## Standard Unshrouded Header Plug XG8

## Standard Plugs can be used in a wide range of applications.

- The XG8 2 row plugs mates with different Omron 2 row Sockets: XG4M Flat Cable Connector, XG4H Board to Board Connector and XG5 Discrete-wire IDC Connector
- XG8A and XG8B Header / Plugs are sold in strips of 50 (single row) or 100 (double row) terminals. Simply cut the strips to the desired length / number of contacts.
- XG5Z-0002 Top Lock Levers (sold separately) ensure secure connection to Omron Sockets when used with double row, right-angle XG8W.
- RoHS Compliant



## Unshrouded Plugs

## Original Header / Plug

| Model | XG8V |  | XG8W |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Single Row |  | Double Row |  |
|  | Straight | Right-angle | Straight | Right-angle |
| Appearance |  |  |  |  |

Header / Plug Strips

| Model | XG8A |  | XG8B |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Single Row |  | Double Row |  |
|  | Straight | Right-angle | Straight | Right-angle |
| Appearance |  |  |  |  |

Note: 1. See the following pages for exact part numbers

Ratings and Characteristics

| Rated current | $3 \mathrm{~A}($ See note 1.) |
| :--- | :--- |
| Rated voltage | 300 VAC |
| Contact <br> resistance | $20 \mathrm{~m} \Omega \mathrm{max}$. (at $20 \mathrm{mV}, 100 \mathrm{~mA}$ max.) (See note 2.) |
| Insulation <br> resistance | $1,000 \mathrm{M} \Omega \mathrm{min}$. (at 500 VDC ) |
| Dielectric <br> strength | 650 VAC for 1 min . (leakage current: 1 mA max.) |
| Ambient <br> temperature | Operating: $-55^{\circ} \mathrm{C}$ to $105^{\circ} \mathrm{C}$ (with no icing) |

Note: 1. The rated current will depend on the Socket you are using. It is 1 A if using the XG4M and 3A if using XG5, for example.
2. The contact resistance is measured with the Plug mated to an XG5M-N.

## Materials and Finish

| Model |  | XG8V and XG8W | XG8A and XG8B |
| :---: | :---: | :---: | :---: |
| Base |  | Fiber-glass reinforced PBT resin (UL94V-0)/black |  |
| Contacts | Mating end | 1) Brass/nickel base, $0.15-\mu \mathrm{m}$ gold plating <br> 2) Brass/nickel base, $2.0-\mu \mathrm{m}$ tin plating | Brass/nickel base, $0.15-\mu \mathrm{m}$ gold plating |
|  | Terminal |  | Brass/nickel base, $2.0-\mu \mathrm{m}$ tin plating |

Note: Two types of contacts and mating ends, one with gold plating and the other with tin plating, are available. (XG8V and XG8W)

## Applicable Sockets

| XG8W and XG8B |  |
| :--- | :--- |
| (Double Row) | XG4M Flat Cable Connectors (Sockets) |
|  | XG4H Board-to-Board Connectors (Sockets) <br>  <br>  |
|  | XG5M-N Discrete-wire IDC Connectors |
|  | (Double-row Sockets) |
| XG5N Discrete-wre IDC Sockets |  |

## XG8V Single-row Header Plugs

## Dimensions

XG8V- $\square 31$
(With gold-plated straight terminals)
XG8V- $\square \square 41$
(With tin-plated straight terminals)


| No. of <br> 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- $\square \mathbf{3 4}$
(With gold-plated right-angle terminals)
XG8V- $\square \square 44$
(With tin-plated right-angle terminals)


| No. of <br> 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 Double Row Plugs for MIL Connectors

## Dimensions

XG8W- $\square$ $\square 1$
(With gold-plated straight terminals)
XG8W- $\square 41$


Dimensions

| No. of <br> 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 | 40.46 |
| 40 | 50.8 | 48.26 |
| 50 | 63.5 | 60.96 |
| 60 | 76.2 | 73.66 |

XG8W- $\square 34$
(With gold-plated right-angle terminals)
XG8W- $\square 44$
(With tin-plated right-angle terminals)


$0.635 \times 0.635 \rightarrow+$


## Dimensions

| No. of <br> 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) Header Plug Strips for MIL Connectors

## Dimensions

- Single-row Plugs

XG8A-5031
(With straight terminals)


वय)


Mounting holes (bottom view)


XG8A-5034
(With right-angle terminals)




## Double-row Plugs

XG8B-0131
(With straight terminals)



XG8B-0134
(With right-angle terminals)



## Ordering Information

| Terminal type | Plugs with straight terminals | Plugs with right-angle terminals |
| :--- | :--- | :--- |
|  | Model (gold plated contacts) | Model (gold plated contacts) |
| 50 (Single-row) | XG8A-5031 | XG8A-5034 |
| 100 (Double-row) | XG8B-0131 | XG8B-0134 |

## Accessories

## ■ Top Lock Levers

## XG5Z-0002 - "Lock Lever"

Can be used to lock XG8W Double-row Right-angle Terminal Plugs to XG4M Flat Cables and XG5M-N Discrete-wire IDC Connectors. (See XG4 and XG5 Datasheets).
They cannot be used with XG8W Double-row Straight Terminal Plugs.


Note: Order the above model in multiples of 10 pieces.

## 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 XG8BThe above mentioned models may have the number of terminals and rows reduced prior to pcb assembly, using the following method:

- 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.
- XG8W's with right-angle terminals are not designed to be divided in this manner. Do not divide the XG8W with right-angle terminals. Instead, use the XG8B Header Plug Strip with right-angle terminals, if a double-row header plug with right-angle terminals must be divided to reduce the number of terminal rows.

(1) Using a cutter, make a cut along the dotted line.
(2) Manually fold in the direction of the arrows.

Automated Soldering Conditions (Jet Flow)

1. Soldering temperature: $250 \pm 5^{\circ} \mathrm{C}$
2. Continuous soldering time: Within 5 s

Cross-sectional View of Terminal


All sales are subject to Omron Electronic Components LLC standard terms and conditions of sale, which can be found at http://www.components.omron.com/components/web/webfiles.nsf/sales_terms.html

## ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937 . To convert grams into ounces, multiply by 0.03527 .

## OmROn

OMRON ELECTRONIC COMPONENTS LLC
55 E. Commerce Drive, Suite B
Schaumburg, IL 60173

## 847-882-2288

## OMRON ON-LINE

Global - http://www.omron.com
USA - http://www.components.omron.com

