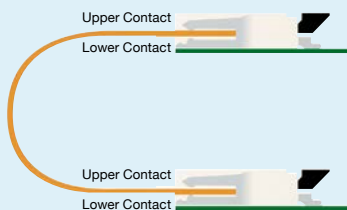


## Features of Rotary Backlock Mechanism

- 1** Rotary latch is independent of the FPC socket. The Rotary latch will not release if the FPC is lifted.



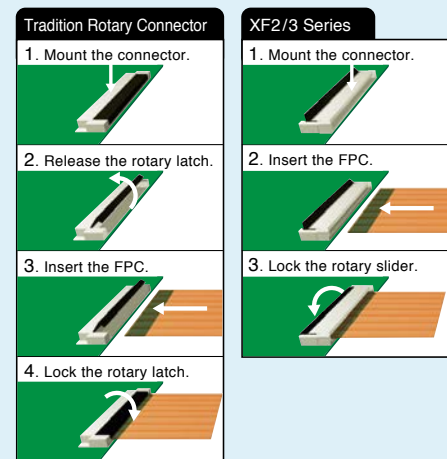
- 2** Dual contact. There is no need to distinguish between the upper and lower FPC connection.



- 3** Four-sided housing. Construction prevents FPC displacement.



- 4** Delivered with the rotary latch open. Less work required for FPC Mounting.

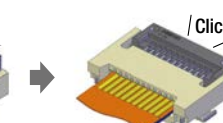
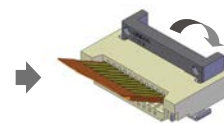
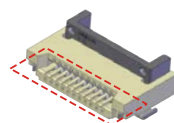


Improved insertion into FPC/FFC cable connectors with sure lock feeling to confirm proper connection.

## XF3M FPC/FFC Connectors

Improved FPC/FFC Insertion and Lock Feeling

The insertion opening is easy to see.

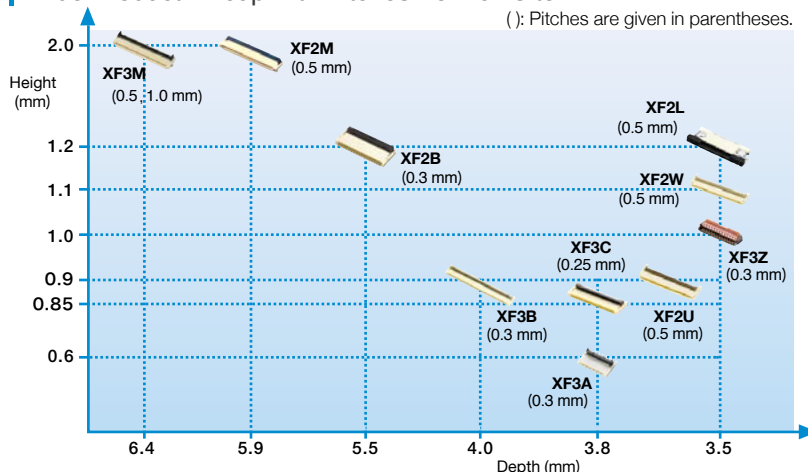


Click!

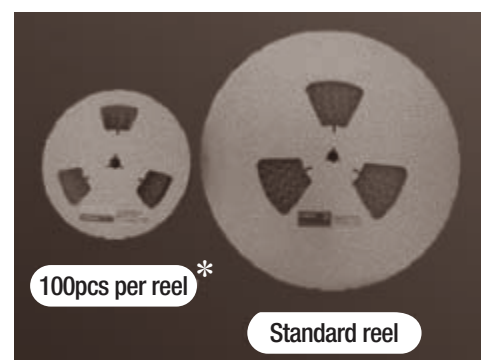
It's easy to tell when the lock is completely engaged.

Wide Product Lineup with Pitches from 0.25 to 1 mm

( ): Pitches are given in parentheses.



Small Reels Are Available with Only 100 Connectors to Fit Small-scale Applications



\* Applicable Connectors : XF2M, XF2J, XF2W, XF3M

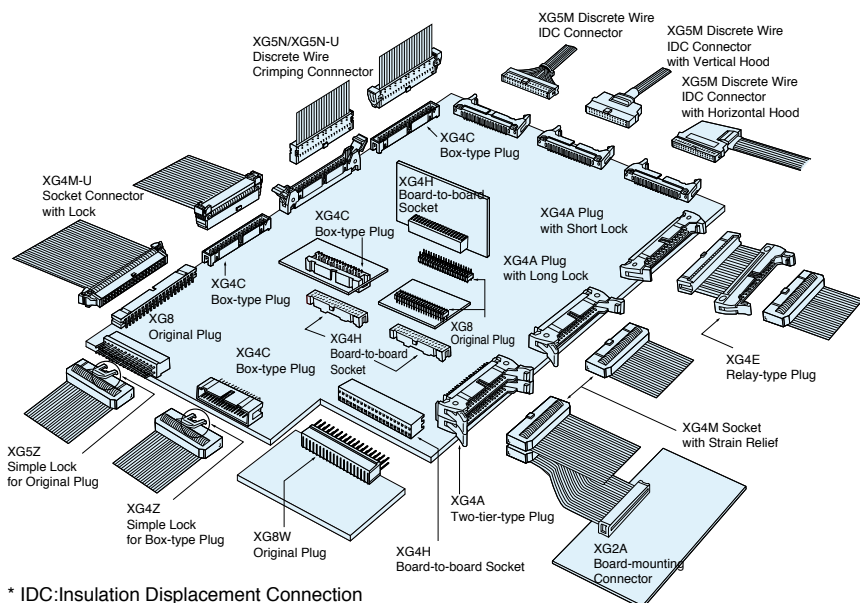
We also provide PCB Terminal Block Connectors and other Connectors that help increase mounting density and reliability of PCB. Let OMRON handle your connector needs. You will find a model that perfectly matches your requirements.

# ctors

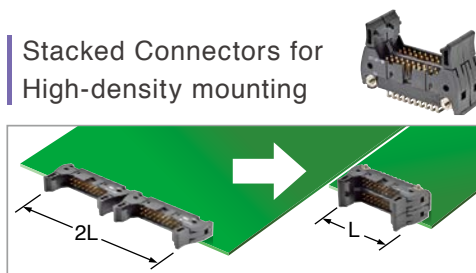
## XG4A



### Easy-to-Use Lock Levers for One-Hand Insertion and Removal



\* IDC:Insulation Displacement Connection



### XG4A 2-tire Plugs



D-sub Connectors Are Ideal for Office Automation Interfacing.

### XM2/XM3 D-sub Connectors

#### Hood Assemblies

- Shielded against EMI.
- Metallized plastic Hood provides excellent noise protection.
- Connectors are available with cables connected horizontally to enable using the space behind the Connectors more effectively.

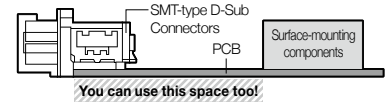


Surface-mounting 9-pin and 25-pin SMT Connectors (XM3K/L) Are Also Available

#### Use the Back Surface to Increase PCB Surface Usage

Tapping holes and processing through holes, such as is required for DIP terminals, is not necessary, so you can use the back of the PCBs as well.

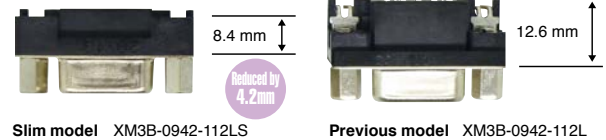
And reflow soldering is possible in the same way as for other surface-mounted components, which reduces mounting work.



Footprint on board reduced by 33% over previous models.

#### Space-saving 9-pin Slim D-sub Connectors for Boards

Board mounting area is reduced by 33% (compared with previous models) using depth of 8.4 mm.



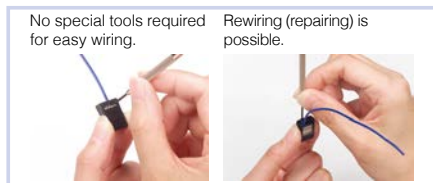
## Easy-wire Connectors for Industrial Components



Easy-wire Connectors with **e-con** Specifications; Ideal for Connecting Sensors.

### XN2 Easy-wire Connectors for Industrial Components

- Use industry-proven spring clamps for wiring.
- No special tools required for easy wiring.
- Rewiring (repairing) is possible.
- Each Connector accepts any wire size from stranded wire AWG28 (0.08 mm<sup>2</sup>) to AWG20 (0.5 mm<sup>2</sup>). (External sheath diameter: 1.5 mm max.)
- With the simple tool Jig (XW2Z-0001), assembly can be completed for 4 wires simultaneously, is available.



## PCB Terminal Blocks

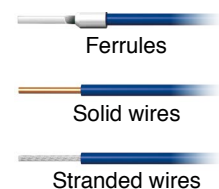


PCB Terminal Blocks That Are Ideal for Control Device Interfaces

- Both Push-in Connectors and Screw Terminals are available.
- With Push-in Connectors, all you have to do is insert solid wires or ferrules to complete the connections.
- With twisted wires, all you need is a standard screwdriver.



Connect any of 3 types of wires.



## DIN Connectors

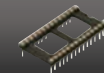


High-density High-reliability Connectors Compliant with International Standards

Connectors with twin contacts provide both contacts on one surface to reduce insertion force and increase reliability with a wiping effect.

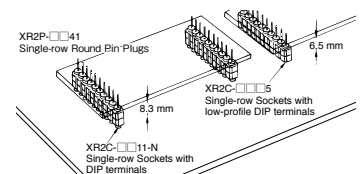
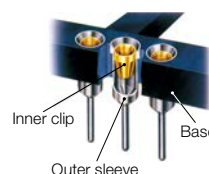


## IC Sockets





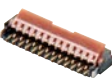












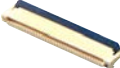








IC Connectors Have Excellent Reliability and Can Tolerate Momentary Interruptions in Power. Ideal for Highspeed Data Processing.

- Round pins and 4-point (4-finger) contact construction ensure long life and excellent shock and vibration durability.
- One-row Connectors allow you to freely adjust the pitch between rows and can be divided into the required number of contacts.
- Low-profile stacking possible in combination with Single-row IC Sockets (XR2C and XR2P).



# Comprehensive Lineup of OMRON Connectors

Classification	FPC/FFC Connectors						
Model	XF3C	XF3A	XF3B	XF2B	XF3Z *	XF2U	XF2W
Appearance	 For FPC	 For FPC	 For FPC	 For FPC	 For FPC <b>NEW</b>	 For FPC	 For FPC/FFC Available 100pcs per reel
Contact pitch	0.25 mm	0.3 mm	0.3 mm	0.3 mm	0.3 mm	0.5 mm	0.5 mm
Type	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
No. of contacts	100 90 80 70 60 51 59 45 35 23 25 17 19	51	67 51	61 51	(35) 25 (13)	40 30 32 20 24 27	60 64 50 55 40 45 20 24 26 10 14 16 18 4 5 6 7 8 9
Rated current	0.2 A AC/DC	0.2 A AC/DC	0.2 A AC/DC	0.2 A AC/DC	0.2 A AC/DC	0.5 A AC/DC	0.5 A AC/DC
Rated voltage	50 V AC/DC	50 V AC/DC	50 V AC/DC	50 V AC/DC	50 V AC/DC	50 V AC/DC	50 V AC/DC
Ambient operating temperature	−30 to +85°C	−30 to +85°C	−30 to +85°C	−30 to +85°C	−55 to 85°C	−30 to +85°C	−30 to +85°C
Applicable FPC/FFC thickness and applicable wire	0.12±0.03 mm	0.12±0.03 mm	0.2±0.03 mm	0.2±0.03 mm	0.2±0.03 mm	0.2±0.03 mm	0.3±0.05 mm
Applicable board thickness	—	—	—	—	—	—	—
Terminal shape							
International standards	—	—	—	—	—	—	—
RoHS Compliant	Compliant						

Classification	FPC/FFC Connectors										Miniature Battery Connectors
Model	XF3M *					XF2M	XF2L	XF2J	XD2B		
Appearance	 <div>For FPC/FFC</div> Available 100pcs per reel					 <div>For FPC/FFC</div> Available 100pcs per reel	 <div>For FPC</div>	 <div>For FPC/FFC</div> Available 100pcs per reel			
Contact pitch	0.5 mm		1.0 mm			0.5 mm	0.5 mm	0.5 mm	0.5 mm		
Type	Side-entry					Side-entry	Side-entry		Top-entry		—
	Dual Contact Au flash	Dual Contact Sn	Upper Contact Au flash	Dual Contact Au flash	Dual Contact Sn		Upper Contact	Lower Contact	Standard terminal type	Reverse terminal type	
No. of contacts	100										
	90	80									
	80										
	70										
	60	60				60					
	50	50 (53)				50 54 55					
	40	40 41 45		40		40 42 45				40	
30	34 (35) 36 37 30 31 (32) 33			30		35 36 38 30 32 33 34	30	30	30		
20	25 26 (28) 29 20 21 22 23 24	(20)	(20) 22 24	20 22 26	(20)	20 22 24 26	21 26	20 22 24	26 28 20 22 24	20 22 24	
10	15 16 17 18 19 10 11 12 13 14	(15)(16)(17)(18)(19) 10(11)(12)(13)(14)	(15) 16 (17) 18 (19) (10) (11) 12 (13) 14	15 16 (17) 18 10 11 12 14	(16)(17)(18) 10(11)(12)(15)	10 12 14 18	10 12 13 18	15 18 19 10 12 13	16 18 10 12 14	10 12 16 18	
Rated current	0.5 A AC/DC					0.5 A AC/DC	0.5 A AC/DC	0.5 A AC/DC	0.5 A AC/DC	2 A , 3 A	
Rated voltage	50 V AC/DC					50 V AC/DC	50 V AC/DC	50 V AC/DC	50 V AC/DC	5 V DC	
Ambient operating temperature	−30 to +85°C					−30 to +85°C	−30 to +85°C	−30 to +85°C	−30 to +85°C	−30 to +85°C	
Applicable FPC/FFC thickness and applicable wire	0.3±0.05 mm					0.3±0.05 mm	0.3±0.03 mm	0.3±0.05 mm	0.3±0.05 mm	—	
Applicable board thickness	—					—	—	—	—	—	
Terminal shape											
International standards	—					—	—	—	—	—	
RoHS Compliant	Compliant										

Note. Inquire about the compliant standards for individual models.























\* Consult your OMRON representative for the marketing dates for the numbers of contacts in parentheses in the No. of contacts row.















Terminal shape




























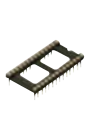
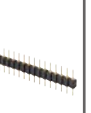










# Comprehensive Lineup of OMRON Connectors

Classification	Flat Cable Connectors											Easy-wire Connectors for Industrial Components	
	MIL sockets with lock	Flat cable connector		Box-type plugs	IDC plugs	Board-to-board sockets	Flat Cable Connectors for PCBs		IDC socket for Discrete Wires	Crimped Sockets for Discrete Wires	Original Plugs		
Model	XG4M-U	XG4A/M		XG4C	XG4E	XG4H	XG2		XG5M	XG5N	XG8		XN2
Appearance													
Contact pitch	2.54 mm	2.54 mm		2.54 mm	2.54 mm	2.54 mm	2.54 mm		2.54 mm	2.54 mm	2.54 mm		2 mm
Type	—	MIL Sockets	MIL Plugs	—	With long lock With short lock	—	Standard Terminal Arrangement	Reverse Terminal Arrangement	Two-row Sockets	Two-row Sockets	One-row Plugs	Two-row Plugs	—
No. of contacts	100										100		
	90												
	80												
	70												
	60	60 64	60 64	60 64	60 64	60 64	60 64	60 64	60 64	60 64		60	
	50	50	50	50	50	50	50	50	50	50	50	50	
	40	40	40	40	40	40	40	40	40	40		40	
	30	30 34	30 34	30 34	30 34	30 34	30 34	30 34	30 34	30 34	36	30 34	
20	20 26	20 26	20 26	20 26	20 26	20 26	20 26	20 26	20 26	20 26	20 26		
10	10 14 16	10 14 16	10 14 16	10 14 16	10 14 16	10 14 16	10 14 16	10 14 16	10 14 16	15 16 17 10 12 13 6 7 8 2 3 4 5	10 14 16	3 4 5 6 8	
Rated current	1 A	1 A	3 A	3 A	1 A	3 A	1 A	3 A max	3 A	3 A	3 A		0.5 to 3 A
Rated voltage	250 V AC	250 V AC	300 V AC	300 V AC	250 V AC	300 V AC	250 V AC	300 V AC	250 V AC	300 V AC	300 V AC		32 V DC
Ambient operating temperature	−55 to +105°C	−55 to +105°C		−55 to +105°C	−55 to +105°C	−55 to +105°C	−55 to +85°C	−55 to +85°C	−55 to +105°C	−55 to +105°C	−55 to +105°C		−30 to +75°C
Applicable Wires	1.27-mm pitch flat cable incorporating AWG28	1.27-mm pitch flat cable incorporating AWG28		—	1.27-mm pitch flat cable incorporating AWG28	—	1.27-mm pitch flat cable incorporating AWG28		Discrete Wires AWG24,26,28	Discrete Wires AWG22,24,26,28		—	Stranded wire AWG28 (0.08 mm²) to AWG20 (0.5 mm²).
Applicable board thickness	—	1.6 mm		1.6 mm	—	1.6 mm	1.6 mm		—	—		1.6 mm	1.6 mm
Terminal shape	(  )	(  )  			(  )		(  ) 		(  ) Sockets	(  ) Sockets			—
International standards	—	UL		UL	UL	UL	—		UL	UL/cUL		UL	UL/cUL
RoHS Compliant	Compliant												

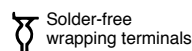
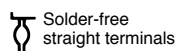
Classification	PCB Terminal Blocks										Half-pitch Connectors						
	PCB Terminal Blocks										Connector Terminal Blocks				Board-to-Board Connectors	Low-profile Stacking Connectors	Board-to-Board Connectors
Model	XW4C				XW4E						XW4A/B				XH3	XH4A	XH2
Appearance																	
Contact pitch	3.5 mm		5.0 mm		3.81 mm			5.08 mm			3.81 mm		5.08 mm		1.27 mm	1.27 mm	1.27 mm
Type	Horizontal	Vertical	Horizontal	Vertical	Small Terminal Blocks	Inclined Terminal Blocks	Two-row Terminal Blocks	Small Terminal Blocks	Inclined Terminal Blocks	Two-row Terminal Blocks	Line Terminal Blocks (Sockets)	PCB Terminal Blocks (Plugs)	Line Terminal Blocks (Sockets)	PCB Terminal Blocks (Plugs)	—	—	—
No. of contacts	100														100 120 (Straight only)	100	100
	90														80	80	80
	80														60 68	60	60 68
	70														50	50	50
	60														40	40	40
	50														30		30
	40														20 (Straight only)		20
	30																
20							20										
10	10		10		10		18 14 16 10 12	10			10						
	23 4 5 6 7 8 9		23 4 5 6 7 8 9		23 4 5 6 7 8 9		4 6 8	23 4 5 6 7 8 9		4 6	2 3 4 5 6 7 8 9						
Rated current	17.5 A / 10 A		24 A / 10 A		10 A / 10 A		8 A / 10 A	13.5 A / 10 A		14 A / 10 A	8 A / 8 A		12 A / 10 A		0.5 A	0.5 A	0.5 A
Rated voltage	200 V AC / 300 V AC		400 V AC / 300 V AC		160 V AC / 300 V AC		250 V AC / 300 V AC		160 V AC / 300 V AC		160 V AC / 300 V AC		250 V AC / 300 V AC		125 V AC	125 V AC	125 V AC
Ambient operating temperature	−40 to +100°C				−40 to +100°C			−40 to +100°C			−40 to +100°C				−55 to +105°C	−55 to +105°C	−55 to +105°C
Applicable Wires	—				AWG26 to AWG16			AWG26 to AWG16			AWG28 to AWG16	—	AWG24 to AWG14	—	—	—	—
Applicable board thickness	1.6 mm				1.6 mm			1.6 mm			—	1.6 mm	—	1.6 mm	1.6 mm	1.6 mm	1.6 mm
Terminal shape											—		—				
International standards	—				UL/cUL,CSA			UL/cUL,CSA			UL/cUL,CSA				UL	UL	UL
RoHS Compliant	Compliant																

Classification	DIN Connectors										D-Sub Connectors																
	Twin-contact type (DIN-standard)		Twin-contact type (DIN-style)		Fine-fit W-pin type		Four-row, 128-contact type		Cable-connected-type		Sequence type	Mid-current and High-current-type		Cable-connected type	SMT-type D-Sub Connectors												
Model	XC5		XC5		XC5		XC5		XC6		XC7		XC4		XM3	XM3K/XM3L											
Appearance																											
Contact pitch	2.54 mm		2.54 mm		2.54 mm		2.54 mm		2.54 mm		2.54 mm		2.54 mm, 5.08 mm		2.74 mm, 2.76 mm	2.74 mm, 2.76 mm											
Type	Two-row Plugs		Three-row Plugs		Two-row Plugs		Three-row Plugs		Four-row Plugs		Flat Cable IDC Connectors with double rows		Flat Cable IDC Connectors with triple rows		Discrete-wire IDC Connectors		Two-row Plugs		Three-row Plugs		Mid-current type High-current-type M-type(Mixed)		Shielded-type		SMT Type		
No. of contacts	100	100	100	100	100	100	128					100	100														
	90		96	96	96	96					96	96															
	80																										
	70																										
	60	64	64	64	64	64	64				64	64															
	50	50	50	50	50	50																					
	40	44	48	44	44	44	48																				
	30	32	32	30	32	32	32																				
	20	20	20	20	24	20	24																				
	10			10	14	16																					
Rated current	2 A		2 A		2 A		2 A		1 A		0.65 A		3 A max		2 A		2 A、6 A、15 A		3 A /5 A		3 A		3 A		3 A		
Rated voltage	300 V AC		300 V AC		300 V AC		300 V AC		250 V AC		100 V AC		300 V AC		300 V AC		300 V AC / 380 V AC / 500 V AC		300 V AC		300 V AC		300 V AC		300 V AC		
Ambient operating temperature	-55 to +125℃		-55 to +125℃		-55 to +125℃		-55 to +125℃		-55 to +105℃		-55 to +125℃		-55 to +125℃		-55 to +125℃		-55 to +125℃		-55 to +105℃		-55 to +105℃		-55 to +105℃		-55 to +105℃		
Applicable Wires	—		—		—		—		1.27-mm pitch flat cable incorporating AWG28		0.847-mm pitch flat cable incorporating AWG30		Discrete Wires AWG 24,26,28		—		Faston tab #250		AWG22 max.		—		—		—		
Applicable board thickness	1.6 mm		1.6 mm		1.6 to 3.2 mm		1.6 mm		—		—		—		1.6 mm		1.6 mm		1.6 mm		—		—		—		
Terminal shape									(H)		(H)		(H)														
International standards	UL, CSA		UL, CSA		UL, CSA		—		—		—		—		—		UL		UL/cUL		—		—		—		
RoHS Compliant	Compliant																										

Classification	D-Sub Connectors						USB Connector	LAN Modular Jack Connectors	Jumper Plugs	IC Sockets	
	D-sub Connector Assembly Hood	D-sub connector assembly hood connected horizontally	D-sub Connector Assembly Hood with ESD Protection	D-Sub Connector	High-density D-sub Connectors	Slim D-Sub Connector				Round Pin Sockets	Round Pin Plugs
Model	XM2S	XM2S	XM2S-E	XM2-L/XM3-L	XM4K/XM4L	XM3-LS	XM7	XM9B	XJ8/XG8S/XG8T	XR2	XR2P
Appearance											
Contact pitch	—		—	2.77 mm	2.29 mm	2.74 mm	2.0 mm, 2.5 mm	2.04 mm	2.54 mm	2.54 mm	2.54 mm
Type	—		—	Shielded type	Shielded type	Slim-type	SMT Type Straight DIP terminals Right-angle DIP terminals	Right-angle DIP terminals	One-row, Two-row, and Three-row Plugs/Sockets	Open-frame Sockets, Closed-frame Sockets, Open-frame Sockets with Seal Tape	Round Pin Plugs
No. of contacts	100										
	90										
	80										
	70										
	60									64	
	50									50	
	40									40 42 48	
	30	37								32	
	25		25		25					20 22 24 28	32
	15				15	15			20 21 24	14 16 18	20
Rated current	—		9	9	3 A	3 A	4 5	8	2 A	8	1 A
Rated voltage	—		—	—	300 V AC	300 V AC	30 V AC	250 V AC	300 V AC	300 V AC	300 V AC
Ambient operating temperature	-25 to +85°C		-25 to +85°C	-25 to +105°C	-25 to +105°C	-25 to +105°C	*2	-45 to +80°C	-55 to +105°C	-55 to +105°C	-55 to +125°C
Applicable Wires	—		—	—	—	—	—	—	—	—	—
Applicable board thickness	—		—	1.6 mm	1.6 mm	1.0 mm, 1.6 mm	1.0 mm, 1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm
Terminal shape	—		—								
International standards	—		—	UL	UL	—	—	—	—	UL	—
RoHS Compliant	Compliant										

\* 1. DIN 41612 and IEC 603-2 compliant.  
 \* 2. USB 2.0, -40 to 60°C.  
 USB 2.0 or mini USB, 0 to 50°C.

Terminal shape



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