

# XG8W-1631 Datasheet



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DiGi Electronics Part Number	XG8W-1631-DG
Manufacturer	<a href="#">Omron Electronics Inc-EMC Div</a>
Manufacturer Product Number	XG8W-1631
Description	CONN HEADER VERT 16POS 2.54MM
Detailed Description	Connector Header Through Hole 16 position 0.100" (2.54mm)

This model XG8W-1631 is available at DiGi Electronics.

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## Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
XG8W-1631	Omron Electronics Inc-EMC Div
Series:	Product Status:
XG8	Active
Connector Type:	Contact Type:
Header	Male Pin
Pitch - Mating:	Number of Positions:
0.100" (2.54mm)	16
Number of Rows:	Row Spacing - Mating:
2	0.100" (2.54mm)
Number of Positions Loaded:	Style:
All	Board to Board or Cable
Shrouding:	Mounting Type:
Unshrouded	Through Hole
Termination:	Fastening Type:
Solder	Push-Pull
Contact Length - Mating:	Contact Length - Post:
0.236" (6.00mm)	0.118" (3.00mm)
Overall Contact Length:	Insulation Height:
0.453" (11.50mm)	0.098" (2.50mm)
Contact Shape:	Contact Finish - Mating:
Square	Gold
Contact Finish Thickness - Mating:	Contact Finish - Post:
5.90µin (0.150µm)	Gold
Contact Material:	Insulation Material:
Brass, Nickel	Polybutylene Terephthalate (PBT), Glass Filled
Features:	Operating Temperature:
-	-55°C ~ 105°C
Ingress Protection:	Material Flammability Rating:
-	UL94 V-0
Insulation Color:	Current Rating (Amps):
Black	3A
Voltage Rating:	Mated Stacking Heights:
300V	-
Contact Finish Thickness - Post:	Applications:
5.90µin (0.150µm)	-
Base Product Number:	
XG8W	

## Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
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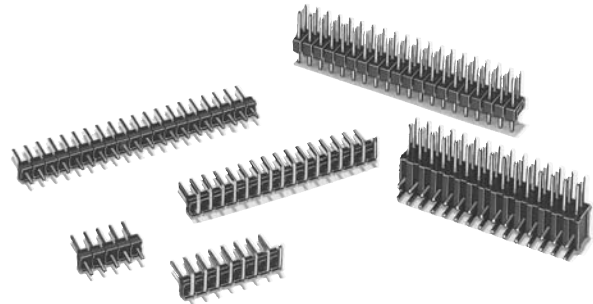


# Original Plugs

# XG8

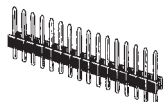

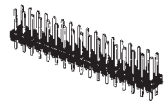





**Original Plug that can be used in a wide range of applications.**

- Can use as a Plug for different Sockets.  
Applicable Sockets:  
XG4M Flat Cable Connector  
XG5 Discrete-wire IDC Connector  
(Refer to Applicable Sockets below.)
- Through-holes handle 0.8-mm wires.
- With Double-row Plugs with right-angle terminals, block-base soldering improves productivity while lock levers simplify locking (excluding XG8V and XG8W Plugs with straight terminals).
- Simply cut to divide (excluding XG8W Right-angle Plugs).
- See the "Standards certification / conformity list" for information on conformity to certification standards.



RoHS Compliant

## Connectors For MIL Connectors

Model	XG8V		XG8W	
Appearance	Single-row plugs with straight terminals 	Single-row plugs with right-angle terminals 	Double-row plugs with straight terminals 	Double-row plugs with right-angle terminals 
Page	2		3	
Model	XG8A		XG8B	
Appearance	Single-row plugs with straight terminals 	Single-row plugs with right-angle terminals 	Double-row plugs with straight terminals 	Double-row plugs with right-angle terminals 
Page	4			

## Ratings and Characteristics

Rated current	3 A (See note 1.)
Rated voltage	300 VAC
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.) (See note 2.)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength	650 VAC for 1 min (leakage current: 1 mA max.)
Ambient operating temperature	-55 to 105°C (with no icing at low temperature)

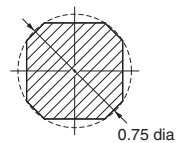
- Note:**
1. The rated current will depend on the Socket you are using. It is 1 A using the XG4M for example.
  2. The contact resistance is measured with the Plug mated to an XG5M-N.

## Materials and Finish

Model	XG8V and XG8W (See note.)	XG8A and XG8B
Base	Fiber-glass reinforced PBT resin (UL94 V-0)/black	
Con-tacts	Mating end	Brass/nickel base, 0.15-μm gold plating
	Terminal	Brass/nickel base, 2.0-μm tin plating
		Brass/nickel base, 0.15-μm gold plating
		Brass/nickel base, 2.0-μm tin plating

**Note:** Two types of contacts and mating ends, one with gold plating and the other with tin plating, are available.

## Cross-sectional View of Terminal



## Applicable Sockets

XG8W and XG8B (Double Row)	XG4M Flat Cable Connectors XG4H Board-to-Board Sockets XG5M-N Discrete-wire IDC Connectors (Double-row Sockets) XG5N Discrete-wire crimped Sockets
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# XG8V Single-row Original Plugs

## ■ Dimensions

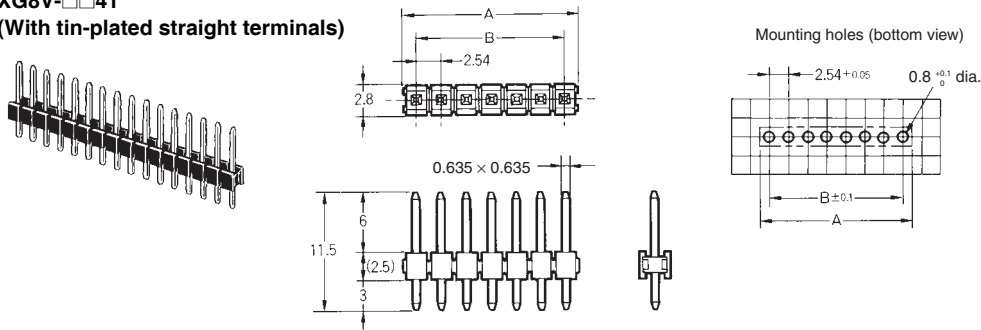
(Unit: mm)

### XG8V-□□31

(With gold-plated straight terminals)

### XG8V-□□41

(With tin-plated straight terminals)



### Dimensions

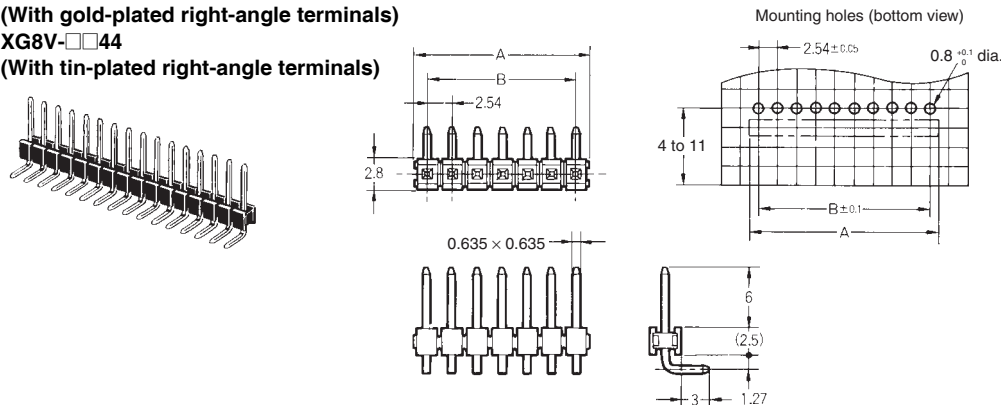
No. of contacts	Dimensions (mm)	
	A	B
2	5.1	2.54
3	7.6	5.08
4	10.2	7.62
5	12.7	10.16
6	15.2	12.70
7	17.8	15.24
8	20.3	17.78
10	25.4	22.86
12	30.5	27.94
13	33.0	30.48
15	38.1	35.56
16	40.6	38.10
17	43.2	40.64
20	50.8	48.26
36	91.4	88.90

### XG8V-□□34

(With gold-plated right-angle terminals)

### XG8V-□□44

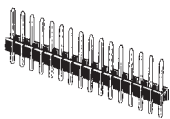
(With tin-plated right-angle terminals)



### Dimensions

No. of contacts	Dimensions (mm)	
	A	B
2	5.1	2.54
3	7.6	5.08
4	10.2	7.62
5	12.7	10.16
6	15.2	12.70
7	17.8	15.24
8	20.3	17.78
10	25.4	22.86
12	30.5	27.94
13	33.0	30.48
15	38.1	35.56
16	40.6	38.10
17	43.2	40.64
20	50.8	48.26
36	91.4	88.90

## ■ Ordering Information

Appearance	Plugs with straight terminals		Plugs with right-angle terminals		
	No. of contacts	Model (gold plated)	Model (tin plated)	Model (gold plated)	Model (tin plated)
	2	XG8V-0231	---	---	XG8V-0244
	3	XG8V-0331	XG8V-0341	XG8V-0334	XG8V-0344
	4	XG8V-0431	XG8V-0441	XG8V-0434	XG8V-0444
	5	XG8V-0531	XG8V-0541	XG8V-0534	XG8V-0544
	6	XG8V-0631	XG8V-0641	XG8V-0634	XG8V-0644
	7	XG8V-0731	XG8V-0741	XG8V-0734	XG8V-0744
	8	XG8V-0831	XG8V-0841	XG8V-0834	XG8V-0844
	10	XG8V-1031	XG8V-1041	XG8V-1034	XG8V-1044
	12	XG8V-1231	XG8V-1241	XG8V-1234	XG8V-1244
	13	XG8V-1331	---	XG8V-1334	---
	15	XG8V-1531	---	XG8V-1534	---
	16	XG8V-1631	XG8V-1641	XG8V-1634	XG8V-1644
	17	XG8V-1731	---	XG8V-1734	---
	20	XG8V-2031	XG8V-2041	XG8V-2034	XG8V-2044
	36	XG8V-3631	XG8V-3641	XG8V-3634	XG8V-3644

# XG8W Original Plugs for MIL Connectors

## ■ Dimensions

(Unit: mm)

XG8W-□□31

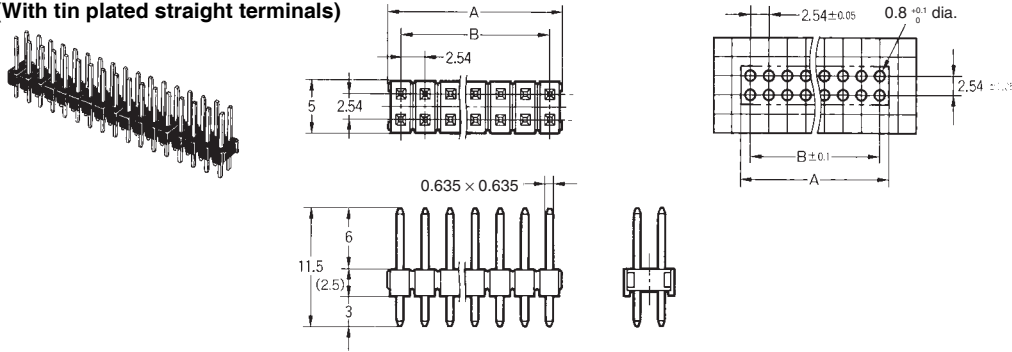
(With gold-plated straight terminals)

XG8W-□□41

(With tin plated straight terminals)

### Dimensions

No. of contacts	Dimensions (mm)	
	A	B
10	12.7	10.16
14	17.8	15.24
16	20.3	17.78
20	25.4	22.86
26	33.0	30.48
30	38.1	35.56
34	43.2	40.64
40	50.8	48.26
50	63.5	60.96
60	76.2	73.66



XG8W-□□34

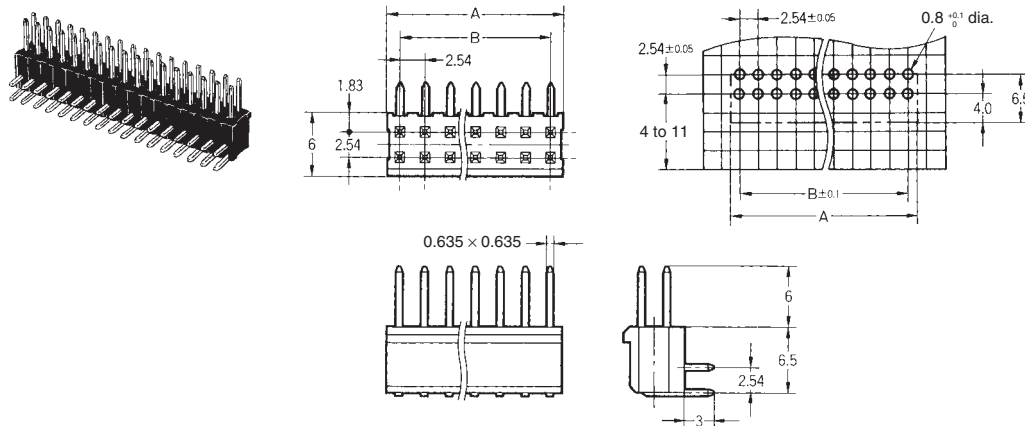
(With gold-plated right-angle terminals)

XG8W-□□44


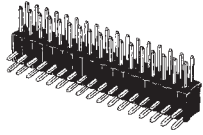
(With tin-plated right-angle terminals)

### Dimensions

No. of contacts	Dimensions (mm)	
	A	B
20	25.4	22.86
26	33.0	30.48
30	38.1	35.56
34	43.2	40.64
40	50.8	48.26
50	63.5	60.96



## ■ Ordering Information

Appearance	Plugs with straight terminals		Plugs with right-angle terminals		
	No. of contacts	Model (gold plated)	Model (tin plated)	Model (gold plated)	Model (tin plated)
	10	XG8W-1031	XG8W-1041	---	---
	14	XG8W-1431	XG8W-1441	---	---
	16	XG8W-1631	XG8W-1641	---	---
	20	XG8W-2031	XG8W-2041	XG8W-2034	XG8W-2044
	26	XG8W-2631	XG8W-2641	XG8W-2634	XG8W-2644
	30	XG8W-3031	XG8W-3041	XG8W-3034	XG8W-3044
	34	XG8W-3431	XG8W-3441	XG8W-3434	XG8W-3444
	40	XG8W-4031	XG8W-4041	XG8W-4034	XG8W-4044
	50	XG8W-5031	XG8W-5041	XG8W-5034	XG8W-5044
	60	XG8W-6031	XG8W-6041	---	---

# XG8A (Single-row)/XG8B (Double-row) Original Plugs for MIL Connectors

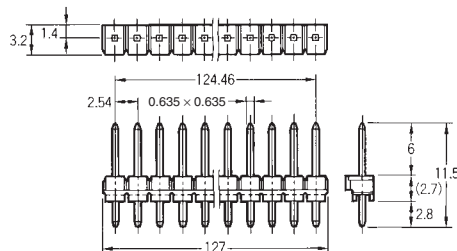
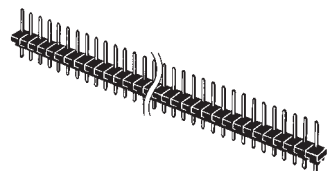
## ■ Dimensions

(Unit: mm)

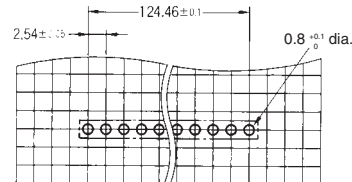
### Single-row Plugs

XG8A-5031

(With straight terminals)

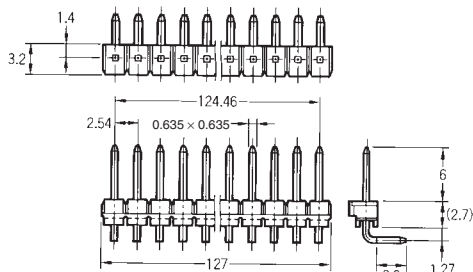
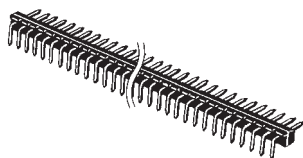


Mounting holes (bottom view)

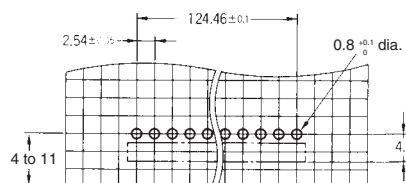


XG8A-5034

(With right-angle terminals)



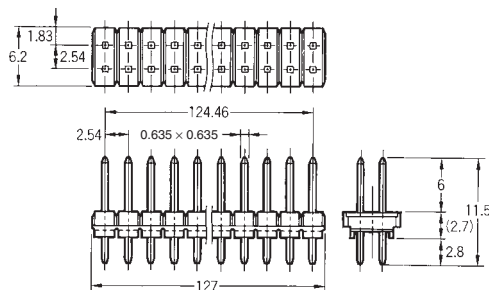
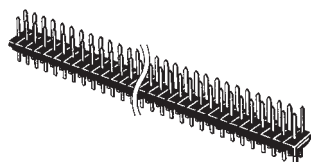
Mounting holes (bottom view)



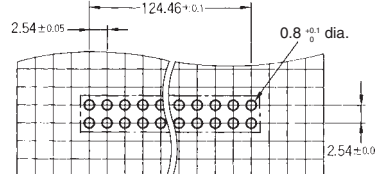
### Double-row Plugs

XG8B-0131

(With straight terminals)

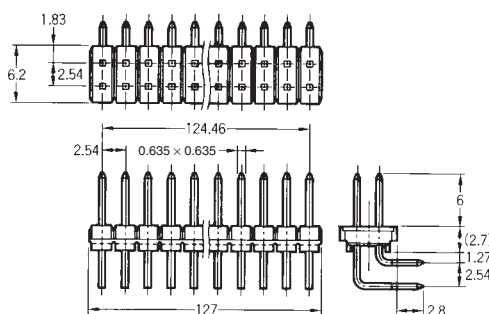
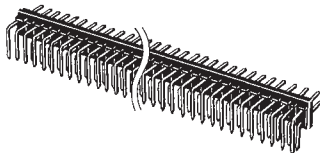


Mounting holes (bottom view)

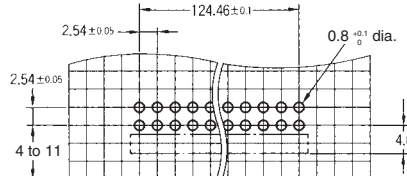


XG8B-0134

(With right-angle terminals)



Mounting holes (bottom view)



## ■ Ordering Information

Terminal type	Plugs with straight terminals	Plugs with right-angle terminals
No. of contacts	Model (gold plated)	Model (gold plated)
50 (Single-row)	XG8A-5031	XG8A-5034
100 (Double-row)	XG8A-0131	XG8A-0134

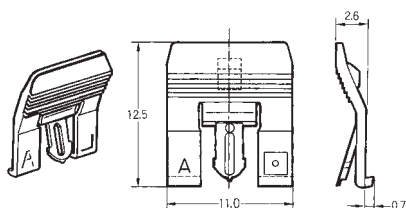
## ■ Accessories (Sold Separately)

### Lock Levers

#### XG5Z-0002

Can be used to lock XG8W Double-row Right-angle Terminal Plugs to XG4M Flat Cables and XG5M-N Discrete-wire IDC Connectors.

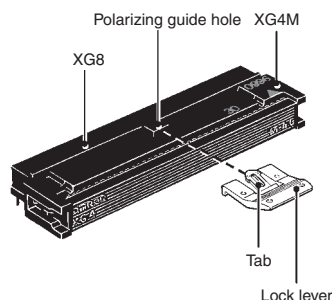
They cannot be used with XG8W Double-row Straight Terminal Plugs or XG8V Single-row Plugs.



<b>Model</b>
<b>XG5Z-0002</b>

### Mounting the Lock Lever

Insert the tab on the Lock Lever into the hole on a Socket with a polarity guide. In this way, it can be locked with XG8W Right-angle Terminal Plugs.

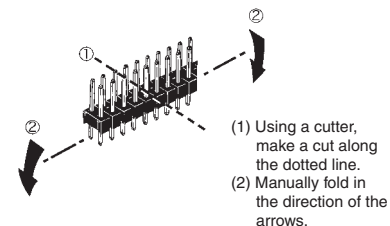


## ■ Precautions

### Correct Use

#### Dividing the XG8W (with Straight Terminals), XG8V, XG8A, and XG8B

- Using a Cutter, make a cut on the slot as indicated by the dotted line in the diagram. Then fold the Plug manually in the direction of the arrows.



#### Automated Soldering Conditions (Jet Flow)

- Soldering temperature: 250 ±5°C
- Continuous soldering time: Within 5±1 s

## ■ Ordering Procedure

- Contact your OMRON representative if you require a product with a non-standard number of contacts.

Please check each region's Terms & Conditions by region website.

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